BIRTH DIRT RELATIONS OF POWER IN CHILDBIRTH

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CERTIFICATE OF AUTHORSHIP

I certify that the work in this thesis has not previously been submitted for a degree, nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and in the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Candidate

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ABSTRACT

This thesis presents the findings of a doctoral study which analysed video tapes of labouring Australian women at the end of the 20th century, historical data from midwifery and medical textbooks, consumer material, and personal experience as a midwifery student in 1970-1971. The data analysis was achieved using discourse analysis, but was influenced by Michel Foucault together with anthropological and sociological approaches, particularly as these can be applied to visual material.

'Dirt' is a commonly accepted term, but it becomes difficult to define as it is so dependant on the context. Since the discovery of the germ theory in the 19th century, however, it is difficult for western health professionals to conceive of dirt as being anything but unaesthetic, unhygienic and pathogenic. When analysing the data from this study, it became evident that birth and dirt have a close association. The changes that have occurred in childbirth have revolved around who and what is perceived as clean, and who and what is perceived as dirty. This thesis argues that 'birth dirt' exists, but, its form will vary depending on the time, the place, and the culture, although it is always centred around the physical reality of birth.

Video tapes of the birthing process indicate that midwives, in their ritualised behaviours of containing, controlling and cleaning up the 'dirt' associated with birth, create a barrier between themselves and the women. 'Dirt' in this instance is the 'contaminating' body fluids and substances derived from the woman and her baby. The dirt relationship is a power relationship and the midwife is an essential part of its structure. The midwife is the dirty worker who maintains the cleanliness of the environment and controls the 'dirt' during birth. There is considerable rhetoric about midwives as being 'with woman', but the reality is that the midwives are more often 'with dirt'.

CHAPTER 1

APPROACHING BIRTH

INTRODUCTION

Childbirth is constructed across a range of cultures differently: as a momentous time for some, a developmental stage, or life crisis, a journey, or a rite of passage. It is a profound experience in western cultures that has a lasting impact on the women, their partners and their families. The birth of the baby changes these family dynamics. Depending on the woman's experiences of birth, it can be on a continuum from a joyous and momentous occasion, an opportunity to mature and develop, a confirmation of herself, her family, and life, to a devastating disappointment, an horrific event, a reason for grief. Some of this range of responses occurred for the women in this study.

This thesis entitled, *Birth dirt: Relations of power in childbirth*, is about women, both birthing women and midwives, and their experiences of birth as they travel this journey together. It is about childbirth in Australia, but particularly about 22 couples who were willing to have the labour and birth of their baby video taped, and it is about the midwifery and medical staff who provided their care. Information about the women, their labour and birth, and their partners are presented in Appendix 1. The names by which the couples are referred to are fictitious.

The video tapes were collected from 1996 to 1998 when the women laboured in a delivery suite and a birth centre. The aim of the study was to identify and explore the discourses surrounding birth, and how these discourses shaped the relationships between the women and their care givers. I was particularly interested in the power relationships. During the preliminary analysis of the video taped data, however, the focus narrowed because 'clean and dirty' and how this is constructed and played out exemplified the location and the symbolic representation of power. The research became centred, therefore, on the discourses and discursive practices surrounding who and what is clean, and who and what is dirty in childbirth.

In the health arena, the 'clean' and 'dirty' concepts can be translated to 'clean' or 'sterile' and 'contaminated' and usually refer to body products or substances or items which have been in contact with them. The study was conducted in the era in which universal / standard precautions were being emphasised in health care workplaces, but particularly in the study site as many of the midwifery staff had embraced the philosophy of 'natural' childbirth. Many staff had become used to wearing minimal protective clothing during the birth with some staff wearing none. They were now being asked to practice in a very different way. Because this transition from 'natural' to universal precautions is the context in which the study was conducted, the major tenets of universal / standard precautions are presented in Appendix 2.

My personal view of the world has coloured this thesis. I am a woman, a midwife, a nurse (although it is many years since I practised as a nurse), a clinical manager in a delivery suite, and feminist with a strong sociological background, a liking for philosophy (as long as it is not too complex), a love of reading, an appreciation of the visual, a fascination with other cultures and times, and a preference for qualitative research. All these factors have influenced how this thesis was conceptualised and developed.

My occupation as a midwife, together with my sociological background, awakened me to the importance and relevance of feminism in my life. Both sociology and feminism have helped shaped how I work as a midwife. I believe sociology has enabled me to have a broader view of the world, be critical and reflective of the health system in which I work, while feminism has made me a better midwife by making me more woman focussed. My midwifery and feminist focus were influential in choosing the area for study – the interaction between the woman and her family and the health professionals who provide their care. I did not set out to 'do' feminist research, although I always acknowledged that I was taking a feminist approach with my study. Because this influenced the thesis, there is a brief discussion on feminism and research in this chapter.

Also in this chapter I introduce a discussion on authoritative knowledge, particularly as it is applied to childbirth. The authoritative knowledge of the midwifery and medical staff in this thesis is both obvious and covert while the power that they derive from it is extensive.

It is such an important overarching concept in relation to the analysis of the data that I decided to present an exposition of the concept at the beginning of the work. Authoritative knowledge underpins all the interactions between the women and their support people, and the health professionals, with the term used repeatedly in the analysis chapters. However, authoritative knowledge and who owns/holds it is also important throughout the thesis.

ORIGINS OF THE STUDY

The focus of this thesis, women's experience of labour and birth, was the result of a previous study in which I had examined midwives' perception of care during labour (H. Callaghan, 1996; H. M. Callaghan, 1990). Throughout the analysis of the data and trying to understand midwives' perception of care, I was left with many unanswered questions. Some of these questions related to how the women 'chose' particular positions for birth. Many queries were related to the interactions that occurred between the women, the midwives and other health professionals. Further questions related to the manner in which the women's agreement to particular interventions, such as, vaginal examinations, amniotomy, analgesia, or epidural, or a syntocinon infusion, was obtained. Some questions were related to the degree of autonomy the women who were cared for by the independent midwives really had, and would the midwives always agree to what the women wanted, regardless of the severity of the complications. While some of the midwives in this earlier study described the power of the medical profession, and sometimes that of the midwife, the latter was not really acknowledged, let alone understood, by many of the participants.

My own experience as a midwife made me aware that the power relationships in childbirth could be both obvious and subtle. My personal view was that medical staff were powerful and that midwives, many without acknowledging it, were also powerful in their relationship with childbearing women. This 'space' between the woman, her family and the health professionals deserved detailed study and analysis. Thus, a design for the research, which became the focus of this thesis was developed to explore this 'space'.

In this study, I set out to identify and explore the discourses and related practices surrounding birth and explain how power was manifest and reproduced. This was to be achieved by studying the interactions that occurred between the childbearing women and their caregivers. The data was collected by video tape with discourse analysis the method of analysis. Although the aim of my study remained the same, how this was to be achieved was modified.

Twenty-two women were video taped during labour with a range of recorded data from three to 33 hours. Pilot and early analysis showed that taping time was irrelevant. What was more essential, however, was that taping captured the critical incidents¹ between the women, their families and the health professionals.

Further refinement in the direction of the study occurred during the analysis process. The video tapes showed the importance of 'dressing' or covering the body and this provided a focus for the analysis of power and the use of dress to enhance the wearer's power. The importance of dress reminded me of how we worked when I was a student midwife and how concepts of cleanliness and asepsis were strictly enforced with labour ward dress and cleaning procedures emulating an operating theatre. The protective clothing at that time was supposed to protect the woman and her baby from infection. This was followed by a relaxation of protective apparel in the 1980s associated with the emphasis on 'natural' childbirth. This emphasis on 'cleanliness' and protection changed again with the discovery of AIDS/HIV and an improved understanding of hepatitis. The focus of the study became more specifically an investigation of what clean and dirty meant, especially in relation to the birthing woman's body. In this study I provide an overview of dress in the childbirth encounter. These explorations made the role of dirt in the changing modes of dress surrounding childbirth more apparent and led to an examination of professional textbooks and consumer books. Although, the study expanded and incorporated these other sources of data, the focus of the research remained the same.

¹ Critical incidents are defined as: "any observable human activity that is sufficiently complete in itself to permit inferences to be made" (Cormack, 1991, p. 242)

AUTHORITATIVE KNOWLEDGE

The concept of authoritative knowledge is attributed to Brigitte Jordan (Davis-Floyd & Sargent, 1997) following her publications in the 1970s and 1980s (Jordan, 1977, 1978, 1987, 1989). As Jordan (1993, p. 152) noted, authoritative knowledge is a social process which is considered the "natural order" and both reflects and builds upon the power relationships within the practice of a knowledge system. Jordan (1992, p. 3) considers that authoritative knowledge is similar to Garfinkel's notion of common sense in that it is "unselfconsciously constructed, displayed and used" by people in their everyday interactions. Where Jordan considers it different, however, is that the authoritative knowledge is owned and used by a privileged group. The characteristics of authoritative knowledge are summarised in the following quote:

Authoritative knowledge is persuasive because it seems natural, reasonable and consensually constructed. For the same reason it also carries the possibility of powerful sanctions, ranging from exclusions from the social group to physical coerciveness people not only accept authoritative knowledge (which is thus validated and reinforced), but are actively and unselfconsciously engaged in its routine production and reproduction*The power of authoritative knowledge is not that it is correct but that it counts* (original layout) (Jordan, 1992, p. 4).

For Jordan (1997) authoritative knowledge does not mean the knowledge of those who are in authority, although she acknowledges they share an understanding of the local version of authoritative knowledge with the other members of their practice community. For her authoritative knowledge is about the way "participants ... make visible to themselves and to each other" the rationale for their behaviour in particular environments (Jordan, 1997, p. 58). Jordan dispenses with the concepts of authority and knowledge and prefers to determine how participants deal with these notions in practice.

Jordan acknowledges that there are usually several knowledge systems for a domain, but believes one will become dominant. The dominant knowledge system may "carry more weight than others" because it provides a better explanation of "the state of the world ... (efficacy)", or it may have "a stronger power base (structural superiority)", but most likely it will have both (Jordan, 1997, p. 56). Jordan (1997, p. 56) acknowledges that "equally legitimate parallel knowledge systems exist" with people moving freely from one to the

other, however, one system usually gains dominance resulting in the devaluing of other systems of knowledge with those who believe in the alternative knowledge system often being denigrated. In Australian childbirth, medicine is the dominant knowledge system with midwifery as the lesser valued, but alternative knowledge system. Medicine has a stronger power base than midwifery while the societal perception is that medicine is more effective and necessary. Some midwives and some doctors move to and from a midwifery knowledge system to a medical knowledge system depending on the situation and the woman's wishes.

Other authors (Johnson, 1999; Kennell, 1999; J. L. Martin, 1998), have also discussed authoritative knowledge with much of this relating to childbirth and/or anthropology (Davis-Floyd & Davis, 1996; Daviss, 1996; Gaskin, 1996; Trevathan, 1997), presumably because that is the area in which the term originated.

Trevathan (1997) speculated that birth was originally a solitary activity, but became a social activity when hominids began bipedalism. This resulted in the birth canal being orientated differently, with the baby born facing away from the mother, therefore making it difficult for the woman to clear the baby's airways and release the umbilical cord, if it was around the neck. Trevathan (1997, p. 82) theorised that the outcomes for women who birthed near other women was better than for those who birthed unassisted, thus authoritative knowledge transference "from the birthing woman to her attendants" began millions of years ago. Encephalization in the genus homo increased the need for the birthing woman to have assistance which Trevathan (1997, pp. 82-83) assumed resulted in "joint communication and coordinated action" between the woman and her attendant with the woman's knowledge equally or more important than the assistants. This era is long past, with the dominant perception now being that the most important knowledge and technical expertise on childbirth is held by the health professionals, particularly the doctors who specialise in this field, the obstetricians.

Authoritative touch in childbirth has been discussed in detail by Kitzinger who noted that:

Touch is never neutral. It is emotionally supportive or disabling. It is empowering or disempowering. Authoritative touch by caregivers in pregnancy and childbirth conveys strong messages to the woman concerning her status vis-á-vis her attendants, the reproductive efficiency of her body, the normality or abnormality of this birth, and about her value as a woman (Kitzinger, 1997, p. 229).

Kitzinger (1997) notes that touch during birth has several functions, while different levels of the meaning of touch are conveyed to the participants, this may or may not be acknowledged, while various interpretations of touch may conflict. Kitzinger (1997) describes seven different forms of authoritative touch: blessing touch, comfort touch, physically supportive touch, diagnostic touch, manipulative touch, restraining touch, and punitive touch. She acknowledges that these categories "overlap" and that there is a "merging of meanings" between the categories (Kitzinger, 1997, p. 215). In the video tapes, it is evident that there is another form of authoritative touch which I have referred to as directive touch. Directive touch occurs when the care giver uses touch to give the woman directions or commands, for example, applying pressure or traction to a part of the woman's body in order to get her to change her position.

Over time the nature of authoritative touch has changed. In the early history of medicine, touch was limited, but it increased with increasing technical expertise. Kitzinger (1997) considers modern nursing has incorporated the blessing touch into its practice with the notion of therapeutic touch. Similarly, "touch was formalized as massage" and incorporated into midwifery in the United Kingdom, and training methods for birth, such as Lamaze, with the partner being taught the techniques (Kitzinger, 1997, p. 219). Kitzinger considers that restraining touch decreased in response to the increased use of mechanical equipment which ties the woman to the bed, for example, electronic fetal monitoring, intravenous therapy, etcetera (1997). As Kitzinger (1997, p. 228) noted any procedure may be perceived by the woman as punitive, "even when this [was]... not the intention". Restraining, punitive and directive touch demonstrate the powerfulness of the care providers, while diagnostic and manipulative touch can be either supportive and informative, or painful. If touch provides "comfort, offers physical support, and embodies cultural values shared" by the woman and her care giver, "it bridges the social space

between them" (Kitzinger, 1997, p. 229).

In the design of this study, I was interested in exploring the patterns of verbal and non verbal communication, including touch, during labour. I came to appreciate, however, that touch was only one form of non verbal communication and that other important messages were being sent by the birthing environment and how people were dressed.

Dress and the childbirth encounter

All medical encounters, no matter how mundane, are dramatic episodes. The protagonists, often without conscious thought, play out their respective roles of patient and healer according to their society's expectations. In some cultures, the dramatic aspect of healing is overt. Performers' costumes can add to the specialness of a healing encounter, ranging from obviously theatrical dress to a medical white coat, or a stethoscope around the healer's neck (Laderman & Roseman, 1996b, p. 1).

This quote highlights the hidden, but none the less, powerful messages that health professionals convey during what Laderman and Roseman (1996b, p. 1) refer to as the "healing encounter". These authors also discuss the relevance of odours, sounds, appropriate or inappropriate treatments, art forms, "players, audience, props, plots, comedy, poetry and dialogue", and the verbal and non verbal messages inherent in healing performances (Laderman & Roseman, 1996b, p. 2). Some would argue that childbirth is not a healing encounter, as childbirth is a normal physiological function, however, in our society childbirth is treated as a potentially dangerous event requiring medical assistance to achieve the best outcomes. When I first read this quote, I was trying to come to terms with what I was seeing on the video tapes. When viewing the critical incidents on the video tapes, the richness of the data in a single frame could be translated into most of the items, except odour, which these authors considered relevant to any 'healing encounter'. The appropriateness of this quote will be demonstrated throughout the thesis. The majority of midwives and many of the medical staff in the study wore theatre clothing throughout the labour, while a few midwives wore their corporate uniform. Some doctors and a few midwives wore normal clothing. This section focuses on the 'costumes' or uniforms of health professionals, but particularly what is worn by staff in a modern Australian hospital for birth, and demonstrates how important the humble uniform /costume is to the childbirth encounter as it enhances their position as the holders of authoritative knowledge.

All the hospital's clinical midwifery and nursing staff wear a corporate uniform which they have bought and for which they are responsible to clean. The Study Area Health Service² (1994), Section 1, p. 19} requires this uniform to be "freshly laundered" each day. The midwives in the delivery suite and the birth centre, in the institution in which the research was conducted, have been given the option of wearing a normal corporate uniform, or wearing "operating theatre 'blues'" (Study Area Health Service, 1994, Section 3, Obstetric guidelines: Delivery suite), commonly referred to as a theatre scrub suit. This is provided by and cleaned by the hospital. The majority of midwives wear the scrub suit, a few midwives wear their hospital uniform, and a couple of the team midwives wore their ordinary clothes, or 'civvies'. The wearing of normal clothes by the 'team' as distinct from rostered midwives was initially encouraged by the midwifery leadership to facilitate the woman to woman / midwife interaction and normalise the process (S. Paine, personal communication, 24 May 2000). This was never formalised in documentation, but it continued while the team midwives were in operation and has extended to the birth centre team midwives on their clinic days. These approaches are contrary to my midwifery training when our student uniforms were provided, washed and ironed by the hospital. These were the only uniforms we wore.

² The name of the area health service has been removed to preserve the anonymity of the participating institutions and individuals.

Wearing a theatre scrub suit means that the midwife does not have to worry about her uniform becoming dirty, usually from blood, mucus, liquor, urine, or meconium, or, the problem of taking hospital dirt into her home, or, the effort of removing 'the dirt.' It is required that "Clothing will be changed if contaminated" (Study Area Health Service, 1994, Section 3, Obstetric guidelines: Delivery Suite). This is much easier to do, if there is a clean uniform, such as theatre clothing, available. The midwife can keep clean the uniform which she wears to and from work, or she can wear ordinary clothes to work. If she gets splashed on her scrub suit, she places it in the dirty linen bag and obtains a new clean outfit. Similarly, the medical officers on duty in delivery suit and the birth centre may wear theatre scrub suits.

While the video taping was in progress (1996-1998), very few of the medical staff wore the scrub suits, but now the majority of medical officers change into the scrub suit at the beginning of their shift in the delivery suite. This is probably related to the increased emphasis on the use of universal precautions and the increased compliance of medical staff with infection control guidelines. For Laderman and Roseman (1996a), the 'healing encounter' is sometimes explicit, while the costumes of the participants contribute to the encounter. The theatre scrub suits and the corporate uniform fulfill this role in this study.

While the use of the theatre scrub suits does have very practical implications, it also highlights the hospital environment and its 'high tech' nature. Most Australians are familiar with operating theatre garb from television and the movies. Normally the only hospital areas to wear scrub suits are operating theatres and, rarely, some adult intensive care units. Reproductive medicine, particularly in vitro fertilization techniques, operating theatres and intensive care units symbolise modern medicine and the perception of it as a miraculous science with its attendant technology. From a historical perspective, asepsis and aseptic techniques developed following progress in both obstetrics and gynaecology and surgery, so the alignment of these two areas is not surprising. The wearing by delivery suite and birth centre staff of this style of uniform is indicative of the high level of medical influence on childbirth in Australia symbolised in dress.

FEMINISM AND RESEARCH

There are certain theoretical and conceptual frameworks that influenced the approach to data collection and interpretation of this thesis. One of these was feminism. In the following section I have outlined the way in which feminist research approaches are relevant to the thesis.

Feminism has many forms and covers a wide range of beliefs: liberal, radical, Marxist, socialist, cultural, poststructuralist, French, North American, Black, Latino, Australian, and others. The different forms of feminism, however, have a commonality of beliefs: there is "a valuing of women" and their experiences (J. M. Hall & Stevens, 1991, p. 17) together with an opposition to systematic inequality based on gender (Doering, 1992). Mills (1991), however, believes that "the essence of feminism [is] the pluralism of the ideology" with this position being supported by the approach taken in *A feminist dictionary* (Kramarae & Treichler, 1985) which provides several pages of quotes defining feminism. For Hawxhurst and Morrow (1984, cited in Tuttle, 1987, p. 107) "feminism is a call to action". An alternative view is provided by male sociologists (Abercrombie, Hill, & Turner, 1984, p. 89) who describe feminism as a "doctrine suggesting that women are systematically disadvantaged in modern society".

The methods used to collect data in feminist research are the same as those used for more conventional approaches with Reinharz (1993) advocating the freedom of feminist researchers to tackle any topic with any method deemed suitable. Draper (1997) provides a table listing the 14 characteristics of feminist research which she derived by examining Webb's (1993) work. This approach, although certainly woman centred, is fairly rigid and can be accused of excluding "the other", in this case the male from all feminist research. To conceive of feminist research in this manner, has resulted in criticism of feminist methodology (Thorne & Varcoe, 1998). Recently Bradby (1999, p. 290) commented on the "fault-line" of feminist research, particularly in relation to childbirth, where women are seen as either "victims" (oppressed and excluded) or "agents" (initiate action) and the difficulty in incorporating both notions into an analysis.

According to Hall and Stevens (1991), feminist research is distinctive. For these authors, the research topic is of concern to women, with the results being important for women

rather than an institution. The research is conducted without exploiting women with thought being given to the possible uses of the outcomes of the research. The researcher's personal history, beliefs, needs, "interests and interpretations are ... scrutinized" during the reflexive study, while a reciprocal relationship with the participants is desirable (J. M. Hall & Stevens, 1991, p. 18). Similar comments are made by Davis and Gremmen (1998), and Reuben (1978). Feminist research is seen by Reuben (1978) as a challenge to traditional methods because of the use of autobiography and personal choice.

In their book on *Feminist methods in social research*, Reinharz and Davidman (1992, p. 6) categorise feminist research methods as that in which the researcher/s self identify "as a feminist or as part of the women's movement", or the results are published in feminist journals or material, or the research has been granted a feminist award. These authors acknowledge that this does not mean the definition fits all feminist research as some researchers may be unable to, or reluctant to, use the term 'feminist'. This definition was chosen, however, as researchers doing feminist research only identify their methods as such if it "is unusual" (Reinharz & Davidman, 1992, p. 7). Reinharz and Davidman (1992, p. 204) suggest that the use of multiple methods by feminist researchers is an acknowledgement of personal conditions being the result of both "personal and structural factors".

Reinharz and Davidman (1992) consider that feminist research draws upon multiple disciplines and is more likely to use multiple methods. The reasons for choosing multiple methods may be technical, or reflect the researcher/s "intellectual, emotional and political commitments" (Reinharz & Davidman, 1992, p. 197). Feminist research projects are often protracted to permit a profound analysis and are considered as "journeys", demonstrate risk taking, "thoroughness", an "open-ended" approach, while allowing the linking of the past with the present through both data collection and activities (Reinharz & Davidman, 1992, p. 197). One form of data will often assist in the validation, or refinement of other data (Reinharz & Davidman, 1992). Multiple methods often developed because of changes that occur during the research process, but this enables previously "unexamined or misunderstood experiences" to be clarified, understood, often in layers of meaning, while increasing the credibility and the utility of the research (Reinharz & Davidman, 1992, p. 197). Feminist research is "driven by the subject matter" while the multiple methods

approach "put[s] texts or people in contexts, thus providing a richer and far more accurate interpretation" (Reinharz & Davidman, 1992, p. 213).

Although my conception of this research was informed by a feminist approach because of the area being researched, and a desire to improve the conditions of women during birth, I was aware that the method of data collection could be seen by some as exploitative of the labouring women and their families. Video taping, however, appeared to be the best choice when examining this topic for a variety of reasons which are discussed in detail later. Because of an awareness of the power differentials between the participants and the researcher in any research project, every effort was made to give the women what they wanted from the research. The birthing women and their families who participated in the study were very clear, however, that for them, the video camera was not a problem, because they were keen to receive their edited copy of their labour as a memento.

As the analysis of the video tapes progressed, the study became more focussed and additional data was collected and autobiographical information included. The changes made to the study were driven by the early analysis. This has improved the final interpretation and permitted a more comprehensive understanding of what is occurring during birth. Only in hindsight has the multiplicity of methods been recognised as originating from a feminist approach.

THE END PRODUCT

This thesis is about women and their bodies and how they have been constructed by society, but particularly by medicine. During my analysis I have drawn upon a wide and diverse range of theorists. Because of this, some of the more important concepts related to the study are presented in the introduction to the thesis, *Chapter 1: Approaching birth*. The concepts discussed in this chapter provide a framework for the study and an understanding of the material presented in this thesis. Feminist research has guided the approach taken in the study. Authoritative knowledge, especially as it relates to childbirth, is so important to appreciating the data that is presented in the thesis, that it required being 'up front'. The way in which health professionals present to, or approach patients, in this thesis the women and their families, is often ignored during the analysis. While watching the video tapes,

however, it became apparent to me that dress in the childbirth encounter reinforced the unassailable power of authoritative knowledge. This resulted in a brief discussion on this topic in order to set the scene for the rest of the work.

In *Chapter 2: Getting the dirt on birth*, the discussion centres around the methods and methodology used in the thesis and the major influences on the study. There is a section devoted to Michel Foucault who has influenced how I see the world. Foucault is often associated with discourse analysis and this was the main method of analysis. There is a brief overview of the way in which the various theorists have explicated this method and how it can be applied to both visual and written material. A short history on the use of the visual in the social sciences is presented and is followed by a discussion on justifying the use of this form of data. The current use of film is explored and demonstrates a wide range of uses in a variety of disciplines.

I presented a discussion on the way in which analysis of visual data has been described by various experts from various disciplines, however, two authorities from different disciplines provided the blue-print for the analysis. John Collier and Malcolm Collier (1986) are well known and recognized visual anthropologists who have produced a classic text used by many disciplines when analysing visual data. Their book provided me with a starting point and the reassurance that the video tapes would be able to be analysed. Ian Parker (1992), a psychologist, who is one of the leading proponents of discourse analysis considers that it does not matter what is being analysed, as long as it can be interpreted. He also provided a framework for the analysis of data. Detailed information is given on how these two approaches for analysis were synthesised, together with suggestions from other theorists. The preliminary analysis of the visual data led me to examine other data, but this time the sources were books, both professional and consumer orientated.

Because of the pivotal role the analysis of the books has played in development of the thesis, how these texts were 'found' and eventually used, has been described. Many of the books were donations or loans from strangers, colleagues and friends. The generosity of these people has been acknowledged in the earlier pages of the thesis.

The video taping section of the thesis is described in detail and forms another section of Chapter 2. The study sample, the pilot study, together with inclusion and exclusion criteria are described. There is a section on the ethical issues that were relevant to the study. Developing appropriate protocols that protected the participants' privacy and confidentiality was essential. The women, their families and the health professionals had to be aware that they could withdraw from the study at anytime, or ask for the camera to be turned off. The recruitment process is discussed together with some of the challenges I faced. I had always assumed, as it turned out correctly, that the majority of women and their families would reject the idea of video taping their labour, but a minority would be totally accepting of the idea. The health professionals' agreement to participate was challenging with the main stumbling blocks being a fear of litigation and the idea of being under surveillance. Prior to the commencement of the video taping, these fears threatened to terminate the study. The technical details related to collecting the videos are provided, together with the work involved in collecting the labour tapes is recounted.

Chapter 3: There's something about dirt ... is extremely important to the thesis as it provides the foundation on which the thesis developed. In this chapter the concepts of pollution, defilement, contamination, and dirt are explored using theorists from a variety of disciplines, although the work of Mary Douglas (1966/1992) is the starting point for the discussion. It was only when I understood how western thought has categorised what is 'dirty' or 'clean', that I could make sense of what I was seeing on the video tapes.

Douglas considered that the western concept of pollution is really just one way of separating and classifying our world with what has been rejected from various symbolic systems. She pointed out that our current ideas are more related to notions of hygiene, etiquette and aesthetics while the connection between dirt and germs followed the acceptance of the germ theory. Several authors (Enzensberger, 1972; Kubie, 1937; McLaughlin, 1971; Sartre, 1943/1984) discuss feelings of pollution and note how irrational it is. Enzensberger (1972, pp. 22-23) considers that there are four sources of dirt ("contact and excretion"; intermingling; decay and upsetting order; "mass"), which cause pollution. While there is considerable agreement on these categories, there are some differences of opinion. Dirt itself has been defined as "matter out of place" (Chesterfield cited inDouglas,

1968/1999a, p. 109). Again there is considerable agreement on this, although there are many who interpret this definition differently, or expand upon it. Enzensberger (1972) takes the time to detail the characteristics of dirt and notes how we apply these characteristics to people and their behaviours. For Douglas (1966/1992, p. 10), dirt is culturally bound, and is figuratively "in the eye of the beholder", while for Kubie (1937) dirt is a fantasy which is based upon a perception of the body as a dirt factory. He points out that there is a hierarchy of dirtiness, but most importantly, he acknowledged that woman was almost universally constructed as dirtier than man. These ideas are introduced in Chapter 3, but are addressed in detail in Chapter 4.

The dangerous nature of the body margins` is discussed as this has relevance for how we perceive the changing margins of the woman`s body during childbirth. Whatever crosses the margins of the body become "refuse" (Douglas, 1966/1992, p. 120). The relationship between dirt and power is discussed, as is, the relationship between dirt and work, together with the concept of dirty work and dirty workers. The types of work that have been described as dirty are noted, indicating that dirty workers are unable to control when, where or how they work, often they are poorly paid, have low status, work with 'dirt', however it has been defined in society, work with people who are on the margins of society, or do heavy physical work. It is not surprising to find that some examples are related to house and body work.

We have come to accept that anything that is dirty must be cleansed or purified through ritual and this is discussed with particular relevance to the health care system. The relationship between dirt, germs and asepsis is dealt with briefly.

In *Chapter 4: Woman as the dirty 'other'*, I have briefly explored how western societies have constructed women as 'the other' over the centuries. This has included the belief that women's sexuality makes them dangerous, powerful and as threatening to men. Men were considered the normal sex for the human race with women being judged against them and found to be deficient. Ancient medical Greek and Roman texts are briefly discussed as they remained in use for centuries and shaped western philosophical and medical thought about women. I show that women were constructed as dirty and this was played out against their

normal physiological functions of menstruation, childbirth and production of colostrum. Because women were considered dirty, men would not involve themselves in childbirth except in extreme cases. Naturally, the midwives were women and so were 'doubly dirty'. However, when men decided to enter midwifery, there was opposition from both midwives, medical men and women. Other doctors considered the man-midwife as dirty because of his occupation and the new professional group, obstetricians, had to prove that they were worthy of the title doctor – they had to become 'scientific'. The midwives were denigrated as dirty and lost ground to the new professional group.

In the thesis, I have two chapters which relate to birth and dirt in specific historical periods. The first of these is Chapter 5: Birth and dirt – Puerperal sepsis, in which I examine the relationship between birth, dirt, and puerperal sepsis over time, but particularly in the period which led to the validation of obstetrics. Prior to the use of hospitals for birth, outbreaks of puerperal sepsis were rare or sporadic. With the admission of women to lyingin hospitals for birth, the rate of puerperal sepsis escalated with a corresponding increase in the maternal and neonatal mortality rates. The hygienic state of the various institutions was, by all, accounts poor and in some places horrific. Numerous doctors who were interested in childbirth proclaimed the origins of the disease. There was much discussion on the topic, but it took over 100 years for the medical profession to accept the contagiousness of the disease and that health professionals (doctors and midwives) had carried the disease from one patient to another. I have argued that some doctors have never really accepted their culpability in this childbirth disaster and have managed to put the blame on midwives. This 'truth', however, has been accepted by society. Pasteur, a chemist, is the person responsible for ensuring that the medical profession accepted the role of microbes in the aetiology of the disease and the necessity for cleanliness. Once the germ theory was accepted, the medical profession dictated the various rituals considered necessary to prevent puerperal sepsis. Protective apparel was gradually developed for health care workers with only face masks being introduced for the benefit of the patient.

The second set of historical data is presented in *Chapter 6: Birth and dirt – Reflections*. In this chapter I reflect on my midwifery training which I commenced in 1970. This was recognised as a period with a high level of medicalisation in childbirth. The chapter was

important in the development of the theory on birth dirt because I kept reflecting back on how we had operated during this period, and commenting on how different, yet how similar 'things' were if you looked under the surface. During my midwifery training we were focussed on searching for sepsis and preventing its appearance. There were numerous rituals associated with cleansing the maternal and newborn body. Birth was treated as if it was a surgical operation with intense and constant scrutiny of the maternal body. The women were treated as passive dependant children who would often require assistance during labour and birth. Postnatally, the scrutiny of the women was continued, but now it included their babies. There was segregation of the women and their babies from each other and from the rest of their family, while strict timetables had to be followed. This was done in a futile attempt to keep everything clean.

In *Chapter 7: All in a day's labour*, the video tapes are the original source of data from which the vignettes, or short sketches, have been extracted. These are used to demonstrate who and what is currently considered clean and dirty in Australian childbirth. It is evident from these examples, that the discourses and discursive practices surrounding birth, indicate that the woman and all her body products, including the baby, are dirty. The focus of the health care workers, both midwives and doctors is on protecting themselves from the contaminating blood and body substances which are released during labour and birth. There is considerable rhetoric about midwives as being 'with woman', but the reality is that the midwives are more often 'with dirt'. The irrationality of some of these practices is obvious and is discussed later in the thesis.

In *Chapter 8: Treated like dirt*, the analysis focuses on the verbal and non verbal communication that occurred during labour. It highlights the dirtiness of the women and their body products, including the baby. In many instances, this is done without the staff appearing to have to think, it is automatic. Women are still being constructed as powerful and dangerous, but particularly to the health professionals. The rituals that the parents participate in are an acknowledgement that the birth is a rite passage for the families. However, these rituals follow the hospital script. Because of their perceived dirtiness, the women and their families are kept in their place, while it is obvious that the doctor is in charge of the birth process. When the doctor is not present, it is the midwife who takes

control and manages the birth, the woman, and her family.

In *Chapter 9: Labour and birth is dirty work*, I explore the discourses and discursive practices surrounding the women and the midwives as the labour progresses. The woman is dirty and doing dirty work for several reasons: she is continually leaking throughout her labour; she is on the margins; she is about to deliver / excrete a dirty being who will also be on the margins; and, she is doing hard physical work. Following the birth the woman needs to be cleaned, but now she is considered the most appropriate person to do it. Similarly, the midwife is doing dirty work and incorporates the dirty work into her midwifery work. She controls, contains and cleans the dirt that occurs during the birth.

Because of the focus on dirt, there is a corresponding focus on protecting the health care worker from the dirt. Because of the midwives` role in relation to dirt, they act as a protective layer for those health professionals who have more status and power than they do. The contradictions and the inconsistencies displayed by the health professionals in relation to the contaminating blood and body products are discussed.

In Chapter 10: Birth dirt, I present an overview of the findings of the study, including what birth dirt is and how at times it may overlap with "sick dirt" (Littlewood, 1991, p. 168). Birth dirt exists but its exact nature will vary depending on the time, the place, the culture and the discourses which surround birth. However, whoever does the dirty work will be in a subordinate position. This final chapter reviews some of the main concepts relating to pollution and illustrates that the 'relations of power' in the three different time frames have remained the same, although the form and function may have changed. This chapter reiterates some of the points made in the earlier chapters, most importantly that women's bodies were constructed as dirty and dirtier than men's bodies with the dirt relationship clearly being a power relationship. The midwife as a mediator and in a paradoxical position of powerful to powerless is discussed briefly, while her importance in managing the dirt by controlling, containing and cleansing the dirt of birth is made explicit. There is a more theoretical discussion on the dirt of birth and how this has related to the various items / products which were considered dirty in the vignettes. The methods of sanitising birth are examined, while the implications for women, the health professionals, but particularly the midwives, and society are suggested.

There was one other important goal set for any research that would develop from this topic. This was the need to write the results in a 'plain language' version of English, so that they would be accessible and understood by consumers, and a variety of professional groups, but particularly midwives. This goal became more necessary, and more desirable, when the decision was made to use discourse analysis, a methodology renowned for its use of strange terms, particularly those used by Michel Foucault. The use of 'old', and translated texts in my analysis further strengthened my desire for 'plain language' in the thesis.

CONCLUSION / SUMMARY

This chapter has introduced the thesis, *Birth dirt: Relations of power in childbirth*, to the reader and presented a broad outline of the study. The origins of the study have been acknowledged as has my own personal view of the world which influenced the thesis` conceptualisation and development. Feminism and its` influence on the research has been explored, while the importance of authoritative knowledge, which is explicit throughout the study, has been highlighted. The sociological and practical aspects of the use of uniforms / costumes have also been presented.

CHAPTER 2

GETTING THE DIRT ON BIRTH

INTRODUCTION

In this chapter the factors which influenced how the research was conducted are discussed. Initially, the study was directed very broadly at discovering and exploring the discourses surrounding childbirth. This original study design was influenced by feminism, midwifery knowledge, and Foucauldian concepts. I believed that visual methods of data collection, analysed using discourse analysis would expose new understanding and insight into power relations in birthing. As the study evolved the focus sharpened, and the study narrowed to the discourses surrounding who and what is clean and who and what is dirty. As this direction became clearer, both professional and consumer texts were added to the study. This added an historical component to the study, influenced by Foucault's concept of genealogy.

It is now many years since I first read Foucault's (1975) *The birth of the clinic: An archeology of medical perception.* This book has remained a strong influence on how I perceive the world in which I work. Many of Foucault's other works were read and incorporated into my understanding of society, health care delivery and the professions. The subtitle of the thesis owes its origins to Foucault's (1994a, p. 291) phrase "relations of power". While Foucault's understanding of power and the clinical gaze had been influential in my choice of study design, his work became even more important when I recognised and accepted the centrality of women's bodies in the analysis of the discourses surrounding labour. Initially, I had 'resisted' the development of a thesis that focussed on 'the body'. Because of the Foucauldian influence on the thesis, this chapter includes a section on Foucault and some of his concepts as these are used in the thesis.

MICHEL FOUCAULT

Michel Foucault, the French post-structuralist philosopher, is an important influence in many disciplines: psychiatry, philosophy, history, sociology, penology, medicine,

linguistics, literature, cultural studies, and feminism. Although Foucault (1966) was concerned about methodological issues, he did not provide clear guidelines for his methodology. However, he has been used to guide research, for example, Rose (1985) and Hacking (1991), while others have discussed ways of using Foucault's methods (Kendall & Wickham, 1999; Shildrick, 1997; Wearing, 1996). Although used by many feminists (Grosz, 1990; Sawicki, 1991; Weedon, 1987), Foucault is criticised for being "gender blind" (Wearing, 1996, p. 34). He is also "dense and subject to multiple interpretations" (Ritzer, 1981, p. 463) with his position changing over time. As Foucault (1972/1982, p. 17) himself noted: "Do not ask who I am and do not ask me to remain the same". This is further complicated for non French speakers who must attempt to access his work in translation.

Danaher, Schirato, and Webb (2000, p. 3) have described the range of influence of Foucault, commenting that he has been utilized by "professionals in areas such as medicine, public health, social work and welfare; law economics, business management and government; criminology and prison management; media, education, architecture, art and journalism; and computing, public relations and ecology". Foucault's work was concerned with many issues, but probably the most recognised themes are the history of ideas, power, knowledge, the human body as a subject, especially as this is related to sexuality, surveillance, discipline and ethics. Foucault's major works have been devoted to particular topics but the themes were interrelated. The Foucaudian concepts particularly important to this thesis are: panopticism, the clinical gaze, power / knowledge, history of ideas, and practices related to the body.

Panopticism is a concept based on Bentham's Panopticon architectural design in which a central prison tower is surrounded by a building containing individual cells (Foucault, 1977/1991). Each cell has a window through which a supervisor in the tower can view the individuals in their cells without being seen. The cell inmate is invisible to other inmates. Because of the lighting in the cells, the person in the cell is constantly visible, but never knows when being observed. For Foucault (1977/1991, pp. 200-201) the inmates' lateral "invisibility is a guarantee of order" with the major accomplishment of Panopticon to "induce in the inmate a state of conscious and permanent visibility

that assures the automatic functioning of power". The result is that the inmates modify their behaviour just in case they are being observed. In the Panopticon, the central tower is a symbol of the authoritative gaze, rather than the gaze of individual persons. It is irrelevant who operates the Panopticon "machine" as the result is still an "homogeneous effects of power" (Foucault, 1977/1991, p. 202).

The efficiency of panopticism is that the surveillance is now being done by the person being observed and the resulting power relationship is inscribed in the observed. According to Foucault (1977/1991, p. 205), the Panopticon diagrammatically presents "a mechanism of power reduced to its ideal form", while it can be applied to many situations: reforming prisoners, treating patients, instructing children, restricting the insane, supervising workers, finding work for beggars and idlers. This disciplinary power is a form of power which uses various "instruments, techniques, procedures, levels of power, [and] targets", thus demonstrating the "anatomy of power" (Foucault, 1977/1991, p. 215). Disciplinary power serves to infiltrate, link, and sometimes undermine, or extend other forms of power, thus providing a boundless "distribution of the power relations" (Foucault, 1977/1991, p. 216).

Not long before his death Foucault re-evaluated his understanding of power and refined it (Rabinow, 1994). He identified two forms of power. Initially, when Foucault (1976) wrote of power, he also wrote of resistance. For him, the use of power was related to achieving specific aims and objectives. He questioned whether resistance was inescapable and "inside' power", but considered that power relationships are dependent "on a multiplicity of points of resistance: these play the role of adversary, target, support or handle" (Foucault, 1976, p. 95). For Foucault (1994c), resistance was a creative process. Foucault expanded upon these concepts in an interview. He considered that "relations of power" were human relationships, referred to them as "strategic games", which were productive and could be verbal, amorous, institutional or economic, where "one person tries to control the conduct of the other", while the other person tried to prevent their conduct being controlled (Foucault, 1976, p. 94; 1994b, pp. 291-292 & 299). Most importantly, Foucault (1994b) considered that the relations of power could be

unstable, modified, or reversed, while they were mobile and were never fixed. He used the terms "struggle"and "possibilities" to indicate the changing nature of "strategic situation[s]" with others and commented that "power relations are obliged to change with resistance" (Foucault, 1994c, p. 167). Later, Foucault (1994c, p. 168) made the point that the form of the resistance "always relies upon the situation against which it struggles".

The second form of power which concerned Foucault (1994b, p. 299) was "the states of domination". He believed that this was the form of power which most ordinary people thought of when referring to power. Linking both forms of power is the "technologies of government" and broadly includes how institutions, including the family, are supervised (Foucault, 1994b, p. 299). Foucault considered the "technologies of government" required analysis as they were the method by which domination was initiated and sustained. Thus, any analysis of power had to include "strategic relations, techniques of government and states of domination" (Foucault, 1994b, p. 299).

Foucault had a particular way of describing how institutions achieved their power. For example, he used the term "games of truth", meaning the rules, principles or procedures that were used to produce the truth, while it is a game because someone wins or looses, or is "considered valid or invalid" (Foucault, 1994b, p. 297). Foucault (1994b, pp. 281-282) had originally seen these games as "coercive practices ...or theoretical or scientific games". The former he described in his books on madness (Foucault, 1967/1997) and the prison system (Foucault, 1977/1991) with the discussion centred around the social control of people (the insane, the poor, those unable to work, the unemployed, the sick, and criminals). Initially, the insane had lived freely within their communities, but later, with criminals and vagabonds, they were excluded to the margins of society and incarcerated in the old leper houses, or consigned to a "Ship of Fools" and taken from town to town (Foucault, 1967/1997, pp. 7-8).

The theoretical or scientific games are described in his book on medical perception with the central themes being the emergence of modern medicine which is

structured around "the normal and the pathological" together with the importance of the "clinical gaze" (Foucault, 1975, pp. 35 & 108). The "clinical gaze" was, for Foucault, both the clinical setting, the hospital, and the new way in which medicine operated by directly observing the patients. The examination is a combination of an "observing hierarchy [and] a normalizing gaze, a surveillance that makes it possible to qualify, to classify and to punish" (Foucault, 1977/1991, p. 184). Foucault (1977/1991, pp. 184-185) considered the examination as "highly ritualised", a powerful ceremony and a method of establishing the truth, while it subjugated and objectified those subjected to the "normalizing gaze". The "art of surveillance" (Foucault, 1977/1991, p. 172) is necessary to ensure that any deviations from normal are detected and reported to the relevant authority, in this thesis the medical staff.

'Discourse' is a term which has a long history, but in our age it is inevitably linked to linguistics, cognitive psychology and Foucault. Foucault is one of the main influences on the method of discourse analysis and this is discussed in the next section.

DISCOURSE ANALYSIS

Discourse analysis is a relatively new research method within the nursing/midwifery professions. It has recently become a more popular method with these professions in Australia, however, with several authors (Cheek & Rudge, 1994; V. Lane & Lawler, 1997; Raftos, Jackson, & Mannix, 1998; Rudge, 1999; Schmied & Lupton, 1999, 2001; Street & Kissane, 2001) undertaking work which has used this technique. Research using this method has been applied to various health situations and is particularly useful when gender influences outcomes. For example, Lupton (1994) applied discourse analysis to AIDS and discussed how it is presented in the news media; Davies (1994) used the method to analyse gendered primary school classroom practices; Miles (1993) applied the method to research on women, power and their use of safe sex practices, while West (1984) applied the method to the interaction that occurs when the doctor is a 'lady'. Hewison (1993) was one of the first to suggest it has utility for midwifery. Silverman (1993, p. 121) noted discourse analysis is concerned with a broad spectrum of activities in which the concerns of "conventional social science", such as, gender and social control are apparent. For Silverman (1993, p. 124) discourse analysis is an appropriate method for providing

"insights into institutional talk".

One of the most challenging aspects of discourse analysis is the different ways in which the terminology is defined and the methodology applied. According to Potter and Wetherell (1987, p. 6), this is the result of concurrent developments in the study of discourse occurring in a variety of disciplines: "psychology, sociology, linguistics, anthropology, literary studies, philosophy, media and communication studies". It is interesting to note that feminist studies are not included in their list although feminists have been at the forefront of this research method. (See, for example, Cixous` (1981) Sorties, Canto's (1986) The politics of women's bodies: Reflections on Plato, and Spelman's (1982) Woman as Body: Ancient and contemporary views.) Discourse analysis has as its focus the sociocultural and political world. According to Lupton (1992, p. 149) the identifying characteristic of discourse analysis is "its goal in identifying cultural hegemony and the manner by which it is reproduced". As a result of the various disciplinary approaches, there are many ways of 'doing' discourse analysis and no clear and agreed method or methodology identified. The common thread in all the approaches, however, is the privileged position of language and its structuring effect together with an interpretative and reflexive analysis (Burman & Parker, 1993). Rose (2001, p. 139), however, considers that two forms of discourse analysis, with "different methodological emphases", developed from Foucault's work. One form focuses on the discourses as presented through visual images and visual texts, while the other is more involved with the practices of institutions. Rose (2001, p. 140) acknowledges the "distinction is not clear-cut" with examples of the combined approach not difficult to find.

What is discourse?

'Discourse' because of different approaches and uses of the term, has a variety of meanings depending on who is using it. For example, according to The Penguin Macquarie Dictionary (Arthur Delbridge, 1986, p. 171), "discourse" has two meanings: "1. communication of thought by words; talk; 2. a formal discussion of a subject in speech or writing, as a dissertation, treatise, sermon etc". A feminist dictionary provides a contradictory definition: "For women, ... [discourse] usually means conversation, not written work" (Kramarae & Treichler, 1985, p. 125). While Ardener (1975) postulates that the reason men feel comfortable with public discourse and women do not, is because both the form and what has been encoded is controlled by men. Both these points are illustrated by the midwives` change of shift 'handovers'. The verbal 'handover' is colourful, graphic and at times very funny. In contrast, the written reports are dry and staid, while the language used is that of obstetrics. A linguistic definition of discourse is "language above the level of the sentence" while in semiology, it is "a set of related utterances" (Cameron, 1985, p. 189). Both of these definitions are fairly narrow and limited, while a sociological perspective is much broader: "discourse ... is a domain of language use, structured as a unity by common assumptions. There may be competiting discourse and discourses will change over time" (Abercrombie et al., 1984, p. 70).

This definition transforms the neutral "talk" of the mainstream dictionary and there is the possibility and the probability of discourse being a source of conflict. Lupton (1993) is very clear on this point and believes that individuals are able to oppose the dominant discourses and to construct alternative discourses. Foucault considered discourse complex, and unstable. It was

... both an instrument and an effect of power, but also a hindrance, a stumbling-block, a point of resistance and a starting point for an opposing strategy. Discourse transmits and produces power; it reinforces it, but also undermines and exposes it, renders it fragile and makes it possible to thwart it (Foucault, 1976, p. 101).

Foucault's concept of discourse is of a many faceted process, while Parker (1992, p.1) is explicit in his notion of discourses: they "reproduce and transform the material world". Macdonell (1986) proposes that there are hierarchies of discourses, which may differ from institution to institution and may vary even within the institution. For example, it is probable that the discourses of labour are different in a birth centre from those in the

delivery suite. The most obvious discourses during childbirth are the dominating medical model of childbirth and the lower-ranked normal life event model of childbirth, which is sometimes referred to as the midwifery model (H. Callaghan, 1996; Rothman, 1984; Steiger, 1987). Macdonell (1986) believes that gender and class may effect a discourse, but this is done by taking a stand against other discourses.

How are discourses identified?

Parker provides a detailed method of identifying discourses and provides seven criteria which deal with various levels of discourse analysis.

- 1) A discourse is realised in texts
- 2) A discourse is about objects
- 3) A discourse contains subjects
- 4) A discourse is a coherent system of meanings
- 5) A discourse refers to other discourses
- 6) A discourse reflects on its own way of speaking
- 7) A discourse is historically located (Parker, 1992, pp. 6-17)

Parker (1992) believes there are three other auxiliary criteria which should be the focus of research: institutions, power, and ideology. For Parker (1992, p. 17) "the most interesting discourses" are those which support institutions as these discourses are reflected in the "material basis of the institution". Discourses and power in an institution need to be considered together as they both support the power relations within the institution (Parker, 1992). However, the increase in the use of discourse analysis has almost seen the demise of the category of ideology (Parker, 1992). Ideology is considered important, but there are two important aspects to it: not "all discourses are ideological", while some discourses "tell the truth" (Parker, 1992, p. 19) (original layout). For Parker (1992) the importance of an ideology can be seen in its effects and the relationships which result in a particular place, and in a particular time.

Using Parker's criteria, labour talk, that is the interaction that occurs between the labouring women, their families and their health care providers, is a useful focus for discourse analysis. The birth occurs in a hospital, an institution and the woman is in the transition phase to another institution, the family and her role as mother. There are power differentials between the medical practitioners and the midwives and between the health

care providers and the women and their families. There is the power the hospital has as a major health facility or institution and the powerlessness of the woman as an inpatient within that institution. Birth is surrounded by several competing ideologies, these include medical technology, parenthood, motherhood, professions, gender, active birth, active management of labour, homebirth, and normal or 'natural birth'.

The basis of the study of discourse is a critical analysis of how language is utilised to reproduce the dominant themes and ideologies of our society. The dialogue and the language used will vary according to the specific culture or subculture in which it is set and the social positions or status of those who are using it. For example, the language of childbirth is distinctive and is used by the health professionals and to a lesser degree, by the women and their families.

Discourses assist in the creation of various practices and yet at the same time are essential to the continuation and reinforcement for these practices. For Foucault (1972/1982, p. 49) the analysis of discourses leads to "a loosening of the embrace, apparently so tight, of words and things" and ultimately provides the "rules proper to discursive practice ... [and] the ordering objects". Foucault (1972/1982, p. 49) considered discourses more than just signs, and "this *more* ... renders them irreducible to language (*langue*) and to speech". This research explored these processes. This study demonstrates how discourses surrounding birth, particularly those in relation to who and what is clean or dirty, are essential to the creation and the reproduction of these discourses. In Fairclough's (1992, p. 4), opinion, "any discursive 'event' (i.e. any instance of discourse) is seen as being simultaneously a piece of text, an instance of discourse practice, and an instance of social practice". While for Lupton (1994, p. 29) "discourses are the verbal products by which ideologies are expressed, produced and reproduced".

What is text?

For Parker (1992, p. 6) if any form can be given an "interpretative gloss", then it is a text. He provides some obvious and not so obvious examples of text: "speech, writing, nonverbal behaviour, Braille, Morse code, semaphore, runes, advertisements, fashion systems, stained glass, architecture, tarot cards and bus tickets" (Parker, 1992, p. 7). For Fairclough (1992) the term 'text' is used in the linguistic manner and refers to any product which is either written or spoken, but he has extended the term to include visual images. A similar list to Parker's is produced by Lupton (1993, p. 3) who describes texts as "any tangible forms of communication" which can be depicted in a written format. She also provides a specific list for people interested in medical discourses:

... medical textbooks, hospital records and admission forms, popular selfhelp manuals, novels, television programs about health issues, articles in medical and public health journals and popular newspaper or magazine articles, as well as the transcripts of conversations between doctors and patients or interviews between researcher and subject (D. Lupton, 1994, p. 18).

Waitzkin (1991, p. 37) who is well known for his critique of medicine uses "an expansive definition of text" in that it may be either "a written or spoken unit of language" but must be able to be appraised. This definition by Waitzkin implies that critical analysis is important. In fact, Waitzkin (1991, p. 37) advocates the techniques of "deconstruction" in promoting understanding of texts specifically related to medical discourse.

Discourse analysis and visual data

As Kress and van Leeuwen (1996) have noted, language was considered the unchallenged medium of communication, but now it is just one of the many mediums of communication. These authors (Kress & van Leeuwen, 1996, p.32), note that "visual communication is always coded", but it is transparent to members of the culture who know and have internalised the code. They acknowledge that sometimes we know it "passively" and have difficulty in verbalising what we do when we read the code. Kress and van Leeuwen (1996, p. 12) believe that analysis of visual communication is an important aspect of the critical disciplines as they consider all visual images "within the realm of ideology". This stance is similar to that of Parker (1992) who considers that discourse analysis implies a

critique of ideology.

In this research, I have taken the stance that visual analysis, when combined with a verbal analysis, will provide a sounder base for critiquing texts than one which depends only on the verbal medium (Chaplin, 1994). Chaplin (1994, p. 88) notes that even when the text contains only written words, the "layout and typography draw upon a visual repertoire", so the text is always visually coded. For example, the headings, words that are in bold print, or in italics, or in a different font type, or in a different case emphasise the importance of the text, or give it another meaning: these differences result in 'highlighting' particular aspects in the written work. Where illustrations or photographs are positioned, and what the caption says, are all essential to any analysis. This is sometimes ignored in an analysis of texts. For Chaplin (1994, p. 89) "images may signal both iconically and symbolically", while colour is often symbolic. Iversen (1979) takes this further and notes that linguistic signs, or words, have iconic characteristics due to the rationale of using particular sentence structures. For example, who or what takes precedence in the sentence. In English, the most important person or item is always placed first.

This equates well with Parker's (1992, p. 1) belief that language is "structured to mirror power relations" but often we can see no other way of existing. When examining texts it is important to examine the composition of the text, particularly when it is a combination of verbal or written language and visual images. Most of the time the two different components will act together to reinforce and reproduce institutions, power relationships and ideologies. Sometimes there will be competing discourses in a text. When examining data visually, it is important to note what is the most prominent aspect of the text, what is the relationship between the images within the text and what these images suggest. What is represented in the text and what is left out often influences our interpretation of the data.

THE USE OF THE VISUAL

A history of still and moving images as data

The ability of the camera to enhance observation has been known for centuries with Leonardo da Vinci describing the principles of its use (Collier & Collier, 1986). The modern era of the camera is considered to have commenced with Johann Heinrich Schultze

in 1725 when he discovered the ability of silver nitrate to turn black when exposed to light (Matrix, 1983). Progress was slow till in 1829 Louis-Jacques-Mandé Daguerre produced a permanent image, commonly known as daguerrotype. The camera and the photo-chemical process continued to be developed, with George Eastman devising a method of mass production, then following this with "the first piece of real photographic film" in 1889. The production of motion pictures became possible in 1895, while video recording was discovered by John Baird in 1928 (Matrix, 1983, p. 628). Cameras, films, and video tapes have continued to develop and photography has become relatively easy and cheap. The Colliers (1986, p. 8) believe that many people consider "the camera cannot lie", while the impact of the camera can be seen in our altered perception of the world. For Sontag (1977, p. 15) "photographs furnish evidence".

Filming as a method of data collection has been widely used for decades especially among anthropologists, sociologists, journalists, and more recently by psychologists, psychiatrists, and nurses/midwives. The various disciplines have used both still and moving images. In 1895 Louis Lumière produced a film, *L' Arivèe d'un Ttrain en Gare*, which included a segment of people walking past his camera unaware of its function. According to Weinberger (1994, p. 4), this was the first, "purest non-fiction film" as the participants were neither actors, nor self conscious. However, he points out that Félix-Louis Regnault is usually recognised as the first ethnographic film maker because in the same year he filmed a Wolof woman as she produced a ceramic pot (Weinberger, 1994). This is because the ethnographic film is "a representation of a people on film", and although this is an "unlimited definition", he contends that the people are always other people, not ourselves (Weinberger, 1994, p. 4). The result was film makers travelling the world to portray other people's behaviours (Weinberger, 1994), or "cultural patterning" (De Brigard, 1975, p. 13).

Around the same period, the 1890s, the graphic photographs of New York slums taken by Jacob A Riis, a reporter, are credited by Chaplin (1994) as being the beginning of social science in the United States of America. Equalling disturbing photographs were used from 1907 to 1918 by Lewis W. Hine, a sociologist, to fight child labour (Chaplin, 1994). Stasz (1979) has commented on the early encounters by sociology with film. She examined early issues of the *American Journal of Sociology* and found that between 1896 and 1916, 31

articles used photographs to illustrate and provide evidence for their discussions (Stasz, 1979). For Stasz (1979, pp. 131-133), the demise of film as a medium in sociology was due to a variety of factors and she suggests some possible causes: editorial decisions, economic rationalism, the perception of sociology as "a pure science", "responsible" and "scientific", and contamination of photography by females so it was "devalued and seen as frivolous". Stasz's examination of this early phase of visual sociology indicates that the photographs were often manipulated to suit the author's needs. This is a topic that John Tagg (1980; 1984, p. 11; 1988) writes about frequently: photography does not always represent the truth, nor reality, but is dependent "upon the institutions and agents which define it and set it to work".

Film became marginalised within sociology. The story was slightly different in anthropology where by the 1920s the "representation of other people" could be categorised into three genres: a focus on aspects of culture in anthropology, romantic stories of indigenous people, or documentaries which were "somewhere-in-between" (Weinberger, 1994, p. 5). Although there was increasing technical advances in filming, there was also a "reluctance ... to take film seriously" (De Brigard, 1975, p. 14). Mead (1975, p. 5) saw this as a bias towards "verbal descriptions". The period between the World War I and II was one of "isolated achievements" in academia, with the development of an audience for documentaries which focused on the social (De Brigard, 1975, p. 14). In 1952 the International Committee on Ethnographic and Sociological Film was formed with the discipline being reinterpreted and growing rapidly 21 years later (De Brigard, 1975). For De Brigard (1975, pp. 14-15) ethnographic film, which was based on colonialism, has "now turn[ed] the camera on ourselves". For the Colliers (1986) anthropology does not use visual records well and has not been able to bridge the gap between the visual and the verbal.

It was not until the 1970s that the use of still and moving images were rediscovered by sociologists (Stasz, 1979). Since then there has been an explosion of the use of the visual in sociology and anthropology. Goffman's (1976) *Gender advertisements* has become a classic, while Mead's (1965) *Family*, and Cohn and Leach's (1987) *Generations: A universal family album*, have continued the tradition of combing text and visual images.

More recently the print and television media, and movies have been analysed using feminist and critical approaches, for example, *Defining women: Television and the case of Cagney and Lacey* (D`acci, 1994), *Women in mass communication* (Creedon, 1993), *Psychology, science fiction and postmodern space* (Parker, 1996a), and *Women and soap opera: A study of prime time soaps* (Geraghty, 1991).

Current use of film

Research using video tape to collect data has not gained wide acceptance even in our technological age. The reason may have something to do with the cost of the equipment and the difficulty in organising the study setting. According to Gross (1991, p. 658), because the technology has only recently advanced, it is now possible for "less experienced investigators with limited budgets" to use this method. Another possibility is that researchers believe that the participants would be too self-conscious with a video tape running. According to visual sociologists, Cheatwood and Stasz (1979) people react to a camera over a prolonged period in the same way that animals do: they ignore it. They also suggest that if people know they are being photographed, especially if they are working, who is operating the camera and why it is being used, they can be photographed without the need for the photographer to be hidden. That is, the photographic results obtained over long periods will still be meaningful. This was the experience of J. Donoghue (Associate Dean, University of Technology Sydney, personal communication, 25 March, 1995) when she video taped nurse educators and their students. Mead (1975) makes a similar claim. Although Cheatwood and Stasz (1979, pp. 267-268) acknowledge that the camera is an intrusion in some situations they believe that the main concern of researcher "must be a sensitive and sincere concern for his or her subjects".

A study by Campbell (1982), who video taped medical consultations for practitioner assessment purposes, found that the patients considered the technique acceptable and non-intrusive. This study design was used by Quam (1990) but she added a six point Likert scale, to improve the assessment of the patients` comfort. She found 87 percent of the patients were comfortable or very comfortable during the visit with seven of the patients having seen their doctors previously and not noticed any difference in their behaviour (Quam, 1990, p. 397). The same study found that patients preferred the video taping of

their visit to having a supervising doctor present in the room (Quam, 1990). Another study, Wiemann (1981), concentrated on conversational behaviours and found that there were no significant differences in relaxation or anxiety levels due to reactivity from the observational technology of video taping. Wiemann found that anxiety dropped significantly in the first minute and then stabilised. Bottorff (1994, p. 252) found that the participants in her study "forgot about the cameras". To improve validity of the data, Gross (1991) suggests delaying the analysis till some time into the data collection.

The major risk of using a video camera to obtain data, according to Gross (1991) is that the researcher will be, to use Morse's (1993, p. 267) term, "drowning in data". My own study restricted the sample size to minimise this problem. Morse (1991) considers this a problem of qualitative research and recommends a design that reflects the necessary sequence of data collection and the avoidance of over sampling. Collier and Collier (1986) make similar comments and stress the importance of organising the data and maintaining it in sequence.

Justification for video taping

The rationale for choosing video taping rather than other methods of data collection were consistent with the objectives of the study, that is, to identify and describe the discourses and practices of labour and how these discourses influence the woman's experience of labour. Video taping or filming of labour has been used successfully by various authors (Aderhold & Roberts, 1991; Jordan, 1978; S. McKay & Barrows, 1992; S. McKay & Roberts, 1990). It has also been used successfully when researching nursing activities (J. L. Bottorff & Morse, 1994; Kihlgren, 1992; Lotzkar & Bottorff, 2001). The method allows the full complexity of the discourses present in the environment to be studied. These discourses were discovered in the verbal and non-verbal communication which occurred during the labour and delivery process and the behaviours that accompanied the production of language, and/or clinical practice.

Direct observation of labour was rejected as intrusive, it would require extensive note taking over a prolonged period and a selective description of the labour process may be the result. Video taping permits the capture and retention of events as they actually occur.

These may be returned to repeatedly for clarification and verification of the analysis. Jordan (1993, p. 107) in a revised edition of her cross-cultural study on birth admits to being a victim of her "own cultural construction of the birth event" and described Yucatan births incorrectly in her first edition. Only when reviewing the visual recordings of the births did she realize what had occurred.

Direct or participant observation may also have a detrimental effect on the woman's labour. Naaktgeboren (1989) states that all mammals, including humans, require a feeling of safety in labour and removal of this safety element, will result in the inhibition of uterine contractions. In a discussion of three research trials, Keirse, Enkin and Lumley (1989) have demonstrated that the presence of a supportive companion in labour will have a positive affect on labour and decrease some negative processes and outcomes. The presence of a relative stranger, however, who attempts to separate herself from the interactions occurring during labour, may have negatively affected the labour itself and was a major concern. Moreover, from a technical viewpoint, observations via human eyes "are narrow of field and capable of witnessing whole actions only by constantly shifting their focus" (Collier, 1979, p. 271). John Collier also states that the observer is consciously and unconsciously selective in what they comprehend and irrelevant or disturbing data may be edited out. Higgins and Highley (1986, p. 119) also identify this phenomena and add that our auditory and visual senses have been "narcotized" by sensory overload. The human observer's capability of interpretation and recording is erratic over a prolonged period (E. Webb, Campbell, Schwartz, & Sechrest, 1966). Video taping permitted greater consideration being given to an interactive and analytical editing process and, therefore, there was less likelihood of removing essential data.

Because of the length of primigravida labours which may be greater than 24 hours, it was possible that the quality of the data, if collected directly by one researcher, would deteriorate as labour progressed due to tiredness and inattention. This would have been detrimental to the study.

Audio taping was also considered and rejected because of the numbers of people involved, the possibility of confusing sounds (many women are vocal during labour) and the difficulty in allocating the correct voice to a particular person. Interviewing as a method was not considered because to depend only on interviewing the participants involved in the birth process would yield individual perceptions of sections of the process rather than a comprehensive overview of the discourses of the labour process. According to Kehellear (1993, p. 5) unobtrusive measures, such as video cameras, "assess *actual* behaviour as opposed to *self-reported* behaviour" (original emphasis).

The unobtrusive nature of video taping was one of the major benefits to the study. While the participants agreed to the use of the camera and were aware of its presence in the room, both the camera and its operator were separate from the labour and delivery process. According to Mead (1975, p. 9) once the camera is set up and left undisturbed, it becomes part of the "background" without the participants being continuously self-conscious of its existence. Higgins and Highley (1986, p. 121) in their photographic interviews of mothers of infants with congestive heart failure, found that "the act of photographing had a value of its own, such as showing interest and sympathy and caring". The study was conducted in a manner which maximised this potential.

A major factor in the selection of the video camera as the method of data collection was its ability to preserve concurrently the context of an interaction, with many of its nuances, the behaviours, the verbal and non-verbal communication together with a two-dimensional perspective of the physical environment. While many interactions may be readily understood without all these components, it was anticipated that because of the possible complexity of the interactions, the institutional nature of the setting with its own subcultures, that both a visual and written record would be beneficial. For example, do the positions of the people involved in an interaction demonstrate equality, or has someone assumed a power position? It is not unusual in hospitals for a discussion to occur with the patient prone in a bed and the health provider standing over them.

A study (Harrigan, Gramata, Lucic, & Margolis, 1989) of doctor-patient interaction on the telephone, found that women patients rated the doctors more positively. Women perceived the doctors as more empathetic, dominant, and calm than the males, but the authors suggested that this may have been related to "greater compliance and cooperation on the

part of female patients" (Harrigan et al., 1989, p. 91). Harrigan et al. (1989) believed that the vocal behaviour was a major part of the interpretation of what was said in the conversation. Silences, emphasis on particular words, the use of technical terms, voice pitch, rate and volume of speech all influence how the interaction is perceived. I considered it important to establish whether the non-verbal communication matched the spoken word, or if incongruencies were evident in the visual record. According to Argyle (1978, p. 50), "non-verbal communication can have five times as much effect on a person's understanding of a message compared with the words spoken". While Raphael-Leff strongly believes in the strength of non-verbal communication in labour.

[the woman depends] less on what is said than on how it is conveyed, reflecting her sensitivity to subtleties in the manner of relating by birth attendants. A woman in labour has a heightened awareness of non-verbal cues, listening to the tone rather than the words, sensing brusque roughness of touch or a disparaging glance, picking up unspoken 'vibrations' of anxiety, acceptance or disapproval ... (Raphael-Leff, 1991, p. 275).

A major section of each woman's labour related to her interactions with her health care givers. One of the characteristics of doctor-woman, doctor-midwife and midwife-woman interactions are the power differentials between the participants.

One of the deciding factors in the use of a video camera in the study, was Margaret Mead's (1970, p. 255) proposition that it was "scientifically unforgivable" not to use audiovisual technologies which provide a superior quality of permanent data. She believed that anthropology was "clinging to verbal descriptions" which were detrimental to the discipline while she had little patience with the failure of research projects to include filming (Mead, 1975, p. 8). Mead stressed the importance of data that can be analysed years later without a "screen" (Mead, 1970, p. 255). For Mead the 'screen' is created by written descriptions and complicated notations from the field. Later in the same article Mead illustrated her arguments with examples of photographs from Bali in which the authors (Bateson & Mead, 1942) had combined still photographs on trances with a brief descriptive text. It is obvious when viewing these photographs that such ritualistic and detailed physical behaviour could not be described adequately without the use of the photographs. Similarly, the video taping of labours appears to have the potential to reveal the symbolic and ritualistic nature of some of the behaviours, particularly from the health professionals.

Kellehear (1993, p. 74) considers that cultural themes can be assessed through "symbols and icons in film". While the video tapes of labour are not the films he was referring to, they contain many of the symbols and icons of our technological age and assisted in the analysis of the discourses of labour. This author also views audio-visual records as providing a "non-literate source of information about people, especially less literate and verbal groups" (Kellehear, 1993, p. 73). While the women in the study are not illiterate, nor do they have difficulty in speaking, they are disadvantaged during labour because of the stress of the labour process, their level of pain, and the resulting interference in their concentration and ability to speak for prolonged periods. However, interaction and communication still occurs.

Maxwell and Pringle (1983) comment on the remoteness engendered by watching a video tape of a scene compared to actually viewing the scene and consider this one of the disadvantages of video taping. However, in this instance it proved to be an advantage. The researcher has worked in the area of maternity care for the majority of her employed life. She is very comfortable, therefore, with her own subculture. It was anticipated that by viewing the video tapes, the researcher would distance herself more effectively from her cultural background and view the processes as texts to be studied. Crowley (1986) refers to this 'problem' as role confusion and notes the difficulty nurses have in separating the practice role from the research role.

The use of video tapes allowed an initial viewing of each woman's labour in its entirety. As a practitioner who is employed on eight or ten hour shifts, this was quite different to the way in which I normally see the labour and birth process, across a number of women.

Techniques for visual analysis

Various experts from diverse fields of enquiry have demonstrated or described methods of analysing visual data. For example, an important early work was Bateson and Mead's (1942) ethnography using photographs to analyse dancers in Bali; Goffman (1976) and his 'social portraiture'; Sontag's (1977) book *On Photography*; Berger's discussions on different ways of seeing and looking (1980;

1972); Collier and Collier (1986) provided an analysis of still and moving images; Ball and Smith (1992) provided an overview of analysing visual data; Parker (1992; 1996b) has provided a method which can be used for both visual and written texts; Chaplin (1994) has examined visual representation; Kress and van Leeuwen (1996) provide a 'grammar' for reading visual images; while Rose (2001) advocates a critical visual methodology. Semiotics, semantics, linguistics, feminism, communication and cultural theories, have influenced how we perceive and analyse 'our world'. While all of these provided insight into 'how to do' the analysis, the methodological approaches of Collier and Collier (1986), and Parker (1992; 1996b) were modified, combined and proved most helpful during the analysis.

Parker (1992; 1996b) provided a method for analysing text that can be used for both written and visual texts. His approach is based on Foucault's (1972/1982, p. 49) concept of discourse in *The archeology of knowledge*: discourses are "practices that systematically form the objects of which they speak". For Parker, the first step is to describe the objects in the written text and to redescribe the visual text so that they can be spoken about as items of discourse. The second step requires the analyst to freely generate ideas about the text and Parker admits that sometimes these ideas may seem bizarre. Because of this, he suggests that it may be helpful to do this with others. The ideas generated in this step may assist in the formulation of the framework for the analysis.

The third step is to systematically itemise the objects in the text during the reading process. If the text is a long piece of transcript, it may be necessary to work on smaller sections of text, or, on reading the text, note those objects that stand out for you as the reader. Parker considers the search for nouns, or implied nouns, in a text as an important part of the analysis. He considers it is necessary to determine what are the built in assumptions in the text and what type of relationships are set up in the text. The fourth step is to treat the talk or visual images as the object or objects and examine the ways in which the talk or visual images in the text constitutes the objects. It is important to recognize the choices that are set up in the text, about the various objects. The next step is to determine the type of objects that are important for the ideological functions of a text, that is,

the subjects. What type of persons are specified or addressed by the text? What are the different rights to speak for each of these subjects. This will provide a sense of the relationships between the different subjects in the text. Parker uses Althusser's concept of ideology with the individual as an agent of the structure of social relations and asks who is addressed by the text or how are we 'hailed' by the text. According to Parker, a text always positions you and calls you into a particular type of position or person, even if you do not want to respond. Parker asks what are the relationships that are set up between the subjects, addressees, and the addressor who speaks through the text. If the addressor is a source of authority it makes the text an authoritive text. Certain pictures of the world are developed by the relationships described in the text, while these pictures are required to make sense of our world. For example, what would happen if you do not follow the rules? What would this lead to? Characteristic of a discourse is the way it folds around and explicitly refers to itself at some point in the culture. It is reflected upon. People will turn around and speak about it as a way of speaking. This process will confirm that it is a discourse and not a theme. According to Parker, the meaning of Derrida's (1976, p. 158) statement that "[t]here is nothing outside the text" is that the discourses in the text refer to the wider text of what is happening in the world.

Collier and Collier (1986), in their text book on visual anthropology, have produced a four stage model for the analysis of images. They note that although the model has wide applicability it may require modification depending upon the research project. In the first stage they recommend viewing the complete data, looking and listening, to discover patterns. Collier and Collier (1986) consider the researcher's impressions and feelings are important and they should be recorded. First impressions are important as when viewing something new there is no limit to our sensory perception and impressions are vivid. Viewing the video as a cultural drama and responding to it by developing a context for the research, is another of their recommendations that was useful.

The second stage of analysis requires the evidence to be indexed, so the content of the data is known. This index must revolve around the categories "that reflect and assist your

research goals" (Collier & Collier, 1986, p. 178). The third stage requires a more structured analysis and Collier and Collier (1986) suggest asking specific questions that will lead to obtaining the necessary information. This stages appears to correspond to Lupton's questions which she considers necessary to identify the taken for granted ideologies.

The questions ...: what ideas, values, notions, concepts and beliefs are present in the texts, and which are absent? Whose voices receive attention over others? Whose interests are served by the reproduction of these ideas, values, notions, concepts and beliefs in the texts? How might the audiences` view of the world be influenced by the texts? What kind of stereotypes are perpetuated in texts? What norms and values are privileged over others? (Deborah Lupton, 1993, p. 29)

Collier and Collier (1986) also suggested that some form of statistical analysis may occur. Importantly, these authors recommend making detailed descriptions which can then be used to compare situations. The fourth and final stage of analysis consists of searching for the overtones in the data and noting the significance of details, returning to the original text and trying to respond openly to the data so that the patterns and their significance are 'seen' in their complete context. For Collier and Collier (1986) 'seeing' the data in its complete context is essential as without it the microanalysis can obscure the various patterns and structures.

Parker stresses the importance of realising that texts may provide different audiences with different discourses. Therefore, Parker (1992, p. 7) considers it preferable to "explore the connotations of texts ... with other people". Similarly, Collier and Collier (1986, p. 177) found that by using other people to assist in the analysis resulted in a clarification of detail, important questions were raised, conclusions were defined and "the interplay of ideas sharpening our examination of evidence and the precision of our analysis". Morse (1991) supports this process.

Doing the analysis

According to the Colliers (1986, p. 169), simply because a study is well executed, does not guarantee a satisfactory end to the study as "interpreting ... the field data ... can be more difficult". The analysis was difficult, partly because of technical difficulties related to the

sound, partly because of the final topic which necessitated researching different areas of literature, often translated texts, and my reluctance to be doing research on the body.

The original plan was for the master copies from each labour to be left intact with only the critical incidents copied and transcribed. Each video tape was viewed in its entirety and only relevant segments were to be copied. Examples of segments categorised as irrelevant segments were: the room was empty, or everybody in the room was sleeping, or the woman and her family are discussing personal matters, not related to her labour. The remaining sections of tape were to be a series of critical incidents. However, the quality of the sound on the original tapes was variable. Copying the tapes meant that the sounds and the visuals were further degraded with subsequent transcription of the tapes being extremely difficult. As a result the original tapes were used for the analysis with key sections transcribed. Extracts from these transcriptions can be found in Chapter 7. The transcriptions of what is occurring in the visual data is considered by John Collier (1979, pp. 169-170) as the "bridge between the visual, which ... [is] associate[d] with intuition, art, and implicit knowledge, and the verbal, which [is] ... associate[d] with reason, fact, and objective information". Although a certain level of analysis had occurred prior to transcribing the tapes in detail, it was only during the transcription that the full extent of the midwives` role relating to the 'dirt of birth' was understood. This was partly due to the ability of the eye to screen out much of the detail. It was only by repeatedly viewing the tapes that the movements of the actors, particularly those not central to the camera's view, were able to be detailed.

To facilitate the analysis, the tapes were viewed in different ways. The tapes were watched with the sound off. This was particularly useful when watching sections of transition and the second stage, as the noises inhibited concentration on behaviours and practices. It was also useful when tracking the movements of the participants as recommended by the Colliers (1986) in their third stage of the analysis. Mapping of people's movements indicated the focus of the health care professionals' attention in labour. Fast forwarding and reversing the tapes also provided a different aspect with the latter being particularly useful as it allowed the sequence of events to be given a different perspective. The original video recorder used for the analysis had a slow motion button which was also useful, but

the machine became inoperable and was replaced with another machine which did not have this facility. Impressions, themes, queries, language use, power relationships, institutions and ideologies were noted when viewing the tapes. However, a higher level of analysis was only possible once the decision was made to focus on how clean and dirty could be identified, then who and what was clean and who and what was dirty in childbirth as this reflected the power structures in these interactions.

According to Werner and Schoepfle (1987) the best way to view visual images is with limited editing. Thus, in retrospect it was not a great problem using the original copies for the analysis, as by using the fast forward or reverse facility till reaching the relevant sections, the tapes were viewed repeatedly. But, there was the possibility that difficulties may occur during the use of the tapes with the original tape being damaged and the data lost.

Several factors made viewing the tapes and note taking difficult: 'tired eyes' from staring at the tapes; the beginning of the woman's labour was often soporific making concentration hard; and, initially the different height levels of the TV monitor and my notepad. Rearrangement and modification of the furniture was done so that the TV screen and the notes, and later the transcriptions, were more or less on the same eye level, resulting in the analysis of tapes proceeding more easily.

Transcription was difficult and time consuming. Sometimes transcribing five minutes of video taped interaction would take over an hour. This was not only related to the problems with the sound, but to the detail, complexity and richness of the data found on the video tapes. The description of film and video tapes as a "supersaturated" form of data are apt (Collier, 1979, p. 176). During this phase there was much 'toing and froing' between the tapes and the transcription. Even when it was thought the transcription was complete, questions would arise during the analysis of the transcripts which necessitated returning to the tapes and again clarifying what was happening.

Analysis of the audiovisual text was done, using the verbal transcriptions concurrently to aid interpretation of the cultural drama being presented on the tape. The analysis searched

for the patterns and themes of the women's experience of labour, ultimately becoming focussed on rituals/practices surrounding cleanliness, as these demonstrated power and the status of the actors. This analysis was then compared and contrasted to the findings from each labour. The interpretations from each labour were synthesised into a unified sociopolitical analysis.

There are numerous discourses surrounding birth apparent in the video tapes. The more obvious ones are power, technology (not just medical technology), the family, the fetus/baby, pain and 'natural' childbirth. While viewing the tapes initially I was, to use Althusser's and Parker's term, 'hailed' by a midwife who dressed for birth wearing a face mask, safety goggles, sterile gloves, protective arm sleeves and a plastic apron (see illustration opposite). Thus, my midwifery knowledge and experience was an important factor in how the focus of the analysis occurred. This 'hailing' reminded me of how greatly the birthing environment had changed since my midwifery training which was commenced in 1970. Since then, in Australia we have had three distinct eras during which the way, or manner of dressing for birth changed. These eras are referred to as: 1. Medicalisation of childbirth; 2. 'Natural' childbirth; and, 3. Universal/standard precautions. Each of the different eras of dressing has developed from the prevailing and dominating discourses surrounding birth at that time, but despite labelling that implies difference, these eras reflect Foucault's (1972/1982, p. 74) "system of formation" in which "a complex group of relations ... function as a rule", and surround Australian childbirth. The 'complex group of relations' are the power relationships between the medical and midwifery professions, and the women and their families.

As several authors (Collier & Collier, 1986; J. Morse, 1991; Parker, 1992) have noted, the analysis process may be enhanced by discussions with other people. Throughout the study, supervisors and fellow students have offered suggestions and advice, queried the analysis, clarified direction and been used as sounding boards. One of my supervisors commented that it may be worthwhile examining the period of my midwifery training since it kept coming up in the conversation. This produced Chapter 6. These initial stages of the analysis led to an examination of the concepts of clean and dirty in childbirth. It was difficult to come to terms with this stage of the ongoing analysis. Initially, the study results

could have been on anything, but they were "not going to be on the body". It took some time to accept the importance of the body to the study analysis and results.

Concepts of cleanliness and dirtiness inevitably led to Mary Douglas` (1966/1992) work, *Purity and danger*, and other works which explored the concept of dirt in relation to the body. The final pieces in the jigsaw came with the finding of three pieces of work. One was by Littlewood (1991) who discussed the demarcation of 'dirt' work in hospitals between nurses and domestic staff. Littlewood (1991, p. 178), referred to the removal of bodily excretions as "sick dirt" which was so polluting that it could not be done by the domestics. Two authors, Murcott (1993) and Van Der Geest (1998) noted that children, the elderly and the sick require special treatment because of their faeces. Van Der Geest (1998), noted that the sick and the incontinent elderly people require professional assistance which is provided by a specific group of 'specialists' – nurses. Dirt in childbirth, or 'birth dirt', existed. It was not the same as 'sick dirt' and a group of 'specialists' – midwives – was required to manage it.

The discourses that became the focus of the study, however, are those related to how health professionals' dress for birth, together with the different perspectives of who and what is clean or dirty during birth. The drama surrounding dirt, together with its construction and the practices around it, enabled me to grapple with power relations and how these were played out at birth.

power and its relationship to knowledge, and the built environment may contribute to a "knowledge" of such things as how to behave, who may behave in certain ways and who is ascribed particular privilege. Such an approach emphasizes the "reading" of spaces by actors rather than the "writing" of behavioural imperatives within the physical structure of the built environment (Fox, 1997, p. 649).

The reading of the spaces was clearly important, and is similar to the Colliers` suggestion about mapping. Examination of the midwives` behaviour, demonstrated how closely it was linked to their unacknowledged role in childbirth as the 'dirty worker'.

Because discourse analysis places such emphasis on language and the words actually used, it was anticipated that transcription of key sections of the video tapes together with the

audiovisual text would benefit the analysis and the production of discourses. These sections can be found in Chapter 7. During the analysis of the transcribed vignettes, there were several questions asked. Who and what is clean? Who and what is dirty? How is the cleanliness or dirtiness demonstrated? Are universal/standard precautions followed? What is demonstrated as the health professionals' focus during the various practices? Does this focus interfere with the commonly accepted aim of achieving a safe birth for the woman and her baby? Is there ritualised behaviour present? Is power demonstrated by the actors? What level of power is apparent in each of them? How are the power differentials demonstrated? Are there any inconsistencies present? Was there anything else of importance or relevance in the transcriptions? What is the predominant message conveyed in the transcriptions? Does time have relevance for this transaction? Communication patterns were examined. The words, metaphors, slang and jargon were examined in relation to the context in which they are spoken. If there were periods of silence, an understanding of what the silence meant was sought. In a number of critical incidents, it was the absence of, or minimal use of, language which was important, but particularly when linked to practice.

Similar questions were asked of the professional textbooks and consumer texts. As mentioned earlier even the written word has a visual component to it and this was taken into account when analysing the texts. Questions were used to guide that analysis, for example: Who is the author of the text? Is it an authoritative text? Who is addressed in the text? Who is missing from the text? What is the stated aim of the text? Does it fulfill this goal? Who are the subjects within the text? What are the ideologies being presented in the text? What are the relationships being presented in the texts? Who holds the power in the texts? These questions were particularly important when examining the historical texts as they provided a particular view of the world. The consumer orientated texts provided a commentary on childbirth which sometimes was critical, but at other times was accepting of the status quo.

The writing of the results of the analysis focussed on how the health professionals, but particularly the midwife, treated and managed the woman as a source of dirt, the baby as a source of dirt, and the boundaries or margins of the body and their dangerous nature. Comparison of data from the other tapes is included. Equally important was a description

of the power relationships inherent in Australian childbirth. The doctor, when present, is the person in charge and is seen as 'clean'. The midwife is either assistant, or second in command, and in charge when medical staff were absent, but she is the dirty worker and therefore also 'dirty'. This is the paradoxical nature of the midwife's role: they are both 'clean' and 'dirty', but are protected from the dirt by their position in the institution which is demonstrated by their uniforms. The woman and her family have little control over the process. There is a high level of surveillance in childbirth with it increasing as medical technology 'advances'.

THE VIDEO TAPING SEGMENT OF THE STUDY

The original aim of this study was to identify the discourses surrounding birth in a delivery suite and a birth centre, then describe how these discourses influenced the experience of childbirth for women in ways which reflect and affect their status, role and position in society. The focus of the study was on the practices and interactions, particularly those involving forms of communication, and the use of language between the woman and her family and the health professionals providing her care. The desired outcome of the study was to contribute to improvement in maternity services by incorporating women's experience of a system which appeared to midwifery eyes to be preoccupied with a pathological perspective on childbirth. This was to occur by interpreting the discourses and practices of labour and using these to create a synthesis which illuminated the plight of women giving birth.

The design was formulated in response to the desired outcome of the study, that is, to generate knowledge that can improve the care given to women during labour and childbirth. This can only be achieved if women's experience of birth is understood, both from their experience as well as a professional perspective. The focus of the study was the interactions, particularly communication patterns, the use of language and the practices that occurred between the woman, her support people and health professionals. Nonverbal communication and practices were considered an essential part of these interactions. In this study, the video tapes were considered, not just as the method of data collection, but created texts for analysis. Given the context of the study, a research method which would explore

the labour and birth process and provide data for a comprehensive sociopolitical analysis of the situation was essential for the study.

The study was conducted in the delivery suite and the birth centre of a New South Wales hospital. The 530 bed tertiary hospital is located in the geographic centre of a regional city and is the major referral centre for a large area of the State. When the study commenced the delivery suite had 12 beds and a birth rate for the 1993 year of over 4400, the second highest rate in New South Wales and one of the largest in Australia. The birth centre had four beds and catered to 20 percent of the women who give birth at the hospital.

Pilot study

A pilot study was conducted to refine the methods of data collection and modes of analysis. The specific areas to be examined in the pilot study were the sample size, the unobtrusive versus obtrusive nature of videotaping, and the process of analysing the birth videos. It was anticipated that two participants would be sufficient for the pilot study as between them, it was anticipated they would produce 20 hours of data. These participants were to be the first two women who had their labours video taped.

A trial was conducted with three videotaped labours to confirm the size of the study sample and develop the processes to be used in analysis. The estimated sample size of ten to 15 women reflected the nature of qualitative studies which seek a depth and richness in the data rather than breadth and gerneralizability (Zyzanski, McWhinney, Blake, Crabtree, & Miller, 1992). Primigravida women, that is women having their first baby babies, were chosen, however, because it was expected that the discourses surrounding labour and birth would be more apparent in this group. This expectation was related to the longer labouring period for primigravida women (Malinowski, Pedigo, & Phillips, 1989) and the higher levels of interventions they experience during labour and birth (New South Wales Department of Health, 1994b).

One pilot tape was commercially produced and the other two were filmed by support persons who used hand-held video cameras. In each of these videos, participants are obviously aware of the camera, but it did not appear to alter their behaviour. For example, a number of behaviours and interactions demonstrated interesting power relations — the midwife in one video repeatedly refers to the woman as "a good girl" and the medical practitioner in the same video performs a vaginal examination without speaking to the woman. This pilot data confirmed the feasibility of video tapes of labour as a potentially rich source of data that could be analysed as text.

The study sample

The number of labouring participants required for this study was anticipated to be between 10 and 15 as it was expected that this would produce at least 100 hours of data. Pilot work tested the data collection and analysis method and also assisted in determining the sample size as the richness and comprehensiveness of each woman's experience was assessed. Text from the labour of ten women was considered sufficient to obtain a clear sense of themes and generate a dense analysis. The small numbers relate to the nature of qualitative research: "Because of the in-depth nature of such studies and the analysis of the data required, samples of people included usually have to be small and selective" (M. Hunt, 1991, p. 121). Examples of this strategy are: Kroska's (1985) study of five 'granny' midwives by interview and observation; Dougherty, Courage and Schilling (1985) studied body function and sex education by observation of three girl's classes; and, Bluff and Holloway (Bluff & Holloway, 1994) researched 11 women's perception of their care in labour using unstructured interview. Data collection was to cease when Morse's (1991, p. 135) test for adequacy was fulfilled: informational adequacy occurred if there were no "thin" areas, when the data was complete, it was of sufficient amount and relevant. Morse (1991) noted that many researchers refer to this as saturation and describe it as the stage when they 'hear' nothing new.

The final number of labouring women in the study was more than anticipated: 22 including the pilot tapes. This was necessary because of the difficulties in video taping the whole of the woman's labour to ensure sufficient coverage of early labour through to post birth. One of the 22 labour tapes was not used because the woman was not in labour, while six births were not videoed and another three were only partially videoed. This left 11 complete sets of labour tapes for analysis although all tapes, even the incomplete ones, were studied and drawn on in the analysis.

All the women were primarily cared for by one midwife each shift. Sometimes the woman saw only two midwives, but it ranged from two to eight. Often the other midwives were there for brief periods to relieve for meal breaks, deliver messages, or to provide care when the primary midwife was involved with another woman. Doctors were not required to see all the women and some women saw none. One woman was seen by five doctors. The number of support people, excluding the partner, ranged from nil to seven.

A complete non-identified list of the women who participated in the study is provided in Appendix 1. This list includes the date of participation, the site of their labour, the outcome of the labour and birth, and the number of video tapes generated. There is no similar list for the other support people, or the health professionals as the latter were referred to by their role, that is, doctor, midwife, or 'baby person'.

Inclusion criteria

Only 'competent' adults, that is, over the age of 18, were accepted into the study (See Ethical issues for detailed discussion). There was no exclusion from the study because of complications of pregnancy and/or childbirth. In fact, complications and/or variations of normal labour for the woman, produce patterns of care which extend discourses and therefore, the quality and variety of data.

Exclusion criteria

Women having their second or subsequent babies are often admitted to hospital in an advanced stage of labour and their length of labour is usually less than someone having their first baby (Malinowski et al., 1989). Therefore, only portions of their labours are observable and their requirements for care and/or interventions are often less, so, this group produces less useful and voluminous data for analysis.

Only women from an English speaking background were to be accepted. According to Jordan³ (1993, p. 3) "Childbirth is an intimate and complex transaction whose topic is

³ Although this book has two authors, the first section of the book is Jordan's original text.

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physiological and whose language is cultural". The methodology used in this research emphasised language and communication and so it was essential that all the participants were fluent and comfortable with the Australian version of English. The difficulty of communication for childbearing women from a non-English speaking background, living in Australia, is well documented (Commonwealth Department of Community Services and Health, 1989; Dugard, 1990; New South Wales Department of Health, 1994a; Northern Territory Department of Health and Community services, 1993; Rice, 1993; Victoria Department of Health, 1990; Western Australian Health Department, 1990). To use an interpreter service for these women and include them in the study, would have resulted in discourse analysis being applied to interactions where a first level of interpretation has already occurred.

Ethical Issues

It was not difficult to find examples of the use of video tape as a method of data collection, either in clinical practice (Murphy, 1984; Persutte, 1995; Quam, 1990), or in research (J. Bottorff & Varcoe, 1995; Hersen, Miller, & Eisler, 1973; S. McKay & Barrows, 1992), or, as an educational strategy (Mackenzie, 1995; S. Smith & MacLeod, 1981; Sulzbach, Burke, & Beck, 1988), often combined with clinical practice. However, these authors seldom discussed the crucial ethical issues which needed to be resolved before the video taping could commence. The issues that were obvious on even superficial consideration were: who could be considered participants, and what type of consent was appropriate for each participant, when would it be most appropriate to obtain consent, privacy issues and how to maximise protection of health professionals who participated, or declined to participate in the study. It had been suggested that only the women in the study should sign consent forms as it was their labour. I was uncomfortable with this approach as it devalued the service of the health care professionals who were also labouring/working. A similar argument could be used for the support persons.

Because the literature review on the use of images had demonstrated that video use was quite commonly used, I anticipated that some person/s or institution would have the answers to these questions and guidelines might already exist, but advice was difficult to find from institutional sources, or individual ethicists who tried to assist.

Protocols were developed which attempted to address all the ethical issues (Refer to Appendices 3-8 for the Information Sheets and Consent Forms). It was ultimately decided that if anyone appeared on the video tape, they needed to have given informed consent. The most assistance given in the development of the protocols came, unknowingly, from those who were most opposed to the study. Their questions and perceived difficulties with the study allowed me to incorporate modifications which addressed their concerns with the study protocols. Eighteen months after the study had commenced, work by Bottorff (1994) confirmed that the decisions made about the study protocols had been reasonable and were almost identical to those made by her when facing similar dilemmas.

Informed consent

All the participants (the women, their families and the health professionals) provided informed consent (see Appendices 3 to 8). To promote informed consent by effective communication between the participants and the researcher (Faden & Beauchamp, 1986; Sorrell, 1991), there was a section on the Information Sheets that related to questions and/or concerns the possible participants may have had about the research. Opportunity for discussion was made in the hospital antenatal classes, but the public nature of the classes themselves was inhibiting for most people. Potential participants were encouraged to think about the project, and if interested to contact the researcher.

The information given to the potential participants specified the nature of the research, what would be involved in participation, and that the care provided would not be altered because of the study. There was openness and honesty with the subjects regarding the research topic, the plan of action, the projected time table and the researcher's goals. The participants were informed of their right to withdraw from the project any time. It was stressed to the participants that even if they consented to participate in the study, the videotaping of the labour could not be guaranteed. This was important as all the women wished to obtain an edited copy of the videotape of their labour and were participating to achieve this. A memento videotape would depend upon the availability of the two rooms, the use of the camera, absence of mechanical problems, and a midwife willing to participate in the study. Possible risks related to the research were identified: the possible stress of

being videotaped, and the potential to be videotaped in difficult situations.

Most support people left the final decision on participation in the study up to the woman. The edited video tape that the mother was provided with, fulfilled Faden and Beauchamp's (1986, p.373) "prudent course" when seeking consent. Instead of "psychological and informational manipulation", the reward that was offered was restricted to an object which would be acceptable to the subject (Faden & Beauchamp, 1986, p. 373).

During the study, the researcher was alert and sensitive to the participants withdrawing consent for reasons due to: self consciousness, unfavourable outcomes, such as, perinatal death or feelings of failure, anger and frustration when the birth process has not occurred as they anticipated. Due to reluctance to relocate to the room with the camera, one woman withdrew from the study.

Privacy

This research involved investigating an area of life which is not usually open to such scrutiny. For example, for the birthing women labour is a private, personal time in their life and they may not feel comfortable being 'captured' on video. Similarly, the health professionals may be self conscious about being observed. Babbie (1989, p. 474) suggests subjects may reveal 'bad' attitudes, demeaning characteristics, deviant behaviour and be forced "to face aspects of themselves that they normally do not consider". Therefore, confidentiality of information was maintained.

Because of the private nature of childbirth, it is sometimes difficult for women to understand what happened during childbirth and to accept the reality of the birth process. According to Attrill (1984) this is an essential part of their assumption of the maternal role. The receipt of their birth video tape provided an opportunity for the woman to accept the reality of birth, fill in any 'missing pieces' and/or clarify any confusion related to her labour (Affonso, 1977; Charles & Curtis, 1994; Stolte, 1986).

During the video taping of the labours a control monitor was used to ensure that the closed camera system was working and the data collection was progressing. This monitor was situated in a locked room, referred to as the control room. Instructions were provided on how to start the video taping and set the tapes if I was unavailable when the woman came to the delivery suite (see Appendices 9 & 10).

Edited video tapes, of short interactions from ten to 30 minutes duration, which highlight particular aspects of the research, have been made from the many hours of tapes. Prior to any public showing of these tapes, consent was sought from the participants. A collage of material from the video tapes, for educational purposes, has been made. Additional consent from the participants was sought for this purpose. Cost factors precluded using a mosaic patch to obscure the faces of the participants. Any public showing of the videos was kept to a minimum and the participants` identities, both the women and the health care workers, was safeguarded.

Confidentiality

The confidentiality of the participants was safeguarded by coding the video tapes with a letter of the alphabet and separating them from a password-protected list of the participants. All material collected is kept in locked filing cabinets and accessible only to the researcher and the supervisors of the research.

Turning off the camera

As I was not present all the time, there needed to be restricted access to the control room, so the camera could be turned off without waiting for my arrival, in the event of any of the participants wanting to withdraw, or a need to stop filming. The midwifery staff who worked as in-charge were shown where the key to the control room was kept and provided with written instructions on stopping the system (see Appendix 11).

Recruitment

The women and their families

It was not anticipated that it would be a problem recruiting women to the study.

Importantly, the research did not affect the outcome of their labour, nor necessitate a choice of treatment or procedure. Some women already record their labours on video tape. As an incentive and a 'thank you', the women involved were promised an edited tape, approximately 30 minutes in length of their labour. This video tape concentrated on the woman, her birth and her support persons.

When discussing the National Birthday Trust's survey, Oakley (1993, p. 102) stated that women expressed the desire to help other women have "better births". It was expected that Australian women would have the same motivation and recruitment to the research would not be a problem.

The women were approached during the antenatal period via the parenting education classes, while posters were displayed in the antenatal clinic and the birth centre clinic (see Appendix 12). When the recruitment of the women was in 'full swing', three or four antenatal classes were attended a week with 12 to 18 people in each class.

Recruitment was poor initially. Many couples were surprised to think that someone would want to watch women in labour. I thought the response rate would probably improve if the couples had some forewarning about the video taping. As a result, flyers (see Appendix 13) were developed that were almost identical to the posters. This gave all the information in a much more attractive format than the required information and consent forms. The flyers were given out on the first week of the classes and the following week I addressed the class. This gave the women and their families advanced notice about the research, while a reminder note (Appendix 14), was given out on the last evening of the classes. The recruitment rate improved.

If the couples were interested in participating in the study, they contacted me and a meeting was arranged. Over recruitment was considered necessary because of the expected difficulty in the women labouring in set rooms. Discussions took place with 36 women/couples. The majority of these occurred in their home at a mutually agreed time. Six occurred at the hospital, while one was at a café as the couple lived some distance from the area. The Information Sheets and Consent Forms were gone through in detail, with

some couples signing immediately, however, those who were undecided retained the forms, and it was up to them to return them. Seven of the couples declined to participate in the study.

Recruitment of the health professionals

It was anticipated that the greatest professional challenge for the study would relate to gaining the co-operation of the health professionals and their acceptance to participate in the study by permitting their practices to be videotaped. This was the experience of J. A. Schorr (Professor of Nursing, personal communication, 11 July, 1994) who used videotaping in her research in nursing homes. Potential participants in my study were similarly threatened and nervous.

Fear of litigation is strong among obstetricians (Gamble, 1993; Keeping, 1993; Kilvert, 1993; K. Lane, 2001; Nisselle, 1993) and midwives. One midwife who has articulated her fears regarding videotaping stated:

Now I won't do it and I'm very definite about it I will not be videoed and there are a group of us, because in five years time some enterprising young lawyer, something`s wrong with the baby, nothing to do with us, but if he can get my hands on something in the wrong position with my face (H. M. Callaghan, 1990, p. 71).

It was necessary to be very open about the research, and freely communicate with colleagues to obtain their collaboration and participation. For example, I presented an overview of the study and information on discourse analysis to a Delivery Suite in-service and a Perinatal Meeting (departmental level). Attendees were midwives, medical staff from the Obstetrics and Gynaecology Department and neonatology staff. Informal discussion also occurred with the staff from the Delivery Suite, the Birth Centre and the Neonatal Intensive Care Unit. The research proposal was tabled at an Executive Meeting of the Obstetrics and Gynaecology Department with the support of the Professor of Obstetrics and Gynaecology and the Director of Obstetrics. All the health professionals were provided with copies of the appropriate Information Sheet and the Consent Forms.

I wrote an article about the research that was printed in the Area Health newsletter, to try to increase the comfort of the health professionals. Despite many staff stating they were supportive of research and this study, it appeared a reasonable level of self confidence as a health professional, and courage to participate were necessary personal characteristics for participants. Courage was necessary to withstand the pressure from a number of midwifery and medical colleagues who appeared to actively work against the study and discouraged those who wished to participate.

The midwives

During the period the research proposal and the protocols were being developed, the topic of the research was introduced whenever it was appropriate with midwifery colleagues, many of whom remained non committal about their participation. The issue that caused the greatest discussion was the fear of litigation and its possible financial impact on their lives. The video tapes were considered potentially powerful weapons in any litigation case. Because of their fear of litigation, an article by midwife / lawyer Dimond (1996) on the use of video tapes in childbirth was placed in the tea room, the birth centre notice board, and the communication book. This did reduce some of the anxiety about the video taping but did not change anyone's decision.

Another fear of the midwives was related to my role as both researcher and nursing unit manager in the delivery suite. It was considered by some midwives that it would be safer not to have their practices scrutinised by a manager. Sessions on the ethics of research and the process of seeking ethics approval were done as in-service sessions with the required ethical behaviour of the researcher stressed. Although there had been discussion on where participants could take any complaints about the research, this aspect was reinforced during the ethical sessions.

The medical practitioners

Throughout the development of my research proposal and the application for ethics approval, the key stakeholders in the Obstetrics and Gynaecology Department were informed of my progress. Once ethical approval had been given, it became necessary to discuss the research in detail with all the medical staff. Some were happy with the research

ILLUSTRATION 2.2

THE EQUIPMENT IN THE CONTROL ROOM



Top shelf: TV monitor to ensure the recording was occurring and to check

the view

Bottom shelf: The bank of three video recorders are on the right, with the time

date generator and switch for the camera position on the left

protocols, while others rejected the research outright. Because of medical opposition, I was invited to address the next departmental meeting to discuss the research. The focus of their fears, like the midwives, was the possibility of the tapes being used in litigation. Much of this discussion was about how video taping would be perceived by the courts and how failure to participate in, or withdrawal from the study would indicate guilt. As a result of the meeting, the Chairman spoke to the lawyers on the ethics committee about the research, while the Director of Obstetrics discussed the matter with the Medical Defence Union. The response from the lawyers was that the doctors, if they participated, should ensure that everything was documented, while the response from the Medical Defence Union was that "provided both parties involved were happy with the taping then there was no objection".

Discussion with the other medical professionals was delayed until after the Obstetrics and Gynaecology departmental meeting. They agreed to participate as long as those not consenting were protected.

Technical issues

Closed circuit TV system

In order to video tape the women's labour with minimal interference, a closed circuit TV system was installed (Refer to Appendix 15 for the layout of the system). This consisted of a control room, which for reasons of privacy was kept locked. The control room contained a bank of three video recorders and a television set to monitor the taping. The clock was set on each of the video recorders and was synchronised with a time date generator which imprinted the date and the time in hours, minutes and seconds on the video tapes to ensure the tapes were kept in chronological order (see illustration opposite).

Each room had a visual input and an audio input which was relayed to the control room. A pressure zone microphone on the ceiling in the centre of each room provided the audio data. A small fixed security style video camera was used to record the visual data. The data collection was in real time. As the camera was positioned in a corner, near the ceiling, a 'birdseye' view of the room was obtained (see illustrations next page). There were no close up views obtainable from this camera. As there was only one camera, video taping could

ILLUSTRATIONS 2.3 & 2.4

A VIEW OF THE ROOMS WITH AND WITHOUT THE CAMERA



2.3: Looking towards the corner of the room in the birth centre prior to the camera being fixed in position



2.4: Looking towards the corner where the camera was positioned in the delivery suite

only occur in one room at a time. The camera had a fixed focal lens with an automatic iris adjusting to changes in the room's lighting and provided colour images.

The positioning of the camera was a source of much effort to ensure the best vision of activity by staff, while trying to preserve the privacy of the woman in relation to her genital area. None of the women appeared overly concerned about the camera's position during the private discussions. It was necessary to have a 'time out' option, which allowed the camera to be turned off, so that the full frontal view of the woman's genital area was not 'captured' on the video tapes.

The tapes used to record the data were three hours in length. Because of the repeated playing of the tapes during the analysis process, heavy duty tapes (E180B alpha) were used.

Collecting the video taped data

While the non consent of a number of staff was disappointing and created some gaps in the data collection, the data was "the best available, considering the circumstances" (J. M. Morse, 1999, p. 291). Originally, it was thought that it would be necessary for a large proportion of the medical and midwifery professionals to participate, if the guiding criteria used by Parker (institutions, ideology and power), was to be affective. The analysis of the data, however, demonstrated that these three criteria were still apparent with the data produced being totally unexpected, fascinating and satisfactory.

The process

Once the woman and her support person/s had signed the consent forms, several strategies were employed, to prevent the women being 'lost' to the study. For example, stickers identifying the study were placed on her charts. A regularly updated list of the women's names, their expected date of delivery and chosen site of birth was kept at the admission desk. This gave the staff some warning of when the women could be expected and if she contacted the hospital, but failed to mention the study, they were able to check with her if she was still willing to participate. A memo was placed in the communication book about the research process and another one when the protocol was modified (see Appendices 16 & 17) The women and their partners were requested to telephone me when they went into

ILLUSTRATION 2.5 WARNING NOTICE ON THE DOOR



labour and were planning on going to the hospital. However, only one labouring woman and two women who were being induced contacted me.

On notification of the woman's admission, I went to the hospital. Prior to commencing each video taping, I checked that the woman, her support people, the midwife and the medical staff were agreeable to participation in the study. A bright yellow warning sign (Appendix 18) was placed on the door stating: "Video camera in use - Research in progress" (see illustration next page). This was to warn those who had declined to participate, so they could stay outside the door, or outside of the camera's range. To ensure that an error was not made with the times, a Tape Settings Sheet (Appendix 10) was used. The midwives were informed of medical staff wishes about participation in the study. At this time, it was checked that the midwife-in-charge and the woman's midwife knew where the key to the control room was kept and how to turn off the video tapes, if this was required. If there were any problems the staff were encouraged to telephone the researcher. A warning system for the staff in the neonatal intensive care unit, and the anaesthetist on call for the delivery suite was implemented: they were notified that one of the women in the study was in the delivery suite or the birth centre. This whole process could take an hour or two and was dependent on the busyness of the unit and cooperation of staff.

If the woman delivered, or there was no midwife on the next shift willing to provide care, or there was a problem, the staff were request to contact me. Unless contacted earlier, I returned to the hospital to ensure tapes were replaced and continuity of recording was maintained.

The closed circuit TV system worked well except for the sound which was variable. There was a degree of white noise in the rooms, but it was worse in the delivery suite room. This made transcription difficult. If a radio, or tape deck, or CD player, or fetal monitoring machine was in use, the sounds from these dominated on the video tapes. Despite tips (Appendix 19) given to the midwives and the couple on reducing noise, this remained a problem.

Opposition to the study

Although medical opposition to the study had officially ceased, unofficially it persisted with two doctors remaining particularly difficult and obstructive. This required intense effort to ensure their active non co-operation did not sabotage the study. A private obstetrician "persuaded" one woman to change hospitals when he discovered she was a potential participant in the study. He felt it was 'inappropriate' for a midwife to potentially examine the practices of medical personnel.

Midwives in general were less actively antagonistic, however, the midwifery staff who participated in the study were exposed to frequent verbal harassment from their colleagues who were opposed to the study. This problem was resolved over time.

Midwifery resistance by some to the study continued, manifest by, for example, a delay or a lack of notification of the woman's admission to the hospital. One of the more bizarre examples of resistance was with the camera. At regular intervals, the camera lens would be covered with a theatre cap or theatre boot, or the camera angle would be altered, so that the lens faced the back or side wall. This was the more tedious act to rectify as it took considerable time to get the camera re-positioned

Participants' responses to the study

It was anticipated, and confirmed, that a video camera, fixed in the room, and not hand held, would be unobtrusive and the participants would forget that the camera was there. The parturient women and their support people forgot about the camera once the woman's labour was established, felt comfortable with its presence and did not find it intrusive. Staff appeared to also forget about the camera, but occasionally they were reminded when they said something they preferred was not being recorded. Two midwives felt uncomfortable with the tape and it was there "in the back of their mind[s]". This was not unexpected as Arborelius, and Timpka (1990) commented that when they video taped medical consultations, the physicians had felt influenced by the camera. However, when viewing the tape of the consultation, the doctors realised they were less influenced by the camera than they had thought.

The majority of couples saw the video tape as a memento of the baby's birth. Penny and

Patrick wanted their video to send to family overseas, while one couple, Yvonne and Yuri, planned to show their video tape at their child's 21st birthday party. Some women requested to view all of their labour tapes. For these women and their partners, it filled in blanks in their memories and for the women, they were surprised to realise how their memory of time had been distorted.

Health professionals who participated in the study were also offered the opportunity to view themselves as they interacted with the women and their families. It provided them with a chance to re-evaluate their communication skills. Most, however, declined this offer.

THE USE OF BOOKS

Throughout my thesis I have also relied heavily in my analysis of other sources of text from books. The first group of books are textbooks from midwifery, obstetrics and gynaecology, and occasionally nursing over several centuries with the majority from the 19th and 20th centuries. The authors / editors⁴ of these books were, or are, acknowledged experts in their fields, while the buyers of these books were expected to be midwifery and medical students, clinicians and libraries. Titles of some of the older books may be confusing, as until the mid 1930s, 'midwifery' was often the term used by both midwives and doctors for their field of work. These books instructed health workers in the theory, practice and rituals of their craft.

The second group of books also focus on childbirth, but the authors considered the most likely readers would be the women, their families, support groups, such as, parenting education groups, and local community libraries. The authors of these books are also considered 'experts', often are midwives and doctors, but sometimes anthropologists, physiotherapists, psychologists, sociologists, and consumer activists. The language used, however, is more easily understood by lay persons. Initially, the aim of the authors of this group of books was to inform, instruct and guide women about childbirth, but as the consumer driven childbirth debate escalated, these books presented a divergent view to the

⁴ Sometimes the books have one or more authors, or one or more editors. To avoid the cumbersome use of authors / editors throughout this chapter, only author or authors will be used, but this term will include any editor or editors of the books.

dominant medical discourse that surrounded childbirth and contrasts with the professional textbooks. Because of the original direction of the study, I also collected personal birth stories as these were to be part of the literature review. These were derived from newspapers, magazines, and edited collections. Although the study evolved in a different direction, I became fascinated with these birth stories, continued to collect them, and have also drawn on these throughout the thesis. According to Morse (2000, p. 579) qualitative research is similar to being a detective in that "you ... follow clues, check out leads, confirm facts" until everything comes together and "makes sense". Discussion here describes how the books in both categories came to be 'chosen' and ultimately used.

To support my discussion in Chapter 6 on maternity care during my own midwifery training, I drew upon over 30 textbooks in use from 1960 to 1975. The ideas contained in these texts would have been in circulation and practice for sometime. It was almost a tradition at our midwifery training hospital that the non-required, extra textbooks were 'passed on' from the exiting students to new students. The tatty appearance of the books, mostly 'hand-me-downs' from previous students, may have been because they were well used rather than old. At that time, I certainly had no concept of clinical knowledge becoming dated, however, and was not able to find a publication date on a book. These books hold the authoritative knowledge regarding childbirth from obstetrics, gynaecology, midwifery, nursing and neonatology or paediatrics for this era. I have also used two midwifery training case books, mine (H. Callaghan, 1971) and a friend's (Sheehan, 1971). In our case books, we kept details of what we had 'witnessed', that is, observed, and performed as was required for registration as a midwife in that state. This documentation included 20 case studies. These have been used to stimulate my memory of this period and also for verification of the practices of the time.

I have used women's comments, taken from published birth stories and research on their labour experience to demonstrate those aspects of care that usually were not discussed in textbooks, or to demonstrate the impact of particular clinical practices on the women. These comments are from a variety of published sources: women's birth stories (Adelaide, 1997; Lamprell, 1991b; Littlejohn & Shorne, 1994; McDonald, 1992), extracts from labour reports (Close, 1975), and extracts from a five-year national study of home births in Ireland

(O` Connor, 1995). O`Connor`s work was particularly useful as she explored the reasons the women gave, in their own words, for choosing a home birth. For many women this was because of difficult or traumatic previous hospital births, or because of the depersonalisation they experienced during their hospitalisation (O` Connor, 1995).

Searching for books

Some of the books were in my personal library which is fairly extensive. For example, the set textbook for my midwifery training, *A textbook for midwives* (6th ed.), by Margaret F. Myles, was bought at the commencement of my own course. The 10th edition of her textbook was acquired when it was published in 1985 as I believed it would be her last edition. Over the years as part of my personal on-going education, I continued to acquire more textbooks. I have never discarded these textbooks even though the clinical information was outdated and some had not been used for years, but this archive has proved very useful to this study.

It became evident that I required old textbooks to support the discussion in Chapter 6 on the maternity care the women received during that time, and would probably need textbooks from an earlier period. My first approach was to go to the university library and search for midwifery and obstetric textbooks. This catalogue is linked to all the area health libraries, that is, the three major hospital libraries and the five satellite hospital libraries in the area. A catalogue search of the words in title or in the content note revealed that there were 103 works with 'midwifery', but when this list was limited to any material, in English, published before 1976, the list was reduced to two books. A similar search was done with 'obstetrics' and revealed 223 items, which when limited in the same manner was reduced to 31 items. When journals, texts prior to 1960, those on anatomy and physiology, on medical education, duplicates, lost items, texts written in note format, and obstetrical / surgical texts were removed, there were no items left on the list. It is policy in many institutions to remove clinical textbooks which are five to 10 years old.

I was particularly keen to find those books that I had used during my training and other students may have used earlier. Unfortunately, I could remember only a few details about the books we used. The strategies used to obtain the texts from the desired time frame were: inter-library loans; personal enquiries to many of my midwifery colleagues; notices

placed in the wards, the staff tea room, and clinic areas of the hospital in which I worked; a request in midwifery journals and newsletters in my home state, and a national internet midwifery chatline; a request in a state based Sunday paper and an advertisement in a local paper; an e mail to all the nursing faculty staff at the local university; approaching staff of a local hospital library who were consolidating their collection; canvassing the secondhand book shops in my local area, two metropolitan cities and a rural district; and checking the antiques shops in my local area.

The antique shops have been a valuable source of books. A book titled, *The preparation and after-treatment of section cases* (1905) by Stewart McKay who was a senior surgeon at the Lewisham Hospital for Women and Children, Sydney was sourced in an antique shop. Although this book was not exactly what I was looking for, it does provide very detailed information on the equipment used for caesarean section and details the processes of sterilization used in Australia in the beginning of the century. Other finds were on medical history (H. Graham, 1960; Haggard, 1932; Singer, 1928), on hygiene (E. M. Robertson & McInroy, 1937) (Elkington, circa 1908), and infectious diseases (Hare, 1954; Sigerist, 1943). It is worth noting, however, that all except one of these books were written by doctors. Probably the most useful 'non medical' books found in the antique shops, however, were the 'ladies handbooks' (W. A. Lane, 1934; Richards, 1946; Stockman, 1926). These books all have sections devoted to childbirth and include the preparations for birth in the home, as well as how to ensure sterility of equipment and clothing and the preferred measures of hygiene.

A good source of consumer orientated books was the opportunity shops conducted by such groups as, St Vincent's de Paul, the Good Samaritans, Lifeline, and the Salvation Army. From these shops I have acquired birth story books (Bert et al., 1984; The Parents Book Collective, 1986), several of Shelia Kitzinger's books, and antenatal education type books (Balaskas & Balaskas, 1983; Ewy & Ewy, 1982; A. Robertson, 1989).

It has taken months, years even, to find the books that have helped inform this work. While I have not drawn on all of these texts as references in my thesis, the examination of the books from a variety of disciplines enabled me to have a broader and improved

understanding of changing concepts related to hygiene in childbirth.

CONCLUSION / SUMMARY

In this chapter, I began by describing some of the concepts that Foucault advocated and which are central to the understanding of the thesis: panopticism, power relations, and the clinical gaze. The various approaches used by different theorist to discourse analysis were explored with the privileged position of language being acknowledged. Texts and discourses were identified with the importance of the three auxiliary criteria, institutions, power and ideology, being flagged as sites for research. There was a discussion on how it would be possible to use discourse analysis with visual data. The history of images as data was discussed which included acknowledging that it had been marginalised within sociology. The current use of film in research is varied and demonstrated that video taping is an acceptable method of collecting data. The method of visual data analysis was based predominantly on a synthesis of two different approaches by Parker (1992; 1996b), and Collier and Collier (1986). The importance of various textbooks in the analysis and how they were chosen has been acknowledged.

CHAPTER 3

THERE'S SOMETHING ABOUT DIRT ...

INTRODUCTION

The focus in this chapter is on the work of the theorists who have contributed to our knowledge of pollution as a social construct that helps to explain human behaviour. Some of the words used throughout this chapter need to be defined and are used consistently within these definitions. Probably the most important words are the verb, 'pollute' which is defined as "1. to make foul or unclean; dirty. 2. to make morally unclean; defile. 3. to render ceremonially impure; desecrate." and the adjective 'polluted' which is defined as "made impure or unclean; tainted; contaminated" (A. Delbridge et al., 1997, p. 1660). According to Room (1995, p. 313), 'dirt' is derived from the old Norse term "drit" meaning excrement although the current understanding of the term has been extended to include "filth generally, soil, dust and the like, as well as obscenity of any kind, especially language". These dictionary definitions are brief but they have been explicated by theorists presented here and whose work focussed on some, or all of these terms.

The term pollution in the social sciences is most readily associated with Mary Douglas and her seminal work, *Purity and danger* (1966/1992), in which she focussed on the symbolic interpretation of the rituals associated with pollution. Her analysis established a basis for understanding pollution which can be used across cultures, and religious, secular, or temporal domains. She acknowledged her debt to two friends who struggled daily with the rituals of cleanliness demanded by their particular religions and who increased her sensitivity to "gestures of separation, classifying and cleansing" (Douglas, 1966/1992, p. vii). For Douglas, an exploration of hygiene was the route used to investigate and understand the religions of the world and some of the variations in meaning and practices attached to pollution.

POLLUTION AND DEFILEMENT

Both Douglas (1966/1992, pp. 35 & 73), and Clark and Davis (1989, p. 651), defined 'ritual

pollution' and 'secular defilement' as a state of uncleanliness derived via contact with either a 'dirty' or 'polluting' person, object or activity. The distinction being that 'ritual pollution' occurs within the symbolic system of a religion, while 'secular defilement' occurs within a symbolic civil system and is not related to a religion. This distinction between the terms is not usually made and they are used interchangeably in many professional and lay discussions. Douglas herself does this. But the most commonly used term is 'pollution'. For example, in discussions about the non religious human, or the natural environment the term used is usually 'pollution', or sometimes 'contamination', rather than 'defilement'. In health systems the term used, in the sense of the item or person being dirty, is 'contamination'.

Early in her book Douglas (1966/1992, pp. 34-35), argues that studying "ritual pollution" in religious societies, obviously becomes a study of symbolic systems. She rejects the notion that western ideas about dirt are simply a matter of hygiene. For Douglas (1966/1992, p. 35), "our ideas of dirt ... express symbolic systems" and she considers the variations in pollution behaviour in different parts of the world just "a matter of detail". Douglas (1966/1992, p. 35), noted that western concepts of dirt are actually a "omnibus compendium" of what we have rejected from various symbolic systems.

Current European ideas on defilement, Douglas (1978) noted, are related to secular matters of hygiene, or etiquette, or aesthetics, rather than religion as occurs in 'primitive' cultures. She commented that the discovery of pathogenic organisms in the 19th century has made it difficult for us to conceive of dirt as being anything but unhygienic and pathogenic (Douglas, 1966/1992). This concept of dirt is, however, relatively recent (Douglas, 1966/1992). Corbin (1982/1994, p.33), referred to it as pollution from "a Pasteurian viewpoint". He noted that prior to this view, it was acceptable to dump rubbish and excrement into the rivers as long as they dissolved and became invisible: thus retaining the river's purity (Corbin, 1982/1994). What was of concern was the decomposition occurring on the banks of the river and its accompanying stench. So, prior to our "Pasteurian viewpoint", the margins of the river and the land were considered dangerous.

As Douglas (1978) has stated, Frazer, who was famous for his 13 volumes of the *Golden Bough*, considered that philosophy evolved from a magical phase, to a religious phase and then to a scientific one. He would not have found the current perception of 'dirt' as equating to pathogenic in western cultures as extraordinary. Public health reformers in America had discussed the similarities between the germ theory, their "traditional fears of malign spirits" and the miasma theory (Tomes, 1998, p. 7). The public's acceptance of the germ theory was understandable as the theory identified and named these poisonous agents. A quote from T. Mitchell Prudden, a bacteriologist, writing in 1890, demonstrates the perceived link between the mystic, religious and the scientific phases: "We no longer grope after some mysterious, intangible thing, before which we must bow down or burn something, as if it were some demon which we would exorcise" (cited in Tomes, 1998, p.7).

Pollution, according to Douglas (1966/1992), functions at two levels in society. At the first level, commonly held beliefs about pollution and social pressures are used to influence other people's behaviour. The second level of pollution beliefs occurs when transgressors threaten the "ideal order of society" and the danger is then directed towards the transgressors (Douglas, 1966/1992, p. 3). Douglas considered that this has a two pronged effect: firstly, the threat of danger is used to force the person to maintain the social order and secondly, the enforcer is also reminded of the need to remain righteous. Douglas (1966/1992, p. 3), considered that the "whole universe is harnessed to men's attempts to force one another into good citizenship". The results of pollution have been discussed by She noted that in western cultures, they are "social sanctions, contempt, ostracism, gossip, perhaps even police action", while in other societies the effects are "much more wide ranging" and disruptive (Douglas, 1966/1992, p. 73). Douglas does not specify what these results are except by providing examples. One example was the Israelites who could only win their battles if their camp remained holy. This was achieved by the warriors attending to all bodily functions outside the perimeter of the camp. Warriors with bodily discharges could not enter the camp, while warriors who had bodily

⁵ Miasmia theory: it was believed that the disease was caused by an agent carried in the breathe of the sick person, that is, the person had a 'bad' or 'sick' breath.

emissions during the night had to leave the camp, they could not return till after they washed, and it was after sunset (Douglas, 1966/1992). Although these rules have been incorporated into the Jewish religion, Thorwald (1962, p. 97), noted that they can be traced to "the hygienic rules and ideas of Egypt".

Douglas (1978), commented that pollution and purification are linked by ritual while the nature of the rituals will define the seriousness of the pollution. As this thesis shows, this concept can be applied to the health care system where dirt 'specialists' undertake the ritual purification or cleansing. This notion is discussed later in the chapter, in the section "Purification and cleansing".

Douglas (1966/1992, p. 120) noted that "body dirt is ... powerful" and may be seen and used ritually as good or harmful. This is similar to Frazer's (1978, p. 96) statement about an object having both "perils and powers", but for him the power and the peril could be directed at the same person, regardless of who broke the taboo. Thus, the level of danger or peril may describe the vulnerability of the person involved. Douglas (1978), did note that in some cultures the sexual and bodily fluids of one sex could be dangerous to the other sex, and it was usually the male who was endangered by the female. This statement was seen by Grosz (1994, p. 193), as indicating a possible site for "an analysis of sexual difference ... where sexuality has become reinvested with notions of contagion and death, of danger and purity, as a consequence of the AIDS crisis".

Feelings of pollution were also explored by Kubie (1937), who by examining the structures of adult life, particularly in neurotic people, attempted to demonstrate the fantasies that are hidden behind our concept of dirt. Kubie (1937, p. 389), noted that the assumptions on which we based our behaviour towards dirty objects were often confused, paradoxical, absurd and contained "mutually contradictory implications and premises". Kubie was determined to provide a clinical definition of dirt by observing the behaviour of humans. He commented on how there are certain objects which men (as is the case for many psychoanalysts, he was phallocentric) do not want to take into their body, endeavour to avoid if possible and are reluctant to even view. Kubie included in this the avoidance of food derived from the particular parts of animals, their apertures and what emerges from

them. There are difficulties with some parts of Kubie's theory as in western cultures we eat tripe, tongue, intestines (as sausage skin), the parsons nose, brains, fish heads, eyes, roe, while heart, liver and stomach are combined (as haggis). There are probably other animal parts that are eaten but are not so well known. It is arguable that the cooking process transforms these body parts into acceptable objects to eat, but again this is culturally specific.

The feelings of pollution and the fear or terror associated with pollution has also been discussed by other authors (Ricoeur, cited in Enzensberger, 1972; McLaughlin, 1971; Sartre, 1943/1984). In my experience, nurses and midwives sometimes display these "feelings of pollution" and/or fear after providing care for particular patients, such as, those with worms, or nits, or scabies, or those who have been repeatedly incontinent of faeces and who required regular cleaning to remove the faeces. The nurses repeatedly wash their hands to remove the 'dirt', often because they can still smell the faeces on themselves, or they fear the slightest itch because it may indicate a possible site of an infection or an infestation.

For McLaughlin (1971, p. 2), "ritual defilement is one aspect of this feeling of pollution" and although irrational, it exists in all societies. He has commented upon the practice where we find some forms of dirt as irremovable. He provided the example of false teeth which had fallen into the toilet, then into the sewerage system. The owner of the teeth was relieved when they could not be found and acknowledged that she could "never have fancied them again" (McLaughlin, 1971, p. 2). This is an example of the juxtaposition of a 'clean' item with a 'dirty' item which causes us uneasiness or even revulsion.

Origins of pollution

Pollution, for Enzensberger (1972, pp. 22-23), originates or is derived from four sources of dirt: 1. "contact and excretion"; 2. intermingling; 3. decay and a reversal of order; and, "mass". The first source is anything that endangers his "separateness ... his anxiously guarded isolation". Thus, his unwillingness to allow any person or thing to advance towards him or retreat from him. This clearly includes the dirt of contact or excretion and assists in explaining the second source of dirt: the fear of intermingling. Enzensberger

(1972, p. 23), noted that there is an avoidance of anything in which ownership is ambiguous as "in any confrontation he is afraid of succumbing to the ambiguity and mishmash, of flowing apart, losing himself, suffering injury through processes like amalgamation infiltration supplementation effluence effusion and excavation". The prime example of intermingling occurs during sex and therefore, according to Enzensberger (1972, p. 23), this is why it has an "ineradicable association with dirt". The third source of dirt is decay and when the order is "topsy-turvy", upside-down, or reversed. These create fear and horror. The fourth source, develops from the individual's fear of "everything teeming and swarming, any mass situation where he risks going under and disappearing" (Enzensberger, 1972, p. 24). According to Enzensberger (1972, pp. 32-33), the individual is "isolated, untouchable, homogeneous, structured, unique; which explains the dirt of excretion, contact, intermingling, decay and mass-crowding, marginal products of these orders". He acknowledged that the fourth source creates problems as we do not live in isolation but in couples, or in groups.

For Goffman⁶ (1971, p. 68) any study of "co-mingling" must include boundary offences or violations, which he considered to be an "incursion, intrusion, encroachment, presumption, transgression, defilement, besmearing, [and] contamination". Although Goffman has used only one concept, "co-mingling", which sounds similar to Enzensberger's second source, "intermingling", clearly Goffman's concept is much broader than Enzensberger's. Goffman has not mentioned sex except to note that "sexual molestation" is an extreme form of body/touch defilement. There are six modalities Goffman used to describe how defilement (pollution) occurred.

- "Ecological placement of the body" in relation to a claimed territory, for example the Indian caste system.
- 2. "The body, including the hands ... can touch", and therefore defile the "sheath" or skin, or the person's possessions.
- 3. "The glance, look, penetration of the eyes", although slighter than other offences, can be incurred over considerable and multiple distances, on numerous occasions, and

⁶ It appears that Goffman developed his work separately. Enzensberger's (1972) work was originally published in German in 1968, with the first translation into English occurring in 1972. Unless Goffman read German, or had a translation of Enzensberger's work, each author developed their work independently.

requires good, constant, and delicate eye discipline. A societal rule relating to gazes is: "when bodies are naked, glances are clothed".

- 4. "Sound interference" when individuals claim more than their share of "sound space".
- 5. Speech as when subordinates speak out of turn, or when there is cross talk from an individual who has not been given approval to speak.
- 6. "Bodily excreta" which has four "agencies of defilement"
 - "Corporeal excreta", or the stains from them which will contaminate if touched: "spittle, snot, perspiration, food particles, blood, semen, vomit, urine and faecal matter."
 - viii. Odour which includes, flatus, bad breath and body smells. Like the glance, odour operates across distances, in "all directions", it lingers in confined spaces, and "cannot be cut off", even when the original source has left.
 - ix. "Body heat" as found on toilet seats, or from "recently removed" coats or cardigans.
 - x. Imagined remaining body excreta or "markings left by the body", for example, left over food. (Goffman, 1971, pp. 68-74)

Goffman's lists can be seen to incorporate some of Enzensberger's sources of pollution, except for decay, although remaining body excreta in his fourth point does imply decay.

Another perspective on the origins of pollution for North Americans and for the Hua, a Papuan tribe, has been described by Meigs (1978). This view does 'fit' many western cultures, however, it has similarities with Goffman's modalities:

- (1) body emissions or *nu*
- (2) carriers of them like soiled laundry or, in the Hua case, string bags ..., used dishes or bamboo drinking tubes ..., partially eaten food, dirty hands
- (3) symbols of them in the Hua case the colours red and black, possums, foods which are alleged to be hairy ... (Meigs, 1978, p. 310) (original layout)

Meigs (1978, p. 311) identified conditions when "bodily emissions and carriers of them are polluting". The first condition requires the items to be threatening to gain access to the body. Meigs considered that taste and touch are the essential mechanisms through which entry is achieved for both groups of people. The Hua add sight, sound and smell, which Goffman also accepted. According to Meigs (1978, p. 311), however, for North Americans

these mechanisms would only cause disgust and unpleasantness, rather than "extreme revulsion ... the signal of the presence of pollution".

There is some disagreement on the topic of disgust as Levy (1997, p. 384) claims that it is the primary reaction to an impurity and is "specifically related to "dirty" ingested materials", while the sight, sound and smell categories used by Goffman and the Hua are particularly relevant for pollution in a health institution. Meigs` second condition is that the bodily emissions, and whatever carries them, are polluting only if their access is not desired by the individual. This is an important point and explains, for example, why love-making is desired, as is contact with the partner's bodily emissions while rape leaves the victim feeling not only abused, but "dirty" or unclean (Kitzinger, 1985, p. 277; Russell, 1975, p. 168) and "as if she had some highly contagious disease" (Kitzinger, 1985, p. 277).

Both western and Hua cultures ingest body parts as a method of improving a person's mental and physical health: western cultures in the form of transplants (blood, heart, lungs, kidney, liver, cornea, sperm, ova, fetus) and the Hua through eating, or topical application, or intercourse (hair, semen, breath, sweat, vomit, corpse, faeces). These lists have much in common with ancient Chinese and Egyptian medicine which used many of these items in their pharmacopoeia (Thorwald, 1962).

Meigs has noted that body emissions are considered disgusting and feared by North Americans because they are perceived as:

waste, as substances cut off from the vitality of the body and subject to imminent decay dying, separated from that which can make them live actually or potentially contaminated, ... having the power to cause an ill-defined sickening. Our instinctive recoil from contact with other persons` emissions reflects our fear of their decaying power. (Meigs, 1978, p. 312)

There is a substantial amount of agreement between Goffman, Meigs, and Enzensberger on the origins of pollution, but, Meigs` theorising adds conditions not seen in the work of others.

A different view of pollution is given by Kristeva (1982), who categorised pollution objects

into two groups: excremental and menstrual. Kristeva (1982, p. 77), while she does not specifically refer to childbirth, has discussed men's fear of women's reproductive powers and the need for many "pollution rituals", particularly in those societies where the "patrilineal power" is weak. She also considered that pollution rites were common in societies where overpopulation was of concern, while in those societies which had a desire for procreation, there is a disappearance of incest taboos and pollution rites (Kristeva, 1982).

Maintaining our personal body space can be considered as a method of ensuring that our body does not become defiled by too intimate a contact with someone else's body. But first we have to be able to determine our bodily boundaries. This is a problem for women as they are considered, because of menstruation, to possess permeable leaking bodies. Leach (1972, p. 49) considered bodily boundaries "the child's first and continuing problem" and involved determining the "edge" of the self. That this remains one of the child's first problems can be seen in the terminology surrounding the training of babies in appropriate bowel habits. There is "Diaper Free" (Natural Wisdom Press, 20001), "Elimination Communication, ... Elimination Timing, Going Diaperless, Natural Infant Hygiene and Infant Potty Training", while there is an Elimination Communication Email list (S. Buckley, 2001, p. 17). All of these articles are devoted to how parents, but usually the mothers, can quickly and successfully toilet train their children.

Since the publication of Hall's (1959; 1963; 1966) work, it has been accepted that there is, in western cultures, an appropriate distance kept between individuals, though the distance may vary according to the persons involved, their age, the time and the situation. According to Hall (1966) we use several forms of distance: intimate, personal, social and public. In personal distance or space, this is perceived as a protective bubble which defines our personal space or distance, prevents us from being touched or contaminated by others, and maintains our protection. It has been suggested that perfume or cologne are used to disguise or hide body odour, and to set "the limits of the protective bubble around the individual" (DeVito, 1989, p. 248). Thus, the perfume defines the limit of what is acceptable contact with others.

For Douglas (1966/1992, p. 2), our avoidance of dirt must be considered as a "creative movement", or as a way of organising our environment and as an attempt to unify form and function. According to Douglas, our attempts at purification of our environment must be seen as the equivalent of the purification and prophylactic process which occurs in primitive societies. Douglas` has argued that the community`s experience of using these rituals creates unity within a society.

DIRT. WHAT IS IT?

According to Douglas (1968/1999b, p.109), "Lord Chesterfield defined dirt as matter out of place", but she does not give the source of this statement. This definition is used by Douglas and its' originality is often attributed to her. For Douglas (1966/1992, pp. 35 & 2), "dirt is matter out of place" or "disorder". This is very similar to Freud's (1924/1950, p. 48) description as "matter in the wrong place", but this did not stop him from spitting on the carpets on the stairs in patient's house (Freud, 1932/1971, pp.238-239). For Douglas (1966/1992, p. 2), the coding of what is dirt is defined by the culture and shared by those who belong to the culture, that is, "it exists in the eye of the beholder". This meaning is similar to McLaughlin (1971), who claimed that almost anything we choose can be dirt and it is a matter of relativity. Kubie was more derogatory about our perceptions of dirt. He believed 'fantasy' was the correct term to use when referring to dirt rather than 'reality', as he considered it was an emotional response imposed upon the growing child (Kubie, 1937). A more restrictive definition is provided by Meigs (1978, p. 313), who considered that dirty meant anything which was "perceived as decaying, carriers of such substances and symbols of them ... [which threatened] ... to gain access to the body where that access is not desired". Douglas was the starting point for Kristeva (1982, p. 69) who expanded on the original definition and noted that dirt or "filth is not a quality in itself, but applies only to what relates to a boundary and ... represents the object jettisoned out of that boundary, its other side, a margin". What is worth noting about this definition is that the boundary and the margin are conceptualised by her as two different domains.

McLaughlin (1971, p. 1), has noted that the definition provided by Douglas (1966/1992) is limited and refers to socks on a piano which "are certainly out of place, but ... not necessarily dirty". The socks example does, however, fit Meigs` (1978, p. 310) definition

of "messy things" which may annoy people, but they fail to cause pollution. According to McLaughlin (1971, p. 1), for something to be dirty, it also has to be difficult "to remove and unpleasant". Further criticism of Douglas` definition has come from Harris (1979, p. 197), who noted that if Douglas had "to tidy up a lawn strewn with gold watches and diamond rings", she might accept that disorder is not the only or major component of dirt. McLaughlin (1971, p. 2) also referred to Sartre`s discussion on the elements of sliminess or stickiness which he noted revolves around our concepts of dirt and our "feeling of *pollution* … where something dirty has attached itself to us and we cannot get rid of the traces" (original emphasis).

Sartre (1943/1984, p. 605), had observed that even "very young children" demonstrated "repulsion" for anything slimy as if its symbolic values were already understood by their psyche. These children would not have had the opportunity to learn the rules of cleanliness, and would not understand about germs, yet they identified slimy things as unpleasant. He believed that this was because slimy things, cling to us and blur the boundaries between ourselves and the slime, thus creating in us fear and disgust. For Sartre (1943/1984), the metamorphosis itself was not the problem, but that we would become slime which is frightening. He had considered that if he was liquified, he would become water which for him was the "symbol of consciousness", is often compared to a river, and "evokes the image of perpetual interpenetration" (Sartre, 1943/1984, p. 610). Therefore, for him to be metamorphosed, not into water, but into slime was horrifying. Sartre (1943/1984, pp. 607-611), used several colourful adjectives and metaphors to describe slime and they convey his feelings of fear and disgust: "aberrant fluid", "ambiguous", "the agony of water", "symbol of an antivalue", "a sugary sliminess", "soft clinging", "sly solidarity", "leechlike parts", "vague, soft effort", "emptied, "sucked in", "deflation", "soft to touch", "it runs", "a poisonous possession", "a trap", "degraded".

As McLaughlin (1971, p. 3), has commented, "most of the products of the human body are slimy - salvia, mucus, excrement, pus, semen, blood, lymph - and ... sweat", while Linke (1997, p. 567) noted "dirt dwells in the depths, in the bowels of the body. There nothing is solid; everything is sloppy mush." The latter quote conveys an image of deep dark impenetrable and dirty depths. McLaughlin (1971) noted we are reluctant to be too closely

and permanently associated with other humans as we would be made dirty or polluted by them. He commented that "dirt is ... other people" (McLaughlin, 1971, p. 6). As Sartre (1943/1984, p. 611), noted, even a handshake, because of its previous association, will constitute contact with "the great ontological region of sliminess".

Dirt is defined by Enzensberger (1972, p. 9), as what is created on the outer surface of the body, specifically "anything that comes out of the skin or touches it and clings". That is, dirt is the equivalent of human excrement which while part of the individual is loved, but when no longer a part of the individual, is disowned. Thus, the leftover food which has been touched, or been in contact with our mouth or saliva is classed as dirty. Enzensberger (1972, p. 32) considered human to include human's social behaviour and he wrote about dirt as being essential when there is "structure and order". Dirt, for him, was the negation of the structure and order. This definition has some similarity to the theorising by Douglas and Sartre, but Enzensberger incorporated 'social' into his 'order'.

A different perspective is provided by Kristeva (1982, p. 71), who considered that excrement was equivalent to "decay, infection, disease, corpse, etc" and signified a threat to the body, either human or symbolic while Meigs` (1978) position is similar: She considers excreted body products as 'dirty' because once they are no longer a part of the living body, they are decaying.

Weaver (1994, p. 77) has pointed out the difficulty of defining dirt and the various meanings associated with it in different "signifying networks". She begins her argument by the use of terms which are the opposite: "'dirt' does not mean clean, good, clear, fresh, brightness of colour, hygienic, innocent, morally pure" (A. Weaver, 1994, p. 77). These various states are neither "natural or inherently stable", while the person must fight to maintain these states through various methods: "cleaning, washing, confessing", all of which indicate that there must be "ritualistic practices" to maintain cleanliness (A. Weaver, 1994, pp. 77-78). When it comes to the definitions of various forms of physical dirt, such as, "mud, dust, germs, bacteria" they can only be described in positive terms as "there is no opposite to 'dirt' except its absence", while our understanding of the word 'clean' revolves around the absence of dirt (A. Weaver, 1994, p. 78). What is unusual about the clean/dirty

opposition is that the dominant term is 'clean', but it is also a negative term because of the absence of dirt, while the subordinate term is 'dirty', but it is the positive term and "has been repressed to the margins" where it continually threatens to "ursurp the clean" (A. Weaver, 1994, p. 78). Most importantly, there is a clean/dirty hierarchical structure as noted by various authors (Clark & Davis, 1989; Enzensberger, 1972; Kubie, 1937; W. D. Ross, Hirt, & Kurtz, 1968), while "clean and dirty are not equal, dichotomous, mutually exclusive categories with independent and inherent meanings" (A. Weaver, 1994, p. 78). Derrida (1981, p. 41) when discussing "a classical philosophical opposition", which clean/dirty are, considers them a "violent hierarchy" which is structured around conflict and subordination, rather than "peaceful coexistence". This is reminiscent of Enzensberger's (1972, p. 47) view that dirt relationships are basically "power relationships".

Enzensberger (1972, p. 41) mooted the universality of dirt and that cleanliness was "in vain". Most importantly, he believed that "the more rigid a system" was, the more dirt it would produce, while the greater the complexity of the system would result in a greater variety in the types of dirt (Enzensberger, 1972, p. 41). This is clearly seen in the health care system, at least in Australia where legislation provides rigidity surrounding it, while the system itself is complex. This complexity can be seen in National guidelines for waste management in the health care industry (National Health and Medical Research Council, 1999b). For example, while the health care system has only three main categories of dirt or waste – clinical, related, and general – there are 11 sub categories. There are organisational issues related to waste strategy, management plan, auditing, waste minimisation (five subcategories), segregation of waste, recycling and re-use (three subcategories), and the tracking of waste. This does not include the dirt or waste containers (three subcategories), the storage of waste, or its transport (two sub categories), or the management required for spills. Clearly, to manage the dirt or waste associated with the health care system has spawned its own hierarchal power structure. Thus, the dirty workers in the health care system have to resolve the problems related to the comprehensive classifications of dirt, as well as cope with their designated role.

The characteristics of dirt

The physical characteristics of dirt are discussed in detail by Enzensberger (1972) who

considered that there are eight types of dirt.

- 1. Dry objects, including "ashes and hair, the parings peelings shreds shivers from bottles shears skins, ... as in garbage; ... everything granular and crumbly, anything that crunches crushes splits splinters in a rotten spongy friable fibrous fashion, ... powder chalk soot";
- 2. Spots and splashes from food, "paint, ink, urine" regardless of whether it has soaked in or congealed;
- 3. "The wet and fatty" which again includes foods, ointments, greases and anything that "gushes spurts oozes drivels drips trickles and drops";
- 4. Anything that is sticky and makes threads: foods, "tar glue mucilage syrup pitch";
- 5. Any form of coagulation or wobbling, such as is found in brawn and jellies;
- 6. Anything that "ferments putrefies sours moulds taints rots or decays, plus munching retching farting spitting";
- 7. "Accretions of mud clay slime slush ooze and bog";
- 8. "Everything that crawls creeps writhes wriggles and twists, anything that slithers or spurts ... worms its way out of holes or germinates swells dilates bubbles and bursts". Also included in this group are "all external and internal growths abscesses ulcers pimples boils lumps humps stumps ... all bodily changes ... any physical metamorphosis anything that is loose and flabby puffy bloated obese slack limp and shrivelled" (Enzensberger, 1972, pp. 16-17).

The majority of these characteristics resonate with Sartre's comments on metamorphosis which were discussed previously. The appropriateness of Enzensberger's categories will be seen throughout this chapter and have proven to be very useful when used to explain the empirical findings of this research. It must be stated, however, that although in this list he describes the physical characteristics of dirt, these characteristics are also freely applied to people and their behaviours. For example, we speak of individuals as being 'a worm', or 'a creep', or 'a crawler', or they 'stink', or they 'stink in someone's nostrils', or they 'gush', or they 'blubbered like a jelly' or 'like a baby', or they 'stick like glue', or they are 'an old fart', or they 'have hairy-legs', or they are 'a piece of slime', or 'a slime bag', or they are 'an arse hole', or they "treated me like a piece of shit" (A. Carter, 1984, p. 25), or they 'kicked arse', or they are a 'bit of a cunt', or they have 'a dirty mouth' or 'big mouth', or

they are 'a fuck wit', or they 'don't give a fuck', or they are told to "drop dead!" (Kitzinger, 1985, p. 35), and many other colourful, but derogatory terms. As Clark and Davis (1989, p. 657), have noted, many of these contemptuous terms refer to "sex-elimination amalgam[s]". It is worth noting that Enzensberger's eighth category has many similarities to Goffman's(1963/1973) spoiled identity. For Goffman(1963/1973, p. 11), the original meaning of 'stigma', the incised or burnt signs on the body of "a blemished person, [who has been] ritually polluted", has been incorporated into a broader concept which included the disgrace associated with bodily blemishes, and/or the socially abnormal.

Kubie (1937, p. 392), has noted that we also feel "mistrust and aversion" if we experience smells which are unexpected or strange, however, often it is because the smell is familiar, but present in an unfamiliar setting. He commented on the similarity between the aroma from some foods, such as strong cheeses, and excrement, but, emphasised that smell only means dirty when there is recognition, either consciously or unconsciously, of a threat of contamination from the interior of another's body. Enzensberger (1972, p. 20) has noted, however, that the dirty smell, "gets closest to a person, gets furthest inside him". A classic example of this bad smell reaching the insides of the body is given by Rösllin (1513/1993, pp. 68-69), who recommended that fumigation of the genitals with "things that smell evil and stink" should occur when attempting to deliver a retained placenta, commonly referred to as the 'afterbirth', or, to remove a dead baby from the uterus. Fumigation was practised more recently by the American granny midwives in the 18th and 19th century (Speert, 1980). Corbin (1982/1994), claimed that our tolerance for 'bad' smells was lowered in the middle of the 18th century and linked it to the rise in chemistry. He noted that all unpleasant odours became the odour of faeces, was considered "intolerable", while its treatment became a private responsibility where everyone was instructed to "look after his own shit" (Corbin, 1982/1994, p. 60).

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⁷ Following the birth of a baby, the placenta separates and is delivered within one and a half hours after the birth, though more frequently it occurs in five to 15 minutes. If medical intervention using drugs is the preferred method of placental removal, the process should take not more than seven minutes (Association for Improvement in Maternity Services, 1995, pp. 5-8).

Enzensberger (1972), noted our ambiguity about dirt. For example, when eating we use clean cutlery to prevent us from getting dirty as most foods have the characteristics of dirt, that is, greasy, slimy, sticky. We devote time and energy to displaying the food, we arrange it on clean plates so that it looks attractive, appetising and no longer generates feelings of revulsion. Yet no sooner have we finished a meal, then the leftovers become disgusting even though no different to what was previously relished. The almost simultaneous view of the meal as both clean and dirty is paradoxical. This ambiguity about dirt echos Kubie's discussion on the fantasy of dirt while for Kristeva (1982, p. 76) the "food remainders" are the residues of others and cause pollution because they are incomplete.

DIRT AND THE BODY

The body as a "dirt factory"

Kubie (1937, p. 391) developed his own "psychological definition of dirt as ... anything which ... symbolically or in reality emerges from the body, or which has been sullied by contact with a body aperture". He considered that this position revealed the fantasy which is almost universally and unthinkingly accepted: that the body is a dirt factory. He explained this in detail:

the body itself creates dirt, and is in fact a kind of animated, mobile dirt factory, exuding filth at every aperture, and that all that is necessary to turn something into dirt is that it should even momentarily enter the body through one of these apertures. Furthermore and paradoxically, we find that this curious dirt factory, the body, must despite its own uncleanliness shun as dirty anything in the outside world which resembles or represents the body's own 'dirt', and that above all else it must never allow its own relatively 'clean' outsides to become contaminated by contact with the filthy interior of itself or of anyone else. (Kubie, 1937, p. 391)

His proposition is close to Enzensberger (1972, p. 8), who stated that man is "the procreator of all dirt" and anything inside the body is clean rather than pure or impure. Similarly, Colliere (1986, p. 107), noted a "residual belief" about fear of the body underpins the scientific model because "the body is a source of corruption, evil and dirt". The body as a dirt factory is implied by Enzensberger as he considered that man has 25 different forms of production, or excretion of dirt, and that his body is the twenty-sixth excretion. Enzensberger does not provide a list of these products, but he does discuss or mention

many aspects of behaviour which may result in production of dirt: the written word; dirty language; sex; birth; murder; dietary restrictions; violations of the system; those who exist on the margins of society, such as the homosexuals, different ethnic and racial groups; the soul; social dirt; minority groups; the subjugated are filth; sloth; gluttony; the worker's dirt position; money and capital.

Although women could be included in many of these groups or activities, he does not mention them specifically. A similar position is taken by Theweleit (1977/1987, p. 420), who commented how in Capitalist societies, machines create workers as "waste products" or "dirt"; workers and lovers create dirt as soon as they begin their activities; humans are "the dirt we are ourselves" while the bodily boundaries are the "borders of dirt" (p. 222).

A hierarchy of dirt in body products

A hierarchy of dirt was suggested by Kubie (1937, p. 394), that is, humans react to dirt as if it possesses different degrees of 'dirtiness' and that these reactions were "finely graded". He contended that there would also be a universal ranking of body products from the 'cleanest' to the 'dirtiest' (Kubie, 1937). In this hierarchy, Kubie (1937) considered that tears were the cleanest excreted body product, while milk and semen could not be accurately placed because of the baffling ambivalence towards them. A similar position is taken by Faust (1980, p. 15) who considered semen as "not like faeces, which may smell offensive, dirty the sheets and carry germs. Some ... enjoy the silky feel of fresh semen". Obviously, if the semen was old, she would have given a different description of it. Kristeva (1982), however, considered tears and sperm to lack any polluting value. Some authors (Haidt, Rozin, McCauley, & Imada, 1997), considered that tears were the only body product which did not generate disgust in Americans. Ortner (1973) believes this is because tears are unique to humans, while all other body excretions and secretions are shared with animals. Kubie never actually provided a complete list of body products, but his partial list included: "ear-wax, the desquamated cells between the toes, nose pickings, hair clippings, nail clippings, sweat from different parts of the body, urine and faeces". It is interesting that Kubie has not mentioned any form of blood in his list, but this may be due to the period in which he was writing — prior to the major technical advances, including blood transfusions, made as a result of World War II, and the secrecy surrounding sexuality and reproduction. Neither does Kubie mention the possibility there may be a difference between males and females, or those with different socio-economic backgrounds, or even cultural differences.

Lawler (1991, p. 79) has remarked, Kubie's hypotheses had "flaws, debatable assumptions, and multiple biases". His work, however, was the starting point for several other studies from a psychoanalytical perspective (R. E. Dimond & Hirt, 1974; Hirt, Ross, Kurtz, & Gleser, 1969; Kurtz, Hirt, Ross, Gleser, & Hertz, 1968; W. D. Ross et al., 1968). All the studies which tested Kubie's hypothesis have confirmed Kubie's assumption: there is a finely graduated dirt reaction to various body products, and body products can be graded from the cleanest to the dirtiest. The rank order of the body products varied by one, two, or three positions with a couple of exceptions. Rather than there being ambivalence towards milk and semen, they seem to have their position in the hierarchy: milk is either the cleanest or the second cleanest item, while semen is one of the cleaner items and ranked as either the fourth, fifth or sixth cleanest product.

Menstrual blood was rated towards the clean end of the scale and cleaner by the females, than the males, though the medical students rated it cleaner than the other males, both male groups placed it closer to the dirty end of the scale. One exception was a group of social workers who ranked menstrual blood as the second cleanest body product. It is arguable that the body products would change their graded reactions and ranking over time. Possibly this would occur for blood, menstrual blood, and milk, as since the advent of AIDS, the awareness of hepatitis and other sexually transferable diseases, blood is now considered as one of the most dangerous of body fluids while breast milk has been implicated in the transmission of HIV. An important suggestion by Kurtz et al. (1968, p. 13) is that the hierarchy of body products may be interpreted as having a "body-syntonic" or "body-alien" dimension. That is, the cleaner products, such as, tears, milk, and semen are considered natural and in harmony with the body (body-syntonic), while "feces [sic], phlegm, and pus cluster in the negative section of the continuum because they are seen as foreign, diseased, unnatural, or "waste" products of the body (body alien)". This could explain why menstrual blood was perceived so differently, as it includes the shedded lining of the uterus.

The results of work by Clark and Davis (1989) demonstrated that males and females react

differently to defilement and that the females have a lower nausea threshold when reacting to defilement. From the 110 defiling incidents examined in the study, men reacted more strongly than women in seven incidents, none of which was statistically significant, while women reacted more strongly than men in 94 incidents of which 58 were statistically significant (Clark & Davis, 1989, pp. 665-666). As Clark and Davis (1989, pp. 667-668) noted, these results equate with the commonly held view of women as being "more sensitive", and thus more vulnerable to defilement, while men are less vulnerable as they have "other unviolated sources of power." They contend that defilement itself is a mechanism for lowering a person's status by ruining or spoiling the person's identity. Clark and Davis (1989, p. 667), assert defilement is a resource used by men "to maintain or even enhance their position of dominance over women", but, it is also used against other males, such as, political prisoners who are urinated upon, "forced to eat ... excrement", and raped. For these authors, defilement is considered to enhance the power position of the perpetrators and to "'mark'" the victim (Clark & Davis, 1989, p. 667).

Clark and Davis (1989), noted sexual defilement was another area in which the women reacted more strongly then men. They considered there were three important patterns detected:

- 9. Females "react with repugnance to violations of the person by perpetrators" regardless of their gender, while males "only react" this way "if the perpetrator is another male";
- 10. If carnal knowledge is made public, "females are ... more upset than males";
- 11. Pornography is commonly more repugnant to females than to males (Clark & Davis, 1989, p. 668).

These authors noted that sociobiologists argue that such gender differences are related to the different "biological and social costs associated with the two reproductive systems" resulting in women investing more, being more fearful and having an "aversion to potential violation" of their reproductive system (Clark & Davis, 1989, p. 668). This is one explanation of why the care provided to childbearing women is such a contentious issue for many women.

The conclusions drawn by Clark and Davis (1989), were that males and females in an

Anglo-Canadian culture live and experience defilement differently. To explain this difference these authors used concepts of power, patriarchy, self identity and culture. Within the Anglo-Canadian culture, defiling items or situations are usually related to "sexelimination body products, their carriers or their symbols" (Clark & Davis, 1989, p. 669). Association, either directly or persistently "with cultural 'dirt' is felt to ruin or place in jeopardy one's self-identity" (Clark & Davis, 1989, p. 669). Because of their increased sensitivity and vulnerability to defilement, their strong reactions "to threats of defilement", women are considered weak, while men being less sensitive or vulnerable to defilement, "are positioned to employ, intentionally or unconsciously, defilement as a device in the legitimation and management of their domination over women" (Clark & Davis, 1989, p. 669). The researchers considered everyday instances of defilement, such as, "frequent spitting, flatulence, 'grubbiness', and public genital self-manipulation, ... pornography and ... sexual assault", as "micropolitical acts" which demonstrate the perceived superiority of males (Clark & Davis, 1989, pp. 668-669). They consider it ironic, that women, despite a horror of defilement, because of their lower social position, "find themselves laboring [sic] as housewives and commercial cleaners in close association with dirt" and thus scrubbing toilets and cleaning "the dirt of others" (Clark & Davis, 1989, p. 669).

According to Kubie, the resulting stratification of society as a result of a hierarchy of dirt was, any strange group becomes the lowest and is referred to as 'dirty'. The other result to follow from these assumptions of Kubie's (1937, p. 396) was that there was an "all-inclusive taboo" in human adults in relation to the apertures of the body. This has resulted in a camouflaging of the body apertures to varying degrees at different times and in different societies.

Kubie commented on how as a result of assumptions about the body and dirt, smooth sections of the body are 'cleaner' than wrinkled sections, and so the penis is 'cleaner' than the scrotum. It is also clear that the penis is considered 'cleaner' when aroused than when flaccid. He considered that fat meant 'dirty' and thin meant 'clean', while those parts of the body near apertures were dirtier than those at a distance from them. The assumption about the cleanliness of an absence of hair was taken to extremes in harems in the Middle East. Women were required to removed all body hair, including pubic and nasal hair, but their

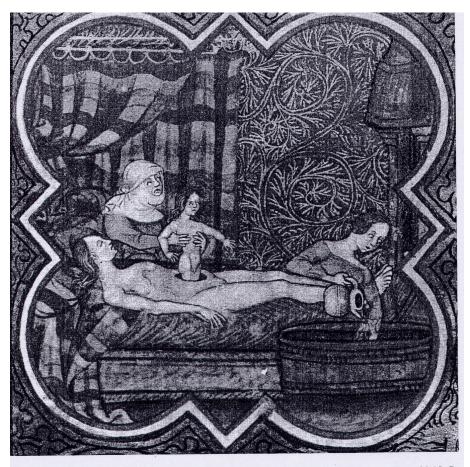
eyebrows and hair "on the crown of their heads" were excluded (K. S. Daly, 1995, p. 230). Davis-Floyd (1994, p. 329) considers: "sexuality and hair are symbolically linked", thus the pubic shaving [in childbirth] symbolically returns the woman to a childlike state.

A hierarchy of the body

Kubie (1937, p. 395), noted that the body parts could also be arranged in a hierarchy and this could be observed in "the rituals of obsessional neurosis" but he never elaborated upon this. It is not possible to confirm or refute his statement as the obsessions and compulsions are currently described too broadly. For example, the most common obsession in one study was "concern with dirt, germs, or environmental toxins" while the most common compulsion was "excessive or ritualized handwashing [sic], showering, bathing, toothbrushing [sic], or grooming" (Swedo, Leonard, & Rapoport, 1990, p. 31). Yaryurna-Tobias and Neziroglu (1997, p. 11), described the contents of obsessive compulsive disorders as most commonly being related to "contamination, religious, sexual and morbid thoughts" while rituals related to purification and decontamination included "cleanliness forms, hand washing, ... showering, ... [and] clothing and house cleaning" (p. 13).

A hierarchy of body regions and their susceptibility to pollution has been noted by various authors. Enzensberger (1972) believed that the legs and the outside of the body were the least susceptible, while the susceptibility and danger increased as you approached the middle and top of the body. The greatest area of danger is the upper part of the body and the face. Similarly, Daly (1995, p. 178) noted that until the 1950's, discussions relating to the body in the Catholic Church were categorised as "decent, less decent and indecent". "The face, hands and feet" were in the first group, with the "breasts, the back, and limbs" in the second group and "the sexual organs and other adjacent parts" in the third group (K. S. Daly, 1995, p. 178). Although not identical to Enzensberger's grouping, there are commonalities. Goffman's (1971) statements about the back and the elbows having scant ability to contaminate while the sexual organs do contaminate, likewise suggests a hierarchy of body regions. This was also implied by Douglas (1966/1992, p. 123) in her discussion on the Hindu caste system when she talked about the bodily division of labour where "the head does the thinking and praying and the most despised parts carry away waste matter".

ILLUSTRATION 3.1 BIRTH THROUGH A 'CLEAN' HOLE



7. The birth of Julius Caesar (Les Faits des Romains, London, British Library, Royal MS G

Reference: Blumenfeld-Kosinski (1990, p. 66)

Kubie (1937, p. 395) admitted that the "most important single consequence of this hierarchy of fantasies is an unconscious but universal conviction that woman is dirtier than man" (original emphasis). Although Kubie does not mention it, it is clear from his assumptions that the female genitalia are also considered dirtier than the male genitalia. Based on Kubie's hierarchy, the female genitalia are dirty, not just because of their surroundings, but because of their physiology and their anatomical shape. He does discuss his belief in women's obsessive conviction of having "one aperture too many, and that a dirty one" (Kubie, 1937, p. 398).

Saint Augustine is credited with perpetuating the idea of birth as dirty as he believed all infants are born "between faeces and urine" (cited in B. G. Walker, 1983, p. 586). According to Berle (1999), because of the 'dirtiness' of the female genitalia and its proximity to the bladder and the rectum, it was considered inappropriate for someone of Julius Caesar's importance to have been born via this 'dirty' area and so the myth of his abdominal birth was created. Similar comments have been made by other authors, for example, Churchill (1997, p. 2) noted that a caesarean birth was considered a "godly" method, while Kahn (1995, p. 207) refers to it as "extraordinary" and as a "marker of the powerful of the world" (see illustration opposite). The Christian perspective is given in the following quote:

Birthing was regarded [as] an objectionable, private, and nasty business. That the birth passage was placed between where the feces [sic] and urine were eliminated was often cited as God's way of showing disgust for the birth of yet another sinner. The act of giving birth itself defiled the mother, who could be readmitted to the Church only after rites of purification, called "churching" These rites were based on older Judaic precepts, which regarded a woman as unclean for seven days after the birth of a son, fourteen days after the birth of a daughter. (Achterberg, 1991, p.119)

While the woman was considered as 'unclean' from the birth process, evidently she was made 'dirtier' by the birth of the 'dirtier' female child. Kristeva (1982), when commenting on Judaic childbirth laws noted that the mother is considered to be impure, defiled, bloody, and requires purification by a sacrifice. She considered the requirement for the male infant to be circumcised as a symbolic separation of the child from the mother, demonstrating his

alliance with God. For Kristeva (1982), the male infant's alliance with God removed the need for reparation. What is implied by Kristeva is that the male child is definitely now cleaner than the female child because he is aligned with God.

The perception of women as dirty is supported by Sartre (1943/1984, p. 607), who asked "What mode of being is symbolised by the slimy?". Sartre (1943/1984, p. 608) then described slimy using various terms which indicated that slimy and women were irretrievably connected in his beliefs: "a constant hysteresis in the phenomenon of being transmuted into itself display — like the flattening out of the full breasts of a woman who is lying on her back slimy is docile". Further into the discussion he elaborates:

... a soft, yielding action, a moist and feminine sucking Slime is the revenge of the In-itself. A sickly sweet, feminine revenge which will be symbolized on another level by the quality "sugary". This is why the sugar-like sweetness to the taste — an indelible sweetness, which remains indefinitely in the mouth even after swallowing — perfectly completes the essence of the slimy. A sugary sliminess is the ideal of the slimy; it symbolizes the sugary death of the For-itself (Sartre, 1943/1984, p. 609)

It is evident when reading Sartre's work that 'For-itself' is given male characteristics, while the 'In-itself' is given female characteristics. According to Olen (1983, p. 199), however, 'For-itself' is the technical term used by Sartre for an individual who is "a free choosing agent", while 'In-itself' "is the form of being characterizing *nonhuman* reality" (p. 252) (original emphasis). If this is taken further, it seems that Sartre feared females, considered them nonhuman, and, either unable, or without the ability to choose freely. Later in the chapter, Sartre (1943/1984, p. 613), loosely linked some characteristics of slime with holes and considered that holes are "nothingness" which need to be filled. He elaborated upon this:

The obscenity of the feminine sex is that of everything which "gapes open." In herself woman appeals to a strange flesh which is to transform her into a fullness of being by penetration and dissolution. Conversely woman senses her condition as an appeal precisely because she is "in the form of a hole." Beyond any doubt her sex is a mouth and a voracious mouth which devours the penis — a fact which can easily lead to the idea of castration. The amorous act is the castration of the man; but this is above all because sex is a hole. (Sartre, 1943/1984, pp. 613-614)

An alternative perspective to Kubie's fantasy of dirt and its resulting hierarchy is provided by Dworkin (1976, p. 11) who considered that "the male sexual model is based on a polarization of humankind into man/woman, master/slave, aggressor/victim, active/passive". She considered that this model, although centuries old, has been used as the model for male identity, wars, civil, economic and governmental power, and is the model for all types of "dominance and submission, whether it be man over woman, white over black, boss over worker, [or] rich over poor" (Dworkin, 1976, p. 12). In a similar vein, Kitzinger (1985, p.35) noted that many women find the use of "crude four-letter words about sex (fuck, screw, bang, score and so on) ... unpleasant". She believed that this was because many women consider the words are insulting. Kitzinger (1985), however, believed there was more to the use of these words than just insults – they suggest that sex is an aggressive act with the implication that women are harmed during it.

The margins of the body

For Douglas (1966/1992) all the margins of the body should be considered as dangerous. She commented that if the margins changed shape, the "fundamental experience is altered" (Douglas, 1966/1992, p. 121). Douglas (1966/1992, pp. 121 & 120) noted that the bodily orifices are specially vulnerable and the "bodily refuse" that comes from these orifices are a "symbol of danger and power". A list of this "bodily refuse" was provided: "Spittle, blood, milk, urine, faeces or tears or by simply issuing forth have traversed the boundary of the body. So also have bodily parings, skin, nail, hair clippings and sweat" (Douglas, 1966/1992, p. 121). This type of contact which is believed to be dangerous also carries a "symbolic load" (Douglas, 1966/1992, p. 3). A similar position was taken by Kitzinger (1979), who noted that Judaeo-Christian and other cultures conceptualized the body as a vessel whose exits and entrances were closed and only opened at specified times. She remarked that "to do so at any other time is 'dirty'" (Kitzinger, 1979, p. 207).

Contrary to Douglas, Enzensberger (1972), has taken a different position and commented that the margins or limits of the insides of the body are clearly defined and he does not include the orifices. He has provided examples to illustrate his statement, one of which is the throat which is susceptible to pollution inside the body at the level of the larynx. Thus,

for Enzensberger, the margins of the body flow continuously and are the skin and the various mucosa layers that provide an entry into the body. This also means that the vulnerability of the body is increased. Some authors (Haidt et al., 1997, p. 112) use the term "outer envelope" when referring to the boundaries of the body, and like Enzensberger's explanation, this suggests that there are folds and bends to the body's boundaries. Enzensberger (1972, p. 9) noted that the most important boundaries of the body are the skin but this has only been so for the past 200 years since "social intercourse became so unexpectedly difficult".

Intrusions and traversing of the margins of the body

Health care professionals expect and are usually permitted, almost licensed into a person's personal space and to traverse the margins of the body. Yet, as Brown (1996, p. 297), has noted, it is not just touch that health professionals are permitted, but in some circumstances they are allowed to "break the surface and to cut away parts of the body". This is an obvious reference to surgery, but it also applies to other health workers. For example, dentists remove teeth, drill holes, fill the holes and descale teeth; nurses insert catheters or tubes into various orifices of the body, cleanse wounds, ulcers, mouths, apply dressings, ointments, administer medications, lay out the dead, and provide the daily body care that the patient is unable to attend to; physicians regularly examine patients, and this would include inserting their fingers or objects into orifices; pathology technicians collect samples from patients, and while many may be collected by the patient, the most commonly collected sample would be blood, which requires breaking the boundaries of the skin, traversing the subcutaneous tissue and the walls of the blood vessels; midwives and obstetricians examine women vaginally in labour, they may incise and repair the perineum, they may manipulate the woman's and/or the baby's body during delivery of the baby, and/or the placenta.

Health professionals regularly interfere with the margins of the body, areas normally considered dangerous. The dangerous nature of the margins of the body and health professional boundaries is acknowledged or implied by recent publications (McMillan et al., 1999; National Council of State Boards of Nursing Inc., 1996; National Health and Medical Research Council, 1999a). There is an imbalance of power between patients and

health professionals, but of particular importance is when professional boundary crossing or violation occurs as it often affects the patient's bodily margins. According to one study, under involvement results in neglect of, or assault on the patient, while over involvement results in exploitation and abuse (McMillan et al., 1999). This group provided an example of appropriate therapeutic touch, or what Kitzinger (1997, p. 217) would refer to as "comfort touch", which involved the margins or boundaries of the body:

Story C ... I remember this guy who lived alone in the scrub with his dogs. Was having a tough time _ social worker with me gave him a hug _ dirt and all. I looked at his face over her shoulder. The tears came to his eyes and he said, "It's so long since I've had a hug" (McMillan et al., 1999, p. 9). (original layout)

What is evident in this story is the importance given to the dirtiness of the client. The social worker, despite the man's uncleanliness gave him a hug. The narrator was surprised, not only by the hug, but that the social worker gave the hug to someone who was dirty.

DIRT AND POWER RELATIONSHIPS

Douglas considered the body, with its complexities, boundaries and margins as the perfect source of symbols for other complex structures, such as society. She stated:

We cannot possibly interpret rituals concerning excreta, breast milk, saliva and the rest unless we are prepared to see in the body a symbol of society, and to see the powers and dangers credited to social structure reproduced in small on the human body. (Douglas, 1966/1992, p. 115)

Her position differs from Enzensberger (1972), who considered the societal structures, boundaries and margins are the product or result of human activity. Enzensberger (1972), quoted a statement by Ricoeur and expanded upon his concept of defilement as an entry point for terror. He considered this the role of dirt in society and so

all dirt relationships ... [should be] reinterpreted as power relationships. Anyone carrying dirt is powerful, and anyone in power utilizes dirt for purposes of control. The one who can defile others, whether clean himself or not is the boss. (Enzensberger, 1972, p. 47)

This statement has been used by Clark and Davis (1989), given a more cultural perspective and expanded upon to describe their beliefs in relation to the power structures underlying

the concept of defilement. They believe that the "rules and conditions" related to secular defilement are supported by inequalities in the "distribution of power and advantage" in cultures with "structural social inequality" (Clark & Davis, 1989, p. 651). They allege:

Culture becomes a vehicle for the maintenance and reproduction of dominant-subordinate relations in so far as it extends, through enculturation and identity construction processes, differential sensibilities and vulnerabilities in relation to defiling situations and substances. Such differentials provide the dominant with a means to distinguish itself from the subordination while also providing the dominant with a device to control and manage dominant-subordinate relations. (Clark & Davis, 1989, p. 651)

This expansion on Enzensberger's statement on dirt and power relationships clarifies the mechanism through which dominance is achieved, but it still does not cover all situations. For example, Corbin (1982/1994) has discussed the throwing of excrement by the lower socio-economic groups at the powerful, but considered it only a challenge which reenforced his own lower status.

Murcott (1993, p. 125) has shown that infants, while their eating habits and "digestive discharges" pollute both literally and socially, their pollution is tolerated because of their age. Infants are not motivated to establish control of their mothers through their various uncontrolled physical methods of excretion, while their mothers held a shared perception that the infants, even if unable to fit into an adult timetable, should not dominate the household (Murcott, 1993). Murcott (1993) considered babies as innocent, pure and on the margins of the social world. As such they require protection both literally and metaphorically from pollution. This follows Douglas` (1966/1992, p. 97) approach when dealing with "marginal beings" whose protection from dangers must be provided by others. The protection provided by others, in this instance the mothers, Murcott (1993, p. 131) called "the cordon sanitaire": literally "a line of sentinels, military posts or the like, enclosing or guarding a particular area" (A. Delbridge et al., 1997, p. 484) who were focussed on sanitary (Olsen, 1999) matters, that is, on cleanliness and preventing disease (A. Delbridge et al., 1997, p. 484). The term, "the cordon sanitaire", was introduced in 1720 when Marseilles was ringed by sentries, to prevent anyone leaving the plague-infested city, and to ensure that the infected and uninfected districts remained separated (Matrix,

1983). Bashford (1998, p. 78), has provided, however, a slightly different definition with a sociological perspective: "the cordon sanitaire" was "the notion of quarantine in which individual bodies were separated, isolated, subject to rituals of exclusion".

DIRT AND WORK

Hughes (1971b, p. 312), a sociologist interested in occupations, believed that all occupations contained tasks which could be labelled as 'dirty' and provided a partial definition of 'dirty work' – it was "drudgery ... requires no skill. It has to be done, but is a low-prestige item". Work is 'dirty' in several ways by being "physically disgusting", or it may symbolise degradation, or "wound one's dignity", or it may be contrary to "our moral conceptions" (Hughes, 1971b, p. 343). Hughes (1971b, p. 343), noted that he could not imagine an occupation in which there was not a repetitious need for the worker to "be compelled to play a role of which he thinks he ought to be a little ashamed morally". Hughes then continued that in occupations there is always some action which offends the worker's dignity. He provided the example of janitors who described dealing with the garbage as their most difficult task. It is difficult to decide if Hughes was using "moral" and "morally' to describe right or wrong conduct, or if he was using them to describe the rules of right conduct, or correct manners, as for example, one does not to handle the garbage.

Various authors have labelled work as 'dirty', covering a variety of jobs in different occupations or groups, and varying levels of skill or knowledge. For example, there was:

- 12. Housework and the care of infants done by servants in Victorian England (Davidoff, 1979);
- 13. The care of alcoholic patients by medical officers (Strong, 1980);
- 14. The practice of sociology by sociologists outside academia (Ford, 1986);
- 15. Nonpsychiatric work involving homeless persons, welfare and disability recipients done by the psychiatric staff (Phil Brown, 1989);
- Nursing care (Lawler, 1991; Murcott, 1993; van der Geest, 1998; Wood, 2001), hospice care (Lawton, 1998), and labour ward work by midwives (S. Hunt & Symonds, 1995);
- 17. Daily hygiene care provided by health care assistants (Arborio, 1995);

- 18. Garbage (Perry, 1978), and sanitation collection (Prashad, 1995);
- 19. The physically heavy, tough work related to the nuclear weapons` program done by peasants (Reed & Kramis, 1996);
- 20. The abuse of elderly people in a nursing home (Stannard, 1978);
- 21. Repetitive, unskilled manufacturing work and shift work done by migrants (Probert, 1989).

In a study by Jeffery (1984), although he never used the term 'dirty work', it is apparent that caring for the deviants, or the "rubbish" patients in Casualty is dirty work. The "rubbish" patients could be categorised into four groups: "trivia", or patients with minor injuries not requiring treatment; drunks; overdoses; and tramps (R. Jeffery, 1984, pp. 251-252). There were a small number of other patients who were included in the "rubbish" category: "nutcases" and those who were dirty, or smelly, or obese (R. Jeffery, 1984, p.252). According to White (1973, p. 288), the indicators for a "poor man's work" are low rates of pay, the distance between the worker, and dirt and grime, an inability to determine when, where, and what he works at, resulting in many unskilled workers doing "hard, dirty, night-time jobs". Clearly many of the above jobs have these characteristics, so it is obvious why these occupations are referred to as 'dirty work', but for some jobs the reasoning is not so clear.

Hughes (1971a, p. 312), however, noted that the "frontiers" of different occupational groups were continually changing, particularly in hospitals. He noted that wherever there were 'frontiers', there would be areas of either conflict or co-operation. This concept is similar to the term 'margins' used by Douglas and Enzensberger, and the 'boundaries' used by Sartre (1943/1984) and Kitzinger (1979). Maternity care is the site of professional conflict in many countries with continual 'battles' between the medical and midwifery professions. These are usually based on the midwives` legal right to provide care for childbearing women, and/or gain remuneration from governmental rebates or health insurance. Some examples are: Canadian midwifery, once outlawed, has been reintroduced with support from the government (DeVries, 1996); in 1990 New Zealand midwives won the right to compete equally with general practitioners in providing care for maternity services, but is fighting with the New Zealand Medical Association to retain this right (Donley, 1998), while midwifery in Australia is continually struggling to prove its worth

and independence from both medicine and nursing (Barclay & Jones, 1996).

Wicks (1999, p. 133) believes that "the category of skilled work has been jealously guarded by male workers" and the various organisations that protect their interests, so skill is seen as being part of men's work, but not of women's work. Various authors writing about the Australian work situation would agree (Bates & Linder-Pelz, 1987; Probert, 1989; Scutt, 1990, 1994). Both Willis (1983) and Probert (1989) have commented on how the medical profession, although unable to claim expertise in all areas of the human body, has managed to claim the dominating position by restricting other health professions (dentistry, pharmacy, optometry) to particular areas of the body, or by subordinating other professions (nursing, midwifery, physiotherapy, radiography) to medicine. The professions whose areas of expertise have been limited are male dominated, while those which have been subordinated are female dominated. Probert (1989) has argued that the Australian Arbitration Commission system has entrenched the sexual division of labour. contended that even the payment of "equal pay for work of 'equal value" introduced in 1972 reflected the devaluation of women's work and cites the lifting of heavy objects, a man's job, as having greater value than doing intricate work, a woman's job (Probert, 1989, p. 101). Yet, until recently the lifting of patients was an integral part of nursing and midwifery with a 'no lift policy' being introduced only because of the high insurance premiums and workers compensation payments (Study Hospital, 2000)⁸.

Another nurse-theorist, Lawler (1991) developed her work around the concept of nurses as workers who work with dirt. She noted that the lower ranks of nurses were involved with the dirtier tasks and that as the nurse progressed in her career, her tasks became cleaner. White's (1973) perspective on this would be that the distance between the worker and the dirtier jobs is increasing, and so the work is perceived as 'cleaner'. Because nursing work is done mostly in private, *Behind the screens*, it is not given public acknowledgement, high status, or monetary recognition (Lawler, 1991). This was explained by one participant:

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⁸ The name of the hospital has be removed to preserve the anonymity of the participating institutions and individuals.

You take someone who has been hospitalised. [They] say 'nurses are wonderful, worth a lot more money' they would not go home and say 'the nurses were really wonderful, they took really good care of my bowel'. I think they would go home and ... they wouldn't talk about it. They will talk about 'my operation', my doctor', but they won't talk so much about the pan and having the enema and how the nurse did the enema or 'washed me'

or all that sort of thing. They go back into a situation where those things aren't talked about. (Lawler, 1991, pp. 224-225)

According to Freund (1979), Wiseman, through his cinematic work on social control, claimed that information related to institutional "troubles", "dirty work" and "mistakes" is minimised through institutional structures. This may also affect how the work of doctors, nurses, and midwives is viewed.

Both Murcott (1993) and Van Der Geest (1998, p. 8) have noted that children, the elderly and the sick require special treatment because of their faeces, while the latter notes that the faeces of children are "less 'dirty' than those of older people". Van Der Geest (1998), noted that the sick and the incontinent elderly people require professional assistance which is provided by a specific group - nurses. According to Van Der Geest (1998, p. 8), this indicates the incontinent elderly and the sick have "really dirty" faeces which has to be dealt with by 'specialists'. This would suggest that he considers that nurses are 'specialists' who preform 'really dirty' work. He is not alone in this belief. Littlewood (1991), has discussed the demarcation of 'dirt' work in hospitals between nurses and domestic staff where the nurses remove one type of pollutant, excretions from the body, such as, vomit, urine and faeces, while the domestics remove dust, tidy the spillage from flowers and other similar work. Littlewood (1991, p. 178), referred to this aspect of nursing as "sick dirt" which was so polluting that it could not be done by the domestics. According to her a sick person:

has transgressed social rules, has disobeyed accepted ideas on behaviour in space and time. He is separated off, contained, or isolated in order not to contaminate others he needs to go through a cleansing and healing process he is traditionally removed to the hospital - removed from his home and his culture - and is subjected to being undressed, given a bath or enema, and placed in a space identical in most respects to that of other sick people. (Littlewood, 1991, p. 178)

Littlewood considered that nurses were intimately involved with containing the personal pollution of the sick by redefining their time with hospital rules and regimes, drawing screens around the bed to redefine their personal space, guarding their bed area and providing a close guard both geographically and symbolically when the person was seriously ill. Similarly, Firth (1991, p.2) has described nurses` work as including the "rude realities of living and dying, - and the mobile boundaries of the suffering body". It seems that the present day nursing profession has retained its central, and defining role of "keep[ing] the patient clean ... [and] preserving cleanliness" (Nightingale, 1859/1980, p. 72). Nightingale (1859/1980, p. v) considered most women at some time provide nursing care, and all women should have "every day sanitary knowledge" to assist them with is this process.

PURIFICATION AND CLEANSING

Any discussion about pollution and dirt usually refers as well to purification and/or cleansing. As Levy (1997) noted both purity and pollution are derived from our perceived vulnerability to dirt on our body, or our 'self', while Goffman (1971, p. 78) has referred to ritualised "cleanliness practices" that prevent the individual from "self-befoulment" every day. Purity is restored by removing the dirt from the body's surface, either physically, or by "magical/metaphorical means", or by only using clean items when touching the body, particularly the mouth (Levy, 1997, p. 385). Douglas (1966/1992, p. 96) considered that pollution and its purification indicated the seriousness of an event, while rituals remade "the man". Ritual is defined anthropologically as any expressive activity "with a high degree of formality and a non utilitarian purpose" (Buckser, 1997, p. 410), while the dramatic structure of rituals allows an explanation of the culture's mythology.

Cleansing and purification is discussed by Enzensberger (1972, p. 14) who noted that people throughout history have been using water "to remove the less harmful consequences of contact". He believed the reason for the use of water was because it exemplified the "most negative qualities": it is colourless, odourless, formless, and homeless, as people prefer to use flowing water (Enzensberger, 1972, p. 14). The most obvious example of the last characteristic would be hand washing. For Enzensberger water embodies nothingness, yet it is substantial when compared to air. He considers that we desire the water to absorb

ILLUSTRATION 3.2 BURNING PLACENTAS



Left: Nrs Glazbrook, Johnston, Coleman and Thorp. Burning Plancenta, 1940's.



these "harmful consequences", regardless of how obnoxious they are. As alternative eradicating, but more drastic purification processes, Enzensberger (1972, p. 15), suggests "burying and burning". He believes these are remarkable methods of purification as they remove both the dirt and its agent at the same time! With burying, the original dirt is concealed in the greater dirt, yet it still exists, whereas with burning the dirt is obliterated, and "the polluted individual preserved, provided that the essential self is conceived of as ethereal. He`d be clean all right then!" (Enzensberger, 1972, p. 15). Interestingly, burying and burning are the preferred method of disposal of the placenta in 'primitive' cultures, while burning was a favourite method in western cultures (see illustration opposite) until technology made the disposal easier, by mixing minute particles of the placenta with the sewerage.

A body fluid which surrounds the baby during pregnancy, referred to as amniotic fluid or liquor amnii in the professional texts, but it is usually referred to by women and their families as 'the waters', was considered a cleansing agent of the birth canal. The composition of this amniotic fluid is 98% water with the remaining two percent consisting of solid matter, including electrolytes, proteins, glucose, fats, lipids, hormones, pigments, enzymes, fetal hair, vernix caseosa, discarded fetal cells (Sellers, 1993a). While the amniotic fluid is an excretion of both the mother and her fetus and as such may be considered as dirt, much of the solid material is a waste product of the fetal body. For example, the amniotic fluid contains fetal urine, fetal lung fluid, hair, vernix caseosa, and dead cells that have been discarded by the fetus from the skin and mucosal layers.

Among the functions attributed to the amniotic fluid in various textbooks was its action in washing out, flushing or cleansing the genital tract (Berkeley, 1924; Dawson, 1952; Gibberd et al., 1948; Greenhill & Friedman, 1974; Hickman, 1985; Jellett, 1945; Jellett & Dawson, 1948; Redman, 1966; A. Ross, 1937; Townsend, 1969), its role in more easily opening the woman's body by providing lubricant for the passage of the fetus (Hollick, 1876) and the placenta and membranes (Rösslin, 1513/1993), and, possibly the prevention

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⁹ "A cheeselike, greasy-white substance which is secreted by the fetal sebaceous glands from the second trimester of pregnancy and which protects the fetal skin in utero" (Sellers, 1993b, p. 1794).

of autoinfection during labour (Greenhill & Friedman, 1974). Rösslin (1513/1993, p. 48), the author of *The Rose Garden for pregnant women and midwives*, the first midwifery text published in a vernacular language, claimed that the birth would be "hard", or difficult, if "the moisture and the water break and come before the proper time of delivery/ due to which the baby does not have moistness or slipperiness for a proper issuance" (original layout). At the end of this chapter, he then stated that "the signs of a light easy delivery/ are contrary to the ones written above" (Rösslin, 1513/1993, p. 47) (original layout). Hence, it may be assumed that he considered that the amniotic fluid provided the necessary lubricant to facilitate the birth process.

Amniotic fluid was referred to as a "sterile fluid" (Gibberd et al., 1948, p. 62; Hickman, 1985, p.103), or "as a sterile douche of the birth canal" (Bulman, 1941, p. 29), or a "somewhat antibacterial liquid" which provided a "continual washing out from above" (Greenhill & Friedman, 1974, p. 243), while Brown noted that it flushed "the passages with aseptic fluid" (1950, p. 211). Perhaps the ultimate description of the 'natural' antiseptic and cleansing processes of the liquor and the placenta are given in the following quote:

It should be noted how Nature follows the principles of antisepsis in labour. The birth canal may be divided into three parts. (1) The vulva, including the entrance to the vagina. This area swarms with organisms of various sorts. It may therefore be designated the Septic Tract. (2) The vagina, containing the vaginal bacilli with their acid secretion, a few fungi, and some leucocytes. This is the Antiseptic Tract. (3) The cavity of the uterus, separated by the plug of mucus from the vagina, is entirely devoid of any form of organism. It is therefore the Aseptic Tract.

Now all the natural processes in labour are from the aseptic, through the antiseptic, to the septic. All forms of interference, on the contrary, must be from the septic, through the antiseptic, to the aseptic.

Nature is, however, not content with these advantages. She adopts safeguards. These are: (1) the increase in the vaginal secretion during the first and second stages of labour. (2) The flushing of the vagina by the sterile liquor amnii on the rupture of the membranes. (3) The second flushing of the *distended* vaginal walls by the liquor amnii that follows immediately on the child`s birth. (4) The mechanical cleansing – the mop action - of the placenta and membranes in their passage through the vagina. (Johnstone & Kellar, 1963, p. 183)(original layout and emphasis).

Intriguingly, this is the only reference found to the "mechanical cleansing" of the birth

canal by the placenta and membranes, although the independent midwife in the study referred to this. "Mechanical cleansing" as such is rarely discussed, yet it is the mechanical action of water or fluid which provides most of the cleaning in many cleansing processes. All of these references to the cleansing function of the amniotic fluid and the placenta are found in a defined period. In an examination of 120 midwifery and obstetric texts, ¹⁰ most of the discussion occurs prior to 1974, while there are only three texts (Hickman, 1985; Sellers, 1993a; Verralls, 1993) in which the washing or flushing discourse occurs after this date. All of these texts are written by midwives, with only one obstetric text (Greenhill & Friedman, 1974) referring to the cleansing function of the liquor. It is notable that Myles, arguably the dominating midwifery author for four decades, published 10 editions of her textbook from 1953 to 1985, never included washing or flushing the birth canal as a function of the amniotic fluid.

The amniotic fluid itself has also been referred to as an antibacteriostatic agent (Larsen, Snyder, & Galask, 1974). One famous obstetric text, however, mentions that the amniotic fluid "contains antibacterial activity and acts to inhibit the growth of potentially pathogenic bacteria" (Toot, Surrey, & Lu, 1992, p. 50), while another states "occasionally several millimeters thick, vernix caseosa [found in the amniotic fluid] is vigorously antibacterial" (Kaiser, 1986, p. 317). The vernix caseosa is credited by Sellers (1993b, p. 1794), as a "lubricant during the birth" process and like the amniotic fluid itself, it therefore assists in opening up the woman's body. These were the only texts that provided a discussion on the importance of the antibacterial properties of the amniotic fluid, including the vernix caseosa, or their role in facilitating the birth of the fetus by promoting the opening up of the

¹⁰ Initially, there was an attempt to separate the books into two different groups: those written by midwives and those written by obstetricians. This became difficult as the majority of earlier texts were written for nurses and midwives by medical professionals, while many of the current texts are used by both obstetric and midwifery professionals and some are written for midwifery and medical students. Midwives use both midwifery and medical texts while, medical professionals use only medical texts. The only texts referred to were those that could conceivably be expected to discuss the functions of the amniotic fluid, thus dictionaries were excluded as were texts on pain relief in labour, fetal monitoring, antenatal care, and episiotomies.

woman's body.

Another textbook¹¹ (Moore & Walsh, 1903, p. 552), however, does refer to the normal bleeding that occurs following the birth, medically labelled 'the lochia', and commented that it was popularly known as "the cleansings". These authors considered that "the cleansings" are initially blood containing clots, then change to a watery mixture, then change to a greenish-yellow, while prior to its disappearance it looks like "soiled water" (Moore & Walsh, 1903). That there was a great variation in the duration and quantity of the lochia was accepted, while its existence was considered necessary with any sudden cessation of "the cleansings" being followed by "evil consequences" (Moore & Walsh, 1903, p. 553). Bradby (1999, pp. 287-288) in a recent study of childbearing women in Bolivia used the term, "the cleansing" for a process in which health professionals applied pressure following the birth, to the woman's abdomen with the expressed blood being collected in a tray. This ensured that most of the woman's blood loss occurred in the first two days. Watson (1905, p. 366) observed that the lochia should always "be perfectly sweet" and a possible interpretation of this phrase is that the lochia should not have an offensive smell.

Dirt, germs and asepsis12

According to Sebastian (1999, p. 344) the acceptance of the spontaneous generation of disease was unquestioned until the 16th century. Questioning of this theory accelerated with the improvement of the microscope which allowed microorganisms to be seen. Kircher in 1658 described "worms" in the blood of plague victims (Sebastian, 1999), while around 1674 Leeuwenhoek discovered "animalcules", either on, or derived from plants, animals and humans (Rosebury, 1969, p. 13). That Leeuwenhoek viewed the "animalcules" with

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¹¹ This textbook was written for "numerous individuals, families, and office establishments, necessarily scattered over India", while it was assumed the reader would belong to the "well educated" class (presumably English). The authors were English and had links with the H. M. The Queen, the Indian Government and the Army. I have assumed that it is a reflection of English medical knowledge and therefore of relevance to this discussion (Moore & Walsh, 1903, title page & prefaces).

¹² "Asepsis by definition means absence of pathologic organisms. However, it is impossible to exclude all microorganisms from the environment. Asepsis in the surgical setting refers to the efforts made by the surgical team to prevent the transmission of microorganisms to patients and personnel. Aseptic technique includes those practices that prevent the patient and staff from acquiring infection. These may include nonsterile activities, such as washing hands, or sterile activities, such as donning surgical gloves" (Revell, 1995, p. 52).

curiosity, rather than fear or disgust, is evident in his description of the organisms he found in his own diarrhoeal faeces: they were "... a-moving very prettily; some of 'em a bit bigger, others a bit less" (Rosebury, 1969, p. 14).

An understanding of microorganisms and their effect on health was scientifically explained by Pasteur who classified organisms as anaerobic (not requiring oxygen) or aerobic (requiring oxygen), and developed a method, pasteurization, which prevented the spoiling of wine (Rutkow, 1993). Lister applied the findings of Pasteur to develop a systematic approach to antisepsis (Rutkow, 1993), using carbolic solution on dressings and instruments in 1865, then spraying the operating room (Rutkow, 1993; Sydney Teaching Hospitals, circa 1979). This was followed by the use of carbolic solution in the wound and on the hands of the surgical team. In 1869 Lister soaked the suture material in carbolic solution, thus producing the first sterile sutures (Rutkow, 1993). A major problem with the use of carbolic solution was its damaging effect on the skin of the patient and the person using it (Sydney Teaching Hospitals, circa 1979).

Both Pasteur and Koch discovered organisms which caused specific diseases, with Koch in 1878 providing "convincing evidence, for the first time, of the pathogenicity of pyogenic organisms" (Rutkow, 1993, pp. 342-343). Koch postulated the steps necessary to establish the specific causing organism for a disease (Rutkow, 1993) and proved that many bacteria could be killed by bichloride of mercury (Hæger, 1989). The consequences of these discoveries changed the western concept of health and disease forever. Hygiene and public health became a focus of the medical profession (Sigerist, 1943). With the acceptance of 'the germ theory' in 1878 (Rutkow, 1993), various methods were developed to eradicate 'the germs'. The dangerous nature of germs and microbes was advocated, together with some of the antiseptic and aseptic methods that are now commonplace in a paper on the relevance of 'the germ theory' which was presented in Paris:

... impressed as I am with the dangers of exposure to the germs and microbes scattered on the surface of all objects, particularly in hospitals, not only would I use only perfectly clean instruments, but after washing my hands with the greatest care and submitting them to a rapid flaming, which would cause no more discomfort than a smoker feels in passing a burning coal from one hand to the other, I would use charpie, bandages, sponges

ILLUSTRATION 3.3

DIRT AND GERMS

A great many diseases are known to be caused by tiny little creatures called *germs*, or bacteria, far too small to be seen, except by a



strong microscope. These germs get into the body by the breath or the food, or by water, or milk, or cuts in the skin. Not all germs cause

disease. There are, indeed, dozens of kinds of them which we could not do without, because they help us in all sorts of ways; but there are some really bad tribes of them, who will make you ill if they get a chance. We are constantly



getting these disease germs into our bodies in one way or another; but, if the body is quite healthy, and strong enough to resist them, they will not be able to grow. If it is not quite healthy, they grow and spread and give off poisons which make the person ill, and they may even kill him.

The germs of some diseases have not yet been found out, but it is probable that nearly all diseases

are caused by these tiny creatures.

Reference: Elkington (circa 1908, pp. 8-10)

previously exposed in air at 130 to 150 [C] degree temperature; I would never use water which had not been submitted to a temperature of 110 to 120 [C] degrees. All this is practical. In this way I would have to fear only the germs in suspension in the air around the patient's bed; but observations shows us each day that the number of such germs is insignificant compared to those scattered in the dust on the surface of objects or in the clearest of ordinary water. (Pasteur 1878, cited in Rutkow, 1993, p. 342)

Prior to Pasteur's statement, however, Nightingale (1859/1980) noted that the only way she knew how to remove dust was with a damp cloth. Pasteur's statement probably provided additional support for the damp dusting that has been carried out by nursing and midwifery staff of hospital wards, theatres and labour wards for decades. For Nightingale (1975, pp. 21 & 39), a sanitary reformer, good nursing began with "the fear of dirt", while disease was caused by "dirt, drink, diet, damp, draughts and drains".

Preceding an understanding of the 'germ theory', wounds that were infected were thought to be healing with the exudate from the wound referred to as "laudable pus" (Rutkow, 1993, p. 339). At least one textbook, however, used this term while in the same chapter referred to the use of carbolic acid and 'the germ theory' (Weeks-Shaw, 1896). Once the bacterial origin of infected wounds was understood, dirt and germs became linked. Conditions which were favourable to the growth of bacteria were stressed: "warm, dark, moist places are propitious for the development of bacteria", and later "damp, dark, dirty places favour the development of almost all kinds of pathogenic bacteria" (A. C. Maxwell & Pope, 1914, pp. 23 & 660). A school book used in Australia and New Zealand also made the link between dirt, disease and germs and stressed the need for cleanliness if people were to remain healthy (Elkington, circa 1908). Although the book described the germs as both good and bad, the emphasis was on the 'bad' germs, while the sketches emphasis the effects of dirt and cleanliness (see illustration opposite).

A nursing text which presented very similar views on the growth of germs also implicated "dead or decaying material as food [and] badly ventilated houses where the sanitary arrangements are defective" (E. M. Robertson & McInroy, 1937, p. 62) Another text made the link between possible wound infections and dirt: "nothing ... harbours dirt and filth more than hair", therefore, the patient had to be shaved (Weeks-Shaw, 1896, p. 153). Operating rooms had to exclude dust and dirt if wounds were to remain uninfected (A. C.

Maxwell & Pope, 1914). Infected wounds were referred to as "dirty wounds", a term that is still in current use (Meeker & Rothrock, 1999, p. xv).

"Absolute cleanliness of the body" was required if the growth of germs was to be hindered (E. M. Robertson & McInroy, 1937, p. 62). Because her hair could not be changed, the nurse had to keep her hair covered "with a closed cap" (A. C. Maxwell & Pope, 1914, p. 138), but there was no mention of this being a requirement of the medical staff. Similarly, there is a directive to the nurse about not going from an infectious or septic case, to an obstetric case, but there is no mention of the necessity for a medical person to follow the same guidelines. The operating nurse was instructed not to be careless as she may undo all the surgeon's work (Weeks-Shaw, 1896). In addition, the nurse was expected to ensure that "nothing is handed to him [the doctor] which has touched any doubtful surface" (Weeks-Shaw, 1896, p.171). Thus the nurse was given the job of ensuring that the aseptic process was maintained, yet if the doctor failed to comply she was placed in the impossible position of correcting someone to whom she was supposed to give unquestioning obedience.

Cleanliness was considered an essential constituent of the antiseptic/aseptic process (A. C. Maxwell & Pope, 1914; Watson, 1905; Weeks-Shaw, 1896). Nightingale believed that cleanliness was "the only real Disinfectant" (1914, p. 119), or the "true disinfectant" (1975, p. 26), while she considered disinfection and antisepsis as "mystic rites" (1914; 1975), indicating she did not believe in the germ theory (Summers, 1997). Nightingale fought against the use of antiseptics in hospitals as she believed it would "make physicians lazy and careless" (Larson, 1997, p. 6). The cleanliness theme was continued by Myles (1956, p. 261), who stated that "we must never underestimate the value of soap and water. Good wholesome cleanliness is the first pre-requisite in midwifery and is as important as an impeccable aseptic and antiseptic technique" (original layout). According to Bashford (1998, p. 136) the antiseptic/aseptic process was simply "a new way of coding 'cleanliness'" for the nurses, but for the medical profession it meant that they to learn to be clean.

Following Pasteur's statement, in the mid 1880s sterilisation by boiling "everything used during the operation, including the linen, dressings, and gowns" was introduced (Sydney

Teaching Hospitals, circa 1979, p. 10). Boiling remained a method of sterilisation and had the advantage that it could be used in a hospital or in the community. Sterilisation with pressurised steam (autoclave) was introduced, either by Chamberland in 1880 (Sebastian, 1999), or von Bergmann (Hæger, 1989) around 1886 (Sydney Teaching Hospitals, circa 1979). Various chemical and physical methods of deodorising, disinfecting, and asepsis were described in one textbook: abundant oxygen, carbolic crystals in an open dish or the solution sprinkled around the room, "solutions of sulphate of iron, nitrate of lead, ... permanganate of potash, ... various chlorides of lime, soda, and zinc", bichloride of mercury, baking, boiling, steaming and partitioning the sick room from the main section of the house with a sheet dampened with disinfectant across the doorway (Weeks-Shaw, 1896, pp. 138-143). Currently, the methods used in sterilisation of equipment, or the destruction of all viable organisms, are either physical or chemical. Physical methods include the use of moist and dry heat, radiation and infra-red rays (C. Taylor, Lillis, & LeMone, 1993), while chemical methods involve the use of ethylene chloride, glutaraldehyde, hydrogen peroxide, chloride dioxide and peracetic acid (C. D. Brown, 1995)

SUMMARY / CONCLUSION

In this chapter the concept of dirt, or the 'fantasy' of dirt, and its relationship with pollution and defilement has been explored and linked to behaviours of health workers. The classification as either dirty or clean, of people, their behaviours, objects, and other life forms, can be considered a method of organising, or structuring our world. The diverse characteristics of dirt have been described while the implications for society, the body, and work have been explicated. Chapter 4 continues the concept of dirt and explores its relationship with a western construction of women's bodies. It can be seen that dirt, through its relationship with the body and body products has resulted in humans considering that there is a hierarchy of dirt which they apply in their everyday life. Dirt has become synonymous with disease in western societies, thus complex measures are taken to eradicate 'the dirt'. Most importantly, it can be argued that any dirt relationship is indisputably a power relationship. Because pollution and defilement requires some form of purification or cleansing, we have developed elaborate rituals to change what is dirty to clean, or to prevent dirtiness. These rituals are especially evident in the health arena where the cleansing is both physical and 'magical'. The following chapters provide detailed

examinations of the way in which birth has been constructed as dirty, and explains the changes in rituals related to dirt and cleansing in different historical periods.

CHAPTER 4

WOMAN AS THE DIRTY 'OTHER'

INTRODUCTION

In this brief chapter, the centuries old construction of women as 'the other' in western societies is explored. Although women are approximately half the human race, they have not been seen as equal to men. Women have been compared by men, against men and have been found wanting, defective and abnormal. The ancient Greek and Roman texts are still relevant to how women are perceived. These texts, especially the medical ones, were used for centuries and have shaped western medical and philosophical thought. Women were seen as powerful and dangerous to men, because of their sexuality, and this notion is investigated. Women have also been constructed as dirty and this was related specifically to their normal physiological functions of menstruation, childbirth, and the production of colostrum.

Because women and their normal physiological functions were considered dirty, it was inappropriate for men in many cultures to attend women in childbirth. Childbearing women were cared for by other women. This chapter examines the changing relationships between women, midwives and medical men.

WOMAN AS 'THE OTHER'

Before discussing women's place and position in childbirth, it is necessary to first describe women's position in society. Despite both women and men being essential to the continuance of the human race, women have been almost invisible in the histories of human endeavour. A simple example of this can be seen in the use of the words to describe the female and the male. The term 'woman' is derived from the Old English 'wifman' where 'wif' meant woman and 'man(n)' meant humankind, with the amalgamated term meaning an adult female (Mills, 1991). There was a similar term for a male, 'waepman', but it was "lost" and male became

the term used generically for humans and for a male (Tuttle, 1987, p. 347). The idea that 'woman' is derived from "womb-man" was espoused by Purchas in 1619 who considered women were houses whose purpose was "for generation and gestation" (Mills, 1991, p. 266).

The manner in which women are perceived in western societies has developed over the centuries. According to Bullough (1988, p.16) western civilisation was considered to have begun in the Middle East between modern Egypt and modern Iraq, but the "attitudes formed in these areas were incorporated into Jewish, Greek and later ... Roman and Christian attitudes". Woman became 'the other', or as Gatens (1991, p. 5) notes the "shadow" which is used to define "the neutral human subject". Gatens (1991, p. 4) commented, modern philosophy is dominated by the problem surrounding the construct of the dichotomies of "mind / body, reason / passion and nature / culture", with the complex interplay between these and the male / female dichotomy resulting in prejudice towards women. According to Jay (1981), this is because there are underlying social and political assumptions in the dichotomies that are assumed to be true. For example, in the mind/body dichotomy, the 'neutral' division between A (mind) and B (body), hides the dominant position of A (mind), where A (mind) defines itself and B (body) as Not-A. B (body) becomes a symbol of all bodies (animals, celestial, plants, rocks etcetera), virtually whatever is not A (mind).

duBois (1988) examined the metaphors related to the female body in ancient Greece and considered these viewed it as a field, a furrow, a stone, an oven and a tablet. The common thread for all the metaphors is that the woman is considered passive, while the male is active. The woman is the space in which reproduction occurs, and she is the space to be inscribed. From the 5th century BC, the woman as a field links the female body, but particularly its reproductive ability, to the earth, with this metaphor still in used today. duBois (1988, p. 42) claimed the earth was seen as "giving, containing; it is the giver of foods, the holder of the dead" and so the concept of the earth as a vase, vessel or container developed. The link between the earth, the female body and the vase is supported by the archeological findings of "nippled ewers" where "two erect nipples ... [protrude] from the shoulder

of the vase" thus mimicking the shape of the female body in the vase (duBois, 1988, p. 47). The metaphor of the female body as a cultivated furrow is seen in the Greek tragedies, such as Oedipus, with an emphasis placed on the cultivation of the furrow (duBois, 1988). The woman is still linked with the earth, while the children she produces are considered the crops or harvest (duBois, 1988). duBois (1988, pp. 87-88) considers "the stones ... [as] the bones of the mother", and "are an extension of earth", but it is "hard and unyielding", is associated with virginity, menopause, and a desire of men to "make it yield", and to work the stone into spaces of "receptivity". For duBois (1988, p. 88), the stone metaphor is "the inversion of the fertile earth" and suggests negativity rather than the "fruitfulness of the earth and the female" together with the female ability to hoard and store goods.

The oven metaphor is based on the passivity of the female as a receptacle, and continues the link between the earth and the female body, while representing the woman as providing nothing but the space and heat (duBois, 1988). With the metaphor of the woman as a tablet, the productivity of women is removed and the focus is on the woman as "a blank surface", something to write upon (duBois, 1988, p. 130). For the ancient Greeks, writing could be erased and new writing inscribed on the tablet, while the tablet "folded up on itself" and symbolises the woman's potential for deception (duBois, 1988, p. 130).

The ancient texts of the Greeks and Romans are also important as they were the source of knowledge for the western medical texts and midwifery manuals and were in use till the 15th and 16th centuries (O`Hara, 1989). As O`Faolain and Martines (1979) commented, over a period of some 2100 years there was minimal change in the biological and medical views on the subject of women. Bullough (1976, p. 59) deemed the ancient texts provided "scientific justification" for misogyny.

In his *Generation of animals*, Aristotle (1943/1953, pp. 101, 109, 113) considered that the woman's contribution to the pregnancy consisted of the "matter" or "material" which was derived from menstrual blood, while "the male provides the 'form', and the 'principle of movement", like a carpenter who used material to make a

bedstead. For Aristotle this was expected as "the female, ... is a female on account of an inability" to produce semen, and is a "deformity", while he considered male and female as "opposites"(Aristotle, 1943/1953, pp. 103, 459, 461). Thus, the woman as a passive vessel is clearly seen in his writings, while the life of the newborn was deemed to have come from the male, who was active.

Hippocrates provided a different version. He considered both male and females produced male and female sperm, but the female seed was weak while the male seed was strong. If there were male sperm from both parents, or there was male sperm from one of the parents, it overcame the weaker female sperm and the baby was a boy, but if there were female sperm from both parents, the baby was a girl. Galen (AD 131-201), another Greek physician, who was a major influence on perceptions of the female body, and the medical authority of mediaeval and Renaissance Europe (O'Faolain & Martines, 1979) was explicit in his understanding of the differences between the male and the female bodies. He considered: man is perfect, warmer than the woman, therefore, he is the one who is active and forms new life; woman is imperfect, certainly less perfect than man and colder than him; because of this coldness the woman is more imperfect; the woman does not form new life because of "the impossibility for the female genitalia to emerge externally"; woman produces an imperfect sperm, although she has "a hollow organ capable of receiving perfect [male] sperm"; the reverse occurs in the male who has "an elongated member" used for intercourse and ejecting sperm; there is greater warmth on the right side than the left of the uterus and [female] testicles, so males originate from the right side and females from the left side (Galen, cited in O'Faolain & Martines, 1979, p. 132). Furthermore, Galen (cited in V. L. Bullough, 1976, p. 50) described women as "mutilated," but described this mutilation of "half the whole race" as serving a purpose for the Creator.

Intercourse was considered necessary to the woman's health by Hippocrates. He provided two reason for this: the uterus and the vagina are moistened by the sperm thus preventing dryness and painful contractions of the "matrix" [vagina and uterus]; and, because it moisten and heated the woman's blood, encouraging her menstrual flow, without which she became "sickly" (Hippocrates cited in O'Faolain & Martines, 1979, p. 136). In a nutshell, if the woman did not have intercourse with a male she would become sick! Women who

did not produce children are "prone to all mishaps", as are other women with menstrual problems (Hippocrates cited in O`Faolain & Martines, 1979, p. 137).

Similarly, Soranus (AD 98-138), who is often referred to as the "Father of obstetrics", was a Greek who moved to Rome to practice medicine (Margotta, 1996, p. 36). His textbook, *On the diseases of women*, remained in use for the next 15 centuries (Margotta, 1996). As Rich (1986, p. 123) noted men did not attend births and she implies that his knowledge was derived from midwives as "women did not write books".

Women as dangerous and powerful

The "male fear of demonic "feminine" qualities" probably existed from "the dawn of time" (Shorter, 1984, p. 286). Shorter (1984, p. 286), a medical historian, claims that this fear of women's sexual power was seen as "a magical threat to men"and because European societies were male dominated, the fear of women's qualities became part of the culture and was believed by both men and women. During medieval times, the men of the Church considered the sexuality of women was a temptation and therefore women were evil and had to be controlled (V. L. Bullough, 1976). Taylor (1959, pp. 64, 71-72), when discussing the same era noted that women were seen as "the source of all sexual evil," "the instruments of Satan," someone who attracted evil, and "tempted men". For Taylor this view of women is the basis of European sexuality. Women were considered as either evil like Eve, or pure like Mary. Picasso provided a variation on this dichotomy when he noted that women were either "goddesses" or "doormats" (K. S. Daly, 1995, p. 169). According to Kitzinger (1979, p. 189) in the Judaeo-Christian culture women have been seen as either the "mother" or the "harlot" since women were indicted as such by Clement of Alexandria. Dworkin (1976) presents a similar analysis. These two extremes in women are also seen in Summers` (1975) book on the history of women in Australia, while Mills (1991, p. xvii) provides another example: "the virgin/whore dichotomy". For Kitzinger (1978, p. 226) because of these opposing views of women, "in most societies woman is a paradox".

That women's sexuality is a problem to men is seen in myths and in both 'primitive' and civilised societies (Millett, 1969/1980). Todd (1983) claimed women's bodies', but particularly their sexuality, were considered by definition as deviant requiring religious

control and later medical control. Sexuality is a taboo subject in public, and between the sexes in some cultures (Gleave & Manes, 1993). The Chimbu of New Guinea avoided the problem of pollution from women by creating a lifestyle in which a couple were "rarely seen together" (Paula Brown, 1972, p. 30). Their villages had both men's and women's houses and while couples' did share the evening meal, "close and continuous contact" with the women was considered "dangerous" to the men (Paula Brown, 1972, p. 30).

Okely (1975) has described how English Gypsies consider outsiders or Gorgios, that is, members of mainstream society, as polluting. Gypsy men, however, consider Gypsy women as polluting with three categories: "1. Female sexuality is inherently polluting if mismanaged. 2 Menstruation is associated with pollution. 3 Childbirth is polluting." (Okely, 1975, p. 62). Okely (1975) used her own material and material from another researcher, T. W. Thompson (1922; 1929), when developing these categories and found there was a greater emphasis on categories one and three. Management of female sexuality is clearly about managing women's behaviour. Gypsy women were restricted in what they could wear, how they moved their body, where they washed and dried their clothes, where and how they bathed and went to the toilet. During pregnancy the women hide their body shape with concealing clothing as "shame is attached to pregnancy" as it is proof that they have had intercourse (Okely, 1975, p. 67). Okely (1975, p. 63) found that the majority of women artificially fed their babies, contrary to the advice given by health professionals, possible because breast feeding had to be done in private, while one woman described it as "filthy." Separate crockery for each family member was not uncommon due to the belief that the woman could pollute the man through his food and drink (Okely, 1975). The large apron worn by Gypsy women was to protect the cooking and the meal from becoming polluted by their dirty dresses which are in contact with the outer female body and women's "sexual parts" (Okely, 1975, p. 64).

According to Shorter (1984) of the fears` men entertained about women, the most extreme fear was related to the uterus, with this fear surviving in folklore. The uterus was able to wander around the woman's body and was capable of causing hysteria in women. In many European cultures, the uterus was not only alive but was considered as a separate animal which could cause colic and required feeding and/or appearament (Shorter, 1984). According to Shorter (1984, p. 287) the desire to control women's demonic bodies focussed

firstly on the uterus, while the blood which was derived from the uterus was considered a source of fear which is found in "virtually every society". Similarly, Todd (1983, p. 86) saw women's physiology as the "key" to understanding women and the cause of their "crimes and insanity". The normal functions of women (childbirth and lactation) were redefined as not only bodily diseases, but as mental diseases (Todd, 1983).

WOMEN AS DIRTY

Women as unclean, dirty, or polluters is discussed by several authors (M. Daly, 1978/1990; de Ras & Grace, 1997; Kitzinger, 1978, 1993; O`Hara, 1989; Shorter, 1984; Todd, 1983). The identification / description of women as polluters aligns readily with the role of women as "organizers, clearers-up, and cleaners-up in domestic life" (Oakley, 1976, p. 32). Oakley believes that because in western societies, before modern nursing existed, nursing was done by the domestic servants, thus she argues a link can be made between various roles. She notes that: "woman = polluter = housewife = domestic servant = nurse = midwife" (Oakley, 1976, p. 32).

Menstruation as dirty

"The taboo of menstruation" has existed for thousands of years and includes denying the realities of menstruation and menopause (Weideger, 1977, p. 10). The aim of the taboos, according to Weideger (1977) is to control and limit the power of the powerful person, so any danger to the group is prevented. The groups' safety is dependant on the group members, including the tabooed person obeying the required rules.

Because women have been taught to hide menstruation, including menopause, and feel ashamed of it, shame and silence are the result of taboos associated with them (Weideger, 1977). Kitzinger (1978) claimed that all taboos operate around concepts of pollution and cleanliness, while body products must not be allowed to enter the body, or the body will be considered contaminated. For Kitzinger (1978, p. 88), the "essence" of these concepts of pollution, in some cultures, but particularly Judaeo-Christian cultures, are "represented by the mixing of the male and female principles of ... semen, and ... menstrual blood." Although women are no longer required to live in a menstrual hut, Weideger (1977) asserts that women today have internalised the assumptions underlying the taboos related to

menstruation, that is, it is unclean, indecent and wrong, and have "constructed menstrual huts around ... [their] hearts and minds." The silence surrounding menstruation was one of the discourses apparent in a study of Australian magazine advertisements on menstrual products (Raftos et al., 1998). It is interesting to note more recently that the advertising power of product sales appears to be overcoming this taboo, especially in the television advertisements. This seems to be similar to Kristeva's (1982, pp. 74-75) claim that "defilement rituals" act as "a 'writing of the real" in those societies without a written system. It could be argued that the 'writing of the real' is continued in current society.

According to Islamic beliefs in Bangladesh the menstruating woman is polluting and, therefore, she cannot take part in religious ceremonies, such as, visiting the mosque, pray, fast, and touch or read from the Quran (Rozario, 1992). Rozario (1992) observed that the menstruating Hindu woman is polluting and a danger to males, because she is responsible for the purity of their caste. Thus child marriages and widow burning are the methods employed to counteract the pollution associated with menstruation. For Hindu women in Bangladesh, each menstruation is referred to as an "embryo murder" if the woman remains single after puberty (Rozario, 1992, p. 98). This is similar to the western medical concept regarding menstruation "as an expression of disappointment by the womb at the non-arrival of a fertilised egg" (Dunn, 1988, p. 17).

Even in the new scientific age of the 'germ theory', menstruation was considered a danger: "the monthly discharge of a healthy woman is a source of danger, as it decomposes ... rapidly" (Haultain & Ferguson, 1898, p. 12). The quote comes directly after a list of items of "decaying matter" which are poisonous to lying-in women, the implication is that the monthly discharge should be included in this list. Similarly, the perception that menstrual blood and the placenta was dirty was the perception of a research participant: "I still think of it being sort of dirty or whatever ... more like afterbirth or something like that ... not something Γ d like to be touching ... whereas ordinary blood, I wouldn't bother at all" (Laws, 1990, p. 33). Clearly touching the afterbirth or menstrual blood would be dangerous for him and his position reflects the majority view of anthropologists who until recently considered menstruation as "concepts of taboo (supernaturally sanctioned law) and pollution (symbolic contamination)" (T. Buckley & Gottlieb, 1988, p. 4).

Nurse-midwife Rubin (1984, p. 33), who used a psychological approach in her research on achieving maternal identity, described both puberty and menstruation in fairly negative physical terms, yet considered both to be necessary to developing positive personality characteristics, such as, empathy, compassion, assertiveness and developing an interest in "justice, ethics and morality". In relation to puberty, she stated:

Menses are also an exudate possessing malodorous and sticky qualities, but are more impacting at first in that menses are experienced as an exsanguination, a loss of blood, the life substance and sustenance.

.... in being feminine one is burdened with a messy discharge, exsanguination to the degree of flooding, or painful contractions at the onset of menstruation But the feeling is that this is an unfair burden, that men have it easier. (Rubin, 1984, pp. 32-33)

Other phrases Rubin used in relation to menstruation are the same, or similar to those used by Enzensberger (1972) and by others (Goffman, 1971; Sartre, 1943/1984) when describing dirt, while the description clearly identifies the body as a 'dirt factory' in which the male body is cleaner and less burdensome than the female body.

Childbirth as dirty

Various terms have been used to describe the pregnant woman. In Victorian times she was said to be in a "delicate" (OʻHara, 1989, p. 20) or 'interesting' condition, or "indisposed" (Ehrenreich & English, 1973a, p. 21). These terms reflect both the Victorian view of modesty and the perception of women who are pregnant as being ill or diseased and thus requiring the assistance of a medical doctor. Various euphemisms have been described by a range of authors that avoid directly referring to the woman being pregnant (Davis-Floyd, 1992; Findley, 1934; P. Jeffery, Jeffery, & Lyon, 1989; Kitzinger, 1993; MacCormack, 1994). In India pregnancy is associated with shame and should not be referred to by a bride or an unmarried woman and once pregnant, the woman practices "rigorous bodily concealment by pulling her shawl" down to cover her pregnant abdomen (P. Jeffery et al., 1989, p. 72). Pregnant women who highlight their abdomen are considered "shameless", while even appearances outside the home are to be avoided (P. Jeffery et al., 1989, p. 72).

There are many instances where childbirth is described, historically and/or culturally, as taboo, or polluting, or powerful, or dangerous, or dirty, or unclean, or a combination of these terms (Douglas, 1966/1992; H. Graham, 1950; Hendry, 1999; P. Jeffery et al., 1989; Kitzinger, 1993; Oakley, 1976; M. Potts & Short, 1999; Rubin, 1984). Birth may be perceived "as the ultimate form of excretion" in some cultures (M. Potts & Short, 1999, p. 133). In India there is a hierarchy of polluting circumstances of which childbirth is considered the most severe (P. Jeffery et al., 1989).

Shorter (1984, p. 288) claims that pregnancy was considered as unclean because of the state of a "pregnant uterus", but that this was hidden by the "pronatalism" of various European officials who wanted to increase their population and so ensured "pregnant women received special favours". In Finland the woman could not attend church, or be seen in public places, or attend baptismal ceremonies (Shorter, 1984). The pregnant woman's seclusion was due to her susceptibility "to evil spirits" but most importantly, because she was considered contaminating (Shorter, 1984, p. 288). Not only the childbearing woman, but everyone who had contact with her during labour was considered dirty in some parts of Hungary (Shorter, 1984). In some cultures, the woman was segregated from her husband for the pregnancy, labour and for a period following the birth until she could be cleansed or purified, although some women birthed alone away from their communal area (Findley, 1934; H. Graham, 1950; O'Hara, 1989; M. Potts & Short, 1999). Religious ceremonies to decontaminate the newly delivered mother occurred with Protestant and Catholic churching ceremonies until the 20th century with the ceremony and 'clean up' reinforcing the perception of the woman as contaminating (Shorter, 1984).

If the woman died in childbirth this was considered ominous with some areas of Europe still complying with the churching service, while in others the woman's body was buried at the edge of the cemetery with murderers and suicides, or sometimes even outside the wall of the cemetery (Shorter, 1984). These measures were taken to protect the community from the contaminating nature of the dead women's bodies. Similarly, there are laws for Jewish people in Leviticus which describe the purification required after childbirth and menstruation (H. Graham, 1950).

Rozario (1992, pp. 80-81) has provided a photograph from Bangladesh where the birthing hut is built close to the main Hindu home but totally separate. This was because the woman was not only "unclean ...[but] a source of danger" and to touch her was forbidden (Findley, 1934, p. 47). Rozario (1992, p. 98) compares menstruating women and women in childbirth to the "Untouchables" in Hindu society. In northern rural India women's concerns about childbirth are related to "shame, pollution, and ... vulnerability and danger" (R. Jeffery & Jeffery, 1999, p. 268).

Oakley (1976, p. 33) claims the development of the modern obstetric hospital as a separate entity was due to the perception of pregnancy as an "infective malady" and the danger these women posed to the remaining population. For Kitzinger (2000, p. 150), childbirth most dramatically expresses "the power of women's bodies" and as such is threatening to men. These threats could be that the men would "swell up and die ... [or become] cowardly and their weapons ineffective", or a drought could occur (Findley, 1934), or the crops would not grow (O`Hara, 1989), while simply viewing a "lying-in woman" would result in death in battle (Hays, 1972, p. 33).

In Gypsy culture, women, during and following labour, are a particular potential danger to men. While many women now use the hospital facilities, rather than the traditional approach of segregation within the camp, Okely (1975, p. 67) has suggested it is "a convenient way of dealing with a polluting act." Outsiders or Gorgios are in charge of the pollution process and of disposing of the polluted items (Okely, 1975), thus their homes are not contaminated or polluted by the birth process. The Gypsies distinguish between the inner and outer body and consider matter which is excreted from the inner body as particularly polluting (Okely, 1975). Because during the birth the baby is covered with blood and the waste products of birth, she/he is considered is as considered ambiguous matter, that is, the inside waste of the mother covers the outside of the baby (Okely, 1975). Priya (1992) has provided more traditional information: the woman is considered polluted until the baby has a Gypsy baptism, usually about four to six weeks; the father may then kiss the baby for the first time; the woman's purification process is a wash in the river after which she either burns or destroys everything she used since the birth.

In Siberia, a Yukaghir woman is considered unclean for 40 days following childbirth with a prescribed order of purification: for the first three days she is not permitted to touch anything in the house, on the fourth day she is ritually cleaned by the midwife, then washes the midwife's hands, a smoking ceremony follows after which the woman may resume her household duties, but she is prohibited from sexual intercourse and must avoid hunting and fishing equipment (Priya, 1992).

Colostrum as dirty

While breast feeding has been accepted as the normal method of feeding the baby in 'primitive' societies and in 'civilised' western societies until recently, colostrum was not seen in such a favourable light. Colostrum is the product produced by the woman's breasts from the 16th week of pregnancy till the third or fourth day following the birth of the baby (Sweet, 1992, p. 57). Thereafter, the breast milk 'comes in'.

Jackson (1999) sees a connection between the near invisibility of colostrum, and how it has been perceived in many cultures. Colostrum has been called "green milk" and "beesting" (Fildes, 1986, p. 441). The use of 'green' in reference to breast milk may be related to considering the milk as not yet 'ripe' enough to drink, while the 'beesting' may be a reference to the perceived nastiness of the colostrum. Fildes (1986, p. 86) has noted that in Europe, colostrum was perceived as "harmful and undesirable" prior to 1673, while 1746 was the last time any writer recommended against its use. After that date, it was seen as: a purgative, better than other milk, a preventative of maternal milk fever, and a preventive of "many infantile disorders" (Fildes, 1986, p. 86). Odent (1992, p. 74) believes that a "negative attitude towards colostrum is almost universal". In many parts of the world colostrum is considered as dirty, unhealthy, not suitable for consumption (Odent, 1992; Rossiter, 1994; Schott & Henley, 1996; Tran, 1994), and associated with taboos against its use (Jackson, 1999). In Tibet it was "thrown away" as it was considered "impure" (Maiden & Farwell, 1997, p. 99). In India some defiling menstrual blood is believed to remain in the colostrum, congeal, then become heavy, solidify and become yellow in colour, "like pus" (P. Jeffery et al., 1989, p. 76). Odent (1992, p. 74), has noted that colostrum has been likened to pus and poison in some traditional African societies. Negative attitudes to colostrum are found in many countries around the world with it being discarded and replaced with various other food substances (Odent, 1992; Palmer, 1988). Colostrum, from this perspective, is clearly very dirty!

MIDWIVES, MIDWIFERY, AND MAN-MIDWIVES

Historically, in most cultures, midwives were women, often with a variety of skills which reflected the society in which they lived. Midwifery, like most other occupations, probably had women with varying levels of expertise and experience. Four words/roles have been associated both historically and in origins of their meaning: "woman, witch, midwife, healer" (Oakley, 1976, p. 23). Midwifery was generally learnt in an apprenticeship model in most places until relatively recently (Bourdillon, 1988; Oakley, 1976).

Healers were known by various names: "the 'good woman', 'cunning woman' or 'wisewoman'" in pre-industrial Europe and colonial period in America (Oakley, 1976, p. 23). From the 11th to the 13th centuries European medicine began to be transformed into a "secular science and profession" which was originally open to anyone, but from the 13th century, with the exception of Italy, was the exclusive providence of men (Oakley, 1976, p. 28). Various guilds were set up, including the barber-surgeons, which exclude women (Oakley, 1976). According to Oakley (1976) the control of women in childbirth was transferred from female control to male control in two stages. The first 'takeover' occurred from the 14th to the 17th centuries when European medicine became a male dominated discipline, while empirical female healers were suppressed. Despite this, females continued to control reproduction, until the second 'takeover' in the 19th and 20th centuries when obstetrics was incorporated into various medical courses. Oakley (1976) points out that the takeovers occurred first in the upper and middle classes before gradually filtering down to the working class.

Midwives had high status in ancient times in the middle eastern countries but their status diminished following the demise of the Roman Empire (O`Hara, 1989). Midwives in western societies were considered on the lowest social level and from 14th century were often isolated within their communities, that is, they were "a social outcast", while in "primitive tribes midwives were expected to live alone, tainted with the 'unclean' nature of birth" (O`Hara, 1989, p. 56). Oakley (1976) presents a slightly different version. Female

ILLUSTRATION 4.1 SARAH GAMP, MIDWIFE



Dickens' character Mrs Gamp is portrayed as the worst type of midwife: Callous, drunk and unscrupulous

Reference: Riley (1968, opposite p. 49 & p. 64)

healers were well thought of in pre-industrial societies where the role of the housewife included the role of healer. Similarly, the practising midwives were highly regarded, although the women's prestige and position was gradually eroded over the centuries by the Church and the state due to their anti-female proclamations and laws (Oakley, 1976).

Initially, in western societies, the registration of midwives was done by the Catholic Church which focussed on the spiritual aspects of childbirth (the baptism of the child), rather than the physical well being of the woman and her infant (Donnison, 1988). In the United Kingdom, the local priest was required to verify that the midwife was a woman of good character (Bourdillon, 1988; O'Hara, 1989; Rongy, 1934). Thus, although registration existed, its purpose was not to ensure that there was a reasonable standard of physical care, but that the authority of the Church was maintained. The number of licences issued was unknown due to the remoteness of some communities (O'Hara, 1989), while there was no direct supervision of the midwives` practices. Midwives were required to obtain the name of the father from single women they attended in labour so he could be made to pay maintenance (O'Hara, 1989). Often the midwives had other jobs to supplement their income and were abortionist, fortune tellers, and washerwomen (O'Hara, 1989). The Italian medical historian Castigilioni (1927/1941, p. 146) gave a list of the midwives` services which consisted of providing "abortifacients or aphrodisiacs ... [or] lewd services" and requests for illegal assistance. From the middle ages, midwifery was considered an unclean profession with the midwife preforming "a necessary but degraded function" (Rich, 1986, p. 134).

Midwives were believed to be witches in some countries, "or at least, of meddling in witchcraft" and were believed to use the nail, hair from the baby and placenta from the mother in their work. (O`Hara, 1989, p. 56). Oakley (1976) believed the negative interpretation of the term 'witch' was encouraged by the Church in medieval times where previously a witch could be either 'good' or 'bad', or 'white' or 'black'. This resulted in a period of witch hunting in Europe and England and spanned "the 14th to 17th century" (Ehrenreich & English, 1973b, p.7). The witch hunts have been identified as a method of removing/controlling female peasant empirical healers who challenged the authority of "the Church over laity, man over woman, landlord over peasant …. the existence of the woman-

midwife-witch-healer challenged all three ... hierarchies" (Oakley, 1976, p. 26).

Superstitions and cultural beliefs would have influenced all health professionals, including midwives. Oakley (1976) maintains that the superstition was less likely to influence the women who worked empirically and used trial and error to improve their outcomes, than the medical practitioners who used theology and were anti-empirical, but in today's knowledge system, paradoxically were acceptable to the Church.

Many histories of medicine and obstetrics have been written in English, or translated into English, and until recently the majority of the authors of these texts were men. The English language texts tend to ignore the services provided by midwives through the centuries, invariably denigrated midwives, although grudging admiration was occasionally attributed to some well known midwives (Aveling, 1872/1967; Findley, 1934, 1939; Rongy, 1934; Speert, 1980; Spencer, 1927). For example, Castigilioni (1927/1941, p. 726) in his classic text, rarely mentioned midwives, but commented that they were replaced by "well trained-surgeons and obstetricians", thus implying that the midwives were poorly trained. Yet, some European countries, such as, France, Germany, Denmark, Austria, subsidized the education of their midwives as they considered it necessary to improve the health of their citizens (Donnison, 1988). For example, Madame du Coudray, a midwife, travelled extensively throughout France teaching both midwives and doctors, sponsored by the Crown (Gelbart, 1998).

This belittling of midwives is continued in *A doctor's creed. The memoirs of a gynaecologist*, Bourne (1962, p. 22) describes how at his first delivery he was on his own except for "a typical fat old gamp of the old school with no training in cleanliness and certainly without knowledge ... of antiseptics" (see illustration opposite). Bourne described how he stood several feet from the bed because he did not know what to do, but watched the birth with amazement. Thinking his work was over, Bourne (1962, p. 22) decided to leave but was stayed by the gamp saying: "Ere, doctor, what abaht the afterbirth". The forgotten placenta soon appeared and as Bourne (1962, p. 22) left, he heard the husband tell his mates: "Y'know, it's experience what counts". Bourne's denigration of the midwife seems to be because she is fat, old and knew nothing of antiseptics, yet clearly she

knew more about the birth process than he did.

Lloyd (1968) continued this theme, but added a new twist to his tale.

[Midwives] conducted large numbers of labours, often without medical direction and often in a most slatternly way, so that damage to life and health must have been considerable. The discoveries of Semmelweis and Lister could hardly have been put to any effective use by the ignorant 'bodies' who, by attending labour after labour, could spread puerperal sepsis far and wide (W. E. B. Lloyd, 1968, p. 271).

Lloyd not only has denigrated the majority of midwives, but failed to acknowledge that the discovery by Semmelweis was prompted by his noticing the better mortality and morbidity rates of the midwives when compared to doctors. Indeed, both Australian and American data from early in the 20th century implicated the doctor rather than the midwife as responsible for the high maternal mortality and morbidity (Lewis, 1978). Interestingly, a textbook published late in the 19th century quotes a Dr. Playfair who considered that puerperal fever was caused by some "preventible accident" [original emphasis], "originated in the nurse" who through "dirty hands, sponges, catheters, and sheets had been direct causes of the disease", and that this was "beyond the control of the medical man" (Haultain & Ferguson, 1898, p. 13). Later these authors (Haultain & Ferguson, 1898) stress the importance of cleanliness on the part of the nurse working with lying-in women, but there is no mention of the need for the medical man to do likewise, although some of the instructions are about activities that nurses would not undertake, for example, dissecting and post mortem examinations. Similarly, there are detailed instructions for the nurse on personal hygiene. It is evident when reading this textbook that the causes of puerperal sepsis follow those described by Semmelweis, but it diverges on an important point. Rather than acknowledge the role played by both the medical and midwifery professions in the spread of this disease, particularly the medical men as exemplified in Semmelweis' research, the midwives, with their dirty habits, are blamed for its occurrence.

Various authors (Oakley, 1976; Rich, 1986; Todd, 1983) have commented upon the practice of portraying midwives as dirty, or dangerous, or unreliable, or ignorant, or superstitious, or inferior, or a combination of these traits. The classic example of this

would be the Indian indigenous midwife or dai, who is considered the lowest of the low (Gordon, Gideon, & Wyon, 1965; R. Jeffery & Jeffery, 1999; Rozario, 1998). However, one of the best known and enduring of these portrayals of this role in western culture is Charles Dickens character, Sairey Gamp, in the novel *Martin Chuzzlewitt*, although Rowlandson's sketch of a midwife going to work is also well known (see illustrations - opposite and 4.1). Interestingly, in the reprint of Charles White's work, an introduction by Longo (1773/1986, p. x) includes a table of the evolution of concepts related to puerperal sepsis with a heading: "Transmission by midwives and other attendants". The 'other attendants' are the medical persons, but this doctor could not bring himself to identify them except by this vague non-identifying phrase. Rich (1986) has commented on the perception of 'filthy' midwives who were replaced by 'clean' and antiseptic obstetricans.

One of the reasons that maternity care in the west remained the province of women for so long was because childbirth pollutes, while midwifery was seen as an unclean profession and "beneath the dignity of" males (Donnison, 1988; Rich, 1986, p.132), or "not for a gentleman" (Mayes, 1987, p. 48). Until the end of the 19th century, "'proper' doctors had no business with midwifery" (Oakley, 1976, p. 31). The medical profession saw a distinction between three main areas: physicians, surgeons and pharmacists, with no room for the new area which was not considered a true part of medicine (Oakley, 1976). Walker (1954) does not discuss childbirth, midwifery or obstetrics in his history of medicine although there is one reference to obstetrics. Midwifery was seen as "the poor relation of 'proper' medicine" in countries like the United Kingdom, Australia, New Zealand, Canada, and the United States, with this creating a "largely invisible barrier to the masculinization of midwifery" (Oakley, 1976, p. 33). Similar, sentiments were made by Bourne (1962), a well known author of textbooks on midwifery/obstetrics and gynaecology.

Throughout the history of childbirth, men had retained for themselves the use of instruments (Bourdillon, 1988; Rich, 1986), together with the right and responsibility to provide assistance in emergency situations (Rich, 1986). Thus, male doctors made rare appearances, but did come to "officially pronounce a death", or offer peace of mind, or an autopsy (Musacchio, 1999, p. 26), or as surgeons (butcher, barber, sow gelder) they used destructive instruments to remove an obstructed or dead baby (O`Hara, 1989; Rich, 1986),

or from the 18th century when forceps were in general use, the baby was delivered (Oakley, 1976). The man-midwives specialised "in surgical intervention in childbirth", and were the forerunner of obstetricians (Oakley, 1976, p. 35).

Female midwives were regulated to the sphere of normal birth and from the 1720s on, the man-midwife and the female midwife competed directly for work (Oakley, 1976). Women turned to doctors because they believed that the birth would be safer and less painful if they utilized drugs, forceps and anaesthetics (Apple, 1987). However, the new benefits of medical science were only slowly extended to women (Oakley, 1976). This becomes evident when the history of puerperal sepsis is examined in the next chapter.

SUMMARY / CONCLUSION

This chapter has explored how women were constructed as 'the other' in western philosophical and medical thought. The ancient Greeks saw women as symbolising a field, a furrow, a stone, an oven and a tablet. All of these are passive objects, while the male was considered as active and normal. The ancient Greek and Roman medical texts were used for approximately 2100 with minimal changes to their views of women. These texts considered women negatively and judged them as inadequate when compared to men. Women were feared because of their sexuality, while they were considered dirty because of their leaking bodies. Although childbirth was seen as dirty and beneath the dignity of men to assist at the birth, as medicine progressed, men moved into midwifery and there was a demarcation dispute with the midwives over who controlled, and who was the most appropriate person to attend women in childbirth. The male midwives / obstetricians became the dominant health provider in childbirth.

CHAPTER 5

BIRTH AND DIRT - PUERPERAL SEPSIS

INTRODUCTION

This chapter examines the early period of the development of obstetrics and gynaecology. It explores puerperal sepsis, its' various definitions, and its incidence over time. The devastating effect of the disease on the women is described, as are the standards (or rather the lack of standards), of cleanliness in the hospitals and homes when this scourge killed so many women. This was the period in which women's bodies were being opened up to medical science, and, at the same time, to puerperal sepsis. This is one of the darkest periods of medical history. An investigation of childbirth literature at that time, indicated that puerperal sepsis was an iatrogenic disease which escalated with the development of lying-in hospitals and the use of the obstetric forceps. Many medical practitioners advanced theories about the origins of the disease and some of these are mentioned. Although it took over 100 years for the problem to be solved, there were several practitioners who 'almost got it right'. Some of these theories are investigated and there is a discussion on why this information was ignored. Once the cause of puerperal sepsis was acknowledged, the death rates decreased. Midwives were often denigrated and labelled as 'dirty' despite the evidence to the contrary. The last section of the chapter is devoted to the development of protective clothing and how this occurred and has changed over time.

WHAT IS IN A NAME?

This disease has been given different names over the centuries. "Puerperal sepsis" is the current term, but it was also called "childbed fever", "lying-in fever", "puerperarum febris", "febris puerpera" (H. Graham, 1950, p. 375), while the "milder" forms of the infection were referred to as "milk fever" or "weed" (Shorter, 1984, p. 105). As early as 1781, Foster deemed "puerperal fever" a poor name, as the disease did not occur exclusively in either childbirth, or in females (cited in

Cutter & Viets, 1964, p. 108). At least one author considered it congruent to refer to the disease as "lying-in 'infection' [as it] is a very good illustration of what 'infection' really means, since *parturition* [itself] is not infectious or 'contagious'" (Nightingale, 1871/1976, p. 78). White (1773/1986, p. 64) also referred to it as "miliary, low nervous, putrid malignant or milk fever." "The pyogenic fever of lying-in women" was how Voillemier (cited in Cutter & Viets, 1964, p. 113) referred to the disease he witnessed in the Paris epidemic of 1838. When classifying maternal deaths, the original term used by the Registrar General for England and Wales in 1843-1844 was "metria" (Loudon, 1992, p. 525). Rösslin (1513/1993, p. 67) referred to "a suffocation from the womb/ which is called suffocatio matricis in Latin" (original layout), but from his description this was an instance of puerperal sepsis, which followed a retained placenta and was complicated by pneumonia. Other names give some indication of the devastating effects of this disease on women: Semmelweis (1860/1981, p.355) referred to puerperal fever as the "darker aspect of midwifery14", while Gélis (1991, p. 245) called it "the black death of mothers".

These labels generally reflected an association with childbirth. This association with childbirth meant that the disease was seen as a "distinct disease entity ... in practically all disease classifications, well into the nineteenth century" (Cutter & Viets, 1964, p. 99). This inevitably influenced the discovery and the acceptance of the pathophysiology of the disease, and the methods of prevention and treatment. An epidemic in Paris at the Hotel Dieu in 1778, in which seven of twelve women died, provides an example of this approach:

Staff members counseled [sic] over what they called "the bothersome

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¹³ "Metria": I am unable to find a definition for this word. Loudon (1992, p. 50) referred to it as an "obsolete term." "Metria" probably has been replaced by the term, 'endometritis,' meaning an infection of the endometrium, or the lining of the uterus.

[&]quot;Midwifery" at this time referred to the care of childbearing women by both doctors and midwives. It was only in the 20th century that doctors differentiated themselves from midwives and midwifery care by referring to themselves as obstetricians.

epidemic," and out of their deliberations and their findings at the postmortem table the milk theory was evolved. From then on milk was banned from the hospital — but the epidemic swept on. (Findley, 1981, p. 5)

Childbearing women's vulnerability to infection

Women are susceptible to infection during and following the birth process due to the physiological and anatomical changes related to the pregnancy itself and because of what occurred during the labour and delivery. For example, the placental site is a large open wound¹⁵ inside the uterus, while the lochia, or the vaginal discharge following the birth, is a warm rich medium in which bacteria will easily grow (Silverton, 1993). Often there are lacerations of the genital tract, or there may be an episiotomy, or a caesarean section incision (Silverton, 1993). Frequent vaginal examinations, particularly when the woman's membranes have ruptured, increase the possibility of infection (M. G. Ross & Hobel, 1992). Obesity, anaemia, operative and instrumental deliveries, and "retained dead tissue" are considered by Silverton (1993, p. 454), to be predisposing factors in a woman developing an infection. Hayashi (1992) added other examples to this list: poor nutrition and hygiene, premature and prolonged rupture of the woman's membranes, prolonged labour and the manual removal of the woman's placenta. Other risk factors, some of which would not be considered currently applicable in western cultures, but were very important in previous times were:

- poor aseptic technique;
- manipulations high in the birth canal; ...
- insertion of unsterile hand, instrument or packing [into the vagina] (traditional practices should also be examined); ...
- obstructed labour; ...
- unrepaired vaginal or cervical lacerations;
- pre-existing sexually transmitted diseases;
- postpartum haemorrhage;
- not being immunized against tetanus;
- diabetes (World Health Organization, 1996b, p. 25) (original layout).

¹⁵ I have deliberately used this term as it is relevant to how puerperal sepsis was understood.

[&]quot;Retained dead tissue" is described as "due to intrauterine death of [the] fetus, retained fragments of [the] placenta or membranes, shedding of dead tissue from [the] vaginal wall following obstructed labour" (World Health Organization, 1996b, p. 25).

Many of these factors still play an important role in the continued maternal mortality and morbidity related to puerperal sepsis in non western countries with poor health services and with women who are malnourished or unhealthy.

Definitions of puerperal fever

One of the problems related to puerperal sepsis has been how it is defined. The current definition being championed globally is:

Puerperal sepsis is defined as an infection of the genital tract at any time between the onset of rupture of membranes or labour and the 42nd day following delivery or abortion in which two or more of the following are present:

- pelvic pain;
- fever of 38.5°C or more measured orally on any one occasion;
- abnormal vaginal discharge;
- abnormal smell, foul odour of discharge;
- delay in the rate of reduction of the size of the uterus.

(World Health Organization, 1996b, p. 13) (original layout)

This definition, like the description of the disease in the 18th and the 19th centuries, focuses on some of the clinical signs and symptoms, together with the woman's uterus, as the source of the problem. Why puerperal sepsis was a life threatening event for the woman is evident when reading a description of the mechanisms by which this disease may develop, and the possible clinical courses:

- 1. By *peritonitis*, in which the bacteria spread from the infected uterus, tubes and ovaries to the glistening white lining of the abdominal cavity called the "peritoneum."
- By bacteremia, in which the bacteria spread from the infected veins of the uterus into the general blood stream, disseminating poisons called "toxins."
- 3. By septic *thrombophlebitis*, which is the infection of a blood clot in an inflamed vein. As pieces of this infected clot break off, they are carried in the blood stream to distant parts of the body, causing further infections in such sites as the lungs. When pus-forming bacteria are at work in the bloodstream, this is called "pyemia."
- 4. By *cellultitis*, which is an infection of pelvic connective tissue. This is accompanied by large pockets of pus ("abscesses"), which are painful and enervating under the best of circumstances and, under the worst, can rupture into the abdominal cavity, causing a grave illness. (Shorter, 1984, p. 108) (original layout)

As Shorter (1984) noted, these different forms of the disease often overlapped in the women. While it is now known that many different organisms¹⁷ can cause puerperal sepsis (World Health Organization, 1996b), it is accepted that the principal organism responsible for puerperal fever was the streptococcus pyogenes (Bridson, 1996; Loudon, 1997), which has several different strains (Dixon, 1994). According to Colebrook (1954), it was not until the period between 1926 and 1950 that the identification of the organisms that caused the most serious infections occurred.

Puerperal sepsis in other times

Puerperal fever was recognized by the ancients, for example it was described by the Hindus in their "books of revealed knowledge," the Ayur-Vedas, which date back to 1500 BC (Speert, 1994, p. 289). Bridson (1996) considered only sporadic cases occurred until the middle of the 17th century, while according to Cutter and Viets (1964, p. 99) death was rare because of the "non-interference practiced [sic] by the midwives". Hippocrates and other medical writers from the 5th century BC (G. E. R. Lloyd, 1983), however, have described case histories which appear to indicate that women experienced both puerperal sepsis and what was referred to as "epidemics". Other authors wrote of "sporadic cases" (Bridson, 1996, p. 134) and "clustering" of cases (Lancaster, 1994, p. 13). The Hippocratic cases are found in the treatises entitled, Epidemics book I (cases iv and v) and Epidemics book III (cases 2,10, 11, and 12). Treatment consisted of an enema and a pessary (G. E. R. Lloyd, 1983) but all the women except one died. According to Findley (1939, p. 32), the genuine Hippocratic writings reveal "almost nothing of value" in the area of obstetrics and gynaecology. Centuries later, Planchon writing in 1801, noted that a woman with a pelvic abscess following a complicated birth, was treated unsuccessfully, by repeated purgings (cited in Gélis, 1991). Regardless of Findley's claim, Bridson (1996), credited Hippocrates with differentiating between the deadly form of the disease and the less virulent form.

Gebbie (1981) has postulated two scenarios for the ancient Egyptian women. Because the women laboured in a special room with many female birth attendants,

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¹⁷ Streptococci, staphylococci, Escherichia coli or E coli, Clostridium welchii, chlamydia and gonococci

whose number increased according to the woman's affluence, Gebbie (1981) believed that sporadic outbreaks of puerperal fever may have occurred. Supporting this argument are the references to magic and amulets required to protect the women in childbirth (Gebbie, 1981). However, Musacchio (1999, p. 24) contends the obvious reason for the 'magical' objects surrounding childbirth was because it "was ... difficult and often dangerous". Gebbie's (1981) alternative position of an absence of puerperal sepsis, was supported by citing Ghalioungui (1963) who believed that the midwives were well respected, godly and correct, while the hygiene in ancient Egypt was almost perfect for the times. The depictions of birth in ancient Egypt suggest that birth was "uncomplicated" (Gebbie, 1981, p. 19), while the traditional position for birth, both cephalic and breech babies, was by squatting on birth stones (Thorwald, 1962). Litzman (1844, cited in Semmelweis, 1860/1981, p. 508) provided support for Gebbie's second position when he noted that "milk-disease is wholly unknown" in Egypt.

THE STANDARDS OF CLEANLINESS IN HOSPITALS AND HOMES

There is no doubt that the standards of hygiene and cleanliness were very different in previous times. The first maternity ward in a hospital was in the Hôtel Dieu in Paris (Findley, 1934). The conditions in this hospital have been described, but it is difficult to determine in which year these conditions applied:

There was little light and almost no ventilation. The windows were nine feet above the floor and were seldom opened. The beds were made of wood, painted black, and draped with serge curtains and canopies. In the same bed there were seldom less than two patients and often four. When the demand was great, eight patients were assigned to a single bed. They occupied the bed in six-hour shifts and in alternating shifts were laid upon the floor. There was little or no nursing of the sick after ten o`clock in the evening. There was no segregation of contagious and infectious cases. (Findley, 1934, p. 201)

Findley does provide an illustration of a ward in this hospital from a 16th century wood engraving. The illustration shows two people in each of two beds, with a single occupant in the remaining bed. There are seven nuns in the scene and five other figures besides the patients. The scene is crowded. Corroboration for these statements comes from Tenon who in 1788 noted that women sometimes shared a

bed with another woman, regardless of her infectious state, or with as many three other women (cited in Findley, 1939). As recently as 1928 a photograph of a women's and girl's ward in Huttwill, Switzerland, depicts two and three people in a bed (Tröhler & Prüll, 1997). The beds are evidently made to accommodate a varying number of occupants. The unsanitary conditions of the l'Hospital Port Royal were alluded to in one report: rats were a severe problem in 1860, while chlorea was a problem in 1865 (Fuchs, 1992).

Generally, the conditions for patients in hospitals were horrendous in the first half of the 19th century. MacEachern (1962, p.16), considered this period in the history of hospitals as one of "ignorance and error". He provides a graphic description of a general hospital:

Surgeons of the day had sufficient knowledge of anatomy to lead them to perform many ordinary operations, ... more surgery was probably undertaken than previous[ly] But there was one important difference: whereas the medieval and ancient surgeons had sought to keep wounds clean, even using wine in an attempt to accomplish this purpose, nineteenth-century surgeons believed suppuration to be desirable and encouraged it. Hospital wards were filled with discharging wounds which made the atmosphere so offensive that use of perfume was required. Nurses ... used snuff to make conditions tolerable. Surgeons wore their operating coats for months without having them washed; the same bed linen served several patients. Pain, hemorrhage [sic], infection, and gangrene were rife in the wards. Mortality from surgical operations was as high as 90 or even 100 percent. Nathan Smith, in the second decade of that century, advocated a bichloride of mercury solution for reducing infection, but his ideas did not even provoke ridicule; they were simply ignored. (MacEachern, 1962, p. 16)

Although this description relates to a general hospital, it must be remembered that there were many lying-in wards in these hospitals and staff often went from one ward to another. Similarly, while this description is specifically related to surgeons, there is nothing to suggest that the men-midwives behaved any differently. There is one instance in which Semmelweis attended a woman in labour in his army uniform during the Hungarian revolution (Larson, 1997). There is no mention of it being a clean, or dirty uniform, or if he attended the woman immediately before, during or after fighting: the information was given to illustrate his patriotism.

The latter part of the nineteenth century was described by MacEachern (1962) as a renaissance period for hospitals, mostly due to the work of Florence Nightingale, whom he called the "first hospital administrator, a genius in organization." Nightingale had very clear ideas about the level of cleanliness and the standard of care she expected to be provided. Her reputation was built on the results of her work in the Crimean War where the conditions of sick have been described in detail, and were accepted as 'normal' at that time. Pre-Nightingale days during the war: "the sick were lying on canvas sheets in the midst of dirt and vermin. Beds were of straw. There was neither laundry nor hospital clothing" (MacEachern, 1962, p. 17). Nightingale "establish[ed] order and cleanliness," through initiating what are now considered essential ancillary hospital services – kitchen, laundry, and stores – and was able to reduce the death rate from 40 to two percent (MacEachern, 1962, p. 17). According to Larson (1997), sanitary reform and applied epidemiology were Nightingale's major contributions to infection control. "She formalized

cleanliness and sanitation so that it became the standard for the first time in hospitals, workhouses, and the military," while the data she collected and presented in relation to "filth on the battlefront" provided overwhelming evidence on its catastrophic impact (Larson, 1997, p. 7). Nightingale's (1871/1976) book on lying-in institutions is an example of her collating data collected by others and analysing the material, critique the results and making recommendations. Larson (1997) considered it ironic that Nightingale never accepted the germ theory. Despite this, however, her work revolved around the implementation of sanitation.

Charles White's description of the treatment of the postpartum woman is horrendous by today's standard, but was obviously fairly common in his time:

As soon as she is delivered, if she be a person in affluent circumstances, she is covered up close in bed with additional clothes, the curtains are drawn round the bed, and pinned together, every crevice in the windows and door is stopped closed, not excepting the key hole, the window are guarded not only with shutters and curtains, but even with blankets, the more effectively to exclude the fresh air, and the good woman is not suffered to put her arm, or even her nose out of bed, for fear of catching cold. She is constantly supplied out of the spout of a teapot with large quantities of warm liquors, to keep up perspiration

and sweat, and her whole diet consists of them. She is confined to a horizontal posture for many days together, whereby both the stools and lochia are prevented from having a free exit. (C. White, 1773/1986, p. 3)

Smellie (1695 - 1763), who is often referred to as the "Master of British Midwifery" (Johnstone, 1952; Rhodes, 1995; Jean Towler & Bramall, 1986), had very definite ideas on the use of forceps. Initially, his forceps were made of wood, but he was dissatisfied with these and developed a pair that were made of steel and covered with leather (Johnstone, 1952). By current standards, Smellie's practices would fail to meet infection control guidelines. Apparently, Smellie was aware of the possibility of the transmission of infection by instruments and recommended the renewing of the leather wrappings after use, especially if a venereal infection was suspected (Johnstone, 1952). The covering of the forceps with leather was continued by Denman, one of Smellie's famous pupils, and "it persisted into the nineteenth century" (Johnstone, 1952, pp. 78). Levret (1703 - 1780), a contemporary of Smellie, commented on the blood and other discharges which would coat the forceps, the possibility of infection if the leather was not changed after each delivery, and the necessity for the troublesome chore of changing the leather (Radcliffe, 1967). Similar comments were made by other obstetricians, while there was a discussion on the use of Moroccan leather which would be easily cleaned with soap and water (Cutter & Viets, 1964). This practice, however, also would not meet current infection control guidelines because of the dampness of the leather and the ability of body products to be retained in the creases of the leather. It is possible that neither the replacement of the leather, nor the washing of the forceps was always done. Some operators would not have considered it necessary, while others could have considered that there was an inadequate amount of time between usage of the forceps.

It was accepted that puerperal fever was "less frequent and fatal" in summer time due to the better ventilation in the warmer months (Nightingale, 1871/1976, p. 24). A different reason for this was suggested by Semmelweis (1860/1981) who noted that the medical students intake commenced in October, the month in which the rate death started to rise, but decrease once spring arrived and the students went on country picnics. "The midwives` woollen clothing," however, was the source of

the infection to Unterberger (1911-1912, cited in Shorter, 1984, p. 126), the women becoming contaminated when they brushed against the clothing. The latter is probably the reason why midwifery and nursing staff for years were not permitted to wear any form of a cardigan in the clinical areas during the winter months. There was no restriction on what clothing or fabric was worn by the medical staff: either they were considered to be cleaner, or they were perceived as not having contact with the women, or possibly both!

According to Gélis (1991) prior to 1780 it was exceptional if doctors or midwives washed their hands prior to working with the labouring women. After this time, some practitioners realised the implications of the "midwives" black fingernails and dirty hands" (Gélis, 1991, p. 135).

'Opening up' the woman's body to obstetrics

Cutter and Viets (1964) claim that it was the development of obstetric procedures, requiring the inserting of the hand into the birth canal together with the rise of lying-in hospitals, that led to puerperal fever epidemics. This claim is supported by other authors (Bridson, 1996; Carr, 1999; H. Graham, 1950; Speert, 1994) (Oakley, 1976; Rich, 1986) while Wertz and Wertz (1989, p. 128) referred to puerperal fever as "the classic example of iatrogenic disease". The latter was accepted by Semmelweis (1860/1981, p. 359), who noted: "A very frequent and certainly a successful measure for arresting the progress of an epidemic of childbed fever is to close the lying-in hospital". A similar comment was made by Nightingale (1871/1976). These claims would be supported by Wills (1997) who considered any imbalance in the ecology would probably cause an increase in disease, and possibly epidemics. The imbalance in this case was the admission of women to hospitals where they were exposed, when vulnerable, to various sources of infection. "Advances" in medicine were accompanied by

frequent internal examinations of women in labor [sic], contaminated instruments, dressings, and linens and crowding of patients. Ignorant of asepsis, physicians and students often proceeded directly from the autopsy room to the birth chamber, their hands unwashed. Spread of infection resulted. (Speert, 1994, p. 289)

The Hôtel Dieu in Paris recorded the first epidemics in 1646, according to Speert (1994), while, Gélis (1991) claimed that in Leipzig in 1652, a new disease, puerperal fever, "astonished [the doctors] 'by its novelty, its malignity and the vast numbers which fell victim to it". Graham (1950, p. 375) claimed that over the next 200 years there were "two hundred epidemics of lying-in fever", while no European country failed to experience puerperal fever epidemics (Gélis, 1991). Therefore, in their dealings with the 'new' disease these new professionals described the symptoms of the disease in great detail and with scientific detail and language available at that time.

This was the period in some countries in which males moved into the area of maternity care, and by 1770 in some countries had included it in medicine (Wilson, 1995). The claim of the man midwife, or obstetrician, was that he had a scientific base for his treatments, and certainly the use of the forceps often meant the survival of a baby who previously would have died or been killed during the labour process. Effusive praise for the obstetric forceps is common: forceps "have saved the lives of hundreds of thousands, probably millions, of women and their babies" (Rhodes, 1995, p. 37). "The science of midwifery", that is, obstetrics, was advanced by the development of forceps (Cutter & Viets, 1964, p. 44), while they have been referred to as "the key to the lying-in room" (Radcliffe, 1967, p. 30), the invention that "ended the autocratic rule of the midwife" (Findley, 1934, p. 320), and "a landmark in the progress of obstetrics" (Findley, 1939, p. 306). Oakley (1980, p. 11) has provided a scathing assessment of the same medical advances and claims that the man-midwife's use of forceps was minimal and "had little effect on infant mortality" while in some instances the rate would possibly have been increased.

According to Joseph Clarke (1793, cited in Cutter & Viets, 1964, p. 109), eleven years after the establishment of the first lying-in hospitals in England, "puerperal fever was epidemical in London". Many of these epidemics had a mortality rate of over 90% (Fuchs, 1992; Gélis, 1991; Loudon, 1992; Speert, 1980). The following is a brief description of an epidemic in 1773 at the Royal Infirmary of Edinburgh:

It began about the end of February, when almost every woman, as soon as she was delivered, or perhaps about twenty-four hours after, was seized with it; and all of them died, though every method was used to cure the disorder. This disease did not exist in the town. (Young, cited in Cutter & Viets, 1964, p. 109)

The sites of the epidemics and the infectious nature of the disease are the focus of the following quote:

The child-bed fever is remarkably infectious; and, when epidemic, capable of being propagated from one person in the puerperal state to another, and its event is generally so fatal, that, like the plague, few escape of those affected ... in public hospitals, and where a number of women are crowded together. It raged in the public hospitals of Paris, London, and Dublin, communicating from one person to another with astonishing rapidity, and its ravages were equally striking. (Hamilton, 1781, cited in Cutter & Viets, 1964, p. 108)

One of the epidemics was in King's College Hospital where Florence Nightingale had established a training system for midwives (Woodham-Smith, 1952) where "every precaution" was taken to ensure the school was "perfectly safe" (Nightingale, 1871/1976, p. vii). Nightingale (1871/1976, p. 26) indicated these precautions included only "a limited and regulated attendance of [medical] students," which had been "disregarded," while Larson (1997) reported that the midwifery students were not permitted to go to the other wards, but the rule was ignored, and the puerperal fever epidemic commenced. The worse episode commenced in 1867 after the admission of a parturient woman with erysispelas¹⁸ and resulted in the closing of the midwifery school. Nightingale investigated the epidemic, despite difficulties with the medical profession whom she found to be "suspicious" and "ignorant", while institutions were reluctant to provide her with their statistics (Woodham-Smith, 1952, pp. 357-358). Nightingale concluded: "in lying-in institutions and hospital wards, the rate of mortality was much higher than when patients were delivered at home, however poor and unhygienic those homes might be" (Woodham-Smith, 1952, p. 358). She decided that further investigation was required and so collected and analysed the data on puerperal fever for a period of

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Erysispelas is defined as "an acute, febrile, infectious disease ... characterised by diffusely spreading, deep red inflammation of the skin or mucus membrane" (A. Delbridge et al., 1997, p. 721-722).

ILLUSTRATION 5.1 SEMMELWEIS'S STATISTICS FOR THE TWO DIVISIONS

Division 1

Division 2

TABLE I

Physician's Division				Midwives' Division		
Year	Births	Deaths	%	Births	Deaths	%
1841	3036	² 37	7.7	2442	86	3.5
1842	3287	518	15.8	2659	202	7.5
1843	3060	274	8.9	2739	169	5.9
1844	3157	260	8.2	2956	68	2.3
1845	3492	241	6.8	3241	66	2.03
1846	4010	459	11.4	3754	105	2.7
Total	20,042	1,989	9.92	17,791	691	3.38

Reference: Semmelweis (1860/1981, p. 356)

three years. Nightingale's answer to the problem was for each woman to be in a small separate room (Woodham-Smith, 1952), but, she was adamant "that not a single lying-in woman should ever pass within the doors of a general hospital" (Nightingale, 1871/1976, p.33).

Nightingale (1871/1976) was adamant that childbirth was not a disease, or a fatal disease, nor was it an accident, let alone a fatal accident. This is, presumably, a reference to one of the classifications, used by the Registrar General in England, for maternal deaths, "accidents of childbirth" which included "haemorrhage, convulsions, exhaustion, mania &c" (Nightingale, 1871/1976, p. 4). She believed that lying-in women were like "surgical (or operation) patients, *not* ... medical patients, and should be perfectly" healthy (Nightingale, 1871/1976, p. 73). Nightingale believed that hospitals were places where people with fatal diseases and accidents were received, but, because the lying-in institutions were called 'hospitals,' this deadened people's senses to an understanding that there "ought, in a lying-in institution, to be no death-rate at all" (1871/1976, p. 64). She continued on this theme of the inappropriateness of lying-in women going to a hospital and used an example from France in which the newborn baby was counted as an admission¹⁹ (Nightingale, 1871/1976). This "confusion of ideas" was apparently a strong belief of Nightingale's for she later stated:

Since lying-in is not an illness, and lying-in cases are not *sick* cases, it would be well, as already said, to get rid of the word 'hospital' altogether, and never use the word in juxtaposition with lying-in women, as lying-in women should never be in juxtaposition with any infirmary cases. (Nightingale, 1871/1976, pp. 64 & 73) (original layout and emphasis)

This "confusion of ideas" still exists today.

"There are ... lies, damned lies, and statistics"

This quote by Benjamin Disraeli (A. K. Adams, 1969, p. 344) seems to be an appropriate heading for this section on statistics related to puerperal sepsis. The

¹⁹ Currently, the newborn baby is formally admitted at birth into Australian society when his/her hospital chart is created.

symptoms of puerperal sepsis vary according to the sites of the infection, although, according to Shorter (1984), the obstetric origin of the disease was often unrecognised unless it was associated with peritonitis. Thus, Shorter (1984) believed that the statistics, related to maternal mortality and morbidity from puerperal sepsis, were usually inaccurate and sometimes 'fudged' by the doctors. Similarly, Murphy-Lawless (1998), believed that mis-diagnosis was common and that the medical profession denied or confused the evidence related to its origins, while Bridson (1996) cannot understand why at the end of the 18th century the required measures to prevent this infection were not implemented. Even within the obstetric profession, there was amazement that

such outstanding progress in preventing puerperal fever, all but proving the complete etiology, should have been within the grasp of so many widely scattered observers with so little effect upon the practice of midwifery of the time or of that of the two or three generations immediately succeeding [it]. (Cutter & Viets, 1964, p.101)

Loudon (1992) noted that because of the confusing terminology used for puerperal fever notification, the resulting incidence of the disease was less than the mortality rate in many areas, while Fothergill(1924), described the statistics of 1920 as comical and noted that puerperal sepsis had a mortality rate of 127 percent! Perhaps the most damning information relating to statistics is supplied by Nightingale:

It is a lamentable fact that the mortality in lying-in wards from childbirth, which is *not* a disease, approaches closely to the mortality from all disease and accidents together in general hospitals, and in many instances even greatly exceeds this mortality. (Nightingale, 1871/1976, pp. 31-32) (original layout)

Semmelweis (1860/1981) was very clear on the 'problem' of the maternal deaths from postpartum infections and acknowledged that the records were inaccurate. Officially, the mortality rate for the years 1841 to 1846, for the Vienna Lying-in Hospital, the largest maternity hospital in the world, varied from 6.8 to 15.8 in the first division (medical students), to 2.03 to 7.5 in the second division (midwifery students) (Semmelweis, 1860/1981, p.356) (see illustration opposite). The Vienna Lying-in Hospital, transferred ill women in large numbers, from the first division,

where medical training occurred, to the General Hospital. Only those who died in the first division, because of the rapid progress of their disease, were entered on the ward's statistics. The mortality statistics of the transferred women were entered in General Hospital, not the Vienna Lying-in Hospital. In the second division where the midwives were trained, "only single puerperae²⁰ were removed whose condition was ... too dangerous for those remaining" (Semmelweis, 1860/1981, p. 357). Thus, the real statistics for the Vienna Lying-in Hospital were much greater than acknowledged, while the difference between the two wards "was in truth much greater" (Semmelweis, 1860/1981, p. 356). The women who used the hospital were only too aware of the difference in the mortality rates for the doctors and midwives ward.

That they really dread the First Division can readily be demonstrated, because one must endure heart-rending scenes, when women, wringing their hands, beg on bended knee for their release, in order to seek admission to the Second Division, after having hit upon the First Division (Semmelweis, 1860/1981, pp. 373-374)

Florence Nightingale found in her investigation of puerperal sepsis that "no reliable statistics of mortality in childbirth existed" (Woodham-Smith, 1952, p. 357) and commented: "The absence of information in almost all published statistics on the point would be grotesque, if it were not alarming from the carelessness it shows" (Nightingale, 1871/1976, p. 51). The various statistical classifications for maternal deaths varied greatly and so comparison was difficult. Some institutions kept more detailed records, but the categories commonly used were 1. number of births and the number of deaths; 2. puerperal, or non-puerperal causes; or, 3. puerperal diseases, or accidents of childbirth, or miasmatic diseases, or consumption and chest diseases (Nightingale, 1871/1976).

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²⁰ "Puerperae" are women who have recently given birth.

A detailed picture of the maternal mortality statistics of King's College was provided in a table by Nightingale (1871/1976, p. ix). Over a period of nearly six years there were 27 maternal deaths from a total of 781 deliveries. This equates to a mortality rate of 34.5 per 1,000 births²¹. Nightingale, however, reduced this rate to 33.3 by removing the woman who delivered in a cab, but died in the maternity ward from a haemorrhage. This woman was the only one to die because of haemorrhage, which appears remarkable for the era. The causes of death are listed as puerperal fever (12), puerperal peritonitis or peritonitis (3), phthisis²² and puerperal fever (1), pyæmia (2), haemorrhage (1), embolism²³ (1), puerperal metritis and pelvic cellulitis²⁴ (1), gastro-enteritis (1), laceration of perineum and puerperal fever (1), laceration of vagina and puerperal fever (1), emphyæma and bronchitis (1), considerable haemorrhage and puerperal fever (1), and retained placenta with puerperal fever (1). The women diagnosed with metritis and pelvic cellulitis, and both the lacerations, were associated with forceps deliveries, while the woman with pyæmia had an induction of labour. There were two women with stillbirths who died of puerperal fever, one had a singleton pregnancy and the other a twin pregnancy in which the second twin was "turned"²⁵ and survived. The greater percentage of women, 61.5%, however, had a normal vaginal delivery. There is no mention of the number of vaginal examinations the women experienced.

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²¹ The mortality rate was measured, at the time, as the number of deaths per 1,000.

²² "Phthisis" is defined as pulmonary tuberculosis (Sweet, 1992).

An "embolism" occurs when a blood vessel is blocked "by a solid or foreign substance introduced into the circulation" (Sweet, 1992, p. 85). The cause may be air bubbles, amniotic fluid, or part of a clot from a pelvic or leg vein thrombosis.

²⁴ "Cellulitis" is a "diffuse inflammatory process within solid tissues, characterised by oedema, redness, pain and interference with function" (Sweet, 1992, pp. 45-46).

²⁵ The second twin was either head first and turned so the bottom or breech was first, or, a bottom or breech was first and the baby was turned so the head was first. The procedure was usually done

Nightingale (1871/1976), felt she had no choice but to close the wards. This decision was made by a person who believed that the mortality rate in childbirth should be zero unless it was related to "causes unconnected with the puerperal state" (Nightingale, 1871/1976, p. 64). The criticisms of the statistics by Nightingale, who was not a midwife, were numerous and insightful, particularly considering she was approaching the problem from an administrative and public health perspective. Her criticisms were related to the various institutions in Britain and Europe, and home birth practitioners (Nightingale, 1871/1976). One of the interesting aspects of Nightingale's (1871/1976, p. 27) book is that she commented on Dr Le Fort's conclusions that the mortality statistics were better in the larger institutions than in smaller institutions, then went on to comment that his "general conclusion ... is no doubt correct." She then demonstrated that the statistics for home births were much better than was found in lying-in institutions, while of 27 London workhouses, in 13 workhouses with a yearly delivery rate of 16, there were no deaths over a five-year period (Nightingale, 1871/1976, pp.28-29). conclusions were that lying-in women were safer being delivered in their home, lying-in hospitals should be closed, while lying-in women should never be admitted to a general hospital (Nightingale, 1871/1976).

SOLVING THE MYSTERY OF PUERPERAL SEPSIS

The origins of childbed fever were a mystery for centuries. During the 18th and 19th centuries fevers were referred to either as "putrid" or "inflammatory", while the theories related to epidemics were varied:

"Galenic Caused by natural cosmo-telluric phenomena, eclipses,

comets, earthquakes

Miasmic Caused by noxious vapours and smells

Liebigian Conveyed by non-living, decomposed animal-organic

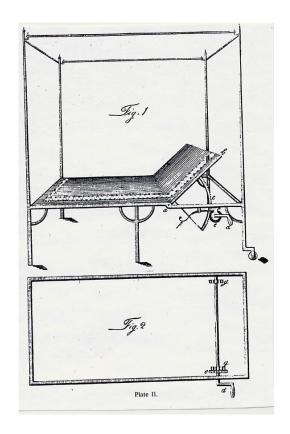
substances introduced into new hosts" (Bridson, 1996, pp. 134-

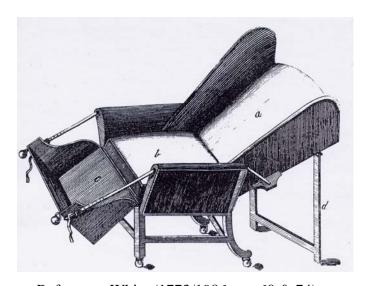
135) (original layout)

During this period putrid or 'bad' smells were equated with disease and Fuchs

internally.

ILLUSTRATION 5.2 EQUIPMENT USED TO PROMOTE DRAINAGE OF BODY FLUIDS





Reference: White (1773/1986, pp. 60 & 74)

(1992) noted that doctors began washing their hands when they realised their hands had an offensive odour. This was not sufficient to stop the spread of infection. Fuchs (1992), however, does not consider that the origins of puerperal sepsis were as explicit as those suggested by Bridson. He lists several other causes that were held by the medical profession: poor ventilation, unsanitary hospital conditions, "closed curtains around the beds", the closeness of the women in bed, "inexperienced student midwives", the bed linen being changed only when it had become "fetid and encrusted ... until the stench became unbearable", the women themselves because of their low working class status, "their poverty, malnutrition, physical and moral weakness" and finally, because the women had attempted abortions "in dirty rooms, and on dirty linens", this made them susceptible to viruses which could be found in the air (Fuchs, 1992, pp. 118-119). It is interesting that in this list, women (the mothers and midwives) are singled out as part of the problem, but the man-midwife, or obstetrician, or his students are not mentioned. Contrary to this smultiplicity of causes of puerperal fever suggested by many members of the medical profession, Semmelweis nominated a single cause, his "decomposed matter," which, initially he believed, was transported to the women via the medical men and their students. Perhaps this is one reason why his work did not gain immediate acceptance.

The galenic and miasmic theories were debunked by Semmelweis (1860/1981, p. 358) who argued that it was absurd for two adjoining wards, one for training doctors (the first division), one for training midwives (the second division), in the same building, in the same city, in the same area, to have very different outcomes as the result of epidemics, if the epidemics were caused by "cosmo-telluric phenomena, eclipses, comets, earthquakes" or "noxious vapours and smells". According to Semmelweis (1860/1981, p. 359), the childbed fever epidemics, were actually "a disease which is the result of causes confined within the walls of the lying-in hospital". However, it seems that he refined the Liebigian theory on the origins of puerperal sepsis and continued with the noxious smell segment of the miasmic theory.

Bridson (1996, p. 134) accords the first recognition of the contagiousness of puerperal

fever, to a group of English doctors in the period between 1772-1795: "John Leake (1772), Nathaniel Hume (1772), Charles White (1773), Joseph Clarke (1790) and Alexander Gordon (1795)". Speert (1980), however, believed it originated with Thomas Kirkland with the publication of his Treatise on childbed fevers in 1774, in which Kirkland stated: "I cannot approve of the modern doctrine, which asserts that the puerperal fever is a disease sui generis [unique] ..."²⁶ (1774, cited in Cutter & Viets, 1964, p. 106). He described the transmission of the disease from a male patient with a "poisoned wound" to a postpartum woman and concluded: "It is evident that an inflammation of the uterus and a consequent absorption of putrid matter from this part will bring on ... puerperal fever" (Kirkland, 1774, cited in H. Graham, 1950, p. 376). Kirkland recognised that retained coagulated blood in the uterus will cause a problem when it begins to putrefy, as it will cause an inflammation in the uterus. He attacked the routine manual removal of the placenta and membranes which was in vogue, "in no uncertain terms" (Findley, 1939, pp. 360-361). Kirkland (1773, cited in Cutter & Viets, 1964, p. 107) considered that "the putrid effluvia, arising from the lochial discharge, in lying-in hospitals, [are] capable of producing the same disease". He announced his belief that "we ought always to make a distinction betwixt the fever and the disease" (Kirkland, 1774, cited in Cutter & Viets, 1964, p. 107). Edward Foster (1781) and Phillip Pitt Walsh (1787) supported Kirkland's belief that the fever was not the disease (Cutter & Viets, 1964). Unfortunately, few people accepted his theory (Cutter & Viets, 1964; H. Graham, 1950).

There seems to be a consensus of opinion about the value of the contribution of Charles White of Manchester, who was considered the first person to indicate methods which could be used in the prevention of the disease (Bridson, 1996; Cutter & Viets, 1964; Findley, 1934; Radcliffe, 1967). White (1773/1986) repeatedly referred to puerperal sepsis as a "putrid fever" and an "absorption fever" and so his aim was to prevent the stagnation of the uterine discharge, the stools and the urine. He provided detailed instructions on how to care for the woman who has just delivered, including the use of an "Easy Chair" and a bed which could be used as "a bed chair or dozer" (C. White, 1773/1986, pp. 60-61 & 74-75) (see illustration opposite).

²⁶ "Sui generis" is defined as "of his, her, its or their own kind, unique" (A. Delbridge et al., 1997, p. 2116).

As soon after the woman is delivered as it can conveniently be done, clean linen should be put about her, she should be left to the most perfect quiet of body and mind, that she may, if possible, get some sleep. The child should be removed into another room, and no visitors, or other persons, except such as are absolutely necessary, should be allowed to enter the patient's chamber

[A] frequent upright posture is of the utmost consequence, and cannot be too much enforced. It prevents the lochia from stagnation, the stools and urine from being too long retained, and promotes the contraction of the uterus, together with that of the abdominal muscles

The patient should often be supplied with clean linen, for cleanliness, and free, pure, and in some cases cool air, are the greatest necessaries in this situation

The sooner she gets out of bed after her delivery, the better; even on the same day if possible; she should not defer it beyond the second or third at the fartherest [sic], and then if it be winter time, it will be necessary to have a fire (C. White, 1773/1986, pp. 48-55) (original layout)

Many of these instructions have a modern feel to them and emphasised the necessity for cleanliness, however, there is no mention of hand washing. Demand feeding, no supplementary feeding of the baby, and maternal mobility as soon as possibly following the birth are still relatively 'new' approaches to the care of the postpartum woman. "White leg" or venous thrombosis of the leg was initially described by White (Radcliffe, 1967, p. 62). It is not known if he realised that the mobility he advocated, also decreased the incidence of this childbirth complication. White (1773/1986) commended the use of a bed with an adjustable backrest, a reclining chair, and, in his 2nd edition, the removal of "acrid or putrid" matter from the uterus by irrigating the uterus with a mild antiseptic (1773, cited in Cutter & Viets, 1964, p. 104). White endorsed the use of separate apartments for childbearing women and isolation for women with puerperal fever. He also recognized the similarity between the surgical fever from an infection and the absorption fever of childbirth (C. White, 1773/1986). White had an obsession for cleanliness which paid dividends as he was able to claim that he "never lost ... nor ... greatly endangered" a woman with puerperal fever (1773/1986, p. 64).

While the obviousness of the causes of puerperal fever was becoming clear to many physicians, it was not always accepted by the establishment. In 1795 Alexander Gordon published his *Treatise on the epidemic puerperal fever of Aberdeen* which centred around his experience of and the epidemiological data related to the Aberdeen epidemic of 1793 (Cutter & Viets, 1964). He commented on the fact that erysipelas was in epidemic

proportions in the hospital, while childbearing women did not succumb to the disease

till after delivery, for, till that time, there is no inlet open to receive the infectious matter which the disease. But after delivery, the matter is readily and copiously admitted by the numerous patulous orifices, which are open to imbibe it, by the separation of the placenta from the uterus. (Gordon, 1795, cited in Cutter & Viets, 1964, p. 111)

According to Gordon (1795), there was no doubt about the contagiousness of the disease and he commented that "this disease seized such women only, as were visited, or delivered by a practitioner, or taken care of by a nurse" who provided care to other women with the disease (cited in Cutter & Viets, 1964, p. 111), while he could predict who would experience the disease by knowing who attended the women (Loudon, 1992, p. 59). Gordon (1795) acknowledged he had been responsible for carrying the disease to some of his patients, but claimed that before he recognised it was infectious, he had discovered a cure if it was applied early (cited in Radcliffe, 1967). Gordon's (1795) treatment was radical: doctors and midwives must throughly wash themselves, and dress with clean clothes, or fumigate their clothing, while the woman's clothing and linen was either burnt or "throughly purified" (Radcliffe, 1967, p. 66). Part of his treatment was bleeding and purging which was unpopular at the time (Loudon, 1992). Apparently, numerous doctors and midwives considered his advice as "censure on their practice" (Radcliffe, 1967, p. 66), while the local women rejected him because of his admission that he had carried the disease (Loudon, 1992).

In February 1843 Oliver Holmes (1843/1936) presented a paper, *The contagiousness of puerperal fever*, to a meeting of the Boston Society for Medical Improvement (Cutter & Viets, 1964). It was published a few months later in a minor journal which ceased publishing not long afterwards (Radcliffe, 1967). What was so remarkable about this paper was that it was written by a physician who was an anatomist, not an obstetrician. Holmes (1855/1936) did not provide care for childbearing women, while the paper was basically a literature review together with an analysis of data he collated about particular epidemics known to himself, or friends of friends. In the first paragraph, he strongly stated his results:

In collecting, enforcing and adding to the evidence accumulated upon this most serious subject, I would not be understood to imply that there exists a doubt in the mind of any well-informed member of the medical profession as to the fact that puerperal fever is sometimes communicated from one person to another, both directly and indirectly (Oliver Wendell Holmes, 1843/1936, p. 211).

It is clear from Nightingale's (1871/1976) book, that the aetiology of puerperal fever was still being hotly debated, yet Holmes (1843/1936, p. 213) commented that these "facts are too generally known and acknowledged" and some may feel he was, therefore, unjustified in presenting his paper. He felt the paper was required because of the two major midwifery textbooks, considered to contain the authoritative knowledge on maternity care in the USA – one failed to mention puerperal fever, while the other denied that it was contagious (Oliver Wendell Holmes, 1843/1936). Holmes (1843/1936, p. 213) believed that the users of these textbooks needed to know that the authors may have "slighted or omitted" to discuss "sources of danger," but that the physicians' services "are of questionable value whenever he carries the bane as well as the antidote about his person".

The concluding remarks in Holmes` paper were eight detailed instructions on the prevention and treatment of puerperal fever. His eighth point is particularly pertinent to this thesis:

No longer should physicians be excused for being the "ignorant causes" of the disease. "The existence of a *private pestilence*" in a physician's practice "should be looked upon not as a misfortune but a crime" while the "duties of the practitioner to his profession, should give way to his paramount obligations to society. (Oliver Wendell Holmes, 1855/1936, pp. 267-268)

Apparently Holmes` paper caused controversy and he was denigrated, particularly by one of the obstetricians he had criticised. Twelve years after his originally publication, he published *Puerperal fever as a private pestilence* with similar and new information, together with a clearer, more solid argument. By this time Holmes was a Professor of Anatomy and Physiology at Harvard University and would have had greater standing within the medical profession. This time, using the statistics provided by English authorities, he had a mathematician calculate the possibility of puerperal fever occurring by chance, but the evidence showed that chance was an absurdity (Oliver Wendell Holmes, 1855/1936).

Semmelweis' theory developed over a period of years. As noted earlier he used logic and observation of his immediate and local surroundings to prove that "epidemic forces," such as, "atmospheric, cosmic, telluric changes" (Semmelweis, 1860/1981, p. 357) were incorrect as the origin of the fever. He identified predisposing conditions which facilitated a rise in the incidence of puerperal fever: the teaching of medical staff and traumatic deliveries (Semmelweis, 1860/1981). Semmelweis commented on the fact that hospitals without medical teaching departments had, "with few exceptions" much better outcomes (1860/1981, p. 360). He identified conditions which did not influence the number of cases: premature births, overcrowding as occurred in the midwives' ward compared to the doctors' ward, and within the doctor's ward, the busiest period did not correspond to the greatest number of deaths (Semmelweis, 1860/1981). Women who experience prolonged labours in the first division (medical students), "almost without exception, became ill, ... either during the course of labor [sic], or in the 24-36 hours after delivery and died," yet, this was not a danger for women in the second division (Semmelweis, 1860/1981, p. 381). Following autopsy examinations, Semmelweis (1860/1981) diagnosed puerperal fever as the cause of death for the babies of these women, but could not determine why the neonatal death rate was worse in the first division (medical students).

Theories proposed for the increased outbreaks of puerperal fever, and the more virulent form of the disease in the medical students` ward were – the roughness of the male examiners, the "injured modesty" of the women, the different treatments in the wards, the requirement that the women walk to their postnatal bed three hours after the birth and on day seven or eight they change beds again, the ventilation in the wards, the proximity to the general hospitals, the linen, the shared waiting room, the intermingling of attendants for the healthy and the unhealthy, and fear (Semmelweis, 1860/1981, p.377). While Semmelweis (1860/1981) acknowledged that the women were fearful, and had much to fear, he refused to accept this as a reason for their developing puerperal fever. He (Semmelweis, 1860/1981) noted that these possible causes were either the same in each division, or worse in the midwives` division, and so the death rates should have been higher in the midwives` division, but the reverse was true.

More puzzling to Semmelweis (1860/1981, p. 385), however, was the fact that the women

who delivered on the streets "became ill noticeably less often" than the women who delivered within the hospital. This was "extraordinary" for those women who were admitted to the second division where the medical students practised. He described the conditions under which these "Street-births" or *Gassengenburten* occurred:

... parturients on the way to the lying-in hospital are delivered on the street, on the glacis²⁷, under the arches of the doorways of houses, wherever the accident befalls them, and then with the newborn carried (wrapped) in the apron, must proceed to the lying-in hospital, often in the worst of weather The street-births obviously occur under more unfavourable circumstances than those delivered on our delivery-beds. (Semmelweis, 1860/1981, p. 384)

²⁷ A glacis is defined as "1. a gentle slope. 2. a bank of earth in front of the counterscarp or covered way of a fort, having an easy slope towards the field or open country. [F: originally icy or slippery place ...]". (A. Delbridge et al., 1997, p. 899)

From his daily dissections of women who had died of puerperal fever, Semmelweis (1860/1981) was able to recognise the same disease in a friend who was accidentally stabbed during an autopsy. He realised:

That the cadaveric particles cling to the hands are not entirely removed by the ordinary method of washing the hands with soap, is shown by the cadaveric odor [sic], which the hand retains for a longer or shorter time. During the examination of gravidae, parturients, and puerperae, the hand contaminated by cadaveric particles is brought into contact with the genitals of these individuals, and hence the possibility of absorption, and by means of absorption, introduction of cadaveric particles into the vascular system of these individuals is postulated, and by this means ... [puerperal fever] is produced. (Semmelweis, 1860/1981, p. 392)

Semmelweis (1860/1981, p. 393) postulated that the "cadaveric particles" could be destroyed by a chemical and introduced hand washing in May 1847 with "Chlorina liquida", which he later replaced with chlorinated lime because it was cheaper. There was a dramatic decrease in the number of deaths due to puerperal fever. Semmelweis (1860/1981) noted there was a corresponding decrease in neonatal deaths in the hospital, and in the foundling-asylum due to the introduction of chlorinated lime in that institution. Initially, the chlorinated lime hand washing was only done on first arriving in the labour ward, and between patients the hands were washed with soap and water (Semmelweis, 1860/1981). The other important discoveries that were made by Semmelweis (1860/1981, pp. 396-397, 426 & 552) were: "childbed fever is caused by ... by ichorous discharges originating in living organisms" and transported by the "examining finger"; "atmospheric air could also be a carrier of the decomposed organic matter"; contaminated linen, utensils, instruments and bed-pans can be the cause of an infection of childbed fever; and, autoinfections can occur. The changing of the clothes, as practised by the English was considered superfluous, but Semmelweis (1860/1981, p. 506) did admit that it was possible that "during examination ... the sleeve of a coat contaminated with decomposed matter" could cause infection if it came in contact with the genitals.

The uterine wound

According to Wertz and Wertz (1989), the wound on the uterine surface was not initially considered an important factor in the origins of puerperal fever. The term, "wounded

women", was first used by Pasteur (no date was given) to highlight parturient women's susceptibility to infection (Wertz & Wertz, 1989, pp. 119-120). This probably would have been towards the end of the 19th century. However, the "Father of British Midwifery" (Rhodes, 1995, p. 23), in his *Exercitationes de generatione animalium* which was originally published in 1651, graphically described the 'hazards' of childbirth:

But *Women* alone, as they onely [sic] have *Termes*²⁸, so²⁹ do they abound with *after-purgings*³⁰, and do alone undergoe [sic] *difficult* and *hazardous deliveries*: because their *Uterus* doth either unseasonably gather, it self together, by reason of weakness, or else the *After-purgings* are depraved contrary to nature, or do not come away kindly For the womb being excoriated by the separation of the *After-burden* (especially if the separation were violent) like a large inward *Ulcer*, is cleansed and mundified³¹ by the liberal *emanations* of the *After-purgings*. (Harvey, 1653/1953, pp. 504-505)³² (original emphasis)

²⁸ "Termes" refers to periods, or menstruation, or menses.

²⁹ 'f' has been substituted by the modern 's' to improve the ease of reading this text.

^{30 &}quot;After-purgings" refers to the lochia, or the uterine discharge following a birth.

³¹ fortified

This extract is from the first English version, either translated by Harvey, or possibly translated by Martin Llewellyn under the supervision of Harvey (H. Graham, 1950, p. 243). The original work was in Latin. The following is a different translation of the original text:

Women, as they alone have a menstrous, so have they alone a lochial discharge; added to which they are exposed to disorders and perils immediately after birth, either from the uterus, through feebleness, contracting too soon, or from lochia becoming vitiated or suppressed. For it often happens especially in delicate women, that foul and putrid lochia set up fevers and other violent symptoms. Because the uterus, torn and injured by the separation of the placenta, especially if any violence has been used, resembles a vast internal ulcer, and is cleansed and purified by the free discharge of lochia (cited in Cutter & Viets, 1964, p. 99).

The use of the words "excoriation" and "ulcer" by Harvey suggest that he understood the importance of the uterine wound. It is interesting that Harvey refers to the placenta as the "After-burden", indicating that while the placenta and membranes were an essential part of the birth process, they were, nevertheless, burdensome to the woman. "After-burden" is very similar to the current lay term for the placenta, 'afterbirth'. From Harvey's description, he clearly recognised retained products were a major source of infection and death in the parturient woman. The use of the term "After-purgings" for the discharge from the uterus following the birth, indicates that the purging or cleansing nature of the discharge was understood and possibly emphasised by Harvey. According to Cutter and Viets (1964), the uterine wound and the possibility of it becoming infected, was discussed by other famous medical people: Thomas Willis (1621-1675), Hermann Boerhaave (1668-1738) and Gerhard van Swieten (1700-1772).

It is evident that Charles White (1773/1986) recognized that the problem of puerperal fever was related to a uterine wound and the retention of stagnating uterine fluids. Likewise, Semmelweis (1860/1981, p. 380) recognised the "wounding of the inner surface of the uterus by the birth-act" and was very clear on the importance of this wound, but considered that this was not necessarily the only possible site for an infection. Semmelweis (1860/1981, p. 504) appreciated the importance of the skin as a barrier to infection and noted that puerperal fever was the "same disease" which occurred following surgery, or in surgeons, or anatomists, who had wounded their skin, thus allowing the "decomposed matter" to enter the circulation of both males and females.

In gravidae, parturients or puerperae, there is a place in the body which has no epidermis or epithelium, and that is the internal surface of the uterus; starting from the internal os³³ upwards, this is the absorption place for the decomposed matter which causes puerperal fever. If wounds are caused by labor [sic], then every place on the genitals, indeed any wound on the body, can be a site of absorption. (Semmelweis, 1860/1981, p. 504) (Original layout)

The "internal os" is "the opening through which the cavity of the cervix [neck of the womb] communicates with the cavity of the body of the uterus [or womb]" (Sweet, 1992, p. 142).

ILLUSTRATION 5.3 ROMAN PLAGUE DOCTOR



Plague doctor in his protective clothing. Doctor Schnabel of Rome, from an engraving by Paul Fürst, 1656.

In Rome the doctors do appear,
When to their patients they are called,
In places by the plague appalled,
Their hats and cloaks, of fashion new,
Are made of oilcloth, dark of hue,
Their caps with glasses are designed,
Their bills with antidotes all lined,
That foulsome air may do no harm,
Nor cause the doctor man alarm,
The staff in hand must serve to show
Their noble trade where er they go

Reference: Glasscheib (1963, p. 22) Reference: Dopson (1997, p. 189)

It is evident that Semmelweis (1860/1981) comprehended the occupational health and safety problems associated with midwives, medical men and their students and the danger of injuries, such as needle stick and stab wounds, sustained during work.

Dissemination of information on puerperal fever

Obstetricians were developing a new specialty from around the middle of the 18th century and through the 19th century and had to prove to their medical and surgical colleagues that they were worthy of the title 'doctor'. Findley (1934, p. 199) commented that obstetrics was considered the "Cinderella of Medicine [and] was despised and rejected ... by Medicine and Surgery". In less formal terms, this insult could be equated to referring to obstetrics and as 'the dirty little girl of medicine'. Obstetrics, nevertheless, "gave antisepsis and shared honours with surgery in giving anaesthesia to the world" (Findley, 1934, p. 199). A very visible method of resolving this dilemma was to publish their descriptions of their

work experiences, the diseases or problems they encountered, and their scientific theories related to diseases. Cutter and Viets (1964) stated that the number of books published on puerperal fever in the latter part of the 18th century and the beginning of the 19th was almost the equivalent to the number published on all other midwifery topics. This did not include journal articles or pamphlets which were "legion" (Cutter & Viets, 1964, p. 100). Loudon (1992, p. 57), noted that in 1870, an obstetrician, Fordyce Baker, reported that in the previous 20 years, "20,000 pages had been published on various aspects of puerperal fever" while the dominating topic was the contagiousness of the disease. The publication centre for midwifery was London after the middle of the 18th century, while prior to this it had been Paris with "a flood of publications from the 1740s" (Loudon, 1992, p. 400).

Young (1954, p. 323) reported that in 1733, the first continuing publication of a journal, *Medical essays and observations*, commenced in Edinburgh, while the 'common' medical journals of the British Isles, the *Lancet* (1823), the *Glasgow Medical Journal* (1828), the *Irish Journal of Medical Science* (1832) and the *British Medical Journal* (1857), came into existence several decades later. During this period, there was no specialised obstetrics or gynaecology journal and so articles on these topics were found in the general journals and the hospital reports, while many articles and case reports were reprinted in American and

European journals, the latter being first translated into the appropriate language (Young, 1954).

Charles White's monograph, A treatise on the management of pregnant and lying-in women, and the means of curing, but more especially of preventing the principle disorders to which they are liable (1773), received wide circulation and "made a big impact" (Radcliffe, 1967, p. 62). It was originally published in London and translated into French and German, then published in Paris in 1774, in Leipzig in 1775 respectively (Cutter & Viets, 1964). There were three further English editions in 1777, 1784, 1791, while an American edition was published in Massachusetts in 1793 (Cutter & Viets, 1964, p. 105).

It is evident that Semmelweis (1860/1981) in his literature review on the aetiology of puerperal fever analysed the information from the British Isles, France, Germany and other European centres. He made the following comment:

The English, proceeding on the opinion that childbed fever is contagious, do not attend a healthy gravida³⁴, parturient³⁵ or puerpera³⁶, if they have previously attended a sick gravida, parturient or puerpera, without having previously washed their hands with chlorine water, or having changed their clothes, and if the number of cases childbed fever increases, even go away on a trip or give up practice entirely for some time. English physicians do not attend a healthy gravidae, parturients or puerperae after an autopsy on the cadaver of a puerpera, without previously washing their hands in chlorine water, or having changed their clothes. (Semmelweis, 1860/1981, pp. 462-463)

This extract is interesting for several reasons. It is obvious that there is a difference in the understanding of the concept of "contagious" by Semmelweis and "the English". It is also clear that Semmelweis did not consider clothing a problem.

WHY THE INFORMATION WAS IGNORED?

One of the most disturbing aspects of the history of puerperal sepsis is why it took so much time for effective preventative measures and treatments to be implemented. There seems to

³⁴ A 'gravida' is a pregnant woman, while 'gravidae' are pregnant women.

³⁵ A parturient is a woman who is in labour.

³⁶ A 'puerpera' is a woman who has recently given birth, while 'puerperae' are women who have recently given birth.

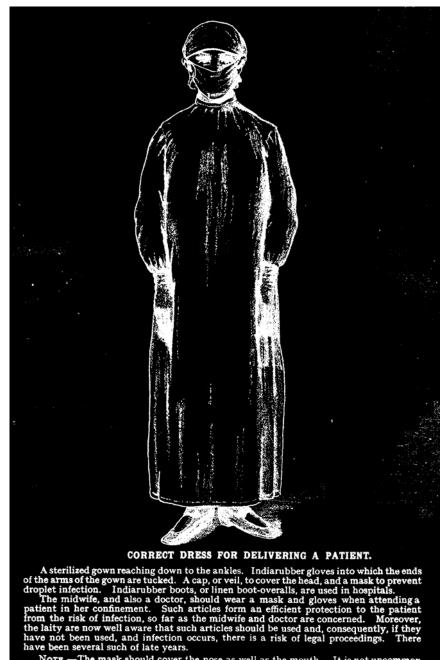
have been numerous reasons: interpersonal rivalries, national pride, dislike of the person promoting a theory, 'seeing is believing', the correct theory either implied, or stated that the person delivering women, but particularly the issue that the men-midwives and the institutions developed to support their learning and teaching, were involved in the cause and spread of the disease. They may have considered themselves and their institutions above the need to follow rules. Bridson (1996) considered ignorance, apathy and bigotry played a part. Semmelweis (1860/1981, p. 786) went so far as to call those obstetricians and professors who ignored him as being "a partner in this massacre [of parturient women]" and repeatedly refer to the deaths from puerperal fever as "murders."

Semmelweis was, however, the one to provide most of the answers. If the term 'bacteria' was substituted for the "decomposed matter" he cited as the cause of puerperal fever, he would have been correct. Medical historians and sociologists have labelled him by various tragic or heroic names: "the prophet of bacteriology" (Wyklicky & Skopec, 1983, p. 367); "saver of mothers" (De Kruif, 1932, p. 35); "manic depressive" (Carr, 1999, p. 3); "defender of motherhood" (Bender, 1961, p. 216); "lone rager against puerperal fever" (Bendiner, 1987, p. 194); "the defeater of puerperal fever" (Turunen, 1967). Semmelweis participated in the failed Hungarian revolution, but found his politics did not advance his professional career (Encyclopædia Britannica Online, 1994-1999). He was "erudite and popular", and a "fashionable obstetrician" (Sós, 1966, p. 1), but only because he failed to obtain the positions he desired: first in pathology and later in medicine (Nuland, 1989). According to one biographer, Semmelweis

seems to have seen himself as a maladroit, graceless outlander, who came from the wrong place, the wrong social class, spoke the wrong dialect, and had been rejected for the right university jobs; ... always the outsider clanging and banging on the gates of an academic Pantheon in which he felt unworthy to dwell. (Nuland, 1989, p. 250)

In other words, Semmelweis was on the margins of society and of the medical profession. Semmelweis was not comfortable in either Hungarian or Viennese German when enrolled in the Vienna medical school in 1837 (Nuland, 1989). Presumably this did improve, but, it may have influenced his "innate aversion to ... writing" (Semmelweis, 1860/1981, p. 352). Semmelweis` (1860/1981) theory on the aetiology of puerperal fever developed over a

ILLUSTRATION 5.4 DELIVERY DRESS IN 1941



Note.—The mask should cover the nose as well as the mouth. It is not uncommon to see nurses and doctors with the mask covering the mouth only.

Reference: Berkeley (1941, p. 73).

number of years commencing in 1847, but it was not until 1860 that he published his work. Three years after developing his aetiology, Semmelweis presented his findings to the Medical Society in Vienna where he won "a resounding victory for his thesis" (Nuland, 1989, p. 250). According to Nuland (1989, p. 251), his theory was "on the verge of acceptance" but he failed to publish his presentation and so his thesis was presented only as an abstract in the meeting minutes.

The methods of reducing the puerperal sepsis rates were fairly simple, but were not accepted by everyone. Lister's work on antisepsis was based on Pasteur's work and is considered by Radcliffe (1967) as a logical extension of Semmelweis's work. Listerism was not readily accepted by the new profession of obstetricians and carbolic solution was first used in 1880 by Tarnier in Paris (Radcliffe, 1967). The debate about cause of puerperal sepsis was finally settled by Pasteur in 1879 when he was attending a conference in Paris (Finney, 1937; Radcliffe, 1967). The speaker was discussing the various possible causes of puerperal fever. Pasteur interrupted the speaker and informed the audience that puerperal fever was caused by microbes being transferred from patient to patient by the nursing and medical staff (Finney, 1937). The speaker maintained that no one had seen these microbes. Pasteur then went to the platform and drew a chain of dots representing the organism on the blackboard, saying "There! That is its picture." (Radcliffe, 1967, p. 89).

Early in the 20th century, it was still accepted that puerperal sepsis, although now "under control," was less prevalent in the home than in the hospital (Castigilioni, 1927/1941, p. 855). According to Castigilioni (1927/1941, p. 726,) it was "the control" of puerperal fever together with the importance of hygiene, which lead to the decrease in maternal mortality and the shift from midwives to "well-trained surgeons and obstetricians." This belief was extended to the general community and is accepted as a 'truth'.

THE EVOLUTION OF PROTECTIVE MEASURES AND APPAREL

Throughout the centuries, different cultures have used various methods to deal with infectious diseases. These methods involved the use of amulets, blessed medals, relics, prayer, pilgrimages, isolation and segregation (quarantine), the use of scents, and the medical practices accepted as appropriate at the time. One of the earliest descriptions of

doctors` protective clothing occurred in 1656 during the plagues of the Black Death (Glasscheib, 1963). The ditty that accompanied it indicates that the outfit was designed to protect the doctor and promote his "noble trade" (Dopson, 1997, p. 189) (see illustration opposite). Considering the differences in the availability of materials at the time, the only difference in this outfit and those in current use is the absence of the bill with its sweet smelling "antidotes". While protective clothing has often been introduced as a method of protecting the health professional, it has just as often become part of the "obstetric armamentarium" (Johnstone, 1948, p. 168) in the perceived war against disease.

The gowns

One of the first to wear specific clothing during a birth was William Smellie (H. Graham, 1950; Rongy, 1934). Graham (1950, p. 292) claims Smellie, in an attempt to reduce "the prejudice against man-midwives" and for cleanliness and practical reasons introduced the use of a gown. This was referred to as a

commodious dress, namely, a loose washing nightgown, which he may have in readiness to put on when he is going to deliver; his waistcoat ought to be without sleeves, so that his arms may have more freedom to slide up and down under cover of the wrapper; and the sleeves of his shirt may be rolled up and pinned to the breasts of his waistcoat (Smellie, cited in H. Graham, 1950, p. 292).

Elizabeth Nihell (cited in Rongy, 1934, p. 93), a midwife who fought against the introduction of men into midwifery, "satirized" Smellie's outfit with her description of it: "however softened his figure might be by his pocket nightgown being of flowered calico or his cap of office tied with pink and silver ribbon". Although Smellie had many students, it is unknown if any of them continued his practice of dressing for the birth. It is not a topic that seems to have been of interest to the various historians.

That special clothing was worn for the birth seems to have become a practice following the acceptance of the work of Lister, Pasteur, Holmes and Semmelweis. A textbook from 1876 makes no mention of cleanliness or asepsis during the management of labour, instead it focuses on the need to maintain the woman's modesty and instructs the medical practitioner how to behaviour with "the most refined delicacy" during childbirth (Hollick, 1876, p.

222). However, "the value of *cleanliness*, *antisepsis and eternal vigilance* ... in averting the dangers of childbirth" (original layout) was lauded in the preface to the first edition of a textbook which devoted two chapters to the topic of antisepsis and where the emphasis on cleanliness was retained throughout the book (Fullerton, 1893, p. ix). This text details the dress requirements of the nurse³⁷ attending the labouring woman:

On arriving at the patient's house, the nurse should put on her working-clothes, which should always be scrupulously clean and of wash material. The uniform worn by the nurses of the Woman's Hospital, of Philadelphia, consists of a blue and white striped seersucker dress, very plainly made; a large plain white apron, with bib, well protecting the dress; over-sleeves, of the same material as apron, for the protection of the dress-sleeves, and a white muslin Normandy cap.

Woolen [sic] dresses, or those made of any material which will not bear frequent washing, should never be worn by a nurse. There is always the possibility — in fact, the probability — of such a dress having been worn during her attendance upon some previous caser of illness, in which case it would greatly endanger the patient (Fullerton, 1893, pp. 95-96).

It is interesting that this description refers to an "apron, with bib" which is the same as the current style of plastic apron, and the use of "over-sleeves" to protect the sleeves of the dress, which is the same as the current plastic sleeves used to protect the staff's arms. The apron and the sleeves are still being made of the same material.

Similarly, it is difficult to find specific material on the introduction of the use of operating style clothing in maternity care, but surgery and obstetrics were aligned in the fight against sepsis and the "control of the environment" (Sydney Teaching Hospitals, circa 1979, p. 2). Like current changes in practice, health professionals and institutions probably adopted new methods at various rates. Surgery was a spectator event until the late 1800s with surgeons and spectators both wearing their normal street clothes (T. G. Williams, 1989). Coats were not removed or sleeves rolled up and "everything was ordinarily dirty" (T. G. Williams, 1989, p. 22). Cherry (1997, p. 10) noted that at the end of the 18th century some surgeons were using partial asepsis but the predominant image was of a "surgeon in his blood soaked operating coat, with accessible silk ligatures threaded through its button hole". Fogg (1999,

³⁷ This is an American text. In the USA female midwives were denegrated while male midwives or obstetricians were accepted by 1870 (Litoff, 1978, p. 13).

p. 98) has commented that the surgeons' morning coat initially was replaced by a white apron and gown, but this was visually difficult so was changed to green for improved "eye comfort." Australian conditions in 1905 were noted by McKay (1905) who commented that on the continent spectators are not admitted to many of the theatres unless they are in a washing gown provided by the hospital.

A 19th century midwifery text (Hollick, 1876, pp. 223 & 226) does not mention hygiene or cleanliness in relation to the birth process, but does state that "all useless persons³⁸" should be excluded while the accoucheur will find it "a good precaution" to keep a stethoscope and a lancet in "his pocket". A similar comment is made by Fullerton (1903, p. 123) who considered that friends and neighbours should be "expelled" from the room. Fothergill (1896) while discussing the prevention of sepsis, mentioned the need for cleanliness by the doctor and the nurse, but does not refer to clothing. Donald (1896, p. 76) in the same period, stressed that everything that came in contact with the labouring woman should be "surgically clean" (original emphasis), while the clothing worn by the midwife or the monthly nurse should be made from washable material, with a "a large white apron", preferably fresh for each birth. Fullerton (1893; 1903), an American author, described the outfit the nurse³⁹ wore, but did not mention what was worn by the doctor who did the delivery.

There are examples, however, of the theatre dress code being used for maternity patients in the first decades of the 20th century. The nurse should either wear a fresh gown, or cover her clothes with a sterile gown or sterile apron, but no mention is made of what the doctor wore (E. P. Davis, 1908). Berkeley (1920, p. 502) stipulated that "sterilised linen overalls must be used" when conducting a delivery in a labour theatre, while a later edition of his text refers in detail to the personal hygiene requirements and the apparel of the midwife, presumably in the woman's home (Berkeley, 1938). The midwife was expected to wear a clean washable dress and apron, but for the birth she was expected to either add another clean apron or, preferably, "a clean linen overall" (Berkeley, 1938, p. 262). Similar points

³⁸ This is a reference to the women (relatives, friends and neighbours) who previously had kept the woman company during her labour.

³⁹ According to Litoff (1978) the American midwifery manuals of the late 19th century assumed that parturient women used a doctor and a monthly nurse for their births.

are made by Ross (1937). A few years later, Berkeley (1941b, p. 73) provided an illustration of the "correct dress" for delivery and it is a sterile theatre outfit (see illustration opposite). Other textbooks discuss the use of sterilised outfits, or "overalls" (Gibberd et al., 1948, p. 234), or a "sterilised guard as an apron" (Jellett & Dawson, 1948, p. 145). The "overalls" were tied up at the back and at the waist, and literally were worn over all other clothes. This description 'fits' the current surgical gown used in operating theatres and for some medical procedures. The "guard" was probably a cloth drape and was pinned to the clothes of the accoucheur. It seems that sterile gowns became more common in the 1940s.

Gloves

Gloves were originally a status symbol and accompanied the giving of land and wealth (Sebastian, 1999). The use of gloves, or a handcover, during medical procedures was first mentioned by a German obstetrician in 1758 (Hæger, 1989). The first gloves were made of horse bladder, cotton, or leather (Hæger, 1989). The use of gloves as a means of protection for the surgeon was accepted by a colleague in 1827, with Josef Jakob Plenck advising midwives "not to insert bare hands in a vagina with sores" (Hæger, 1989). The use of cotton gloves was advocated by Johann von Mikulicz-Radecki to ensure a firm grip on the surgical instruments during surgery (Bishop, 1960; H. Graham, 1939). No date was given for this event.

Rubber gloves were probably first used in the 1840's for dissections (Hæger, 1989; R. Porter, 1997), yet in 1836 Sir Thomas Watson, observed: "In these days of ready invention a glove might be devised which should be impervious to fluids and yet so thin and pliant as not to interfere with the delicate sense of touch required in these manipulations" (cited in T. G. Williams, 1989, p. 24). In 1843 "vulcanisation of rubber was patented" and this overcame the problem of "tacky" gloves in warm conditions and "stiff and hard" in cold conditions (T. G. Williams, 1989, pp. 22, 24). Articles in *The Lancet* in 1847 and 1848 advocated the use of rubber gloves as a protective measure when undertaking dissections.

Improvements in the vapour curing process of rubber were invented by Abbott in 1878, thus ensuring that gloves became more pliable (T. G. Williams, 1989). In the same year Thomas Forster was issued a patent to improve "the manufacture of gloves and covering for

the hands for the use in surgical and other operation[s] ... [and] yet retain their delicacy of touch" (T. G. Williams, 1989, p. 24). There was an ongoing debate for years over the use of gloves: gloved hands versus bare hands; the sterility of rubber gloves versus cotton gloves; the prevention of slippage with cotton gloves over rubber gloves (T. G. Williams, 1989).

There is considerable debate about who actually introduced the use of rubber during surgery. Horatio Robinson Storer, an obstetrician and gynaecologist, used rubber gloves in 1874 in the operating theatre of The Boston Hospital for Women "for his own protection rather than the patients", 15 years before Halstead (Speert, 1980, p. 102), an American surgeon, who is often credited with introducing rubber gloves (Marks & Beatty, 1973; Tansey, 1997; T. G. Williams, 1989) in 1890 or 1891 (Bernheim, 1949). Porter (1997), claims that Halstead popularised the use of rubber gloves in 1889 when he had them specially made for his fiancee, Caroline Hampton, who was also his theatre nurse. She required the gloves because she suffered from dermatitis as a result of the sterilizing solution used by Halstead. Halstead himself did not use gloves (R. Porter, 1997) till his assistant, Joseph Bloodgood, proved that sterility improved the outcomes in herniorrhaphy (T. G. Williams, 1989). According to Gutteridge (1993), Bloodgood was the first to use gloves for all operations from 1896. Bernheim (1949, p. 211) noted the use of gloves for surgery was a 'bottom up' process: "first the nurse, intern, then assistants, and finally the professor". In 1910 gloves were mandatory for surgeons (T. G. Williams, 1989) for the protection of staff (Caunt, 1991).

Following the discovery of the 'germ theory', but prior to the use of gloves in childbirth, hands were washed throughly and 'sterilized' by the use of chemicals (Berkeley, 1920; Donald, 1896; Fothergill, 1896; Fullerton, 1893; Jardine, 1911). Later, the use of rubber gloves was considered essential for vaginal examinations and the birth, although in some texts there is no mention of them being sterile (Berkeley, 1941b; A. W. Bourne, 1925; Jellett, 1942; A. Ross, 1937), while other texts stressed the use of sterile gloves (Berkeley, 1938, 1941a; Dawson, 1952; Johnstone, 1948). An interesting variation on the use of gloves come from *The Queen Charlotte's text-book of obstetrics* (Gibberd et al., 1948). Following the scrubbing of the hands, "a pair of clean, dry, unsterilised, powered rubber

gloves [were] put on", the gloved hands were then washed with soap and water, "rinsed in running water", then sterilised by "rubbing all over (up to the wrist) for three minutes with 30 percent Dettol cream" (Gibberd et al., 1948, p. 233). This same text recommended the use of "boiled gloves" in the home environment (Gibberd et al., 1948, p. 234). Another variation on hand protection is provided by Jellett (1942, p. 74) who advised the use of a "double finger-stall with protecting apron to cover the remainder of the hand" whenever performing a rectal examination.

As Halstead noted the use of gloves "was an evolution ...[not] an inspiration", while acknowledging his own blindness in only using gloves occasionally before perceiving them as a necessity (1913, cited in Rutkow, 1993). Gloves, although now accepted as a basic protective measure for staff, have not been free of problems. The lubricating powders have been documented as causing granulomas⁴⁰ and adhesions⁴¹ from 1917 (Gutteridge, 1993). The current glove debates are over powder free gloves, or latex free gloves, or the wearing of more than one pair of gloves for operations and procedures.

Face masks

Prior to the introduction of face masks, Fogg (1999) claims that many surgical procedures were done in silence to decrease the risk of wound infections. This would have to have been some time, however, after Pasteur's discoveries of germs. Face masks are believed to have been introduced by the Polish surgeon, Johannes von Mikulicz-Radecki, who was concerned with droplet infection (R. Porter, 1997). This was in 1896 (G. Williams, 1981), or in 1897 (R. Porter, 1997). Williams (1989, p. 24) noted that face masks were the "least important theatre ritual" and that some surgeons do not wear them for minor operations. McKay (1905, p. 126) noted that some operators followed "Milulicz's practice of having a mask" especially if they had infected teeth. Apparently, face masks were introduced for the protection of the patients.

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⁴⁰ Granuloma: a mass of "tissue composed largely of ... growing capillaries which forms on the surface of healing wounds" (A. Delbridge et al., 1997, p. 927).

Adhesion: "union between two surfaces normally separated: usually the result of inflammation when firbous tissue forms; e.g. peritonitis may cause adhesions between organs; a possible cause of intestinal obstruction, or of sterility through occlusion of the lumen of the fallopian tubes" (Sweet, 1992, p. 8).

Fogg (1999, p. 98) claims that in the major teaching hospitals "by 1910 use of sterile instruments, gowns, masks and gloves" was established. Caunt (1991), when discussing surgery, claims that face masks were not worn until the 1950s, but this is clearly erroneous. Initially face masks were made of calico (Dawson, 1952), or cotton, washable and reusable (Caunt, 1991), while (Roberts, 1989) remembers ironing face masks prior to rolling them for maternity patients in 1968.

Early midwifery texts do not mention face masks (Berkeley, 1920; A. W. Bourne, 1925; Fothergill, 1896; Jardine, 1911; A. Ross, 1937). Later in the century, various texts do mention the use of masks during labour and for procedures, such as vaginal examinations (Berkeley, 1938, 1941b; R. C. Brown et al., 1950), with sterile masks appearing for a brief period (Dawson, 1952; Johnstone, 1948). According to Kennedy (1988, p. 11), there were some surgeon's operating without gloves or masks till the 1900s, but by World War II, "surgeons and nurse[s] ... wore masks and rubber gloves". At the Queen Charlotte's Hospital, London, the wearing of a face mask was a prerequisite to entering the labour ward (Gibberd et al., 1948). Brown (1950) also recommended the use of a face mask by the woman if she had a sore throat. At the height of the medicalisation of childbirth, face masks were mandatory for all sterile procedures. This is discussed in Chapter 6. More recently, face masks have been manufactured with an attached clear visor to protect the eyes. In some instances, the wearing of the face mask has been replaced by either protective eye wear or a full facial shield/visor. The full facial shield/visor was an addition to the operating theatre outfit during 'dirty' or infectious cases, but it has now become commonplace in maternity care.

SUMMARY / CONCLUSION

In this chapter it can be seen that the move by men into the area of childbirth had devastating results for the childbearing women and their families. The building of lying-in hospitals resulted in puerperal sepsis becoming endemic in many areas of the United Kingdom, Europe and the United States of America. Previously there had only been scattered outbreaks of the disease. The development of a medical science relating to women meant that women's bodies, both alive and dead, were being operated upon. Despite the growth of medical science, and information reported by some authorities, it

took over 100 years for the cause of puerperal sepsis to be acknowledged and a concerted effort to reduce the rates. Fudging of statistics relating to puerperal sepsis was not unusual. Florence Nightingale, administrator, statistician and sanitary advocate was promoting cleanliness long before the doctors accepted the need to 'clean up' their act, while the statistics for home birth or midwife delivery were showing superior results. This did not stop them from describing midwives as dirty and themselves as the reason for the improvement in maternal mortality and morbidity rates.

CHAPTER 6

BIRTH AND DIRT - REFLECTIONS

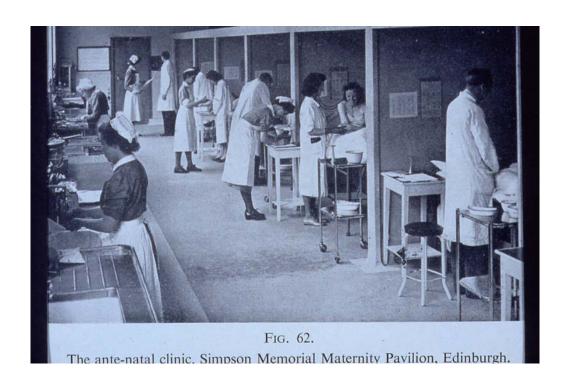
Introduction

In this chapter, I explore the discourses and the discursive practices, surrounding the hygiene of childbirth during my midwifery training in 1970 to 1971. I examine practices around who was clean and who was dirty and what was clean and what was dirty. The period when I was educated as a midwife was close to a period that could be described as the zenith of the medicalised model of childbirth. This period is important as it clarifies and makes evident, the dramatic, profound, but slow, and almost unnoticed changes that have occurred in maternity care over a period of three decades since 1970. It is clear that when reflecting upon my midwifery training, the hygienic practices were carried out with religious fervour and with great attention to detail.

In this analysis, surveillance (as Foucault understood it), could be considered a central practice used to control women, and identify possible sources of pollution / contamination / infection. The 'clinical gaze' searched the normal seeking the pathological. This searching for the pathological, and the potential for the pathological, was important, as was the way maternity staff treated the body margins and opened up the body. This is relevant not only for this era but for current maternity practices, where arguably the same script is 'played out' very differently three decades later.

To support my discussion of maternity care during my midwifery training, I have used textbooks from that era and two midwifery training case books, mine (H. Callaghan, 1971) and a friend's (Sheehan, 1971). In our case books, we kept details of what we had 'witnessed', that is, observed, and performed as was required for registration as a midwife in that state. This documentation included 20 individual case studies. These have been used to stimulate my memory of this period and also for verification of the practices of the time.

ILLUSTRATION 6.1 PROCESSING THE PREGNANT WOMEN



Reference: Myles (1969, p. 95)

This antenatal clinic is almost identical to the clinic in my midwifery training hospital, except there is more staff present

Background

In August 1970, I completed my general nursing training in an Australian capital city in an apprentice style system. Together with friends, I applied to an interstate hospital to do our midwifery training. I cannot remember all the details of our applications, but we filled in an application form, provided references from a minister of religion, our employer and someone who had known us for a minium of two or three years. There was no interview. We had to have a medical and a dental examination, and nose, throat and rectal swabs taken to determine if we carried any infectious disease. The results of these examinations were included with our application forms. We each received a written response from the hospital stating that we had been accepted and what date we were expected to start. Thus, my introduction to midwifery was through a form of long distance surveillance which ensured I was 'clean' and suitable to work in maternity care.

Midwifery training

In October 1970 I commenced my midwifery training in a private maternity hospital in one of the Australian capital cities. A major incentive to learn and pass our examinations was our case book. Throughout both case books drawn on here, the dominant perspective is one of a medical approach to childbirth. Five of the required 'cases' were women whom the student had followed through from the antenatal clinic, and in these cases the student had to concentrate on different aspects of antenatal care. The other 15 cases provided a broad overview of the topics we were expected to know for our examinations and vivas. The topics in my case book were: normal confinement, breast feeding, artificial feeding, instrumental delivery, caesarean section, postpartum haemorrhage, induction of labour, breech presentation, Rhesus incompatibility, placenta praevia, multiple pregnancy, preeclampsia, trial of labour, premature labour and antepartum haemorrhage, and obstetric analgesia. Additional studies in the Sheehan's case book were diabetes and occipito-posterior position⁴². It is clear from this list of required case studies that childbirth was not considered as a normal healthy process, but rather a medical event. It is a reflection of what was conveyed in our stated textbook: "Both doctor and midwife are essential, even

⁴² This position means that the baby's spine is close to the woman's spine. It is not the most common, nor the easiest position for birth.

for normal cases" (Myles, 1969, p. 672) (original emphasis).

Margaret F. Myles, the Scottish author, was considered the guru of midwifery for nearly four decades. Myles contributed globally to midwifery knowledge, practice and expertise, but was the dominant influence in the United Kingdom, and the old colonial countries of Africa, Asia, North America, Australia, and New Zealand (M. Peters, personal communication, 21 April 1999). Myles` textbook was the one used to relaunch midwifery in the USA and remained their dominant textbook until they started publishing their own books (M. Peters, personal communication, 21 April 1999). Her influence in Australia was probably greater than in the UK as the midwifery profession there had access to a greater variety of textbooks. Myles is often spoken of as if she were an old friend, for example, "Maggie says", or "According to Maggie we should". When I did my midwifery training, it was "The gospel according to Myles is ...", or "In the bible it says ...". No one ever questioned who you were referring to.

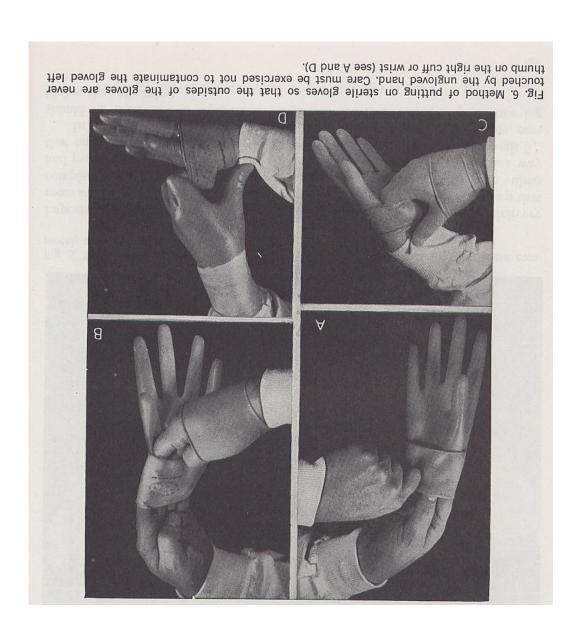
There were other consumer orientated books (Dick-Read, 1961; Vellay, Vellay, Jeanson, Bourrel, & Bourrel, 1966) of the time, however, which advocated 'natural' childbirth, while Townsend (1969, p. 1), an Australian obstetrician, believed that the obstetrical role involved supervision of a natural process, rather than an active participation by those who must be "doing something". The infamous Professor Green⁴³ (1966), in his text book for New Zealand midwives and obstetric nurses⁴⁴, thought that obstetric nurses should be encouraged to read widely, rather than be spoon fed the information. During my midwifery training days, I was focussed on achieving state registration as a midwife and only on what I needed to learn the job. While with hindsight, I can analyse what happened during that period, at the time I was totally engrossed in learning my new role as a midwife, and I accepted what I saw as normal maternity care.

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⁴³ Herbert Green was the central figure in the medical scandal that erupted in 1987 at the National Women's Hospital, Auckland when it became known that New Zealand women with cervical cancer in situ were not treated because he believed, contrary to all the evidence, that it did not require treatment.

⁴⁴ In New Zealand the term is used in reference to their general nurses who included an obstetric term during their general training

ILLUSTRATION 6.2 THE RITUAL OF GLOVING



Reference: Hellman, Pritchard, & Wynn (1971, p. 410)

In 1970, our midwifery curriculum did not include topics such as, ethics, or law, or sociological concepts, or the application of these topics to midwifery practice. This construction of knowledge had far reaching implications for the women in our care who were called patients and treated accordingly. Books on law, ethics and their relationship to health care, but particularly midwifery care, were rare in health care generally. None of the midwifery or obstetric textbooks from this era addressed these topics. On re-examining these textbooks for this research, the focus was found to be on clinical anatomy, physiology and pathophysiology of the woman's reproductive and fetal/neonatal systems, and clinical midwifery and obstetrics.

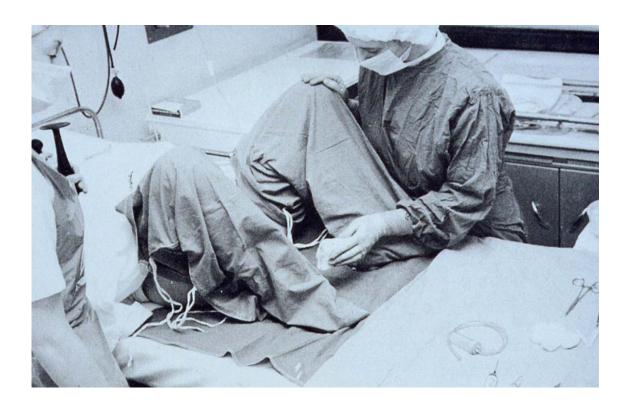
Because labour is a personal experience, Myles (1981, p. 99) considered it engendered "the presumption that she [the woman] ought to participate in professional decisions and dictate regarding her obstetric care". Clearly, Myles believed that professional knowledge and freedom to practise was of greater importance than the autonomy of childbearing women. She was not alone in this belief and all the textbooks from this era emphasis the need for the childbearing woman to be 'guided', 'managed', 'instructed', 'supervised' and 'controlled' by the obstetrician and the midwife. Myles produced 10 editions of her textbook, the last edition in 1985, and none included a chapter on ethics. She did include a chapter on the use of medications, but the content is related to clinical knowledge about the drugs, and their correct storage. There is no mention of obtaining consent from a woman prior to the administration of drugs to either herself, or her baby.

The hospital, its policies, and layout

The senior hospital staff considered my training hospital as modern in both design and in the staff's attitude. In many ways this was true. The women were encouraged to bring in their own iron pills and analgesic or pain relieving tablets. The women kept these medications in their bedside lockers and were individually advised on the required frequency of the pills, that is, self medication⁴⁵ was practised. The baby⁴⁶ 'roomed in' with

⁴⁵ Patient controlled intravenous analgesia is now in vogue, but it is clearly a high level medical technology controlled by the medical staff who commence the process and monitor its usage through the midwifery staff. The woman is limited in how much medication she may use.

ILLUSTRATION 6.3 'DRESSED' FOR BIRTH



Reference: Myles (1985, p. 307)

his mother prior to discharge for either 24 or 48 hours, depending on her doctor's stated protocol. The women were also encouraged to have a 'night out' with their husband prior to their discharge.

 $^{^{46}}$ Because it is cumbersome to use 'him/her', 's/he', 'he/she' when discussing the baby, I have tried to alternate the sex of the baby.

In 1970 the woman was permitted one companion in labour, usually her husband⁴⁷, but this was dependant on the hospital's policy. Some other hospitals of the period did not allow anyone to accompany the woman. White (1999) described how her brother, who was not allowed to stay for the birth of his son, paced the floor waiting for news from the hospital. The rationale for this restriction was to prevent infection in the woman and her newborn baby. My training hospital permitted husbands to be with their wives in labour and for the birth, but they were asked to 'wait outside' whenever any treatment was given. There was no special preparation of the husbands for labour and there was no requirement for them to sign a consent form⁴⁸. A report by the Hospitals Commission of NSW (1970 p. 10), claimed that 25% of couples requested the husbands' presence in labour. This was not the case during my training, however, as about 70% of women were supported by their husbands in labour. Fewer men stayed for the delivery, but this was usually dependant on the doctor's preference rather than the couple themselves.

⁴⁷ I have used the term 'husband' throughout this chapter as this is how the male partner identified himself. If the relationship had been acknowledged as a de facto one, he probably would not have been able to accompany his partner during labour. During my time at the hospital, I knew of only one couple who were not married. This information was inadvertently given to me by the woman's doctor. On her chart the woman had identified herself as married and was using her partner's surname. In both case books (H. Callaghan, 1971; Sheehan, 1971), all the women were denoted by Mrs. and the initial of their surname. There is no one identified as Miss, the term in use in that era.

⁴⁸ Two years later when I went to another Australian metropolitan hospital, the husband had to attend a special lecture, watch a video, and sign a consent form. If all of these were not done, he was not allowed in to the room. This privilege was given only to legal husbands, de factos were not accepted. The woman's marital status was checked on the personal information provided by the woman when she booked into the hospital to have her baby. In comparison, one USA obstetrician during the same era was "going through the hospitals channels" in his efforts to have husbands present at the birth, but eventually he took the matter to court (Corea, 1977, p. 218). The concerns of the institutions were that the husbands might faint, "injure themselves or contaminate the [birthing] area" (Greenhill & Friedman, 1974, p. 152).

The design of the hospital was in an 'E' shape with the nurseries the central prong of the 'E'. The second and third floors contained only postnatal beds, and partially surrounded this prong. The wards and their nursery were geographically separate and distinctive. A discussion by Rosengren and DeVault (1963) illustrated how such a segregation of areas actually contributes to a further segregation of care. There was only one combined entrance-exit to the ward nurseries. Each nursery had a central corridor with separate bays on each side, with the internal wall of the bays built with glass from waist height to the ceiling. It was impossible for anyone to enter the nurseries unannounced while only hospital and medical staff were permitted in the nursery bays. The ground floor of the hospital contained administration offices, the antenatal clinic and a chapel, while the first floor had six antenatal beds, the labour ward and the special care nursery. The antenatal beds were either in a single or a double room.

The labour ward area consisted of four delivery rooms, two operating theatre rooms (but only one was used), a treatment room, an assessment area, referred to as 'the prep. room', which contained a couple of beds in cubicles, showers and toilets. The student midwife on duty⁴⁹ in the labour ward, would 'do the obs' [observations] or monitor the labouring women on the postnatal floors. Some time after I commenced my training, a 'first stage room' was opened and situated next to the labour ward. This room contained six day beds⁵⁰ and any woman who was in the early stages of her labour, stayed there until she required pain relief, and/or more intense supervision. Because she was physically closer to the midwifery staff in labour ward, and, therefore, more accessible, the woman was more easily supervised and assessed.

During our training we 'belonged' to one postnatal ward and never worked in the other postnatal ward. Each ward had its own permanent staff and regular doctors. Presumably this was done to reduce the possibility of the midwifery staff not following a particular medical officer's regime. Coser (1963, p. 259) considered that efficiency, rationality and discipline were maximized in hospitals which implemented the principles of bureaucratic

⁴⁹ This is a militaristic term but it is still used within hospitals and reflects both the origins of hospitals and the hierarchal structure.

⁵⁰ I am not definite about the number of beds, it could have been eight.

organizations "by reducing the possibility of conflicting orders and expectations". It certainly reduced the stress levels in the student midwives as we soon learnt what was the 'normal' routine for our particular ward.

An introduction to medical surveillance

Antenatal clinics (see illustration opposite) were provided for the women and the spacing of the women's visits has not changed since my training days. The women were seen early in the pregnancy, usually before the twelfth week, then every four weeks till 28 weeks, then every two weeks till 36 weeks, then weekly till delivery (Chalmers, 1973; Chamberlain & Musgrove, 1975; The Royal Women's Hospital Melbourne, 1972; Ziegel & Van Blarcom, 1972). Some authors advised more frequent visits (Garrey, Govan, Hodge, & Callander, 1971; Myles, 1969), while others advised less frequent visits (Benson, 1966; Redman, 1966; Townsend, 1969). It was assumed by these authors that women would attend one care giver, an obstetrician, or clinic with a team of staff, during the course of their pregnancy. Antenatal care creates in the women a dependance upon the medical institutions.

SURVEILLANCE OF LABOURING WOMEN

During my midwifery training, women laboured and gave birth in the labour ward. Until the late 1980s this practice continued in Australia. The term, 'labour ward' clearly indicated that this was the place where women laboured to produce their babies. However, 'labour ward' was not considered 'nice' or 'genteel' and was an 'old-fashioned term' and gradually many labour wards became called delivery suites. The subtle and often ignored result of this change of name is that the emphasis, instead of being on the labouring woman, is now on the staff who 'deliver' the babies. Potts and Short (1999, p. 141), refer to the current situation as one in which the obstetrician or midwife is the central figure while the woman is "in danger of becoming a depersonalized, anatomical obstacle course". Public perception is that the delivery of the baby is the high point of the pregnancy, yet the reality is that it is the end of one physiological and social stage and the formal beginning of

⁵¹ These were the terms used by a medical superintendent in 1986 when I was working in a maternity unit which was moved to a new building and I objected to the name change.

another: parenting. Another implication of the name change, is that 'ladies' are delivered of their babies, and are seen as the passive recipients of care. It is worth noting that there is "no comfortable verb" to describe human birth (M. Potts & Short, 1999, p. 131). Both 'labour' and 'delivery' have negative undertones of hard work, exertion, effort, difficulty, transport, dispatch, consignment, salvation, and rescue. The last five words also convey the concept of women as being a means of transporting the baby into a new world, achieving their salvation through motherhood and needing to be rescued.

In the 1970s and early 1980s, at the height of the medicalisation⁵² of childbirth, the lady⁵³ was transformed into a patient, while labour ward was treated like an operating theatre. The New Zealand Department of Health (1960, p.12) actually referred to the place of birth as a "labour ward or obstetric theatre", while Ohashi (1982, p. 129) referred to birth in a hospital as having "aspects of an intensive care unit". Kitzinger was not so tentative. Her view is that birth in Western society is based on the assumption that childbirth is a medical event and "should be conducted in an intensive care setting" (Kitzinger, 1989, p. xi). The Hospitals Commission of N. S. W. (1970, p. 2) would agree as they maintained "Labour Ward is essentially an Intensive Care Ward".

Staff working in labour wards were often required to wear theatre clothes or gowns all the time. Some institutions insisted that everyone entering the labour ward had to wear a theatre gown, theatre 'over' shoes and theatre hats. Appropriate dress during this period usually involved everyone in the delivery room, that is, the staff, the woman and her companion. My training hospital did not follow this protocol. Midwifery staff wore their hospital uniform until they were required to scrub for the birth. "Scrub up" was the term used by Myles (1969, p. 300) and it was in common use. We were required to do the equivalent of a surgical scrub, as if we were in an operating theatre. This consisted of a five minute scrub for our first scrub of the day. Second and subsequent scrubs could be three minutes, if they were being done at regular intervals during the day. The scrubbing

⁵² It is clearly evident, however, that the medicalisation of childbirth began much earlier.

⁵³ The parturient women were often referred to as 'labouring ladies'.

up process involved the doctor/midwife donning a fresh cloth face mask, following this with a systematic scrub of the accoucheur's hands and forearms with a nail brush and a soap-disinfectant. Particular attention had to be given to the fingernails and the spaces between the fingers. The resulting foam/liquid was rinsed off the hands and the forearms. It was important that the forearms were held upright and away from the body, so any drips of fluid would be downwards. This was to avoid contamination by the dirtier fluid on the upper arms/elbows, or by the trunk of the body. The scrubbed hands and forearms had to be held upright and away from the body so that the person would not become contaminated. The midwife/doctor then approached the sterile trolley and the sterile equipment was uncovered for him/her using sterile forceps. The person then dried their hands with the hand towel provided, carefully unwrapping the sterile gown, then the gloves. There is a specific way in which the gown and then the gloves had to be applied. The gown was done up by another person, care being taken not to touch either the scrubbed person or the sterile trolley in an inappropriate manner. Once the doctor/midwife was gowned and gloved, he/she was considered sterile from the waist (approximately the level of the trolley) to the shoulders (see illustration opposite). Below the waist, above the shoulders and the back was considered unsterile. If the gowned person touched any area except those designated as sterile, they becomes unsterile. If contamination occurred, the accoucheur was expected to change gown, or gloves, or equipment, depending on what had been unsterilised or contaminated.

The women and their husbands were dressed in theatre gowns. For the woman the theatre gown was her only covering, but the husband wore his over his street clothes. Interestingly, the report by the Hospitals Commission of N.S.W on *Labour wards* (1970, p. 9) although it discussed the need to reduce the risk of infection by relocating infectious staff, adequate maintenance and sterilising of equipment, checking the sterility of sterilised equipment, daily cleaning including "Frequent operating theatre type cleaning", it does not mention the wearing of theatre type clothes by labour ward staff. Despite this, the latter was a common practice at that time.

Processing the women

On admission to the labour ward, the woman was separated from her husband who was sent

to the waiting area. Only one textbook (Ziegel & Van Blarcom, 1972, pp. 331-332), referred to the need to keep the husband informed of the procedures being done to his wife during this separation and to give him instructions on his "attire in the labor [sic] room". According to Green (1966, p. 71), a kind and helpful approach to the woman during the admission "will go far in securing her successful co-operation in the serious business ahead". Obviously, the labouring woman was someone who needed to be controlled and manipulated.

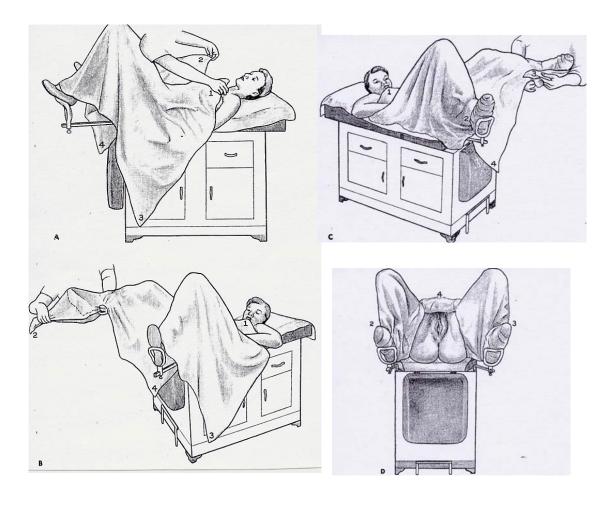
The woman was taken to the preparation or the 'prep. room', identified and tagged with a bracelet on which was written her full name, religion, date of birth and her doctor's name. Hearn (1984) when describing his first child's birth in 1978, noted that he and his partner were immediately separated on their arrival at the labour ward and were not reunited till more than an hour had passed. During this time his partner had been "changed, bathed, shaved and sorted out" (Hearn, 1984, p. 9). During my midwifery training, there was no discussion about the admission procedure with either the husband or wife. They were informed of what would happen, but more to reduce anxiety than for any other reason. The staff, myself included, assumed that the admission procedure was acceptable to the women, and the women themselves never refused to participate.

The admission process included the woman signing a blank consent form, the perception being that she had agreed to any procedure that her doctor deemed necessary. This tactic is referred to by O'Connor (1995) in her national study on Irish home birth, so it clearly was not a practice restricted to one part of the world. Myles (1969, p. 267) refers to the expediency of having the woman sign "a permission slip for anaesthetic and operative procedure(s)" and notes that if the woman "is under 21, it must be signed by her husband, or if single her parent or guardian". This gives the impression that the process was a normal routine practice and was legal, but the result was the same: the woman was signing a consent form without knowing for which procedure it would be used, and others were accepting responsibility for making her decisions.

Searching for sepsis

There is a consensus from the midwifery authors (Bailey, 1972, 1975; Garland, Quixley, & Cameron, 1971; J. Towler & Butler-Manuel, 1973; Ziegel & Van Blarcom, 1972) and some of the obstetric authors (Benson, 1966; Green, 1966; Townsend, 1969) about the admission procedures, but the details are often not discussed in the texts written by other obstetricians (Chalmers, 1973; Garrey et al., 1971; Johnstone & Kellar, 1963; Redman, 1966). The woman's temperature, pulse, blood pressure, weight and urinalysis were taken and recorded. She was also examined for any swelling of her face, hands or feet. A history was obtained and this included a review of her chart, her general health, family's medical history, past obstetric history and the course of her current pregnancy. An abdominal

ILLUSTRATION 6. 4 DRAPING FOR A VAGINAL EXAMINATION



Steps in draping for vaginal examination. **A,** place the sheet diagonally over the patient; ask her to hold corner No. 1. **B,** wrap corner No. 2 around the right foot, tucking it in at the side. **C,** wrap corner No. 3 around the left foot in the same manner; allow the fourth corner to remain free. **D,** the fourth corner of the sheet is tucked up over the abdomen, allowing good exposure of the genitalia. Advise the patient to keep her knees well apart and to relax.

Reference: Miller & Avery (1965, pp. 340-341)

This is how we draped, but there was an extra key-hole drape which went over the genitals. This ensured that only the labia and the vaginal orifice was visible and could be touched.

examination was preformed during which the fetal heart was listened to with a pinard⁵⁴. The woman's vaginal loss was inspected and sniffed⁵⁵. We were expected to be definite that if the membranes were ruptured, they were not infected. Contractions were assessed by placing a hand on the highest point of the woman's uterus. The midwife sat on a chair beside the labouring woman's bed for a minium of ten minutes and assessed how frequently the contractions were occurring, how long they were lasting, and how strong the contractions were. This period allowed the midwife to assess if the woman required either pain relief or a vaginal examination immediately. Sitting on the patient's bed was a definite misdemeanour. If any visitor or staff member sat on a patient's bed they were asked to remove themselves. The rationale given for this rule was the risk of infecting the woman or her baby.

During the admission examination, staff were supposed to subtly check if the woman had any infections and if she had been to the dentist recently. Stevenson (1960, p.107), discussed the need to search for "septic foci" and if found, the need for treatment, while Benson (1966, p. 108), declared "Isolate the patient if a contagious disease is discovered or suspected". This checking and monitoring of the woman was usually undertaken by someone unknown to the woman as it was rare for woman and the midwife to have met prior to the admission, unless the woman was one of the student's own 'case studies'.

Myles (1969, p. 264) placed "cleanliness, antisepsis and asepsis" as the first point in her discussion on the "obstetrical nursing care during the first stage of labour". It is worth noting that the woman is invisible in her statement, as is the midwife. The statement implies that an obstetric nurse, under the guidance of a medical practitioner, will be providing the care during labour and maintaining an infection free environment. Myles (1969) maintained that labour should be conducted with the same precautions that occur in a surgical theatre as she considered the woman to be the major source of a possible infection. Possible sites of infection were listed as "septic finger, discharging ear or boils"

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⁵⁴ Pinard: trumpet shaped instrument placed on the abdomen to listen to the baby's heart rate.

⁵⁵ If the liquor had an offensive smell it was considered that the woman was infected.

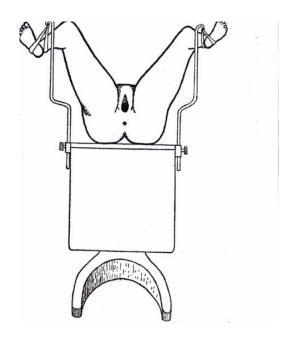
and the midwife was instructed to check if the woman had been in contact with an infectious disease, while the genital area was considered to be "teeming with organisms" (Myles, 1969, p. 264). Green (1966, p. 76), however, noted there were "three potential sources of infection – patients, attendants, and surroundings" and so "the principles of cleanliness, antisepsis, and asepsis" should be maintained during labour. Friedman (1973, pp. 506-507) made similar comments: "Pre-existent local infections must be eradicated if possible Obvious sources of infection, such as personnel, equipment, or poor aseptic technique must be eliminated". Friedman's language is particularly forceful, reminiscent of warfare, and suggestive of a rapid annihilation without mercy.

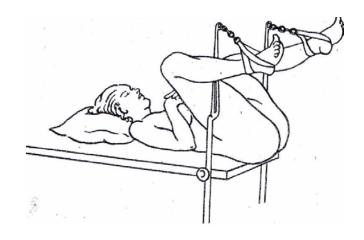
One text (McNiven & Warne, 1964, p. 75) noted that the "chief danger" from bacterial infection for parturient women was caused by staphylococcus aureus and haemolytic streptococcus, but Hill (1969, p. 498) described the haemolytic streptococci group A as the "outstanding cause of severe and fatal puerperal infections". Therefore, the logic of many of the practices related to sepsis has to be questioned. It was assumed continually that the woman and/or family was the source of infection, yet, Hill described the main culprit of puerperal sepsis as originating outside the woman's body. Potential sources of infection could just as easily have come from the staff, but aside from our initial swabs, before we joined the program, staff were not the focus of examination.

Cleansing the maternal body

Woman was perceived as a major source of infection, and there was many procedures which were considered necessary to clean the maternal body. A full pubic and perineal shave, that is, all the hair surrounding the genitals, was performed by the midwife on the woman. A few hospitals accepted a partial shave (labial hair and rectal hair only was removed). The following is a detailed description of the care required during this procedure:

ILLUSTRATION 6.5 THE LITHOTOMY POSITION





Reference: Cairney & Cairney (1963, p. 54)

The nurse⁵⁶ washes her hands carefully ... to prevent contamination of the perineal area from an outside source. The equipment that is used (basin and razor) are sterile. A liquid soap or detergent containing pHisoHex [sic] or another bactericidal agent, and a safety razor are used. The mother lies on her back during the shaving The area is well lathered The skin is held taught, and the hair is shaved off with short, even strokes of the razor in a downward direction. Care must be taken to avoid contamination of the vagina. This care includes precautions against soap solution or loose hair entering the vaginal opening and against return of sponges and razor to the vulvar area after they have touched the anal region. Preparation of the vulva is done ... to assure removal of all hair and also removal of smegma⁵⁷, [from] the folds between the labia Loose hair is quite easily wiped off with dry gauze or gauze moistened with the soap or detergent solution. Sometimes the vulva is washed with warm water after shaving, but if nonirritating antiseptic solution is used, it may be left on the skin for its continuing bacteriostatic effect.

After complete preparation of the vulvar area, the mother is asked to turn to her side for the shaving of the anal region. All other areas should be completely finished before preparation of the anal region is begun to avoid returning to a cleaner area after the anal region is touched. (Ziegel & Van Blarcom, 1972, p. 333)

This description demonstrates the commitment, arguably an obsession, that existed in relation to cleanliness and antisepsis during childbirth in the 1970s. It is also an excellent example of the importance of the order required for any form of swabbing, that is, from the vaginal region/the anterior, to the anal region/the posterior, and the principle that swabs must never be taken from the posterior to the anterior. This quote also illustrates that the vulva was considered "the obstetric counterpart of the surgical incision" (Mayes, 1965, p. 307). I must admit, however, that I did not remove the smegma: I doubt that I knew of its

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⁵⁶ This book was written for obstetric nursing students by Ziegel, an Associate Professor of Obstetric Nursing and Van Blarcom, a Late Assistant Superintendent and Instructor in Obstetric Nursing and Care of Infants and Children, neither of whom indicated that they had midwifery qualifications. Their text was used for midwifery students in Australia. At the time of publication, 1972, midwifery was illegal in the majority of the states in the USA. An obstetric nurse functions under the direction of a medical officer, while a registered midwife is legally allowed to independently provide care to healthy pregnant women.

Derived from the Greek language and means 'grease'. It is the secretions from the glands in the region of the clitoris and the smaller of the labia or lips that surround the vagina (Pschyrembel's Klinisches Wörterbuch Editorial Staff, 1988).

existence.

Myles (1969, p. 278) stressed the importance of the shave "to keep the vulva clean throughout labour or during the puerperal period". She even recommended that if it was not possible to do it prior to the birth, it should be done immediately afterwards! da Cruz (1967, p. 184) simply described the shave as "disagreeable" but necessary to avoid infection. Towler and Butler-Manuel (1973), however, gave the reasons for a shave to maintain cleanliness, provide good visibility and facilitate any obstetric procedures. Garforth and Garcia (1989) noted the assumption that pre-delivery shaving reduced infection had been disputed by Johnson and Sidall as early as 1922. This ritual, however, still persisted. The apparatus provided for shaving was an old style safety razor, but a new blade was not used for each woman!

Insertion of an enema into the woman's lower bowel was another ritual perceived as an important part of the cleansing process. Currently enemata are infrequently used in nursing or midwifery, but during my training days they had eight specific uses and the fluids injected into the rectum were designed to be either returned or retained (Battersby, 1962; Doherty, Sirl, & Ring, 1965). The use of an enema prior to a vaginal or rectal examination was routine (Doherty et al., 1965). Various authors (da Cruz, 1967; Myles, 1969; J. Towler & Butler-Manuel, 1973) (Llewellyn-Jones, 1969) have described the enema as part of the routine admission procedure. Llewellyn-Jones (1969, p. 113) stated that if the "patient has not emptied her bowels recently, ... a plain enema is given", while Johnstone (1963, p. 184) considered it should be given, even if her bowls had opened, unless the patient was in "strong labour". However, this was not the case in my experience. Unless the woman was ready to push the baby out, that is, fully dilated, or the fetus/baby was positioned high in the pelvis (this is considered potentially hazardous), she was given a soap and water enema of one and a half to two litres and asked to hold it for ten minutes, or as long as possible. The description/instruction used by obstetricians and registered midwives was to ensure that the enema was inserted 'high, hot and a hell of a lot'58. The enema was inserted regardless of

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⁵⁸ When examining textbooks for this chapter, I came across a description of a vaginal douche which was reminiscent of this phrase: "long, hot, vaginal douche" (Battersby, 1962, p. 319). The "long" in this case was six pints (Battersby, 1962, p. 319). Like the enema, the douche is a stream of fluid used to clean body cavities, the uterus and vagina.

how recently the woman's bowels had moved. It was given regardless of the fact that some women may have had diarrhea in the previous 24 hours and their lower bowel was already empty. This diarrhea is now recognized as a normal part of the woman's bodily response to the impending labour (Olds, London, Ladewig, & Davidson, 1980; A. Robertson, 1989). Close (1975, p. 76) acknowledged that the diarrhoea was "Nature's way" of providing room for the fetal head in the pelvis. However, she then followed this with comments on the next page detailing how the woman could cope with an enema when she experienced a contraction.

Occasionally a woman would query the need for the enema, but none ever refused to have one. Most women found it impossible to hold the enema and usually rushed off to the toilet after a few minutes. Once they had finished on the toilet, the women were sent to the shower for a 'clean up'. It was common for the women to have to race from the shower area back to the toilet because of a sudden urge to move their bowels again. The New Zealand Health Department⁵⁹ (1960, p. 23) had reservations about the women using a toilet and recommended the use of "A chamber or bedpan ... in preference to the closet ... because precipitate labour sometimes occurs ..." and injury to the infant may result. Myles (1969, p. 279) discussed the possibility of using a suppository but noted that they were "slow in action", not as effective as an enema and "soiling does tend to occur" during the birth. For this author, an enema provided "a clean field during delivery" (Myles, 1969, p. 280).

Following the shave and enema, the woman was sent to the shower to complete the cleansing process. There were no baths in the labour ward of my training hospital. Possibly because baths were perceived as an infection risk to the women. Cairney and Cairney (1963, p. 47), recommended either a shower or "the patient can sit on a seat above the level of the water in an ordinary bath" following the enema, to avoid the risk of bath water entering the vagina. Although no reason is given for these instructions, the implication is obvious. A bath will increase the risk of infection to the woman and her baby. Presumably, for the same reason Hector and Bourne (1965) preferred a shower to a

⁵⁹ Although this booklet was issued in 1960, it was given to me in 1973 as part of my orientation to working in New Zealand as a midwife.

bath.

The medical practitioner was notified of the woman's admission. One of the routines of this notification was for the medical practitioner to check if the woman had been given a shave and enema, and if not, to order them to be given soon as possible. Interestingly, both Llewellyn-Jones (1969) and Townsend (1969), who were male obstetricians, advocated the shower, then the shave, while Stevenson (1960) advocated the shower, shave and then enema. No reason is given for this, but presumably they had never had a perineal shave and did not appreciate the soothing nature of a shower, or the ease with which the shaved hair was washed away during the shower. Probably, they had never had an enema, or considered providing the women with the cleansing comfort of a shower after an enema. Although the first two authors were concerned with cleanliness, they did not appear to register that it was illogical to preform one internal cleansing act (the enema), follow it with an external cleansing act (the shower), and then to do another cleansing act (the shave), but leave the supposed source of infection on the woman. Stevenson's order for the cleansing process, however, was totally reversed!

After her shower, the woman was given a an operating theatre gown to wear instead of her own clothes during labour. This continued the emphasis on the woman as a patient and childbirth as a surgical process to be managed by medical practitioners, especially specialist obstetricians. This gown was white and opened up down the back. If the woman was lucky the three ties at the back were present and usable, and she could do them up. Even so, the gown often separated as the woman walked. Usually the woman was not allowed to wear any undergarments and so she had to clutch the two sides together as she was moved to either a labour room, her room on the postnatal ward, or the first stage room when it was in use. Webster (1992) has referred to this and her resulting embarrassment in her birth story. Shore (1991, p. 132) described how her admission to the hospital intimidated her; how she felt as if she was handing over control; and that "Getting into the gown and getting on the bed just changes the whole way you're feeling". Not surprisingly, most women were happy to remain in bed where, at least, their dignity remain intact. Fox (1997, p.654), in his analysis of operating theatres states "no patient may walk, they are always passive objects". Regardless of the original intention of the use of the patient gown, the result was the same:

the woman became a passive patient, somebody who was operated upon. Following the admission procedure, the woman was reunited with her husband.

Traversing the margins of the maternal body

The use of rectal examinations in labour instead of vaginal examinations was first advocated independently by Kroenig and Ries in 1894 (Reis, 1924). This practice was recommended because of the persistence of puerperal sepsis despite cleansing the operator's hands and the woman's genitalia (Reis, 1924). The choice of vaginal versus rectal examinations in labour remained a contentious issue for decades. According to Manning (1961, p. 1356) vaginal examinations were "taboo" in American hospitals. The well known American textbook, Williams obstetrics (Hellman, Pritchard, & Wynn, 1971, p. 402), stated that "the major advantage of a rectal examination is the limited preparation required of both the patient and the examiner". No scrubbing of the examiner's hands was required while a clean, well lubricated glove, rather than a sterile glove was used during the examination. There is no mention of the preparation of the woman. Rectal examinations were used by Friedman (1954, p. 1570) in his studies on labour, although acknowledging that the method was not universally accepted, it did permit accuracy "with minimal training". During my midwifery training, some institutions were using rectal examinations to assess the dilation of the woman's cervix (da Cruz, 1967; Green, 1966; Redman, 1966; Stevenson, 1960), but according to The Royal Women's Hospital, Melbourne (1972, p. 27) these were a "substitute" and less accurate than a vaginal examination. Townsend (1969), although agreeing about the poor accuracy of rectal examinations, felt they could be used in prolonged labour till the woman's dilation was five centimetres. This was despite his comment that rectal examinations "may spread infection" (Townsend, 1969, p. 136).

Vaginal examinations had been introduced recently in my training hospital and these were done as a sterile procedure with great emphasis placed on the need for "strict aseptic techniques" (H. Callaghan, 1971, case 10), the rationale being a "Need for Asepsis – ... the fingers into the vagina gives rise to the danger of infection" (Sheehan, 1971, case 8). Various authors discussed the importance of these aspects of vaginal examinations (Llewellyn-Jones, 1969; Myles, 1969; The Royal Newcastle Hospital, circa 1970; Stevenson, 1960; Townsend, 1969). Both Stevenson (1960) and Townsend (1969)

ILLUSTRATION 6.6 SWABBING PRIOR TO THE BIRTH



Reference: Myles (1969, p. 299)

discussed the increased risk of infection to the woman during a vaginal examination. Townsend's (1969) explanation on the need for sterility, however, reflected the aggressiveness of the war against disease, the prevention of infection in childbirth, and demonstrated similar sentiments to those of Johnstone and Kellar (1963) who wrote about the different levels of asepsis found in the female genital tract.

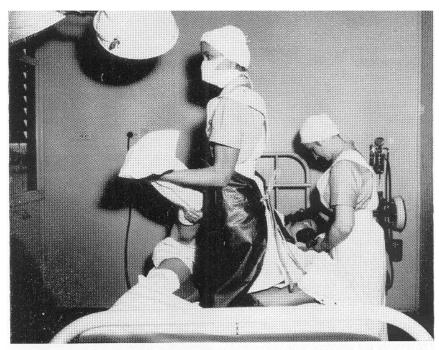
Because of this perception, vaginal examinations and any other procedures, such as, catheterization, artificial rupture of the membranes, or amnioscopy (discussed later), were done using a sterile tray and after the person 'scrubbed up'. The husband was usually asked to leave the labouring room when a vaginal examination was preformed. In my training hospital, it was considered 'inappropriate' for the husband to remain during any procedure. Possible reasons for the exclusions were: the doctor's work could be considered as being overseen by another male; the husband might object to the doctor touching his wife's genitals; the examination may be considered 'dirty business' and therefore, the husband is kept clean and at a distance; the doctor, the wife or the husband may be embarrassed by the procedure being done in front of others, for as Emerson (1970) noted during a vaginal examination reality is delicately poised. Inch (1989, p. 39) suggests that the reason for asking the partner to "wait outside" is so the staff do not have "to explain their actions before the event", or to prevent the staff from being embarrassed by doing the examination in front of the partner. One author noted that he was banished whenever his partner was examined vaginally, or she was given a bed pan (Hearn, 1984).

The timing of the woman's first vaginal examination was dependant on the assessment of her labour on admission. In most cases it was done prior to the shave and enema. Vaginal examinations were also done prior to giving analgesia, but there was no definitive time for doing these examinations. This has changed. Friedman's curve (World Health Organization, 1994), the partogram (M. G. Ross & Hobel, 1992) and the concept of active management of labour (O'Driscoll & Meagher, 1980) led to the introduction of routine fourth, then second, then hourly vaginal examinations in labour. Although some authors

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⁶⁰ Some years later, at another institution, I asked why the husbands could not stay during vaginal examinations, if the woman and her husband did not want to be separated. The senior midwife's response was to ask if the husband accompanied his wife when she went to the toilet!

ILLUSTRATION 6.7 THE "LEGGER"



The left lateral position. One assistant holds the patient's right leg while another supervises the administration of nitrous oxide and oxygen.

Reference: Townsend (1969, p. 143)

This was the most common positioned used for birth during my midwifery training

have abandoned the need for such regular examinations (Study Hospital, 1997) (Varney, 1997), other authors (Hacker, Moore, Berek, Chang, & Hobel, 1992; Morrin, 1997a) continue to use this approach. Silverton (1993, p. 297) comments that there is "limited rationale" to support the current variance in frequency of examinations.

Recording the surveillance of labour

As noted earlier, the woman's contractions were assessed by feeling her abdomen and observation of her while she was experiencing contractions. Both Green (1966) and Townsend (Townsend, 1969) described the use of tocographs to assist in the continuous observation of contractions only, but this option was not available in my training hospital. Assessment were recorded on a columnar labour ward observation sheet in a descriptive format. The headings were date, time, temperature, pulse, foetal⁶¹ heart rate, urinalysis, vaginal loss, contractions, frequency, duration, strength and remarks. The remarks would often describe how the woman was feeling or behaving, for example, nauseated, complaining of pressure on the top of her thighs, wants to push, or grunting. Vaginal examinations were written across the columns in red as were any drugs given to the woman. This was the way in which observations in labour were recorded until the late 1970s and early 1980s in most maternity units in Australia. Although in 1978, Friedman (1978) claimed that the graphic representation of labour was familiar to clinicians everywhere, he acknowledged that there was some resistance to this approach. He saw this resistance as a reluctance by health professionals to objectifying and quantifying the observations done on the labouring woman (Friedman, 1978).

Changing the pace of labour

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⁶¹ 'Foetus' was the correct spelling for 1970. It is now accepted that 'fetus' is correct.

A number of methods of accelerating labour were available. Surgical inductions⁶² were done with the woman in the lithotomy position, that is, the woman lay on her back, her knees were bent, thighs were abducted and her legs were supported in stirrups (see illustration opposite). The bottom half of the bed could then be removed allowing the doctor close access to the woman's genital tract. The woman was swabbed down and draped as if she was in an operating theatre, and about to have surgery performed. The examiner also 'scrubbed up' and wore a sterile outfit. A vaginal examination was performed and either the forewaters⁶³ or the hindwaters⁶⁴ were ruptured. Various instruments, mostly with teeth, were used to rupture the membranes (Garrey et al., 1971; Mayes, 1965; Myles, 1969; Stern, 1956). The advantage of the use of forceps was that if no liquor escaped, the production of fetal hair between the teeth was confirmation of the rupturing of the membranes (Garland et al., 1971). Rupturing of the hindwaters is no longer acceptable routine practice because of the risk of exsanguination to the baby and trauma to the mother from the Drew-Symthe catheter, the instrument used to preform this procedure (Sellers, 1993b). Draw sheets and rubber mackintoshes were used to collect any excess liquor and to decrease the necessity of changing all the bed linen. It was not considered necessary, however, to wear protecting gloves when changing the linen or the placement of perineal pads on the women.

Amnioscopy, or inspection of the liquor through the intact bag of membranes, was often done prior to rupturing the membranes if there was some doubt about the gestation of the pregnancy, or to exclude vasa praevia⁶⁵. This required the passage of a conical-shaped tube, 24 cm in length through the cervix using "strict aseptic techniques" and was "a new technique" (Townsend, 1969, p. 139). A light source attached to the instrument illuminated the forewaters. If the fetus/baby was near term, vernix and fetal hair would be visible in the bag of forewaters. This would indicate that the fetus/baby would be unlikely to develop respiratory problems. My memories are that the liquor was assessed in this manner when

⁶² This form of induction is called 'surgical' because it is considered a surgical procedure.

⁶³ 'The waters' or liquor in the sac of membranes which is in front of the baby.

⁶⁴ 'The waters' or liquor in the sac of membranes which surrounds the baby's body.

⁶⁵ Some fetal blood vessels are in the membranes which lie over the cervical os. If an ARM is done and these vessels are ruptured, the fetus may rapidly die from exsanguination. The only possible treatment is an emergency caesarean section.

Rhesus incompatibility was present, or if fetal distress was suspected. Amnioscopy is rarely done now — instead the woman's membranes are ruptured to visualise the liquor. Current practices do not encourage the use of the amnioscope, while the instruments used for induction do not permit the collection of fetal hair.

Several of the obstetricians 66 booked a list of women for induction on a particular day of the week. This arrangement is identical to way surgical operations were, and still are, organized in operating theatres. There was one particular obstetrician who usually had two or three women booked for each of his 'induction days'. He would start in one room about 7.30am with his first patient, perform an ARM and insert an intravenous cannula. Syntocinon 10 units were added to a litre flask of Dextrose 5% and the induction was given a boost. He would run the syntocinon at the maximum rate till the woman started contracting. The drip was then slowed down and the midwifery staff were allowed to continue the management. Each of his patients would have this done. Sometime after 11.30am he would return. Each woman would have a vaginal examination, then he inserted either an epidural or caudal block. Once the anaesthesia was working, he would return to the first patient and commence delivering her baby. It was immaterial if the women were fully dilated or not, as he was technically very skilled and used a vacuum extractor to accelerate both the dilation of the cervix and the birth of the baby.

The panaceas

It was assumed that the women would accept pain relief, if it was offered. According to Chamberlain (1975, p. 141), "Analgesia is given to the patient, sufficient to her needs". There was no discussion on the advantages or disadvantages of pharmacological pain relief in labour, nor was there discussion on the non-pharmacological methods of pain relief. According to both case books (H. Callaghan, 1971; Sheehan, 1971), the drugs most often used in 1970-1971 were analgesic inhalations of nitrous oxide and oxygen, analgesic and/or sedative intramuscular injections of pethidine 100 mgs and either trilafon 5 mg or sparine 25 mgs, but a woman having her first baby was often given 'stronger' drugs, such as, morphia 15 mgs and largactil 25 mgs, or omnopon 20 mgs. It was fairly common for the

⁶⁶ A female obstetrician was extremely rare. The first one I met was in 1974 when I was in New Zealand. She had trained in the United Kingdom.

doses to be repeated several times during labour (Chalmers, 1973; Garland et al., 1971; Ziegel & Van Blarcom, 1972). My case book (H. Callaghan, 1971, case 18) documents women having their first baby being given valium 10 mg as a sedative in labour, an approach recommended by Chalmers (1973), but he used half the dose! Women were also given regional anaesthetic blocks, such as, pudendal, paracervical, epidural and caudal. These were all administered by the woman's obstetrician, not anaesthetists as occurs currently⁶⁷.

Both case books (H. Callaghan, 1971; Sheehan, 1971) recorded a high utilization of analgesic injections and anaesthetics. Clearly the women were passive patients and so heavily sedated that they would have difficulty in making any rational decisions, or actively participating in their labours. Therapeutically, it was essential for the obstetrician to develop a "strong rapport" with his patient, and create "authoritative dependency" within the patient (Greenhill & Friedman, 1974, p. 149). The high usage of drugs achieved the same goal of 'authoritative dependency' without the need for a 'strong rapport'.

Opening up the maternal body

Once the woman was thought to be in the second stage of labour or the transitional stage just prior to second stage and pushing, her doctor was notified of her imminent delivery. This was usually based on the midwife's ability to feel fetal shoulders rather than head above the brim of the pelvis, or, the fetal head was visible, or, the woman was involuntarily pushing and there was dilation of the anus, or a combination of these signs. If there was doubt about whether she was in the second stage of labour, the woman was examined vaginally. Every effort was made to have the obstetrician present for the birth, but if he did not make the event, it was not considered a problem. The women did not complain either. Pushing was rarely commenced or encouraged before the head was on view, as this was considered a more effective approach (Beynon, 1957), or, according to one author, it minimized trauma to the woman postpartum (Stevenson, 1960). Some textbooks provided no reason for this approach (Bailey, 1972) (Redman, 1966; Stevenson, 1960). Women

⁶⁷ Several years after completing my midwifery training and in another state, this practice caused a demarcation dispute between an obstetrician and the local anaesthetists.

having their first baby were encouraged to push as their second stage of labour was assumed to be longer than women who had a baby before. Active pushing, however, was not done for women with other children unless it was estimated that the obstetrician would have time to arrive and to scrub for the delivery. The woman was informed the obstetrician was on the way and if she could hold off pushing, he would probably make the birth. She was also informed that if she could not stop pushing, that was all right too as the midwifery staff were ready to deliver her baby. There was no attempt, however, to prevent the birth occurring by putting pressure on the fetal head to hold it back. Instead, the student midwife scrubbed up and was prepared to 'do the delivery' if the birth occurred prior to the doctor's arrival.

The Royal Women's Hospital Melbourne (1972, p. 32) stated that there is no need to "hold back the head" if the midwife demonstrated "a nicety of judgement which few [midwives] show, particularly in private practice where the distance of doctors' homes from the hospital differs". O'Connor (1995), provides a comment from a midwife who had to delay pushing until the doctor arrived, but there is no further comment on how this was done, or what she did if the woman continued to push. Leavitt (1998), however, has provided examples of women having their legs held together, or strapped together, and even of the obstetric nurse stiting on the woman's knees, all aimed at preventing the birth before the doctor's arrival. England and Horowitz (1998, p. 91) quote one woman who was told: "Be Quiet ... Put your knees together ... the doctor's not here yet". Another example has been provided by O'Brien (1974, p. 22), who was pushing and grunting to her "heart's content ... when the sister suddenly shouted from across the room, "Stop that! Don't push! Use the mask!". She was not allowed to push till the doctor arrived.

This has changed. Private patients now expect their doctor to make it to the delivery on time. Some have even refused to pay their doctor because he was not the accoucheur. Obstetricians are now determined to be present at all the births of their private patients and some become very angry and aggressive towards the midwife if they miss the delivery. Private patients are decreasing in numbers (Nassar, Sullivan, Lancaster, & Day, 2000) and an obstetrician who does not make it to the birth on time runs the risk of losing his paying customers. Despite this, the way their workload is organised generally precludes them being able to stay around during labour, or even in the second stage until the baby is ready to be born.

When the woman was pushing in the second stage, the husband was sometimes asked to leave the labouring room. Depending on the obstetrician's preference, the husband was then recalled at the last minute to witness the birth. One father commented that he was sent out of the room while his wife was sutured and when she was given "a proper clean up and a bath" after the birth (Hearn, 1984, p. 10). If the delivery was a breech or an instrumental

⁶⁸ This is an American reference and at the time midwifery was not legal in most American states. Instead the health professional who provided care for maternity patients was called an obstetric nurse.

ILLUSTRATIONS 6.8 WAITING FOR THE PRECISE FEED TIME





Note the closed doors. Everyone had to wait for the precise time before the babies were allowed to go to their mothers

one, fewer obstetricians were prepared for the fathers to be present. The explanation was usually that this birth 'wasn't very nice to watch' and he would come and talk to him in the waiting room as soon as the delivery was finished. The implication is that labour is unpleasant and dirty work and there is no need for the husband to watch the baby's birth. This behaviour is reminiscent of surgeons speaking to the next of kin following major surgery. A glimpse of how accepting parents were about these restrictions, and how grateful they felt when they were reduced is provided in the following quote:

Second stage lasted just about half an hour. At some point during this time the midwife invited my husband, who I knew was standing outside the door to come in. I didn't realize this until I felt my head being affectionately patted and a lovely cool face-cloth passed across my forehead. I was thrilled beyond words because we had both accepted that he wouldn't be present for professional reasons. (Close, 1975, p. 151)

At the delivery, the accoucheur donned a face mask, "scrubbed up" as described earlier, donned a sterile gown, and applied sterile gloves. The delivery equipment was on a sterile trolley, which was moved over to the bedside, and then the woman was 'swabbed down', not washed, with an aqueous solution of an antiseptic to clean her vulva and perineum. The woman's body was covered with sterile drapes so that only the vaginal orifice, labia and the perineum were exposed. This supposedly provided a "sterile field" into which the baby was delivered. The woman was usually warned not to touch the sterile drapes as she would make them unsterile or dirty them. Myles (1969, p. 302), however, noted that "the woman may disarrange the sterile drapes", or "the midwife become contaminated" if these preparations were done too soon. Ziegel and Van Blarcom (1972, p. 380) restrained the woman's arms to prevent contamination, but believed early preparation increased "the risk of contamination". During the delivery the accoucheur held a sterile pad over the anus to prevent contamination of the sterile field from faeces. This was a greater problem then as enemas have been shown to increase the risk of soiling with faecal fluid during the second stage, rather than solid faecal matter in the women who did not have an enema (Drayton & Rees, 1989; Romney & Gordon, 1981).

Positioned for birth

The position the woman assumed during the birth always reflected the position considered

ILLUSTRATIONS 6.9 DOMESTIC STAFF ("THE PINK LADIES") HELPED IN THE NURSERY





appropriate by the health professionals to allow them to 'conduct the delivery' the way they wanted. There was never any disagreement from the women although occasionally someone might complain that a particular position was awkward or painful. The maternal position used for the birth varied according to what was in vogue with a particular obstetrician or institution. My training hospital used the left lateral position for normal vaginal births and was one of the few hospitals which provided some labour beds with a leg support for the woman's right upper leg. If this fixture was not provided, someone, usually the student midwife, climbed onto the bed and held the woman's right leg up and in the correct position while she was pushing and/or for the birth of the baby. According to The Royal Women's Hospital Melbourne (1972, p. 34) this assistant was call a "legger". Townsend (1969, p. 143) provides a photograph of this most unnatural, but common, position.

Most textbooks identified either the left lateral position (Stevenson, 1960) (Gibberd, 1960; Stern, 1956; F. D. Thomas, 1959; Townsend, 1969), or the dorsal position (Green, 1966; Myles, 1969) as the preferred option for the birth, others were content with either (Bailey, 1972, 1975; da Cruz, 1967; Garland et al., 1971; Garrey et al., 1971; Johnstone & Kellar, 1963; Redman, 1966), while still others do not state any position (Borody, Peek, Rosendahl, & Wren, 1975; Cairney & Cairney, 1963; Chalmers, 1973; Chamberlain & Musgrove, 1975; J. Towler & Butler-Manuel, 1973). Myles (1969, p. 302) does refer to both positions, but the dorsal is given prominence, while she notes that a squatting position is used by "primitive tribes". Squatting was identified as "the natural position" by Ralph (1977, p. 104) but she described the 'stranded beetle position' which she referred to as a "squatting" position which was possible in a bed! The Royal Newcastle Hospital (circa 1970, section 3) listed the delivery positions as lithotomy, dorsal and left lateral. Benson (1966, p. 118), prefers the "modified lithotomy position", but does not describe what this is. It is probably the exaggerated lithotomy position. He was adamant that the left lateral position may only be used for "spontaneous uncomplicated birth" (Benson, 1966, p. 118). American nurse-midwives, Ziegel and Van Blarcom (1972), used the lithotomy position for both vaginal examinations and normal births.

It was common practice to confine the woman to the bed during second stage (Stevenson,

ILLUSTRATION 6.10 COMPLETE STERILIZING UNIT FOR BOTTLES



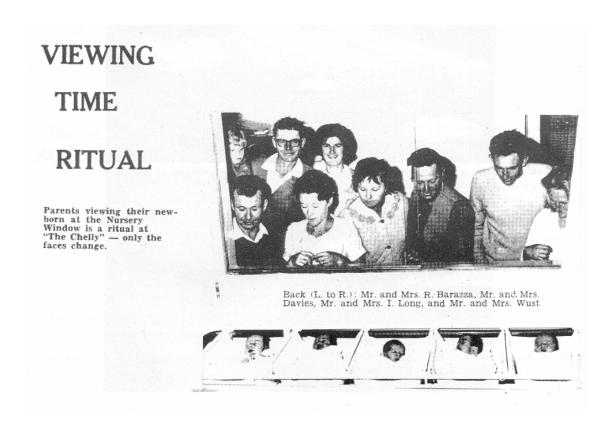
Student midwife at the Royal Women's Hospital in Brisbane in 1970. She is preparing to load the steriliser with bottles containing artificial milk formula. The bottles have a teat and a cover in position during sterilisation.

Reproduced with permission of J. Manderson.

1960; Ziegel & Van Blarcom, 1972), although occasionally she was permitted up to a commode if she was unable to use a pan in bed. Llewellyn-Jones (1969) noted that the dorsal position was replacing the left lateral position previously favoured by obstetricians. The perceived advantages of the left lateral position were described as: better control of the fetal head, resulting in minimal trauma; optimum position for manipulation if necessary when there is difficulty in delivering the shoulders (Myles, 1969); vomiting was more likely to be complication free (Green, 1966); uterine effort was less and so reduced the risk of perineal tears; the anus was easily observed and risk of contamination by faeces could be avoided; it is easier to deliver the woman without an assistant in this position (Johnstone & Kellar, 1963); and it provided "good control of the unruly patient" (The Royal Women's Hospital Melbourne, 1972, p. 34). All of these authors note the major disadvantage with the left lateral position is that the woman has to be moved onto her back for the delivery of the placenta and membranes. Johnstone and Kellar (1963), note that the other major disadvantage was the difficulty in listening to the fetal heart rate, however, it was not considered a problem at my training hospital. The women pushed in the dorsal position, and were only in the left lateral position for the last few contractions. For these contractions, the midwife often requested that the woman tilt her back towards the mattress, thus providing easier access to her abdomen.

Although it was unknown at the time, the dorsal position, creates problems for both the woman and her baby: maternal hypotension, resulting in decreased placental blood flow and fetal hypoxia (M. Humphrey, Chang, Wood, Morgan, & Hounslow, 1974; M. Humphrey, Hounslow, Morgan, & Wood, 1973). The dorsal position, according to Green (1966), was the most suitable position for a normal vaginal birth from the perspective of the attendant, but he noted that the lithotomy position was required for operative and breech births. There was a consensus in the textbooks about the latter statement. It is difficult to imagine a less 'natural' position than the lithotomy position. Ziegel and Van Blarcom (1972) describe the extreme caution necessary whenever placing the women in this position, indicating that it has several major disadvantages from the woman's perspective. Probably, the wide field of vision and the working space between the woman's legs which is obtained when using the lithotomy position, contributed to its popularity. Davis-Floyd (1992) refers to this position as one in which the woman completes a symbolic inversion

ILLUSTRATION 6.11 BABIES` SHOW TIME



Reference: Taylor & Kennedy (circa 1988, no pagination).

and the obstetrician, as society's representative, receives the baby, who is the cultural prize.

Changing the margins of the maternal body

In 1970 and 1971, even normal vaginal births involved the liberal use of an episiotomy⁶⁹ for all women. Some obstetricians routinely cut an episiotomy for all first time mothers, while other women were given a little more lee way and the incision was made if there was the risk of a tear or some other indication. The women were just informed that 'a little cut' was being made. They were never asked to give their consent. According to Kitzinger (1986), episiotomy, the most common obstetric operation, was the only surgery healthy Western women were likely to endure without having consented to the procedure. This was certainly true during my training days. Green (1966, p. 81) advocated that if it was in doubt whether to perform an episiotomy in first time mothers, "it should be done", while for other women it needed to be done if there was "undue thinning and blanching". A formidable and extensive list of indications for an episiotomy was provided by several authors (Bailey, 1972; Llewellyn-Jones, 1969; Myles, 1969; Redman, 1966; Townsend, 1969). It is no wonder that the episiotomy rate was high. A liberal use of episiotomy in the United Kingdom in the 1970s was noted by Graham (1997), and this probably influenced its use in Australia. Australian maternity care at that time followed the United Kingdom's trends, possibly because many of the obstetricians travelled there for further study. There is still a debate about the correct approach to episiotomy: either a liberal use or a restrictive use of this surgical procedure, or to let the perineum tear. This is despite the evidence available that an episiotomy should only be preformed in the presence of fetal or maternal distress, or to facilitate descent of the presenting part when it is the perineum causing the delay (Enkin, Keirse, & Chalmers, 1992). An episiotomy may be considered a literal and figuratively 'opening up' of the female body.

Following delivery in the left lateral position, the woman was asked to move to the centre of the bed and lie on her back, that is, the dorsal position for the third stage of labour. The women's third stage was usually short, three minutes with a maximum of 15 minutes, as delivery was expedited by the use of the oxytocic type drugs. According to both case books (H. Callaghan, 1971; Sheehan, 1971), the majority of women's third stages were completed

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⁶⁹ An incision into the perineum which is done during the birth of the baby.

in two to five minutes, though there was one of eight minutes and one 15 of minutes. The placenta and membranes were delivered using the Brandt Andrews method. This meant waiting for the placenta and membranes to separate from the uterine wall, then pulling on the umbilical cord as upward pressure was applied to the lower pole of the uterus. If there was a delay in delivery of the placenta, a manual removal of the placenta and membranes was preformed as the intravenous ergometrine caused the cervix to close more rapidly. This was done by the obstetrician in the labour ward with the woman being given 'the gas', a mixture of nitrous oxide 70% and oxygen 30%. If she was thought to be particularly nervous or anxious, she would also be given intravenous pethidine. For a manual removal, the husband was always banished from the labour ward area where he could hear his wife's screams. It was a barbaric procedure with most women screaming with pain while it was being done and increasing considerably the risk of introducing infection.

CLEANING UP AFTER THE BIRTH

Attending to the newborn baby

Following the birth of the baby, mucus was aspirated from the nasal and oropharynx. The baby's eyes were cleaned with sterile cotton wool swabs soaked in sterile normal saline. A swab was used for each eye and was taken from the inner to the outer aspect of the eye. This was done to prevent bacteria from the mother's genital tract infecting the neonate (Craig, Morgan, Pattullo, & Taylor, 1969; Garrey et al., 1971; Myles, 1969). According to Myles (1969) the swab should be the size of a golf ball to prevent contact between the possibly contaminated gloves worn by the accoucheur, or the antiseptic solution, and the baby's eyes. Other authors, however, recommended instilling medications: Stevenson (1960) used boracic acid, Benson (1966) chose 1% aqueous silver nitrate, while Ziegel and Van Blarcom (1972, p. 407) preferred "a germicide". Garrey at al. (1971), noted that some countries have a legal requirement on the instillation of antibiotics or antiseptics into the neonates eyes, while Green (1966) commented it was unnecessary to use specific drugs unless it was suspected that the woman had a gonococcal infection. The silver nitrate conjunctival prophylaxis was introduced in 1881 and over a century later, there had still been no controlled trials to determine if it was more effective than routine observation of the neonate (Tyson, Silverman, & Reisch, 1989). Craig et al. (1969, p. 118), however,

when discussing this practice, felt that it "favours rather than prevents infection" because of the local irritation it caused in the eyes. Although Australian maternity units have ceased this procedure, it is still used in some other countries.

The baby's cord was clamped with sterile instruments and then cut with sterile scissors by the accoucheur. A sterile tape was tied around the cord to occlude any blood flow. If the baby was well, she was lifted up so that the mother could see her prior to her being placed on a sterile wrap at the end of the bed (Craig et al., 1969). The baby was tended by a midwife who dried him, wrapped him firmly, then labelled him, before handing him to his mother. Some hospitals washed the baby's hands to prevent him from contaminating his eyes and mouth, with a paediatrician⁷⁰ describing this as a "sound practice ... [which] should be continued" (Craig et al., 1969, p. 115).

The baby was taken to the treatment room, given an intramuscular injection of vitamin K or konakion 1 mg, then weighed. Permission was not sought to give the drug, the parents were just told it would be done, though sometimes they were not even given that information. The weight was given in grams then converted to pounds and ounces, as most people were more comfortable with the empirical measurements.

Examination of the afterbirth

The placenta and membranes were examined by the midwife when she cleaned the delivery trolley in the pan room. It was rare for an obstetrician to check the placenta and membranes from a delivery he conducted. The examination was done to determine the number of vessels in the umbilical cord, the completeness of the placenta and membranes and if there were any abnormalities present. The placenta was weighed and the length of the cord was measured, but this is no longer considered necessary. A similar process is used currently. There is one major difference, however, the examiner did not necessarily wear gloves. There was no need for an aseptic technique as the midwife was nowhere near the woman or her baby. The idea that the placenta and membranes could be a source of

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⁷⁰ At this time, paediatricians provided care to newly born infants. It was a few years later, probably in the late 1970s, that the term 'neonatologist' came into use.

infection to the staff was not seriously entertained as all women were tested for venereal diseases and, if positive, treated during the pregnancy. I must admit that the possibility of the placenta being infected never occurred to me.

Disposal of the afterbirth

Following the examination of the placenta, it was placed in the freezer in the unused operating theatre. We were told the placenta and membranes were used for two purposes. Membranes were being used in research projects at the burns unit of the major public hospital as a skin cover. I was told the placenta and membranes also went to a cosmetics company, Helena Rubinstein, where they used the vernix in various types of creams. Various authors (Balaskas, 1983; Greenham, 1986) have mentioned the latter practice. The disposal of the placenta and membranes was never discussed with the woman or her husband, nor were they asked if they wished to view it. Some hospitals used incinerators⁷¹ to dispose of the placenta.

Cleansing the maternal body

Following the completion of the delivery, the woman's physical 'observations' were checked, while her husband, if present, was sent to the waiting room. The woman was sponged, and her linen was changed as required. She was encouraged to empty her bladder and a sterile perineal toilet was then done. Cairney and Cairney (1963) described the process, including strict aseptic techniques, with the woman positioned on a bedpan. Her vulval area was swabbed with sterile swabs soaked in an antiseptic solution, then the remaining solution was poured over the genitals. The woman's genitals were dried with

⁷¹ I worked at one hospital where the placentas were incinerated rather haphazardly until the local dog pack was found eating the charred remains of placentas and a miscarriage. The police visited the Chairman of the Hospital Board, who then arrived at the maternity ward and wanted to know if we were doing illegal abortions! When he was satisfied that we were not involved in illegal activities, I was told to ensure that our rubbish was disposed of correctly and that it was completely destroyed. Clearly, he saw the midwifery staff as being responsible for all the dirty work related to birth.

sterile swabs, then the anal area was treated in a similar manner.

Following this procedure, an abdominal binder was applied to maintain pressure on the uterus. To keep the perineal dressing in position, a perineal cloth dressing was positioned like a G string between the woman's legs and attached to the lower edge of the binder. The women brought in two packets of sanitary pads. When there was a large number of packets, these were sterilised and later used for and by the women as required. This process was undertaken well into the 1980s. The woman was then transferred on a trolley with her baby to the postnatal ward. The husband usually went home.

SEGREGATION, TIMETABLES AND SURVEILLANCE

On the postnatal ward the woman and her baby fitted into the routine of the ward where the emphasis was on maintaining cleanliness and searching for sepsis. Therefore, if the woman delivered her baby prior to admission to the hospital, the birth was considered "dirty" (Ralph, 1977, p. 116). She was given a single room with her baby, as it was believed they posed an infection risk to the other women and their babies. The women and their babies stayed in hospital for seven days if it was a first baby, five days if it was their second or subsequent baby. If the woman had a caesarean section she stayed in hospital for seven to ten days.

The maternal body

The women were encouraged to have two or three baths or showers a day, preferably before the 'doctors' round', and before the 'peri round' or perineal rounds. The latter was done each morning and evening. This was the equivalent of a surgical dressing or treatment round. The student midwife, pushing her surgical trolley, inspected each woman's perineum and sutures, swabbed the sutured area with an antiseptic, and then painted it with a disinfectant. An infra red ray lamp was used to apply heat to the perineum. These rituals ensured the suture line was "kept clean, antiseptic and dry" (Myles, 1969, p. 459). If the woman had no sutures, the perineum and vulval areas were inspected for signs of infection in any of the grazes, or bruising, both of which are common following a vaginal birth.

A similar scrutiny was applied daily to the woman's vaginal discharge or lochia. The colour, amount and odour was noted with the woman being questioned about the presence of any clots. If the woman's lochia was offensive, she was commenced on a course of antibiotics. The midwives inspected all suspect perineal pads with any clots being dissected to determine if they contained placental or membranous tissue. Every morning the midwife would measure the fundal height of the uterus of those women who had a vaginal birth. This would verify that involution⁷², was occurring at the correct rate, and there was not a problem with either retained products and/or an infection. This information was graphed on the woman's temperature chart and it was easily seen if involution was delayed. Each day the woman was questioned about her urinary output and queried about any problems, such as, hesitancy in voiding, voiding frequently, or painful voiding that was not associated with any grazes, tears, or an episiotomy. This would indicate that she may have a urinary tract infection.

Each day the breast feeding women were supplied with a 'new' sterile breast tray. The tray contained sterile cotton wool swabs and sterile water for the women to wash their nipples before and after each feed. These practices, which Palmer (1988, p. 24) referred to as "persecutions" have been abandoned.

The baby went to its mother for feeding strictly either three or four hourly. The mothers undertook all the feeds except the two night feeds which were given by the nursery staff. All women were offered and most usually accepted a sedative to assist them to sleep each night. Complementary feeding was routine with all babies less than three days only being given a bottle feed following the breast feed, if not settled. Supervision by the midwives at baby feed times ensured that the baby was latched correctly to the woman's breast, assessed how the woman handled her baby, provided assistance as required, checked she was feeding the baby for the correct length of time, and decided on the state of the women's nipples and breasts in regard to infection. This regime was supposed to insure breast cleanliness, prevent trauma to the tissues, and speedy detection of infection (Ziegel & Van Blarcom, 1972).

⁷² The process during which the uterus returns to its non pregnant state.

Husbands were the only visitors that the women were permitted for the first three days. The rationale was that the women required time to recover from the labour and delivery process. The women accepted this ruling although there were grumblings about being separated from their husband and/or children. At that time most maternity hospitals restricted visitors and many did not permit children to visit their mothers while they were in hospital. For example, the Royal Newcastle Hospital (circa 1970, section 3) "protected [the women] from unthinking visitors" and permitted only "the husband and mother, or grandparents". Friedman (1973, p. 507) in a discussion on preventative measures surrounding infections in labour, considered that the "introduction of visitors carrying infections, ... [was] widely recognized as common sources for infection". Ziegel and Van Blarcom (1972, p. 597) were not so tentative: "visitors are not admitted to the nursery, and children are excluded from the obstetric unit".

Nursery life

At my training hospital, the women, at set times, could access the corridor of the normal postnatal nursery, but not the bays where the babies were kept. However, the women were encouraged to visit their sick or premature baby in the special care nursery. The babies were either in an isolette or incubator, or restricted to their cots ('cot care'). It was, therefore, difficult for the women to cuddle their babies, but touching was permitted.

"A scrupulous nursery routine" was considered essential if neonatal infection was to be avoided (Hector & Bourne, 1965, p. 232). Thus, before and after each treatment or procedure, hand washing was mandatory. This included changing the babies` nappies. The newborn baby was placed in a special bay where they were more closely supervised for the first 24 hours of life. Four hours after the birth, if the baby`s temperature was within normal range, she was given her initial bath. Her face was washed with plain water, but the remainder of her body was washed with phisohex, a bacteriostatic. This bathing ritual was repeated on the third day and every second day until the baby went home. This was recommended by Townsend (1969), although he use a different bacteriostatic. A stainless steel sink was used for bathing. The sink was washed with phisohex between baths.

Prior to each feed the baby was 'topped and tailed', that is, his face was washed and his nappy was changed. The main nursery door was closed and only staff could enter the nursery during this period. The domestic staff, mostly migrant women, who because of their pink uniforms were called 'pink ladies', assisted at nappy changing times.

At this time the baby's cord stump was surgically dressed and inspected for signs of inflammation and/or infection. There were special sterile cord trays used for this procedure. The dressing was a gauze tape normally used for packing nostrils following surgery. Once the cord stump separated from the abdomen, cleaning of the navel was continued. If the navel was oozing or looked inflamed, gentian violet was applied. After each feed the baby's nappy was checked and changed as required.

While changing the baby's nappy, she was checked for other signs of infection. It was theorised that the 'sticky eyes' that occurred within the first 24 hours of birth were the result of irritation from the antiseptic cream used during vaginal examinations and operative deliveries, and the chemicals used in swabbing (R. J. K. Brown & Valman, 1975). Again there was a special sterile tray which was renewed daily. Hand washing had to be done between each eye. The baby's eyes were cleansed with normal saline and a cotton wool swab, with the clean eye being done first. A cotton wool ball soaked in normal saline was wiped from the inner aspect of the eye to its outer aspect. This was repeated with a new swab each time till there was no exudate. The baby was placed in the cot with the 'sticky eye' closest to the sheet. This was so any purulent discharge would not escape into the other eye and infect it. The eye toilet was done second hourly. If the eye did not improve, a swab was taken for pathology, then the baby was commenced on the antibiotic drops or cream (Vulliamy, 1973).

Prior to the feeding times, the clean babies were lined up in two long columns, referred to as the 'baby train', in the corridor of the nursery while we waited for the exact time before we could take them to their mothers. This necessitated that the cots were in contact with each other and so the risk of cross infection was increased (F. D. Thomas, 1959). The 'pink ladies' assisted in moving the 'baby train'.

On bath days, the baby was bare weighed prior to the morning feed. He was then weighed

with all fresh clothing on, fed by his mother, and re-weighed prior to changing his clothes. This was referred to as test weighing and it was done prior to all the feeds on the third day, and every second day thereafter until the baby was obtaining sufficient milk from his mother. If the baby was considered to have had an inadequate feed, she was given a 'comp' feed of a milk formula. This process was referred to by several authors (Myles, 1969; Ralph, 1977; J. Towler & Butler-Manuel, 1973).

The special care nursery contained the formula room where all the milk mixtures for the general and the maternity hospitals was produced. There was a special sterilization unit which could which sterilise the bottle, milk, teat and cover together as a complete unit (see illustration on the previous page). All the milk formulae were donated by various milk companies, a marketing strategy that occurred as early as 1918 (Minchin, 1985).

The parents of the baby had limited contact with him as most of the time he remained in the nursery. At the end of the evening visiting hours, there was a half hour when the fathers were allowed to stay, and the baby was taken to the parents. Due to the fear of infection, other family members and friends could only see the baby through the viewing window of the nursery. The viewing times were referred to as 'baby show time' and coincided with a half hour period of the visiting hours (see illustration opposite).

CONCLUSION / SUMMARY

Childbirth, during the period of my midwifery training, demonstrated a high level of surveillance and control of the woman, her baby and her family by the medical and midwifery professions. This was initiated in the antenatal period, but continued throughout labour and birth, and the postnatal period. In addition to the care of the parturient woman, the midwifery focus of care, which was directed by the obstetricians, was on searching for infections, or potential infections, or preventing infection, with many ritualistic practices based around controlling the pregnant woman. This behaviour was fairly specific and designed to find bacteria which produced pus, or infections in various parts of the woman's or the baby's body. The midwives came into their own in the postnatal period and the women had to operate within a strict timetable under constant supervision. The obstetrician was focussed on the ways of accessing, assessing, manipulating and influencing sections of

the woman's body, but particularly those of the genital tract. This further development of the obstetric profession was concerned with the 'best' way of improving the 'clinical gaze'.

CHAPTER 7

ALL IN A DAY'S LABOUR

INTRODUCTION

This chapter focuses on data which has been derived from the video tapes of the women's labours. For more detailed information on the women, refer to Appendix 1. The data is presented as vignettes, or short sketches, with the first six derived from video transcriptions and the last vignette containing two summaries, again from transcription. The vignettes are sequenced in an approximation of the physiological flow of labour and birth, except for the last vignette in which the focus changes. They have been chosen as exemplars of discourse, language and practice that demonstrate how the construction of dirt acts powerfully as a marker and reinforcer of power during birth. The illustrations in this chapter demonstrate visually, this construction of dirt during birth. The priority in the extracts from the first six vignettes is on who and what is considered clean, and who and what is considered dirty. The last vignette is concerned with the period from transition to birth in two of the women's labours. As this period took approximately two hours for each woman, this vignette is written differently. A synopsis of events is presented. The main focus in this vignette is on the work involved in labour. These detailed descriptions also indicate the concerns of the midwives as they care for the labouring women and their babies.

In *Vignette 1: "No naughty bits"*, the focus is on Vera's determination that she will expose as little as possible of her breasts and genitalia to the video audience. Hence its' title. A vaginal examination is the central point of *Vignette 2: Getting on with business*. The 'business' being the registrar's ability to quickly assess the progress of Jill's labour and the safety of her fetus/baby. *Vignette 3: "Dress up"* presents the preparation by the staff for the birth of Wendy's twins. In *Vignette 4: "Yuck"*, extracts from Vera's labour are used to illustrate what the cleanliness or dirtiness of birth means for the participants. Neeta's initiation into breast feeding is portrayed in *Vignette 5: "Would you like to feed him now?"*.

The dirtiness of Ursula's newborn baby is the focal point in *Vignette 6: Almost untouchable*. The final section, *Vignette 7: Labour and birth is dirty work*, with its two summaries, concentrates on the work done by Neeta and Hilary, their support persons, and the midwives as they strive to achieve their common goal of a normal vaginal birth.

VIGNETTE 1: "NO NAUGHTY BITS"

The most important aspect of this vignette is the communication, particularly the non verbal communication, as Vera and Vince struggle to achieve their objective of maintaining Vera's modesty during the labour and birth. Hard work is necessary because of the 'normal' way power relationships and the labour process are organised during the birth in a birth centre or in a delivery suite. Vera, a woman who has given birth before, maintains control most of the time. The couple's resistance to the expected 'normal' behaviour in labour and birth is both creative and persistent, while the 'relations of power' are explicit. The midwife's behaviour is modified by their continual resistance, but this does not occur till the end of the vignette. Vera and Vince achieve their objective of minimising the exposure of Vera's "naughty bits" to the gaze of the video audience.

Background data on Vera and Vince

When Vera and Vince arrived at the birth centre, it was clear that although Vera was determined to have a video copy of her birth, she was still very concerned that "no naughty bits" would be visible. She had raised this topic initially when I met with her and Vince to discuss their participation in the study. I had thought she had been reassured by the distance of the camera from the labouring area and the fact that only a bird's-eye view of the room was possible. It was clear that my understanding was incorrect. To diminish her fears, Vera and I went to the control room of the closed circuit television system. Vera was reassured it was a bird's-eye view of the room without close ups making it difficult to see any detail of the "naughty bits". We examined the view provided by the closed circuit television system and again discussed her options.

One option was turning off the video at different points in the labour, but this would depend on my being present, and she may not achieve her aim of a copy of the baby's birth. Another option was for Vera to use various positions to hide her breasts and genitalia. For example, when in the bath, she could lie with her back to the camera, for the birth she could have her back to the camera, or provide the camera with a side view of her body, or even use a kneeling position in which she faced away from the camera. During vaginal examinations, they could be done with the bottom of the bed being converted to the head of the bed, thus "no naughty bits" would be visible on the video tapes, only the back of her head, upper chest and legs. We talked about moving the bed to get the best position. This was done with the assistance of Vince and the midwife⁷³ caring for Vera. Vince adopted various positions around the bed, the bed was moved to different positions, while Vera determined which provided the best view from the camera and yet did not expose her to view. After almost half an hour of trialing positions for the bed and herself, Vera decided to kneel for the birth thus providing the camera with the right side and a partial back view of her body. At the same time she determined what was the best position for the bed. The camera angle was then changed to provide the best view of this position. Vera then rechecked the camera view from the control room.

Detailed description from the video tapes

The midwife talks to Vera via the phone and asks: "How's that?". The midwife repeats Vera's response to Vince and myself: "That looks really good". There is much laughter as Vince, the midwife and I talk about where Vera will finally have her baby. "Probably over there" according to the midwife and myself as we point towards an area near the bath. Vince disagrees saying: "Nup. X marks the spot" and points towards the spot that Vera has just nominated. Still laughing, the midwife says: "Γ've got to make sure Γ've enough room. Γ'll do that over there", as she points towards the bath.

Vera remained in the clothes she had worn on arrival at the birth centre — a short sleeved, ankle length flowing dress. During the admission process, Vera's abdomen was palpated. During this, other examinations, and throughout labour, she was careful not to expose the parts of the body she considered out of bounds to the view of others. For the abdominal examination, she was lying on the bed and pulled the hem of her dress to the top of her thighs, but waited until the midwife covered her pelvic area and thighs with a towel before

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 $^{^{73}}$ Throughout the vignettes, the primary care giver will be referred to as 'the midwife'.

she pulled up the dress completely. On completion of the abdominal examination, the midwife pulled Vera's dress down over the towel and then assisted Vera to sit up. When Vera was sitting on the edge of the bed, the midwife removed the towel.

Vera used the position we had discussed previously for the vaginal examination, that is, the head of the bed became the foot of the bed and the foot became the head of the bed. Vera, however, held a towel over her pubic area and the tops of her thighs to ensure that "no naughty bits" would be on the video tape. When the vaginal examination was completed, the midwife pulled the towel down, but could not pull it lower than Vera's knees as Vera was also holding the towel in position. Vera pulled her dress slightly over the towel. The midwife then assisted her in sitting up on the edge of the bed. Vera pulled her dress more completely over the towel, but remained with the towel in position while she and the midwife discussed her birth options. Later Vera kept the towel over her pelvic area and thighs when the midwife checked her baby's heart rate. When the midwife left the room, Vera stood up and removed the towel. A similar approach was used by Vera when her abdomen was examined by the resident medical officer, except Vera positioned herself on the bed as she had for the vaginal examination.

It is several hours later. There is a change of shift and Vera has a new midwife. Vera explains to the new midwife that she "want[s] to kneel down here [at the corner of the bed]" for the videotaping. Vera checks that the midwife is happy to be videotaped. Her response was a "Yep". Vera's labour becomes intense.

Vera decides to use the bath. She removes her clothes quickly and steps into the bath. During the undressing, Vera faces the bath so that her back and side are presented to the camera. Vera sat in the bath with her back to the camera and to the main area of the room. While she is in the bath, her new midwife moves the bed and the mat to their 'normal' birthing position against the wall of the room. This is approximately 11 minutes after Vera, Vince and the midwife discussed their wishes for the birth. Vera takes no notice of what the midwife is doing. The midwife leaves the room.

Without any discussion, Vince who has just returned with Vera's belongings, dims the

lights, takes Vera's bikini from her bags and hands it to her in the bath. Vince comments: "... [the midwife] moved the bed. I thought she wasn't supposed to move the bed". Vera turns her head around and queries: "Did she move the bed? How come?" Vince's response is inaudible. Vera slips on her bikini. She then moves around in the bath. Vince uses his video camera to tape Vera in the bath and the layout of the room. Vince repositions the bed. He is given instructions from Vera who turns around to fully face the main area of the room and tells him: "It was about four inches away from the wall over there and the base was about four and a half inches away from that line." Vince points to the end of the bed: "It's about six" and moves the bed slightly. Vera says: "Oh, you couldn't push it back further" Vince lines the camera angle up with the bed and then comments: "Well you were going to be right at the corner of the bed. That's OK". Vera tells Vince to "Just put the mat at the corner". Vince moves the mat so that the person kneeling on it will be on the corner of the bed. Vince notes, "That's better", while Vera comments, "That's it".

The midwife returns a few minutes later. She comments on the lights. Vera responds with a small laugh and says: "I thought of my modesty here. Well these are for my kids and (pause) people to see. I know that at the end (pause) they might see the naughty bits. So I let that out". The midwife responds with: "There are no naughty bits". Vera agrees: "Well there isn't when it is actually happening. But when other people are looking at it, modesty comes back again". The midwife laughs.

Vera's labour progressed rapidly. She stayed in the bath till there were "real beauties" of contractions, approximately 20 minutes before her baby was born. The other support person, a female, who was instructed to take close up video scenes with a hand held camera, without any "naughty bits", is brought into the birthing room by Vince while Vera is in the bath. Vera is assisted from the bath. Vera is standing so that a side view of her body is presented to the camera.

Vince completes drying Vera as she walks over to the bed. Vera suddenly becomes distressed with a contraction. No one takes any notice except Vince. Vera kneels in her chosen position. The midwife brings her delivery trolley close to the mat on the floor. Vince plays with the ties of the bikini top and asks Vera: "Are you cold? Do you want it

off?" Vera's answer is: "No. Can you get me my nightdress?" While Vince is looking for Vera's nightdress, she unties the bikini top, but leaves it in position until Vince has found the nightdress. She rapidly removes the bikini top and starts to put her nightdress on. She is interrupted by a contraction and so holds the nightdress to her chest, hiding her breasts, and leans forward into the pillows on the bed.

Vera remains in the same position till the baby's head is born, while Vince perches on the edge of the bed near Vera's head. Vera turns her head to see the baby reflected in a mirror which is held by Vince. The baby is delivered. Both Vince and Vera watch the birth reflected in the mirror. Vera grabs Vince's hand with her right hand to change the angle of the mirror. She rises slightly off the pillows but still holds her nightdress to her chest, then moves her body upright and away from the bed for a couple of seconds to look at the water/liquor on the mat.

Vince cuts the baby's cord under the direction of the midwife. The second midwife⁷⁴ takes the baby to the paediatrician, while holding the baby away from her body. Vince follows the baby to the resuscitation trolley.

Vera moves her body away from the bed and looks down at the mat and the floor. She does not hold her nightdress over her breasts until she sees Vince has returned with his still camera. The midwife places one gloved hand on Vera's back and the other on her abdomen. She tells Vera to "Turn around now" and tries to assist her in changing her position. Vera resists the position change and remains in the same kneeling position, but away from the bed, with her back slightly more towards the camera and puts her nightdress on. She then moves to the position the midwife wanted. The midwife assists with a gloved hand to Vera's left shoulder. Vera is now on her knees, leaning forward with her head down looking at the kidney dish. She rests her left arm on the bed and the front of her body is towards the camera. Vera gathers her nightgown together holding it between her waist and her breasts. Her genitalia cannot be seen because of her position and because of her

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Throughout the vignettes, this midwife will be referred to as 'the assisting' or 'student' midwife, whichever is applicable.

large abdomen which overhangs and creates a shadow over the pelvic area.

After approximately 15 minutes waiting for the placenta to come, the midwife positions a birth stool beside the bed.

The midwife assists Vera to rise. As she rises, Vera allows her nightdress to fall thus covering her upper thighs and her pelvic area completely. Vera walks over to the birth stool with the umbilical cord and clamp hanging between her legs. She maintains this coverage of her body until seated on the birth stool. Vera gathers the nightgown at her waist area.

The placenta and membranes are delivered. The midwife wants to inspect Vera for any "damage" to her "fanny", or genital tract.

Vera puts the sanitary pads on her perineum and stands up. She sits on the side of the bed, starts to swing her legs over, but says: "Ooh" and looks towards the camera. Vera asks the midwife: "Actually do you mind if we put it this way" and indicates the other end of the bed. The midwife removes the back rest from the bed, takes the pillows from the head of the bed and positions them at the foot of the bed. Vera then lies down on her back with her legs raised and separated. Most of her is hidden by Vince who is standing at the foot of the bed, holding the baby and chatting to the support person. Vince moves aside and Vera can now be seen. Only her arms, legs, and the hair on the top of her head is visible. Her nightgown covers her body and partially covers the midwife's hands as she inspects the genital area.

The examination is completed. Vince gives Vera her baby. The midwife returns with a blanket. She asks Vera: "Do you want to lie there or do you want to turn around?" Vera agrees to return to the normal position in the bed. She returns the baby to Vince, while the midwife replaces the back rest and pillows at the head of the bed. The midwife comments: "I think you wanted to be a film director in another life". Vince replies: "I think she did. There might be a career change coming up". Vera turns around slowly in the bed taking care that her nightgown covers her upper thighs. The midwife picks up the blanket in

anticipation for covering Vera and looks as if she is trying to cover her with it. This provides a protective cover for Vera and only her upper clothed body is visible. Vera is in a sitting position in the bed with the blanket covering her to her waist. Vince returns the baby to Vera.

VIGNETTE 2: GETTING ON WITH BUSINESS

The overwhelming impression from watching this video is that the registrar is concentrating on doing her assessment (vaginal examination) of Jill as quickly as possible. Because of the difficulty in translating the subtleties of the visual/auditory text to a written text, this may not be as evident to the reader of the vignette. Interestingly, Jordan (1987; 1992) has referred to the demarcation that occurs with the woman's body during labour: the upper part is the "interaction end" and it is where the support person will be positioned, while the "business end" is where the health professionals will be positioned. Kitzinger (1997, p. 213) has used a similar term: she calls it the "working end". Henslin (1971, p. 204) considered that the vaginal examination was a depersonalising act and converted a person to a "pelvic", that is a pelvic examination, or a work process.

What also comes through in the vignette is that Jill and Jack's medical encounter is what may be referred to as a "dramatic episode" (Laderman & Roseman, 1996a, p. 1) complete with the props required for a high level technological labour. The midwife's allegiance changes once the doctor enters the room. She becomes the doctor's assistance and the worker who does the dirty work both literally and figuratively. The physical dirty work involves managing Jill's leaking body and contaminating body products. The midwife also tries to clarify the information that the couple have been given while the powerless position of the couple is evident. Although the equipment used during the vaginal examination is initially sterile, there is no real effort to reduce the risk of cross infection to the woman or her fetus/baby. The effort is directed at ensuring the staff are not contaminated.

Background data on Jill and Jack

Jill and Jack, both health professionals, presented themselves to the birth centre in August

1997 when Jill ruptured her membranes. Jill was not contracting but she was draining thick meconium stained liquor, indicating possible fetal/baby distress. Because of this, her fetus/baby was being electronically monitored and she was commenced on an intravenous infusion of the artificial form of the hormone oxytocin, syntocinon, to induce labour. Labour was successfully induced. The midwife had sent a message to the registrar that she would like Jill reviewed. The following interaction occurs over an 11 minute period, from the registrar's knock to the sound of her closing the door as she leaves the room.

Detailed description from the video tape

Jill is kneeling on a floor mat and leaning forward over the bed and rocking her pelvis. Her head and shoulders are supported with a pillow. Jack, her partner, is kneeling behind her and massaging her hips, back, shoulders and upper arms. The midwife is sitting on the floor next to the couple. They are all chatting and laughing between contractions. The registrar knocks on the door and enters the room immediately. The midwife had risen and was walking across the room to answer the knock. The registrar says to the midwife, "Hi. I got your message". She goes immediately to the fetal monitoring machine without looking at, or acknowledging the couple in the room. The midwife joins her. Both health professionals examine the graphic results from the monitor. They discuss and point to the resulting printout, but this is not audible. Jill and Jack turn their heads to watch this discussion but say nothing. The registrar then approaches the couple and while behind them, asks "How re going Jill?" Jill partially turns towards the voice and her response is a small laugh combined with an "Oh, OK". The registrar comments: "Managing — Good". The registrar crouches down beside Jill and faces her. Her discussion is particularly focused on Jill. She makes several very rapid statements about the problem: "The baby's heart rate⁷⁵ is still just dipping with contractions, coming back up to around 120 ... [The midwife] probably told you that and she is having trouble getting that monitor on [the baby] plus and you're a bit [? oedematous ⁷⁶] around there. So how about I put a [scalp] clip⁷⁷ on

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The baby's heart rate should be between 120 and 160 beats each minute, although a drop to around 100 is accepted when the woman is pushing. This is due to compression of the baby's head.

⁷⁶ Not sure if the doctor used the term 'obese' or 'oedematous', but it was probably 'oedematous' as 'obese' would be considered rude.

⁷⁷ "Clip" is jargon for a fetal scalp electrode. These usually have a spiral clip on the end which is attached to the fetus 'baby's head. Coming from this clip are two different coloured wires, twisted

the baby? Are you happy about that? OK?" Jill's response is a nod and a soft "Yeah". There is no response from her partner, Jack. The registrar then queries the midwife about the contractions Jill is having. This is done across the couple and they turn to listen, firstly to the doctor, than the midwife, until they are distracted by a contraction. They do not interrupt or add anything to the conversation.

Both the registrar and midwife get up. There is a question from the registrar to the midwife, "You've [scalp] clips there, have you?" The midwife indicates that she does. The midwife and registrar go to the cupboards for the sterile equipment needed for the vaginal examination: gloves, lubricant, and the fetal scalp electrode. The midwife places the fetal scalp electrode on top of the fetal monitor then, from the bedside locker, takes a fresh packet of perineal pads and blue coloured waterproofed under-sheets with an approximate size of 39 cm by 59 cm, commonly referred to as "bluies" by the staff. The registrar takes the packet of sterile gloves with her, sits down on the bed near Jill and queries: "Are you getting much backache now?" Jill's response is "A bit." The registrar laughs and says: "OK. The disadvantage of this [the vaginal examination and applying the [scalp] clip to the baby's head] is you're going to have to get on the bed. OK?". The registrar waits a few seconds but there is no response from Jill. The registrar leaves the bed and stands off to the side.

The midwife prepares the bed by positioning the waterproofed under-sheets on the centre of the bed. She removes the back rest, and replaces it with a pillow. The registrar opens the packet of sterile gloves. Jill starts to rise from her kneeling position, but Jack puts his hand on her shoulder tells her to "No need to get up. Stay there." He then realises that the registrar is waiting for her to get on the bed and inquires, "You want her to sit up there?" The registrar replies: "Yeah". Jack gives an "Oh, OK". He then walks away to the foot of the bed. The registrar places her opened packet of sterile gloves on the top of the bedside locker. Jill stands and the midwife removes the pressure transducer and strap from her

together, then placed inside a plastic tube, or introducer. During the attachment of the fetal scalp electrode it is important to avoid potentially dangerous areas of the fetus/baby, such as the spaces between the fetal scalp bones, or fontanelles, or the face or the genitalia (Gilbert & Harmon, 1998).

abdomen, then watches as Jill removes her pants containing the perineal pads. Once the pants, containing the liquor stained perineal pads, are eased passed the hips, they drop to floor. The midwife leaves the woman to don a pair of unsterilised rubber gloves. Jill tries to reach down to remove her pants. Jack moves back into close proximity with Jill and assists her in completely removing her pants containing the perineal pads. He moves the pants out of the way when she lifts each leg in turn. Jill flicks the pants away from her and Jack. Jack leaves the pants on the floor (he would have difficulty in reaching them). Throughout this process, the registrar lowers her head and bends forward to observe the perineal pads. The midwife picks up the perineal pads. She and the registrar then inspect the vaginal discharge on the pads. The registrar has her hands clasped together in front of her. The midwife disposes of the pads in the rubbish bin, removes her rubber gloves and then washes her hands. Meanwhile, the registrar rolls up the sleeves of her blouse while she reviews the printout from the fetal monitor. She then washes her hands. Jack helps support Jill during the next contraction then moves away towards the foot of the bed. The midwife opens the packages, then assists Jill to get on the bed. Jill is positioned flat on her back on the bed with a pillow for her head. Her buttocks are positioned on the waterproofed under-sheets.

As the registrar approaches the examining area, she pushes the sleeve on her left arm further up the arm with her right hand. She rests her left hand on the bedside locker, while her right hand is on the fetal monitor trolley when she checks the fetal heart rate. The external fetal monitor remains in position on Jill's abdomen. The registrar performs a perfunctory abdominal examination by laying the palms of both of her hands flat on Jill's abdomen and pressing a couple of times. The midwife offers "I can take it [the ultrasound transducer and abdominal strap] off if you like?" The registrar responds with a "Yeah. It's fine" but does not wait for the midwife to remove them. She then dons a pair of sterile rubber gloves while the midwife removes the remaining strap and transducer. The registrar puts her hand out to the midwife for sterile lubricant, a plain jell. The midwife disposes of the lubricant container and the wrapping from the doctor's gloves then puts on another pair of unsterile rubber gloves. The registrar sits on edge of the bed and waits for Jill's contraction to finish before she begins the vaginal examination. Jack supports Jill during the contraction by crouching beside her and massaging her shoulders. As soon as the

contraction finishes, Jack moves away from Jill and stands out of the way to the foot of the bed during the vaginal examination. The registrar tells Jill to "Pop your ankles together and let your knees go floppy" and uses the back of her sterile gloved examining hand to get Jill to drop her legs even further. The left sterile gloved hand is resting on Jill's right leg. Before commencing the vaginal examination the registrar asks "OK?" while the midwife queries "All gone?" Jill nods at the registrar.

With her left thumb and index fingers the registrar separates Jill's labia. Jill flinches but apologises for it. The registrar responds with a "No, you're right". The vaginal examination is performed by the registrar inserting her two lubricated fingers, the index and second fingers of her right hand, into Jill's vagina. There is no sterile tray used for the examination and there is no swab down of the perineal area prior to the examination. During the vaginal examination there is silence except for the small moans coming from Jill. The registrar is offered the sterile fetal scalp electrode by the midwife. She takes this with her left gloved hand, applies the fetal scalp electrode, then removes her fingers from Jill's vagina. This procedure takes 44 seconds. The registrar walks over to the contaminated rubbish bin with her gloved right hand cupped and her left gloved hand holding the guide from the fetal scalp electrode. She places the guide in the contaminated bin, removes her gloves and then disposes of them into the same bin.

Approximately 15 seconds after the vaginal examination, nothing has been said. Jack sits at the bottom of the bed and asks: "So – what dilation is she?" The registrar replies, "Three [centimetres dilated]". Jack then says to Jill: "There you go love". The midwife applies the leg plate and strap to Jill's right leg. The registrar goes to the sink, washes then dries her hands. The registrar's beeper goes off, she checks it, then turns it off. She approaches Jill and asks "Can I just feel your tummy? Has that contraction gone?" Jill responds with a "Yeah". The registrar palpates Jill's abdomen and says "OK that's good. You can get back on [? your feet⁷⁸]". The registrar checks the printout on the fetal heart rate, then takes the chart. She sits on the edge of the bath while completing her notes. The midwife is still setting up the internal fetal monitoring. She then disposes of the discarded packets into the contaminated rubbish bin. Meanwhile, with the assistance of Jack, Jill sits

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⁷⁸ This is not clear, but probably correct.

up in bed, then on the side of the bed. Jack sits beside her and rubs her back and shoulders. The midwife brings the floor mat back towards the bed. She asks Jill, "Do you want to leave your knickers off?" Jill responds with "May as well, Is`pose" Jack agrees. Jill stands for the next contraction with Jack supporting her. When the contraction is over, Jill sips some fluid while watching the registrar. Approximately one minute and 50 seconds after the

registrar starting writing her notes, Jill comments tentatively: "So you can (pause) feel the [baby's] head on PV (small laugh) and when you put the thing on?" The registrar says very quickly: "Yes. You're about three centimetres dilated. Your cervix which is normally two or three centimetres long, is now almost, what we call fully effaced, that is almost thinned out. Its pretty thin. Ahem. So – all OK at the moment." There is a slight pause then Jack asks while pointing to the scalp electrode attached to Jill's leg: "Does that have a [fetal/baby blood⁷⁹] pH on it as well?" He repeats his question when the registrar does not comprehend what he is asking. The registrar responds with a very rapid "NO, no. To do a [fetal/baby blood] pH we have to take a sample of blood. It's a bit more intensive". The midwife, meanwhile, is explaining to Jill, and demonstrating the dilation and opening up of the cervix with her fingers: "You know how I was telling you that you had to open up and so in that short space of time you have opened up three cm. You're doing really well". There is a small pause then Jill asks "So - what's that, an hour and a half [on the syntocinon infusion]?" The midwife responds with "Yeah, that's excellent". registrar's pager beeps again. She finishes writing her notes, returns the chart to the top of the fetal monitoring machine and exits the room. She says nothing as she leaves. Jill and Jack are involved with a contraction. The midwife who is at the sink cleaning the external ultrasonic transducer, calls out "Thank you".

VIGNETTE 3: "DRESS UP"

⁷⁹ Fetal blood sampling is done if the fetal monitoring suggests a "suspicious or abnormal fetal heart pattern and provides *current* evidence of fetal well-being" (Morrin, 1997a, p. 377). It requires a small incision to be made in the fetal scalp. Droplets of fetal blood are drawn into a very fine tube which is coated to prevent the blood from clotting. The fetal status is more accurately determined by the pH level of the blood (Morrin, 1997a).

The overwhelming impression I receive from this segment of videotape is the hierarchical nature of childbirth in Australia. The registrar although not visible is directing the 'show'. The GP is having a cup of tea while waiting to be recalled for the birth. The student midwife is busy running around preforming a range of tasks. The midwife is directing the student midwife and instructing the woman on how to push. The automatic and continual focus on preventing contamination and cleanliness is evident in the midwife's behaviour. The woman is referred to as a 'good girl', at a time when it is most evident that she is a woman. The husband has been coopted to assist the midwife. The two midwives dress for birth in between doing their work, while the medical and neonatal staff are able to dress without interruption. The power structure is reflected in the "dress up" process.

Background data on Wendy and Warwick

Wendy was pregnant with twins, and was induced. The first twin was in the normal position of a cephalic or head presentation, while the second twin was a breech or bottom presentation which is considered abnormal. The registrar⁸⁰ in the delivery suite was the 'specialist' on call for Wendy. The general practitioner was to deliver the first twin with the registrar delivering the second twin. Wendy's twins were being monitored externally and electronically. Wendy's cervix is fully dilated. The general practitioner has left the room and is waiting to be recalled by the midwife for the birth.

Detailed description from the video tape

Wendy is wearing a hospital gown and is sitting on a waterproofed under-sheet. She has been instructed on how to push and is pushing with each contraction. When pushing her legs are supported by the registered midwife who is standing on the right side of the bed, and by Warwick who is on the other side of the bed. The midwife is wearing a pair of unsterile gloves which she donned when assisting the doctor with the vaginal examination. Warwick is wearing none. The student midwife checks the two resuscitation trolleys are fully stock and labelled for each twin. When she has finished she picks up a packet of sterile gloves, opens them, picks up one glove, then drops it back on the wrapping. She

⁸⁰ Registrar: This is a doctor who is employed by the hospital in a speciality area. Usually s/he will have several years of experience and either have completed or nearly completed the training program for their speciality, in this case, obstetrics and gynaecology.

then goes to the stock area for her protective sleeves and puts them on. The midwife instructs the student midwife to "Tell him [the doctor] that the head is quite well on view". The student midwife exists the room, but quickly returns saying: "He`s on his way". The student midwife then dons a sterile glove on her right hand. The midwife informs the student: "We just need a mirror here actually. There doesn`t seem to be one here". The student midwife responds with an "OK" and exits the room still wearing only one 'sterile' glove.

The general practitioner re-enters the room holding a coffee cup. He places the cup on a small table. The midwife removes the packet containing the student's remaining sterile glove and disposes of it into the rubbish bin while informing the general practitioner that "The head of the first twin is well on view. The fetal heart [rate] is fine". His response is: "Excellent". The general practitioner then goes to the stock area and takes a green plastic apron. The midwife asks: "Do you want her up in stirrups or what?" The general practitioner says: "Not sure". The student midwife returns with a mirror in her 'sterile' gloved right hand. She places the mirror on the mattress at the foot of the bed. The student midwife's left hand is still ungloved. The general practitioner puts on his plastic apron. He continues to wear his normal spectacles. To the midwife, he says: "Doctor ...[the registrar] wants to talk to her". To the couple: "Doctor ... [the registrar], do you know him?". Meanwhile the student midwife walks to the over-bed trolley, looks around, then asks the midwife: "Did you remove my gloves from there? They were there". The midwife responds with a "Yeah. Sorry". The student midwife is out of view for six seconds. On her return she is donning a glove on her left hand. Presumably it was unsterile as there was no sound of a packet being opened. The tape was turned off at this point, for approximately five minutes, while the registrar spoke to the Wendy and Warwick.

When the tape is running again, the general practitioner is standing at the delivery trolley and is dressed in his green plastic apron, white plastic sleeves, and sterile gloves. The sterile delivery set is open on the stainless steel dressing trolley. The contaminated rubbish bin is in close proximity to the delivery trolley. The general practitioner is arranging the equipment on the trolley. Without really looking, he throws some wrapping behind him, probably on the floor⁸¹. Wendy is still pushing, but now her legs are being supported by her

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⁸¹ While the floor is not in sight, to have placed a rubbish bin or contaminated rubbish bin in this position

partner, Warwick, and the student midwife. Warwick is still garbed in his normal clothes. The student midwife is wearing the green plastic apron, white plastic sleeves, and gloves. The midwife is still wearing her gloves and begins to insert her right arm into a plastic sleeve as she walks to the telephone. She notifies the neonatal intensive care unit of the imminent birth of the twins. She then inserts her other arm into a plastic sleeve. The midwife then quickly checks the resuscitation trolleys and the suction tubing which will be used for babies during the birth. The general practitioner is unwrapping the sponges⁸² on the delivery set, then turns his back to the trolley and stands side on to the trolley so he can view Wendy's efforts and the advancement of the baby's/fetal head. In this position, he unwraps the extra instruments for the birth while talking to the registrar who is not in the camera range⁸³.

The general practitioner returns to his original position with his face and body towards the trolley. He picks up the sterile theatre gown from the trolley, steps back from the trolley, faces Wendy, holds the gown away from his body, opens it and inserts his arms into the sleeves. He stretches his arms out, the gown hits his chin and possibly his face, he pulls the left sleeve up by using his right hand which is covered by sterile gown. When his left hand is free, he uses it to free his right hand. He then undoes the ties at the front of the gown, takes them behind his back and does up the ties. The ties at the shoulders are left undone and so the gown is hanging partly off the shoulders.

Wendy is about to have her baby. The general practitioner moves the dressing trolley to the bedside. He removes a sterile drape and places it on the bed between Wendy's legs and close to her perineum. He places some instruments on the drape and takes a kidney dish from the trolley and places it beside the instruments. The instruments are rearranged and the general practitioner removes a sponge from the delivery trolley. He leans over the bed

would be unusually.

⁸² The delivery set up includes a packet of five sterile abdominal operating theatre sponges. The sponges are approximately 15 centimetres square and are made of cotton gauze. They contain a thread which will show up on x ray — just in case they are left inside the vagina or the uterus.

⁸³ This is the registrar who was to do the breech delivery of the second twin. He declined participation in the study, but agreed to allow the video taping of the first twin if I could ensure that he was not visible on the tape. I took him to the control room and showed him the view obtained by the camera. I advised him to stand against the back wall of the room, or in the storage area, as in both of these positions he would not be visible.

and rests his hands on the drape. His right hand still holds the sponge. During the

contraction, the general practitioner, with his sterile left hand, lifts Wendy's right leg onto

his left hip which is covered by the sterile gown, then with his left hand resting on the labia

he controls the advancing baby's/fetal head. With his other hand, the general practitioner

brings the sponge up against Wendy's perineum. Meanwhile, the midwife has put on her

green plastic apron.

There is a soft knock on the door and a staff member from the neonatal intensive care unit

enters the room and says "Hello. How you're going?" Both the general practitioner and

the student midwife say, almost in unison, "The baby person". The "baby person" points to

the gloves which are on a shelf behind the resuscitation trolleys and out of her reach. The

midwife takes the unsterile gloves from the box and gives them to her. "The baby person"

dons her right glove, then checks the resuscitation trolleys. When she is satisfied with the

trolleys, "the baby person" dons her left glove. "The baby person" wears no other personal

protective equipment. She waits by the resuscitation trolleys.

Wendy continues to push with each contraction. She is close to "crowning", when the

crown of the head of the fetus/baby passes over the perineum and does not recede between

contractions. The student midwife goes to the resuscitation trolley and removes a warmed

baby blanket⁸⁴. She returns to her position by Wendy's right side. The midwife presents

the student midwife with a pair of safety glasses. The student midwife puts on the safety

glasses. The midwife dons a pair of safety glasses.

VIGNETTE 4: "YUCK"

⁸⁴ The delivery suite and the birth centre are air conditioned for the mother's comfort. If the babies are

left uncovered, they quickly become cold.

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Vera, who was the central figure in *Vignette 1: "No naughty bits"*, is seen again. This time, however, the videotapes provide data that helps explain who or what is considered clean or dirty during her birth, or what is considered "Yuck". It is seen that there is not much difference between the lay persons` perception of who and what is clean and dirty, and the health professionals`. The birth itself with the release of blood and body substances is seen as "gory". The title of this vignette comes from a term used by Vera in reference to the afterbirth⁸⁵, or the placenta, membranes and umbilical cord. The focus is also on the midwives and how they react to the contaminating body fluids and the afterbirth. The majority of the vignette concentrates on the period following the birth of the baby, during the delivery of the placenta and the initial cleaning of Vera, the baby and the room. The gloves worn by the health professionals are being used for their protection, while there is no real attempt to maintain clean equipment during the birthing process. The midwife is again seen as the worker who controls, contains and cleans the dirt of birth.

Detailed description from the video tapes

Vera, wearing her black bikini, is in the bath while the midwife prepares for the birth. She covers a large vinyl-covered mat with a draw sheet, positions it at the side of the bed, then she places two waterproof under-sheets on the mat⁸⁶. The midwife does her required observations of the labouring woman.

Vince comments on the gloves the midwife has in her hands: "Oh, they're funny gloves. I haven't noticed those sort before". The midwife responds with "Oh, they're the long ones. (pause) The vet gloves". Vince laughs. Vera comments: "Actually I've seen when the vet's arm goes up inside for the calf (pause) in a TV show. That's not what you're going to do to me is it?" The midwife gives a small laugh and puts the long glove on her right hand and arm — it reaches her shoulder. The midwife, using her right hand, places a small

⁸⁶ This mat is used by the women when kneeling in labour and for the birth. The birth stool, or a bean bag, or a back support may also be placed on the mat.

⁸⁵ Throughout the vignette, the term 'afterbirth', or 'placenta', will be used as they are less cumbersome terms than the grouping of the three anatomical parts, unless the discussion revolves around one of the particular anatomical parts.

'underwater' doppler⁸⁷ on Vera's abdomen and listens to the baby's heart rate. [There is no further discussion on the purpose of the long gloves.]

Vera climbs out of the bath. The midwife, without gloves, partially dries Vera and then pulls the bottom of her bikini down her legs. Vera lifts each leg for the midwife to remove the bikini pants. The midwife unrolls the bikini pants and places them on the step to the bath.

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⁸⁷ This is a hand held doppler used to intermittently monitor the baby's heart rate, particularly when the woman is in the shower or bath. The probe, the part which has contact with the woman's abdomen, is waterproofed.

The midwife 'dresses up' for the birth by wearing the plastic apron and the sleeve protectors. She is wearing glasses, but they are her own prescription spectacles⁸⁸. The low level delivery trolley, containing the opened sterile delivery set, is brought close to Vera. The midwife opens a packet of sterile gloves and places the inner wrapping containing the gloves on the floor. The outer unsterile glove packet is placed on top of the sterile delivery set. She brings a mirror and a handheld doppler over to the delivery area. A few seconds later she removes the inner wrapping from the floor and places it on top of the sterile delivery trolley. The outer wrapping from the sterile gloves is screwed up and tossed in the contaminated rubbish bin by the midwife. The midwife removes the inner wrapping with the sterile gloves from the top of the delivery trolley, so she can unwrap the delivery set. The sterile gloves are placed on the floor. The midwife picks up the patient call buzzer and places it on the floor where she can reach it. Vera's membranes rupture with the next contraction and the liquor is moderately meconium stained. The midwife picks up the folded paper containing the sterile gloves from the floor, and begins putting on the gloves. She rips a large hole in the palm of the left glove as she is putting it on. The midwife continues to work with torn gloves. The midwife comments that Vera's membranes have broken. She summons assistance via the buzzer. The midwife moves the mirror and checks the baby's heart rate. A second midwife enters the room. The first midwife explains to Vera and Vince that a paediatrician will be called for the birth because of the meconium staining of the liquor. The midwife asks the assisting midwife for a new pair of sterile gloves. The assisting midwife provides the midwife with a new pair of sterile gloves. The midwife removes the old gloves, tosses them on the glove paper on the floor and puts on the new ones. The midwife observes Vera's perineum with the use of a mirror placed on the sterile drapes situated between Vera's legs. The assisting midwife dresses similarly, except she is not wearing protective sleeves and although she is wearing gloves, they are not sterile. She is also wearing her own prescription spectacles.

The baby is born.

⁸⁸ At this time the staff were not provided with prescription safety glasses and had to provide their own. Very few staff members bought their own.

The midwife is on her haunches on the floor behind Vera. She frequently tosses her head to flick her hair out of the way. The assisting midwife is crouched between the first midwife and the delivery trolley. Vera's position remains the same, while Vince is perched on the edge of the bed near Vera's head. The baby, still attached to Vera by the umbilical cord, is lying partly on the midwife's knees and partly on the sterile drape.

The assisting midwife passes the sterile clamping forceps, one at a time, to the midwife who applies them to the umbilical cord. The assisting midwife has the sterile scissors in her hand and offers them to the midwife. The midwife reacts with a "No [Vince] is going to do it"and then asks: "... [Vince] are you going to do the honours [by cutting the baby's cord]?" Vince responds with a "Yeah", puts down the mirror, places his right knee on the floor and moves towards the baby and the midwife. The assisting midwife hands him the scissors. The midwife tells him to: "Just cut there [between the two clamps]". The baby's cord is cut by Vince. He is not wearing gloves. The assisting midwife takes the baby over to the paediatrician who is wearing gloves and a plastic apron. He is waiting by the resuscitation trolley. Vince stands, looks around for somewhere to place the scissors. He eventually walks around Vera and the midwife and replaces the scissors on the delivery trolley. Vince returns to Vera, but she tells him to go over to the resuscitation trolley with the baby. Vince goes over to the resuscitation trolley where the baby is lying. Most of this area is not within the camera's range.

Meanwhile the midwife announces: "Tell you what. There's **heaps** of meconium". She then starts to roll the saturated sterile drapes into a bundle. The midwife then makes another announcement, but this time much more loudly: "I am saturated". There is generalised soft laughter. The midwife moves the umbilical cord, with one of the clamping forceps still in position, to another area on the mat. Vera asks: "Did I tear?" The midwife replies: "I think you did." Vera's response is: "Oh well". The midwife continues: "I thought (pause) it was fine until the head came out fully and then it just seemed to burst a bit". During this pause, the midwife briefly touches Vera's back.

The midwife stands up and tosses the doppler onto the bed. She notes: "There's heaps of liquor", while Vera adds: "Oh, there's heaps of meconium". The midwife bends down and

picks up the towel she was kneeling on and pushes it between Vera's legs. The midwife picks up the baby sucker which is still on. She removes the end piece of tubing or catheter, which has a narrow diameter, then using the wider diameter of suction tubing, she removes the bulk of liquor and meconium from around the delivery area. While doing this she asks the assisting midwife if she has given the oxytocic drug. The assisting midwife replies: "No. Sorry".

The midwife takes the stainless steel kidney dish off the delivery trolley, places it between Vera's legs, then picks up the clamp on the umbilical cord and places it in the kidney dish. The midwife then rolls up the towel and pulls it and the bundle of wet drapes towards herself near the edge of the mat. She tells Vera: "Do you feel like you can pass (pause) give that placenta a push out?". "Pardon?" says Vera. The midwife repeats: "Can you give that placenta a push". Vera replies: "Is it ready to come?" There is no response, but Vera's abdomen is visible and she is pushing. The midwife picks up the wet drapes and towel, then drops them back on the mat, gets up and goes over towards the resuscitation trolley. She returns to Vera almost immediately but says nothing about the baby.

The midwife tells Vera to "Turn around now". There is a pool of blood between Vera's legs. The midwife is kneeling, facing Vera but slightly to her right side. Vera asks: "Did I get the needle?" The midwife responds with: "I don't (pause) ... [the assisting midwife] didn't give it to you yet?". The midwife gets up and goes to the bedside locker where the oxytocic drug has been drawn up in a syringe, ready to be given. She returns to Vera with the syringe and needle in her hand and injects the oxytocic drug into her right thigh. Meanwhile, the assisting midwife has removed a small bowl containing a plastic cord clamp from the delivery trolley. While the midwife is disposing of the used syringe into the container, specifically for sharp or potentially dangerous instruments or needles, Vera looks towards the resuscitation trolley. The midwives cross paths when the assisting midwife returns the bowl and the forceps used as a clamp on the umbilical cord to the delivery set. The midwife returns to Vera and comments: "What a mess. You can turn around and look [at the baby] while I get the placenta". "Up there?" Vera points to the bed. The response

from the midwife is: "No. Just on the mat⁸⁹". Vera turns on the mat. The midwife picks up the forceps clamped on the umbilical cord and says: "You can give a push out".

⁸⁹ This is followed by a few words from the midwife, but it is fast and indecipherable.

The assisting midwife comes over to the bed area. From the floor, she picks up rubbish, probably paper, and places it in the contaminated rubbish bin. She then positions a clean waterproofed under-sheet and a pillow at the bottom of the bed. The assisting midwife drops a couple of towels strategically on the floor to soak up the liquor. She uses her feet to move the towels around the floor. One of these is a towel used previously by Vera, the other is retrieved from the contaminated linen trolley. There is some discussion between Vera and the midwife but it is inaudible. It is possibly about the wet and /or bloody area where Vera put her hand. The midwife moves the towel around on the mat, trying to soak up more of the fluids. She picks up an unknown item from the floor and takes it over to the bath where she places it on the edge. The midwife goes back to the delivery trolley and picks up the returned clamping forceps. She returns to Vera who has been staring at the blood and fluid between her legs. Vera queries while pointing to a white area amongst the blood: "What's this white stuff?" The midwife replies: "That's the vernix90". Vera continues to question the midwife: "Oh. Right. So there's a bump of that stuff coming out as well?" The assisting midwife comments: "He was covered in it really". Vera asks "That was why he looked so white?" Vera is looking over towards the baby. The midwife looks up at Vera and responds with "He's nice and pink now". The midwife then asks Vera "Have you ever had a bleed before?" Vera answers with: "No. Am I having one now?" The midwife's reply is: "Oh no. There is a bit of a loss there, but I don't think it is anything to worry about at the moment". The midwife tries pulling on the clamp on the cord, but stops when she has no success.

Once the baby began crying, there was fairly constant conversation between Vince, the paediatrician, the assisting midwife and the support person. The midwife asks the paediatrician who is standing near the door: "What time was he born?" The paediatrician replies: "About five minutes ago. About five and a half minutes ago" There is discussion between the midwives and the paediatrician as they work out the actual time of birth. During this conversation the midwife removes her left sleeve and drops it on the floor. The paediatrician removes his gloves and apron, rolls up the apron, then disposes of the gloves

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⁹⁰ Vernix is the shortened term for vernix caseosa, the greasy substance which covers the baby in the uterus (Sweet, 1992).

and apron in the contaminated rubbish bin. The assisting midwife brings the baby over to Vera. He is wrapped up in several bunny-rugs and is greeted with a "Hello" from Vera. She touches his face and stares at him. The assisting midwife begins to tell the midwife what was done to the baby. Vera is still engrossed in her baby. The paediatrician comes over and starts talking to Vera. She looks up and listens to him. The assisting midwife moves away. The paediatrician finishes talking to Vera, picks up the chart, and moves out of camera range.

Vince and the support person take photographs and videos of Vera with her baby. The midwife sits on her haunches and waits till they have finished. She then instructs Vera to: "Give me a push" and at the same time pulls on the cord. The assisting midwife crouches down behind Vera and the midwife, and between them and the delivery trolley. Vera is bent over and looking down at what the midwife is doing. Vince comes over and takes the baby from Vera. Vera and the midwife are talking and laughing together softly. It is inaudible. The midwife tosses her head to get her hair out of the way, when this is not effective she tries to blow it away. She tosses her head again and Vera uses her right hand to smooth the hair away from her face. This is still not effective and so the midwife uses her right upper arm to push her hair away.

The quiet talk continues and includes the assisting midwife and Vince. The midwife then announces: "I' ve never seen so much liquor". The assisting midwife agrees: "It was a big gush". The midwife continues: "I thought that was it to start with, but it kept coming and coming and coming". Vince laughs and admits "It made me sick on three other occasions". The midwife asks: "What was that?" Vince repeats: "It made me sick on three other occasions". There is generalised laughter. Vera, Vince and the midwife are talking together. The assisting midwife gets up, talks to the paediatrician, then goes over to Vince and asks: "Can I just take bub for a minute?" Vince hands the baby over to the assisting midwife who carries the baby to the resuscitation trolley where the paediatrician is waiting. He is not wearing gloves. The midwife is talking to Vera: "It [the perineum] stretched up beautifully till right at the end when it came out and just went (pause) choo (pause) along the scar line. It was getting all white and shiny along the scar before — ". Vince interrupts: "Before it [? goes]". The midwife agrees and then continues: "But it is not too

bad". During the first pause the midwife indicates, with the use of her fingers, that the tear occurred quickly. Vera responds with: "Oh well, he's out now". She and Vince give a small laugh. During this conversation, the midwife has crouched in front of Vera with her hands together, resting her elbows on her knees. When finished she leans forward and starts to pull on the umbilical cord. After 15 seconds she stops and leans back from Vera, then stands, stretches and stamps her feet a couple of times. Vera asks Vince "Can you get a shot of him [the baby] while he's there [on the trolley]?" Vince gets his camera and goes over to the baby. The midwife walks over to the baby then returns to the delivery mat where she crouches down and wipes her hands on one of the floor towels. While there, the paediatrician speaks to the midwife about the baby. Vera listens and nods. While the paediatrician is washing his hands, the midwife then talks to Vera, but most is not decipherable. It is about the treatment the baby received. The midwife picks up the suction catheter from the floor and disposes of it in the contaminated rubbish bin.

The midwife comes back and stands in front of Vera but slightly to her right. She continues to attempt to flick her hair out of the way and comments: "Look at me. I'm saturated up to my shoulders" Vera states: "I could feel it come out that way" and indicates the correct direction with her hand. The paediatrician exits the room drying his hands on paper toweling. He is thanked by Vera, Vince and the midwife. The midwife crouches down and looks at the umbilical cord and asks Vera: "Is it coming?". Vera shakes her head indicating a 'no'. The assisting midwife stands over Vera and her midwife. The midwife stands up, turns around and removes a birth stool off a shelf. She takes the stool, moves the delivery trolley out of the way with her knee and places the stool on the floor alongside the centre of the bed. The midwife then places a waterproofed under-sheet on the floor, under the birth stool. She goes to the bedside locker, opens it and removes two waterproofed under-sheets. These she places on the seat of the birth stool. Meanwhile, the assisting midwife has picked up the suction tubing and discarded it in the contaminated rubbish bin. Vera, Vince and their camera person are chatting with 'congratulations' and 'thank you' being bandied about. The assisting midwife tells the midwife about the other women in labour. She says: "I'll get going now. I'll come back", disposes of her gloves in the contaminated rubbish bin, washes her hands, and exits the room still wearing her apron.

The midwife assists Vera to rise. Vera walks over to the birth stool with the umbilical cord and clamp hanging between her legs. She lifts the cord and clamp up as she sits on the birth stool. The midwife picks up some clots off the mat and places them in the kidney dish. She then takes the kidney dish and positions it between the two front legs of the birth stool. The midwife gets down on her haunches in front of the birth stool, picks up the towels on the floor, looks at them and then drops them back on the floor. Vera states: "I can't believe it. It was short that time." There is a brief discussion between Vera, Vince and the midwife on how long the labour took once her contractions were strong. The midwife changes to a sitting position on the floor, leans forward and pulls on the umbilical cord with one hand, while her other hand is on Vera's abdomen. Vera lets out a long "Oooh" as the placenta is delivered approximately 40 seconds later.

Vera calls out: "Placenta" and Vince and the support person gather around Vera and the midwife. They each have their cameras. Vera asks if she can look at the placenta. The midwife takes the large bowl off the delivery trolley. She drags one of the dirty towels on the floor near the delivery mat over to the birth stool area and places it beneath it the bowl. The midwife then puts the placenta and membranes into the large bowl. Vera states: "I had a good look last time, but even though I had a good look, within a half hour I'd forgotten what it was like. Actually this one is a lot bigger than I remember. A lot more (pause) yuck". The midwife counters: "That's normal" and then proceeds to describe and point out the various features of the placenta, membranes and cord. Vera checks that it is all captured on the support person's video camera. At times she almost touches the cord in her efforts to ensure that the details are recorded on the video tape. She does touch the midwife's hands to provide a better angle for the camera. Vince walks away during the examination and returns to the baby. The assisting midwife knocks, then enters the room during the examination of the placenta and membranes. She still has an apron on, but no Vince and the assisting midwife chat at the resuscitation trolley. acknowledges: "That was terrific ... [the midwife]. Thanks for explaining what goes on".

The midwife asks the assisting midwife for a plastic bag as "They are going to take the placenta home". The midwife wipes her hands on the towel on the floor. The assisting midwife, still without gloves, flaps open the plastic bag and positions it to collect the

placenta and membranes. The midwife tells her: "Don't touch it," takes the bag, tips the placenta into the bag, puts the bowl back on the delivery trolley, then ties a knot in the bag. The assisting midwife walks over to the sink and puts on a pair of gloves. The midwife declares: "And then I'll put it in another bag (pause) just in case." Vera queries Vince: "How's the boy?" Vince responds with: "He's good. Mum was so busy looking at all the gory bits that she -. The midwife interrupts: "... [Vince] was making an active point of ignoring it, weren't you?" She turns her head, looks at him and laughs. He laughingly responds: "I didn't mind looking at it through the black and white view finder, actually. That's pretty good. I just felt a little bit faint with all the muck everywhere". Vera looks around at the mat and the bloody linen sitting on it. The support person laughingly says "You were worried about a leakage [of fluid from the bag of waters]". Vince continues: "I'm glad we didn't do it in the car". He laughs. "A roadside job would have been rugged. Yeah". The support person comments: "For everybody". While this conversation was going on the assisting midwife brought a yellow contaminated waste plastic bag over to the midwife. The midwife placed the plastic bag containing the placenta and membranes into the contaminated waste bag. The assisting midwife then ties a knot in the second plastic bag and places it on the rim of the bath.

The midwife collects the towels from the floor and disposes of them in the dirty linen trolley. While there she removes her gloves, disposes of them in the contaminated rubbish bin, then removes her right sleeve which also goes into the contaminated rubbish bin. Vince tells Vera: "You look like you've been through a massacre, you know. Are you going to hop back in the bath and have a scrub up?" The midwife calls out from the sink where she is washing her hands: "No. Let me just have a look at the damage". As she walks back to Vera, she is applying a pair of clean gloves. She explains to Vera: "I need to check your fanny because you can get grazes and bruises and things inside". The support person comments: "That's pretty mandatory. I had one that had one stitch and one that didn't". The assisting midwife cleans the delivery mat area by folding up the waterproofed under-sheets, rolling the linen into a heap and then disposing of them into the contaminated waste bin and dirty linen trolley respectively. She then moves the delivery mat to the bath area where she proceeds to wash and dry it.

The midwife goes to the bedside locker, opens the cupboard and removes two waterproofed under-sheets which she places in the middle of the draw sheet on the bed. Vera starts to rise but the midwife stops her with a hand on her right shoulder and tells her: "Hang on. I'll get you some pads". She returns to the bedside locker and removes a packet of sanitary pads. She opens the packet and hands them to Vera. Vera puts the sanitary pads on her perineum and stands up. The midwife removes the birth stool. The kidney dish containing blood, which was on the waterproofed under-sheets beneath the birth stool, is replaced back on the delivery trolley. At her request, Vera lies on the bed with her head closest to the camera. The midwife's response to Vera's request was a comment about "the gory tapes".

The midwife removes the water proof sheeting from the floor, and her gloves which she discards into the contaminated waste bin. She walks over to the cupboard and removes a packet containing a pair of sterile gloves. The midwife sits on the bed, opens the sterile gloves, then puts them on. She takes a sponge and a drape from the delivery trolley which she places on the bed the between Vera's legs. Vince moves away from the foot of the bed. The assisting midwife removes the cleaned mat from the room. She returns, puts away some stock items, then removes the birth stool from the bed area and takes it over to the bath area where she washes it. The midwife folds the sponge into a smaller size and presses it into the perineum. Vera flinches and says "Ah" several times. The midwife says nothing. Vera gives a long scream. The midwife responds: "I'd give a scream too". The assisting midwife comes over to the bed. The midwife takes a sponge from the trolley, explains to the assisting midwife and Vera what she found, then applies the sponge to Vera's perineum. Vera brings her knees together. The midwife removes the drape, picks up the packet from the gloves and a waterproofed under-sheet that was on a foot stool and disposes of them into the dirty linen trolley and the contaminated waste respectively. While there, she says: "Thank you" to the assisting midwife who removes her apron and her gloves, then discards them into the contaminated rubbish bin.

The midwife removes her gloves and disposes of them into the contaminated waste bin. The assisting midwife washes her hands. The midwife removes a used sponge from the delivery trolley to the contaminated waste bin, then covers the delivery trolley with the outer wrap which has been in contact with the floor. She and the assisting midwife chat

while the latter is drying her hands. The assisting midwife offers: "Congratulations" then leaves the room. The midwife washes her hands, then removes the cleaned birth stool from the room. As she leaves she tells Vera: "I'll get you a blanket". The support person departs. The midwife checks Vera's pulse rate, temperature, blood pressure, vaginal loss and her uterus. Vince returns the baby to Vera. Vera thanks the midwife for her help. The midwife removes her plastic apron, washes her hands and leaves the room.

VIGNETTE 5: "WOULD YOU LIKE TO FEED HIM NOW?"

This vignette, although brief, is a good example of the midwife as the professional expert. The midwife is the person in the room with the authoritative knowledge on breast feeding, with the family totally accepting this power relationship. By examining this vignette, it becomes clear how the midwife uses her authoritative knowledge to organize the "power relations in a room that makes them seem literally unthinkable in any other way" (Rapp, 1997, xii). The other message that is equally clear in the vignette is that the baby was dirty (but is now clean) and that breast feeding is dirty.

Detailed description from the video tape

A little less than two hours after the birth, Neeta is sitting up in bed, cradling her baby. She is still attached to her intravenous infusion of syntocinon. The baby is firmly wrapped with only his face visible. Neeta's perineum has been repaired while the baby has been bathed, measured and given an injection of vitamin K. The midwife has just taken the baby's temperature. Nick is standing near the head of the bed, on Neeta's right side. Neeta's mother is standing near the wall, a couple of feet away from the foot of the bed, watching what is happening. The midwife has cleaned the resuscitation trolley and the baby bathing equipment. She is wearing the same gloves she put on to bathe the baby. They were originally sterile gloves. The gloves were also worn while cleaning the equipment.

The midwife is cleaning the thermometer while standing by the over-bed trolley which is parallel to Neeta's bed. "Would you like to feed him now?", the midwife queries. Neeta looks towards the midwife, nods her head and replies with a "Hmm". The midwife responds with an "OK". Still holding the thermometer in her right hand, she picks up the kidney dish containing [? a used syringe] and walks to the storage area. She is out of view

for a few seconds, then returns the empty kidney dish to the over-bed trolley. Neeta's mother turns around so her back is to Neeta, then begins doing something with the family belongings, possibly tidying them.

The midwife approaches the bed, picks up the baby and says: "Lets get you ready young Nick, now that your nice and alert". She loosens the baby's bunny-rugs at the front and lowers the wrap from around the baby's head. Neeta begins to undo the buttons on the front of her nightgown. She looks towards her mother who still has her back to the group around the bed. She also quickly glances up at her partner. Neeta comments to the midwife: "I have no idea about this". "Quite alright. No one will ever know", responds the midwife. Neeta smiles and responds with a "I really don't though". Neeta has opened her gown and revealed that she is wearing a bra. She points to each breast. The midwife replies: "Pick a side [breast]. Probably that side", pointing to the left breast. Neeta undoes the clip of her bra, then glances towards her mother. Neeta's mother turns around, looks towards the group, then walks towards a handbag on a chair near the wall. She looks towards Neeta again, then turns around, away from the group towards the belongings on the chair. Neeta glances towards her mother, then rolls down the bra cup, while commenting: "I never had to work this before". Neeta's left breast is now exposed. The midwife asks Neeta: "Have you lost any colostrum⁹¹ during your pregnancy". Neeta nods and answers with a "Hmm". The midwife responds with an "OK". Neeta queries: "Is it right like that?". The midwife answers "Perfect", then loosens the bunny-rugs around the baby even more and opens the front of the bunny-rugs so baby Nick's hands are free, while commenting: "We'll unwrap him a little bit. Your body temperature will keep him warm". Meanwhile, the grandmother looks towards Neeta, then walks back towards the chair, but this time she is turned partly towards the group.

The midwife places the baby close to Neeta's breast, partially screening it. Neeta looks up at Nick and grins. She pokes out her tongue, mimicking a baby searching for the breast. The baby is on his side with his face towards Neeta's left breast. The midwife continues her instructions: "What we're after is (pause) seeing if he will grab it [the nipple]". There

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⁹¹ Colostrum is "the thin, yellow, milky fluid secreted by the breasts from 16 weeks of pregnancy and for 3 to 4 days after the birth until lactation is initiated" (Sweet, 1992, p.57).

is soft laughter from the other adults present, while Neeta grins. Neeta's mother moves closer to the bed and is watching the lesson. "To get his chest across your chest, so wrap him around here", says the midwife while positioning Neeta's right arm so it cradles the baby to her chest. Neeta's left forearm supports the baby's head while her hand is placed behind the baby's upper back by the midwife. The midwife is holding the baby's head with her right hand, while with her left hand she has her thumb and forefinger on Neeta's nipple with her other three fingers splayed across Neeta's breast. The lesson is continued: "Have a good grip on the nipple. Squeeze out some colostrum". (A couple of words are said by the midwife but it is indecipherable) The midwife attaches the baby to Neeta's breast. Nick laughs while Neeta's mother leans forward at an angle to watch the baby feeding. The midwife continues: "You've really got to extend his mouth, and put a bit [of colostrum] on the nipple.". There is silence while all the adults watch the baby feeding. The grandmother moves in closer to Neeta and the baby, almost directly opposite the midwife and leans towards the baby. She makes a comment, points to her watch, then towards the breast, but it is inaudible. There is no response to her comment. The grandmother moves a few steps back from the bed. The midwife straightens her back then mimics the baby's movements and sucking action. She continues to hold Neeta's nipple and the baby's head at Neeta's breast.

The midwife comments: "He wants a bit more", while continuing to hold baby Nick at the breast. The grandmother moves further back from the group involved in breast feeding. The midwife moves her right hand around to where the baby is attached to Neeta's breast. She then stands back from the mother-infant dyad and chats quietly to Neeta. "Hold him there. When he is drawing on it [the breast], you will feel the drawing on your uterus". The midwife draws a line from her breasts to her pelvic area several times. During this process, she touches her theatre scrub suit, and also when drawing circular patterns on her pelvic area. The midwife uses both hands to check the baby's attachment to the breast. Nick walks away from the bed and starts fiddling with the radio/cassette player and then sorting through their tapes. The midwife leans forward over the dyad to watch the feeding. She checks the baby's position on Neeta's nipple with her fingers, then pulls the outer bunny-rug over the top of the baby's head. The midwife straightens her back then begins talking about attaching the baby to the breast. The midwife uses her hands to illustrate the

size of the areola, the pigmented skin surrounding the nipple, and where the baby should be positioned in relation to it. She demonstrates this by drawing circles on her own breasts. Again she touches her scrub suit. She leans towards Neeta and watches the baby feeding. The midwife straightens her back and says "He might feed completely off one side [breast] one feed and not need it [from the other breast]. He might just not touch both sides [breasts].". The midwife checks the baby's feeding again. "Oh, he loves it", says the midwife as she turns away pulling off her gloves. Nick walks back to the family belongings, past the bed area, with only a quick glance at Neeta and the baby. The midwife walks towards the storage area, but out of view of the camera. The closing of the lid of the contaminated rubbish bin can be heard. The midwife calls out: "Can I put the kettle on for a cuppa tea?"

There is a discussion about the refreshments and the grandmother offers to make a cup of coffee for the midwife because: "You've been working hard". The midwife accepts and the grandmother leaves the room. The midwife informs Nick that "I'll just heat this [the meal] up. A fresh tea will be coming soon ... Γ'll just heat that up and Γ'll bring another tray and you both can have tea". The midwife picks up the covered plate from the tray on the small coffee table below the camera and places it on the bedside table. She then picks up the chart and places it on the tray of the resuscitation trolley. Neeta comments: "This is amazing. It's amazing that they know". She looks towards the midwife. There is no response to her comment. Nick queries the midwife about the intravenous infusion and receives an immediate response. The midwife checks the spelling of the baby's name and writes in the chart while Nick takes photographs of the baby feeding. The midwife picks up the chart together with the yellow kidney dish, then walks towards the storage area. She turns back and places both items on the bedside table while checking the breast feeding process. The midwife uses the fingers of her left hand to check the baby's attachment to the breast while she uses her right hand to alter the baby's head position, then she uses both hands to reattach the baby to Neeta's breast. The midwife then explains how Neeta can identify the correct positioning of the baby on the breast. The midwife suddenly exclaims "Oh", then walks rapidly to the sink area and can be heard washing her hands, then drying them. The midwife then exits the room carrying the covered food plate.

VIGNETTE 6: ALMOST UNTOUCHABLE

This vignette centres around how, because of his body products, and the woman's body products on his body, the newborn baby is considered dirty and almost untouchable. This is seen in the behaviours of the staff and by the father and the two grandmothers. The mother, however, is allowed to bath the baby without protection. This vignette is another example of the midwife as the person with the authoritative knowledge in the room.

Detailed description from the video tape

Ursula has been transferred to the delivery suite for the repair of her perineum. Ulrich remained in the birth centre with his daughter, and her grandmothers who had arrived to see the baby. Ulrich's mother wanted to know what she weighed and when "they" were going to weigh her. The grandmothers reminisced about the old days and how she would have been weighed, bathed and taken away by now. Ulrich decided that maybe they were supposed to weigh her as the baby scales were there. He moved the baby scales from the work bench, to the floor where he played with the buttons, then moved the scales to the bed. Ulrich's mother removed the cover from the scales and then placed the baby, still in her bunny-rugs, on them. Ulrich estimated that they would need to work on 80 grams for the baby's wrappings and then said: "I think we should take her out [of the bunny-rugs]". Ursula's mother said "You're game" and laughed. The grandmothers crowded around the scales, but they made no attempt to touch the baby. Ulrich unwrapped the baby and discovered: "She's done her first poo". "Oh, well. You're going to get a lot of those ... [Ulrich]", his mother commented. Ulrich's response was: "Well, I think we better wrap you up". Ursula's mother announced: "We'll just do it [the birth weight] roughly". The baby is rewrapped by Ulrich, with his mother adding the finishing touches to tightly wrap the baby in the bunny-rugs, but still without touching the baby's skin. They then discovered that the scales needed to be "zeroed" with the tray empty. Ulrich picked up the baby, then used his right foot to zero the scales. He placed the baby in the scales. They then estimated that the baby weighed about eight pounds. They left the scales on the bed.

Ursula returned, in a wheel chair, to her birth centre room. Her mother removed the scales from the bed and placed them on the floor. Ursula showered. The midwife, who is not wearing any protective equipment, assisted Ursula in attaching the baby to the breast.

Ursula then breast fed the baby. It is approximately two and a half hours after the baby was born.

Ursula is sitting in a large lounge chair with her back supported by two pillows. She is feeding the baby who is supported by a pillow on Ursula's lap. Ulrich is crouched beside the lounge chair. One grandmother is sitting on the end of the bed while the other is sitting in a chair. The family members, except for Ursula, are drinking champagne. The midwife is leaning over Ursula and her baby while talking about breast feeding. At the end of the conversation, the midwife says: "As soon as she's finished, I'll give her a bath straight away". The midwife leaves the room and returns immediately with a small stainless steel dressing trolley which has a large green plastic rectangular container on the top of it. This functions as the baby bath, although according to the manufacturer, it is made for soaking instruments. A plastic spray bottle is balanced on the edge of the top shelf. This contains the cleaning detergent. On the bottom shelf is a baby measurement instrument.

The midwife moves out of the camera range, but she can be heard opening the cupboards. The family is chatting. The midwife goes to Ursula, bends over and observes her feeding the baby. The parents and the midwife chat about how little the baby has cried. Ulrich comments on how neatly the midwife wrapped the baby prior to her breast feeding and that "It looks great. I really like that. It's a good look". The midwife straightens up, says: "OK. Give me a buzz", then walks towards the door. Ursula replies with an "OK".

One grandmother leaves. A few minutes later the second grandmother is saying her good byes. Ursula asks her to ring the buzzer for the midwife as she leaves. The grandmother rings the buzzer and leaves. A different midwife knocks on the door and opens it. She informs the parents that their midwife: "won't be a minute. She is coming". The midwife returns, saying: "Sorry. I was cleaning a bath and I didn't hear the buzz". Ursula replies: "That's OK. She's falling asleep".

The midwife goes to the sink where she washes her hands, but leaves the room looking for something on which to dry her hands. The midwife quickly returns drying her hands on a towel. She queries: "Do you think she wants a bit more or she is not really (pause) opening

her mouth, really?". Ursula responds with: "No. She was just about asleep". The midwife says: "OK. Γll give her a bath and then she might want a little bit more and then go off to sleep after". The midwife walks around the group, discards the towel onto the back of a chair which she moves out of her way. She goes to the storage cupboards (out of view of the camera) where she can be heard moving items about. Ursula turns her head and apologies: "Sorry for all the mess there". The midwife says: "You're right. Γm just making a little spot here". The midwife walks over to the bedside locker, she has a thermometer in her hand. She turns and puts two items on the dressing trolley. The midwife then goes towards the base of the bed where the baby scales were placed on the floor by Ursula's mother. She picks the scales up and they can be heard being placed on the bench. This is out of sight of the camera. The midwife walks over to the dressing trolley, removes the rectangular container and takes it to the sink. The midwife turns back to the dressing trolley and places a couple of disposable absorbent cloth washers on the trolley. She walks towards the work area opening a disposable cloth. She opens it out and, presumably, lays it on the tray of the baby scales. The midwife then exits the room.

The midwife returns to the room with Ursula's chart and a baby's cot, the bassinet of which contains several items. The midwife removes most of the items from the bassinet and places them on the tray of the resuscitation trolley. Only the foot of the resuscitation trolley is visible, but the midwife is leaning forward, presumably, over the tray of the resuscitation trolley. The midwife returns the plastic sleeves to the bassinet. She opens a packet of sterile gloves, using the bassinet as a table, then puts on a pair of plastic sleeves. The midwife ensures that the plastic sleeves go over the edge of her sleeves of her uniform on her upper arm. She applies her sterile gloves making sure that the cuffs are completely covering the bottom of her plastic sleeves. The midwife disposes of the packaging from the gloves into the contaminated rubbish bin.

The midwife moves the baby's cot near the dressing trolley. She removes two items from the dressing trolley and takes them over to the resuscitation trolley. She then goes to the sink and turns on the taps, The midwife returns to the main area of the room and moves the dressing trolley closer to the resuscitation trolley. She returns to the sink and waits for the 'baby bath' to fill. When the bath is filled, the midwife carries it across the room to the

dressing trolley. She takes the liquid soap container from the resuscitation trolley and empties the contents into the bath water. The midwife picks up the baby measurer, unrolls it and positions it in the bassinet part of the cot. This instrument is made of plastic sheeting which is marked like a tape measure. Each end has a hard plastic section which is at right angles to the sheeting. It is used to assist in accurately measuring the baby's length.

Meanwhile, Ulrich removes the pillow from beneath the baby and throws it on the bed. He places his wine glass on the bench, returns to Ursula, bends down and takes the baby from her. He stands and looks down at the baby. Ursula slowly rises unassisted from the lounge chair. She comments: "Even my arms are sore (pause) from pushing on that stool". Ulrich begins to talk about the way Ursula pushed in labour. The midwife moves the lounge chair away from the resuscitation trolley, says "OK", and everyone moves towards the resuscitation trolley. Ulrich places the baby on the tray of the resuscitation trolley and comments: "You love it under here [where the heater is], don't you?". The baby is crying loudly. The midwife quickly moves over towards the scales, presumably turns them on, and sets the scale on zero. She quickly returns to the resuscitation trolley. The midwife stands at the resuscitation trolley, but is not completely in view. She is leaning forward, while her left elbow flashes in and out of view of the camera. Ulrich is on her right while Ursula is slowly moving around to the left of the resuscitation trolley. The midwife turns around. She is holding the naked baby in her gloved hands and away from her body. She moves to the work bench where she weighs the baby. The parents slowly follow her. The midwife states the baby's weight. Still with her gloves on, the midwife picks up a weight conversion chart and with her finger follows a column down the chart. She converts the baby's weight from grams to pounds and ounces for the parents. Ursula says "Nearly nine pounds". Ulrich asks: "How many ounces in a pound, do you know?". The midwife is walking back to the resuscitation trolley, with her gloved hands under the baby's armpits thus holding the baby upright and away from her body. She responds with: "Hang on Γ 11 just [? put her down]". The baby is still crying lustily.

The midwife puts the baby down on the tray of the resuscitation trolley and then works out the number of ounces to a pound. The three adults are standing around the resuscitation trolley. The midwife says: "I'll just measure her". There is a pause then Ursula says: "She doesn't look that big, does she?". The response from the midwife is: "Oh, she (pause) She does. (pause) She's a good size". The baby continues to cry. The midwife says: "We'll check her all out [by doing the initial baby examination]", and examines the baby. The parents talk about the colour and shape of the baby's head at birth. Ulrich says: "Oh wow," but the midwife immediately explains: "Often you see a lot of hair when it's caught up in the [vernix in the baby's] creases [in the groin, or under an arm]". The parents talk but it is not always audible. The midwife says: "Well I think it just gets caught in their creases, see, and they lie like that you see, and it can't get out see". The midwife removes a disposable washer from the 'baby bath', squeezes it to remove the excess water from it and takes it over to the baby. Although out of camera view, the midwife's next action would be to wash the baby's face. The midwife explains what she found on her examination of the baby to the parents.

The midwife then picks up the baby who is loosely wrapped in a bunny-rug, or towel. She takes the baby to 'the bath' and says: "A bit of shampoo now". The baby's hair is washed. The midwife returns the baby, still wrapped, to the tray of the resuscitation trolley. Again, although out of camera view, the midwife's next action is to dry the baby's hair. The overheating alarm buzzes on the resuscitation trolley. It is turned off immediately. The midwife picks up the baby, places the baby against her chest and pats her back. She stops crying for a short period. The midwife places the baby on the tray of the resuscitation trolley and unwraps her. She then picks up the naked baby to begin the bath, and partially turns towards the bath. She is interrupted by Ulrich who comments: "A very thankless job this one, [midwife's name], doing the washing and all that. It is sort of like (pause)". The midwife laughs: "Like all the actions are over with now". Ursula quietly responds: "He's right". There is no further discussion on this topic. The midwife places the baby in the bath, resting the baby's head and neck on her right wrist and forearm. The midwife picks up the disposable washer and starts to wash the baby. The midwife says: "I usually turn them over and put them on their tummies". The midwife queries: "Do you want to bath her?" and looks towards Ursula. Ulrich responds: "Yeah. I could see Ursula's hands going." There is no response from Ursula. The midwife continues: "Yeah, you can bath her. Yeah," and moves the dressing trolley holding the 'baby bath' towards Ursula. Ursula replies: "I haven't had much to do with (pause) little babies". The midwife responds: "Do

you want me to hold her and you wash her? Yeah?". The midwife removes her left hand from the bath water. Ursula picks up the disposable washer and begins to wash her baby. "It's just getting in the creases that's hard. Like I said, it might take a few washes before you get her properly clean," says the midwife. Ulrich asks: "Is the vernix really hard to get off?". The midwife replies: "Yeah, you've got to give it a good wipe". Ursula is using the cloth to wash the baby. The midwife points and comments to Ursula: "There's a little bit of blood there round the neck". Ursula looks at the area, washes it then continues to wash the baby. Ulrich points to the baby's ears but quickly withdraws his hand. The midwife comments on the baby's posture. Ursula comments: "I don't know how clean I've got her". The midwife responds: "That's fine. I mean, that vernix, I don't like to wipe too hard. That'll come off [? eventually]". There is further conversation between Ursula and the midwife which is inaudible, as the voices are soft and the baby is crying loudly. Ulrich puts his hand out and touches the baby for about 12 seconds. He then withdraws his hand and rests it on the edge of the 'baby bath'.

The midwife says: "Yeah, that's enough. We'll get her out. I can feel a cool breeze on me underneath here". The midwife lifts the baby from the 'baby bath' and places the baby on the table of the resuscitation trolley. She dries the baby while chatting to the parents, particularly Ulrich, about the fluctuating temperature in the room. The midwife remarks: "She's just pretending she's going to sleep so we won't bother her anymore. I've just got to measure her — get how long she is. Her temperature." The adults continue to chat during the drying process. Ulrich leaves the bathing area, picks up his camera and lines the naked baby up for a photograph. When she has completely dried the baby, the midwife removes the towel, walks towards the dirty linen bag and then throws it into the bag.

As the midwife returns to the bathing area, she brings the bassinet with her. The midwife asks the parents: "Do you want her to have the injection of Vitamin K?". The parents respond with a "Yeah". The midwife comments: "They don't usually cry when you give this to them". The injection is given to the baby. The midwife then asks Ursula: "Now, can you just check her armbands that I am going to put on her. This one first, then this

one". Ursula queries: "What does BIO⁹²", but she is interrupted by the midwife who says "Baby stroke O. Baby of and that's your name."

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 $^{^{92}}$ This is usually written as B/O, but to Ursula who is unfamiliar with the abbreviation, it looked like BIO.

Ursula comments: "I need to change [my perineal pads]". She walks over to the shower/toilet area and queries: "Do you normally bleed this much?". The midwife responds with: "Yeah. Have you got the five pads⁹³ on?". Ursula answers: "No. I've got three on". Ursula is instructed to: "Put the whole lot on". She disappears into the shower/toilet. The midwife continues: "I'll check your tummy and your loss in a minute".

The midwife turns around and brings the bassinet closer to the resuscitation trolley. Ulrich is standing at the head of the cot and running his fingers along the baby measurer. The midwife picks up the baby, carries her to the bassinet, then measures her length. The midwife picks up the baby and returns her to the table of the resuscitation trolley. Ulrich asks: "How long is she?". The midwife gives him the answer in both centimetres and inches and responds to a query from Ursula (who is still in the shower/toilet) that it is an average length. Ulrich joins the midwife at the resuscitation trolley. The midwife starts to dress the baby. Shortly afterwards they are joined by Ursula who removes the baby measurer from the bassinet and places it on the lounge chair. The couple and the midwife talk about the "resilience" and the "strength" of babies to be able to cope with labour. When completely dressed and wrapped in bunny-rugs the baby is given to Ursula who walks over to the lounge chair, picks up the baby measurer and hands it to Ulrich. Ulrich plays with the baby measurer for a few moments, folds it and then places it in the tray of the bassinet. Ursula sits in the lounge chair and offers the baby her breast.

Meanwhile, the midwife picks up the extra bunny-rugs and places them on the bottom tray of the bassinet. She picks up the 'baby bath', carries it over to the sink and empties the water into the hand basin. The midwife wipes the 'baby bath' with a cloth which is then discarded into the contaminated rubbish bin. The bath is dried on the resuscitation trolley and then placed back onto the small dressing trolley. The remaining linen on the resuscitation trolley is discarded into the linen bag. The midwife obtains a fresh cloth and using the spray bottle containing neutral detergent cleans the 'baby bath'. Using the same cloth she cleans the top shelf of the stainless steel trolley. The midwife places the 'baby

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⁹³ The sterilized perineal pads are provided in packets containing five pads. The pads are soft, but much thinner than the normal commercial brands and so do not absorb as much of the bloody vaginal loss.

bath', upside down, on the top shelf of the trolley. This indicates to other midwifery staff that the 'baby bath' has been cleaned. The bottom shelf of the small trolley is then cleaned. The midwife looks around for the baby measurer, locates it and removes it to the resuscitation trolley where she cleans it using the neutral detergent and the same cloth. The baby measurer is then placed back on the bottom shelf of the small dressing trolley. The midwife then proceeds to clean the resuscitation trolley with the neutral detergent and the cloth. When she has finished this chore, the midwife walks over to the contaminated rubbish bin where she removes and discards her gloves and sleeves. There is a brief discussion about a meal for Ursula and the possibility of Ulrich staying for the night with Ursula in the birth centre. The midwife then leaves the room taking the small dressing trolley which holds the items used for the baby's first bath.

VIGNETTE 7: LABOUR AND BIRTH IS DIRTY WORK

In each of these births, the description follows the women from around the time they were considered to be in the second stage of labour, that is, able to push their baby out, till the cleaning up process is complete, or the tape is turned off. References to cleanliness and the infection control aspects of the midwives` work have been removed unless it is relevant to the discussion on work.

Vignette 7a: "I don't know what I want"

Neeta laboured in the delivery suite. Almost five hours after her induction, Neeta is in the shower with Nick. She is groaning and screaming with her contractions which are coming every two minutes. For analgesia, Neeta used mobility, massage, pelvic rocking, hot showers ⁹⁴, and vocalisation. The midwife, dressed in theatre clothes, is writing in Neeta's chart. Neeta's mother is present, sitting in a chair beside the bed.

Throughout, Nick supported Neeta by providing her with drinks, wet clothes and ice to suck, and moped her brow. Later he held the mirror so Neeta could view the progress she made with her contractions. Nick also assisted the midwife by providing her with fresh

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The delivery suite rooms do not have a bath

water proofed under sheets and sterile pads, turning on the spotlight, and later helped with the monitor strap. Neeta's mother provided support for Neeta when she was in the room. The midwife goes to Neeta who says: "I can't do this. It hurts too much". The midwife suggests Neeta leaves the shower, is assessed and queries her about what she wants for pain relief. Neeta responses: "I don't know", but with the next contraction she cries: "I can't, I can't. (Pause) Oh, my bum". Neeta, leaves the shower area wearing a long sleeved nightgown that reaches the tops of her thighs, and is pushing the pole holding her intravenous infusion and the syringe pump. Neeta complains: "I don't know what I want – stand, or lay, or what". The midwife offers suggestions, but notes: "It is up to you".

Neeta has another contraction and is involuntary pushing. The midwife tells her: "That's the girl. That's it. Try not to push". Neeta says: "I can't help it". The midwife is chanting continually during the contraction – while observing the perineal area during and following the contraction. Neeta is crying and yells: "Shut up". When Neeta has recovered, the midwife informs her she is getting close to second stage and "getting this labour over and done with". Neeta demands to know: "How far away ... ?". Neeta is told she may "not be so well dilated" but without doing a vaginal examination the midwife "can't tell". Neeta is asked if she wants an examination. Neeta is distressed and states: "I don't know what to do". The midwife encourages Neeta to "Breathe through it anyway you know how. Breathe through it. Don't push too hard". Neeta agrees to a vaginal examination. The midwife tells her it will be more accurate and easily done, if she is on the bed. Neeta's mother leaves the room. Neeta, with difficulty, gets onto the bed. The midwife puts on a sterile glove on her right hand, then examines Neeta vaginally. The midwife uses the theatre spotlight to watch the vulval orifice. Neeta is told she is ready to push and the baby's "not far away". The midwife removes her glove and disposes of it. The midwife says: "We'll get up". She tells Neeta she can push, if she wants to as "The baby's in a great position you wanted to deliver on the birth stool". Because of the pain Neeta is unable to choose a position. The midwife turns on the spot light again. Neeta becomes angry with the midwife, but pushes with her contractions. The midwife and Nick observe the perineum. The midwife comments: "The baby's head is starting to come", then continues her instructions: "It's alright It's alright. Push along with it. Give into your body, and you do what it wants you to do. Trust in your body and this baby will be here soon".

The midwife starts to prepare for the birth on a stool, but stops when Neeta says: "I couldn't move". Neeta is told she can change her mind anytime. The midwife listens to the baby's heart beat. Neeta is given a combination of instructions and a commentary on the baby's progress and her pushing. The midwife adjusts the syntocinon infusion. She prepares the neonatal resuscitation trolley, the delivery trolley which she brings closer towards the bed, and the syntocinon injection to be given after the birth. The midwife comments she was "caught ... off guard", as Neeta is "ten centimetres. You're in second stage. Moving very quickly". The midwife has difficulty in finding the baby's heart rate, so reapplies the monitoring belt around Neeta's lower pelvis, and tells to Neeta: "Its very important to monitor this little baby now". The fetal monitoring is now being done continuously.

The midwife tells Neeta — "It's starting to come up now. That's it. That's it push it out"; ".... [Neeta] push when you want to push, OK?"; "You're doing beautifully". "That's the girl. That's it. Push when you want to push"; "That's the girl"; "It's alright. Just push into it. That's the way. That's it. There's the head. There's a nice bit of hair there". While pushing, Neeta splutters: "I can't. Jesus. I'm gonna to burst". The midwife tells her: "There's burning and some stretching now, OK?" Nick excitedly comments: "There it is", and later to Neeta: "That's it". Although Neeta tells him to: "Shut up", Nick smiles. When Neeta feels she cannot push, the midwife tells her: "OK. Just let it sit there and let it stretch up". Neeta asks for a photograph of the view of the baby. The midwife offers her a mirror so she can view the baby's progress and her pushing efforts. Neeta also wants her glasses so she can see. The midwife 'dresses up' for the birth and buzzes for an assistant of the property of the property

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⁹⁵ The assisting midwife had declined to participate in the study and so I was surprised to see her on the videotape. When I asked the assisting midwife about her changed decision, she told me she participated to support her friend, the midwife, and not the research. The hospital policy required two health professionals to be present at each birth and for the delivery of the placenta (Study Area Health Service, 1994). During the birth, whenever possible, she stayed out of camera range.

Neeta cries: "It hurts". The midwife tells her: "It's alright It's alright You're stretching up beautifully". "Is it coming on?", asks Neeta. The midwife replies: "It's coming on. I can see it right now. Its on view now". The midwife arranges her equipment on the bed. The midwife asks Neeta: "Feeling the stretch now? Yes?". Neeta agrees. The baby's heart rate can be heard slowing to approximately 86 and the midwife tells Neeta: "It would be **really good**, if you could push really hard with the next one and just bring it up that little bit further. Baby's starting to get a little bit tired there". The midwife continues: "We're not far away. The baby's head is just sitting inside the vagina there".

The assisting midwife takes the chart to the back of the room. When the next contraction comes the midwife says: "OK. Whenever you're ready. That's it. Open your pelvis up". With the latter comment the midwife uses the heel of both of her hands to push Neeta's right thigh back towards her abdomen. The midwife tells Nick at what angle to hold the mirror so Neeta can see the baby's head. The midwife address Neeta: "That's the girl. Edge the baby's head up. That's beautiful. Keep going for me. Hold it there and give it some more now". Neeta screams. "No. It's alright, it's alright", the midwife tells her. "Oh, Jesus", says Neeta. The midwife continues to talk: "... [Neeta] give us a push. Come on now. Give us a push. I'm touching you now. Alright. Another one there?". There is no response from Neeta. The midwife informs Neeta: "I'd appreciate another push if you could manage it. A big one. That's the girl. OK See the baby's head?". Neeta looks but cannot see the baby. The midwife gives further instructions to Nick on the required angle of the mirror. Neeta stares at the mirror and queries: "What's all that? Is that it's head?". The midwife admits: "That's it's head. Your about to delivery your baby. OK? (pause) OK?". Neeta asks the midwife: "Is the baby alright?". The midwife answers: "The baby's fine.", then continues: "I'd like, I'd really like a big hard push".

The midwife tells her: "Hold there and again. A big one". Neeta screams, while the midwife applies pressure to the head, and rapidly tells Neeta to: "Pant, pant, pant, pant. Pant. Don't push. Don't push". The head is born, then the shoulders. The midwife tells Nick: "Put your hands here". The midwife and Nick lift the baby onto Neeta's abdomen, as Neeta cries: "Oh my God. Oh my God. I can't believe it". The baby cries almost immediately. The assisting midwife partially covers the baby with the towel. She

checks the intravenous infusion, then moves out of sight. The midwife says a general "Congratulations". The assisting midwife gives the oxytocic drug. The midwife tells Neeta about the injection as it is being administered. The assisting midwife moves out of view. Neeta says: "I can't believe I delivered it". The midwife and Neeta's mother give Nick a big grin. The midwife removes the electronic monitoring equipment from Neeta's abdomen. Neeta's mother reminds Nick to take a photograph. Nick is keen to comply, but looks at his dirty hands, and says: "You might want to". Neeta's mother provides Nick with several clean tissues with which he wipes his hands. The mirror is removed. Neeta's mother takes a photograph of Neeta's upper body with her baby in her arms. The midwife wipes the baby's face while telling Neeta: "The head was just sitting there". Neeta shakes her head and repeats: "I can't believe it". The midwife laughs. Neeta's mother tells Nick, who is still standing at the end of the bed, to take a photograph of Neeta, the baby and the midwife. The midwife, however, suggests a side angle as: "It's beautiful around this side". The midwife indicates a position to the right of Neeta. The midwife turns to Neeta and continues: "It's over. It's all over". Neeta says: "I can't believe it. Oh, I can't believe it".

The midwife states: "The pain's gone now". Neeta's only response is a "Hmm", but then she grins and says to Nick: "Look. Look what we've got". Nick asks: "Is it a girl?" The midwife moves the towel covering the baby aside. All the family lean towards the baby. Because the midwife referred to the baby as 'she' they are surprised to see that they have a boy. There is soft laughter from the family. The baby's cord is cut while Neeta's mother takes a photograph. The midwife says: "Remember that we talked about this [the delivery of the placenta]?" The midwife checks that the couple are still happy for the placenta⁹⁶ to be used for research. As the midwife delivers the afterbirth, she announces: "No bones". Neeta's mother pats Nick on the back. Neeta asks the midwife: "What time?". She is told the assisting midwife would have got "all that as I was a little occupied. I apologise for scurrying around and not being supportive right at the end, but I had to get setup. I was hoping you would be fully dilated".

⁹⁶ Placental research has been ongoing for many years in the Obstetric and Gynaecology laboratories which are renowned for their work.

The midwife tells Neeta she is going to check her "tummy". The midwife then tells Neeta she needs to check for any damage. The midwife asks for more light, "right into the vagina, so I can see what I am doing". Nick obliges, turning on the theatre spot light and directing its beam on Neeta's perineum. The midwife examines the genital tract. "There's a [labial] graze up in there". The midwife tells Neeta: "Just touching you again".

'The placenta man' ⁹⁷ arrives. The midwife asks if the family want to see the placenta before it leaves the room. They do, so the midwife inspects, then describes the various parts of the placenta. It is placed in a specimen bucket, sealed and given to 'the placenta man'. The midwife discards her gloves, opens a fresh pair of sterile gloves and puts them on. She compliments Neeta on her cleverness, especially on managing without drugs. The midwife prepares the delivery trolley for the suturing. Neeta states: "I didn't want to". The midwife, as she does some 'spot' cleaning, tells the family: "You guys are a great team. Congratulations. You really worked well together. And, ahem ... [Nick] kept a nice and balanced approach, very nice, very good with ... Neeta". The midwife tells them a doctor will do the stitching. She picks up the birthing mat and exits the room saying: "I'll be back in a tick". The family continue to admire the baby and take photographs.

The camera is turned off as the doctor declined to participate in the study.

Vignette 7b: "Big push"

Hilary laboured in the birth centre, either kneeling on the vinyl mat and leaning into pillows on the bed, or in the bath. Hilary` waters broke and the liquor was meconium stained. Hugh holds Hilary`s hand but he sits away from her, sometimes he is not in close contact with her⁹⁸. Hugh, however, instantly carries out any request from Hilary. There are long

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⁹⁷ The 'placenta man' is the name given to the laboratory staff member, within the Obstetrics and Gynaecology Department, who comes to the delivery suite and birth centre requesting placentas for research. Initially, it was a male researcher and some staff continue to use the male term.

⁹⁸ I commented to the midwife that they were not a physically close couple. Her reply was "That's how they wanted it". Hilary needed Hugh there, but not too close as she wanted to focus on the labour. The midwife declared that both Hilary and Hugh were very happy with how Hilary managed her labour.

period of silences between the couple and the independent midwife. Hilary is wearing a short nightgown. The midwife is wearing shorts, shirt and sandals. Hilary is having contractions every four to five minutes and grunting with them.

The midwife enters, walks to where she can view Hilary's perineum. She sits on the floor, then informs Hilary and Hugh that she will notify the paediatrician to be present at the birth because of the meconium. The midwife tells them that depending on the condition of the baby's water, how thick the meconium is, the baby may need to go to the resuscitation trolley to be checked. Hilary has another contraction, and she moans and grunts with it. The midwife tells Hilary to breathe through the contractions if she can, but she can push if she has to, and that the contractions will "come in waves". The midwife asks Hilary: "Do you feel like pushing or is it just feeling pressure?". Hilary is told she should push only with a contraction. When listening to the fetal / baby's heart rate, the midwife passes her ungloved hand between Hilary's legs and positions the small, hand held ultrasound on the woman's abdomen. When she has completed her check she withdraws her hand, places the ultrasound on the mat, then usually wipes her fingers on the sheet.

The midwife sits on the floor waiting. She tells Hilary: "The urge is there but it's not strong". When the contraction comes she leans forward to better view Hilary's perineum. Hilary is told: "Big push. Keep it going". The midwife repeats these or similar phrases, but tells Hilary: "with the next contraction I'm just going to feel and see if there is any cervix there. OK?". The midwife, using sterile gloves, examines Hilary while she is kneeling and tells her: "Big push. Go on push. Big push. Come on. Keep going. Rest. You're pushing beautifully. Those contractions aren't coming that often, and that's just slowing it down. Bubby actually not's that far away. I'm just going to put pressure on your cervix at the front, 'cause sometimes that just helps. Hopefully, with the next push the cervix will stay up. Just relax". The cervix remains "gone". The midwife tells Hilary: "Bubby's just in there. OK? Not very far at all. When you get those pushes, push right into your bottom. When you feel like letting it go, just give it everything you've got 'cause you're starting to get tired. We don't want to be doing this for the rest of the night".

The midwife queries Hilary about a change of position to a standing one, or using the birth stool. Hilary sits on the birth stool. Hugh sits on the edge of the bath. The midwife then sits on the floor in front of Hilary. With contractions the midwife bends down so she can more easily view Hilary's perineum. The midwife provides a commentary with each contraction: "Give it everything you've got"; "OK Just rest. You're getting tired. You've got to give it everything you've got. **More** than you've got. You've got the energy to do this [??] Push with the pain - one energy". The midwife prepares the delivery trolley, then moves it close to where she has been sitting on the floor. She places the call buzzer on the delivery trolley. With the contractions, the midwife continues to bend down to assess Hilary's progress. The midwife adjusts her hair so it is confined, then removes her sandals. Hilary is told: "Come on. Big push. Come on. Push down. Beautiful. Beautiful. Keep it going. Well done. And a breath. Well done. That's the way. Beautiful. Fantastic", and with the next contraction: "That's the way. Push. Keep it going. Keep it going. Beautiful. Beautiful. Stop. Stop, stop. Breathe. Breathe. Breathe". The midwife calls for assistance. The assisting midwife responds and is asked to call the paediatrician. The midwife dons a pair of sterile gloves while the assisting midwife puts on a plastic apron and gloves. The neonatal intensive care person arrives. The midwife gets Hugh to sit on the edge of the bed so he can witness the birth. With the next contraction the baby's head is born and the suction is used. The baby is born with the next contraction, the midwife cuts the cord, then the assisting midwife carries him at arms length across to the resuscitation trolley. The midwife says: "Well done". Hugh stands, looks towards the trolley, then announces: "It's a little boy".

The midwife goes over to the resuscitation trolley. She returns to Hilary and sits down in her usual spot in front of her and begins to chat. The midwife wipes her hands and forearms on a towel. The assisting midwife brings Hilary her baby. The assisting midwife strips the resuscitation trolley. The neonatal person tells the midwife what he found, then leaves the room. The midwife asks the assisting midwife to check the ampoule of syntocinon, but does not want it to be given. The assisting midwife offers her "Congratulations" to the parents, removes her apron and gloves, then exits the room.

The midwife suggests: "You can ahem, pop her onto the breast and see whether he's interested. Just let him nuzzle". Hilary has trouble aligning the baby's mouth with her breast. The midwife loosens the baby from his wraps and tilts him towards Hilary's left breast. The midwife leans back saying: "Even if you just let him nuzzle and don't worry about it just yet".

The midwife delivers the placenta. Hilary cries out: "Arghh". The midwife states: "It's a bit of a shock when it happens". The midwife states: "It's the mopping effect of the you know [? afterbirth]. The midwife tips the afterbirth onto the towelling. She examines the placenta and shows the parents the various anatomical features of the organ. Hugh is fascinated. He asks several questions and makes a statement about the disposal of the placenta: "Do you – it goes away to get (pause) studied, or not". The midwife's reply is: "They actually get munched". When Hugh does not understand this term, the midwife elaborates: "Munched into little pieces. And then all of it is basically wasted – they get chucked". Hugh comments: "I thought they were used in university studies". The midwife agrees: "They do [use] them, ahem, well, they usually work during the week, nine to five, so there is not really much going on at the moment. If you want to take it home with you?". Hugh, with a little laugh, says: "Nup". The midwife returns the afterbirth to the kidney shaped dish, then places it on the towel on the edge of the bath. She removes her bloody gloves and drops them in the contaminated waste bin.

Hilary gives the baby to Hugh. The midwife prepares the bed for Hilary, centring the water proofed under-sheet on the draw sheet, and positioning the pillows at the head of the bed. The midwife assists Hilary to the bed, covers her upper body with a sheet, then a blanket. Hilary is shaking, which the midwife tells her is due to shock. The midwife announces that she will "have a look at this [tear]". The midwife puts on a fresh pair of sterile gloves and examines Hilary's genital tract. The midwife observes "You can pull it [the flap of tissue] back [into position] on this side. (Pause) It is more on the inside than the outside, OK? (? indecipherable) It's more on the inside. It's not a big tear. Its only a small tear". She removes her gloves and places them in the contaminated waste bin. As the midwife is walking out of the room, Hilary calls out: "Can I cover up for a minute?". The midwife returns to Hilary and covers her with the blanket and sheet.

The midwife prepares for the suturing. Hilary quizzes the midwife: "So how much did he weigh?". The midwife responds with: "We haven't weighed him yet. Do you want to know now? The scales are just there if you want". Hilary says "No". The midwife continues: "He is just a nice size". The midwife puts on new sterile gloves, positions Hilary and begins the repair — she flinches with the first touch. The midwife explains that "This is time consuming. When we do a repair, but because we do it in layers, an inside vaginal layer then you do an outside skin layer. [?] The outside — [? have a look sometime] so it's going to take me some time to do it right, ??? because it [the tear] looks odd". Hilary does not want her perineum to "look odd". Hilary asks: "What is the problem with its [? shape]". The midwife responds: "Well. It will heal. It won't have any problems healing. Ahem, I suppose you just got to accept that the anatomy is **not** going to be perfect". The midwife has not quite finished when Hilary interjects: "But will it effect when I have intercourse?". The midwife reassures her that "It shouldn't". On completion of the suturing the midwife disposes of her needles immediately, some rubbish goes into the bin, some equipment is put on the trolley.

The midwife asks Hilary what she would like to do first, a shower or breast feed. Hilary is undecided. Hilary asks: "Am I a mess?". The midwife answers "Yes – down the bottom". She suggests: "Have a quick one". Hilary rejoins: "It's just, I don't think I have the energy". The midwife tells Hilary: "Well, just go on your side. Don't worry about what's underneath [the covers]." She positions the baby on his side facing Hilary's breast and encourages him to suckle. The baby feeds. Hugh takes a photograph.

The midwife acquires another pair of clean gloves. When Hilary requests a drink of water, the midwife suggests Hugh gets a fruit juice from their supplies as "it has sugar in it". The midwife glances at the baby then starts to clean up the bloody mess from the birth. She accidentally walks in some blood, glances at the sole of her foot, then keeps walking. The midwife potters as she cleans the area. Hilary and Hugh question the midwife about the effects of the meconium and about the actual delivery. The midwife stops her cleaning and chats to them about meconium and the birth. Hugh leaves the room. On removing her gloves, the midwife scrubs her forearms.

The midwife sits to write her notes and has a discussion with Hilary about what time her labour started. Hilary decides on a time. Hilary admits: "I don't know that I'd want to relive that pushing part", and later, "I was worn out". The midwife puts her sandals on, then searches for Hugh. The midwife returns with clean linen, but without Hugh. The midwife brings in a small trolley with the 'baby bath' on it. Hugh returns. The baby is bathed by the midwife who does not wear gloves. She shows the parents how to clean the umbilical stump, then wraps the baby in clean linen. The baby is weighed, measured, identified and given his vitamin K injection. The midwife hands the baby to Hugh.

Hilary announces: "I've got blood pouring from me". The midwife explains: "You've been laying down, and while you're lying down the blood's been pooling in your vagina. OK?". The midwife palpates Hilary's abdomen, inspects the blood loss on the perineal pads, then positions a water proofed under-sheet between her legs, making a temporary nappy. The midwife assists Hilary to the toilet / shower area. The 'nappy' is kept in position by Hilary during the walk to the toilet / shower area where Hilary is encouraged to empty her bladder. Hugh is directed by the midwife to find Hilary's toiletries. Hugh assists Hilary in the shower. The midwife recommences her cleaning duties and removes the contaminated equipment. Hilary completes her shower and returns to the room. She directs Hugh to remove her dirty towels and pads from the toilet / shower area. He disposes of them in the correct bins. Hilary asks Hugh to get her an under-sheet from the bedside locker. He does, then helps her put it on, over her underpants, as a temporary nappy. Hilary then gets into the bed and nurses the baby. Hugh covers Hilary with a clean blanket. Hilary puts the baby to her left breast.

The tape was turned off at this point⁹⁹.

SUMMARY / CONCLUSION

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⁹⁹ It was just past the change of shift time. The independent midwife would be handing the care of Hilary and her baby over to a birth centre midwife. This midwife declined to participate in the study.

In this chapter various aspects of labour and birth are described. In Vignette 1, Vera is concerned about maintaining her modesty and preventing her breasts and genitalia being exposed to view, but particularly the camera's view. She demonstrates great control and determination as she strives to achieve her goal. Her partner, Vince supports her whenever possible. Vignette 2 portrays Jill's experience of undergoing a vaginal examination and the application of a scalp electrode on the fetal / baby's head. In this vignette, it is evident that Jill is relatively powerless, while her leaking body is a problem and the midwife works to control, contain and clean the resulting dirt associated with the examination. irrationality of the "dress up" process and the hierarchal natural of childbirth is depicted in Vignette 3. Vignette 4 focuses on all that is considered "yuck" or dirty during the birth. This is the bloody body fluids, body products released during birth, including the newborn baby and the placenta, and even the video tapes of the birth. Although the couple and the midwives use different words to describe the "yuck" of birth, there does not seem to be much difference in their understanding of the dirt associated with birth. The breast feeding lesson in Vignette 5 illustrates how accepting the women and their families are of the knowledge health professionals, particularly midwives, impart to them, but it also demonstrates that breast feeding is treated as dirty in our society. The dirtiness of the newborn baby is highlighted in *Vignette* 6, so much so that he is freely touch only by his mother until he has been cleaned. Vignette 7 outlines the various difficult work aspects of the birth for the woman and the midwife. Embedded in the vignettes is the constant use of technology, but particularly medical technology. In all the vignettes, the power relationships between the participants are overt or covert, while surveillance of the midwives, women and their babies is constant.

CHAPTER 8

TREATED LIKE DIRT

INTRODUCTION

This chapter provides an analysis of the discourses and discursive practices that dictate and prescribe what is clean and dirty in relation to the labouring women ¹⁰⁰, their babies and the attending health professionals. The analysis is based on the vignettes, although there is some reference to other incidents on the video tapes. The analysis will demonstrate that the women, their body products, including the baby, are both powerful and dangerous due to their perceived dirtiness or contaminating effects. This perceived dirtiness means that every effort is made to ensure that the 'dirt' is controlled, contained, and cleansed or removed. The management of the dirt of birth is undertaken by the midwife who manages the dirt by managing the woman and her baby. The dirty work aspect of labour and birth is discussed further in Chapter 9. What becomes clear in this analysis is that there are both parental and professional rituals surrounding birth and surrounding the dirt of birth. This chapter also illustrates the hierarchical nature of childbirth and how everyone accepts their place in its organization. Even Vera who struggled for what she desired, accepted the status quo.

WOMEN ARE POWERFUL AND DANGEROUS

In this section the discussion focusses on how the women, both during labour and when newly delivered, and their body parts and products, including the baby, are treated as though they are a source of dirt, pollution, contamination or defilement. In particular, the

The term 'labouring women' has been used for the women on the videotapes when in labour and postnatally. Although the women have given birth, they are in the fourth stage of labour, the period when their bodies adjust to their non-pregnant state. This period immediately follows the birth and is defined as lasting from one hour (S. McKay, 1993, p. 215) to several "hours after delivery while the mother remains on the labour ward or, if delivered at home while the midwife remains in attendance" (Silverton, 1993, pp. 333-334).

disgust that Meigs (1978) referred to in association with the fear of the decaying power of bodily emissions is evident in the data. Throughout the discussion it is evident that the woman's body and the newborn baby's body both leak, providing graphic examples of Kubie's (1937) notion of the body as a dirt factory. During the childbirth process the boundaries of both the woman and the baby are changed. Boundary violations, are a cause of pollution, according to Enzensberger (1972), and occur through contact, excretion, intermingling, decay, reversal of order; and mass. As Goffman (1971, p. 69) indicated, however, "the glance" can cause multiple boundary violations, and the possibility of visual boundary violations is evident in the sections, *The "naughty bits"* and *Establishing a place*.

The "naughty bits"

The phrase Vera used constantly, "no naughty bits" became the title of *Vignette 1*, and is, I have assumed, a euphemism for her breasts and genitalia. My interpretation was confirmed when Vera used the bikini in labour. I never asked her to explain these phrases as I believed I understood what she was talking about and felt she would be embarrassed if I asked her to clarify what she meant. According to Delbridge (1997, p. 1436), a secondary meaning for "naughty" is "improper, obscene", while the colloquial meaning is "an act of sexual intercourse". Thus, the "naughty bits", as Vera defines them, are those parts of the body which are associated with sexual intercourse and can be considered improper or obscene. Another way of referring to the "naughty bits" of the body would be to substitute this phrase with the phrase, the 'dirty bits'. This attitude to the breasts and genitalia is not unusual, and is a reflection of the disgust the Victorians had for public sexuality and reproduction (V. Bullough & Voght, 1976). As Foucault (1976, p. 3) noted, we are still dominated by a prudish "Victorian regime".

For Rubin (1984, p. 17) the body boundaries consist of the distance of at least two centimetres from the skin, hair and nails. She considered that this distance was increased at the body orifices, and was further increased in the area of the neck, breasts and genitalia. One of the protective measures of the body is to move away from a threatening object or person. Vera is unable to do this because of her labour and approaching birth. Another protective measure is to close the vulnerable area so it cannot be penetrated. Again this is

not possible for Vera, but the use of the bikini and the strategic placement of the bed and sheet, allows her to prevent visual contact with her breasts and genitalia.

From the vignette, it is clear that the audience for the parents' videotape will be Vera and Vince's children and some close friends, presumably male and female. The children were young, seven years and under. A possible reason for Vera's modesty and the use of a bikini is that her children had never seen her naked. Another possible reason is that she did not wish them to see her as a sexual person, but wanted them to look at the video from a family or an educational viewpoint. As Miller (1997) has pointed out, the notion of older people indulging in intercourse, is a source of disgust to children and adolescents, while childbirth is proof that intercourse has occurred. Perhaps, as suggested by Foucault (1976), Vera considered that the bedroom was the appropriate place for anything sexual within the family to occur. The naked body is also considered a source of disgust to some people (W. I. Miller, 1997), while a photograph of a naked, pregnant body, Demi Moore's, on the front cover of Vanity Fair (Leibovitz, 1991) caused a furore when published with some retailers refusing to place the magazine on the shelves and others insisting that it must be wrapped in brown paper to avoid offending customers (Forseter, 1991). More recently the Australian singer Marina Prior, while dressed in her pajamas, bared her pregnant abdomen to the camera to the shock of some of her fans (George, 2001). The controversy about a nude pregnant body, however, aided in the magazine circulation wars (Huhn, 1993) and has since been parodied to sell the movie, *Naked Gun 33* (McMorris, 1996; Swetsky, 1997).

Vera is not alone in her beliefs about female genitalia. This is seen in *Vignette 7a: Labour and birth is dirty work* – "*I don't know what I want*". In this vignette Nick is about to take a full frontal photograph of Neeta with her legs widespread and holding her baby, when he is directed by the midwife to: "Come around here and take it. It's beautiful around this side". The photograph taken by Nick from his new position at Neeta's right side and at her waist means he will not be able to include a view of Neeta's genitalia. The midwife's position at Neeta' hip-thigh area does not allow him to be positioned any lower. Similarly, when Fay is about to be sutured and Fergus is sitting where he will have a full frontal view of her genitalia, Fay instructs Fergus: "Why don't you sit over there on the bath". Postnatally, Fay was also careful to cover herself when anyone came into the room.

The dirty women

The material presented in the vignettes demonstrates how the perception of the women and the unwashed babies as dirty is also translated into the health professionals behaviour. In *Vignette 2: Getting on with business*, when Jill is preparing for the vaginal examination, she removes her pants which contain the perineal pads stained with meconium, liquor, and possibly, blood and mucus. Because of her advanced pregnant state and her labour, Jill is unable to remove her pants completely. She requires assistance. The midwife, however, once she has seen the pads drop, instead of going immediately to Jill's assistance, obtains a pair of rubber gloves and puts them on. This is what has been stressed repeatedly in the lectures given to the staff on infection control: Staff must don protective equipment prior to assisting patients, regardless of the circumstances, or the emergency. It is left to Jack to assist Jill. The registrar knew that Jill required assistance, but she also kept her distance while observing the descent of the pants containing the pads. All she was interested in was what was on the perineal pads. This was of interest to the midwife too. Yet it is clear that if any health professional was to ultimately touch the pad it would be, and it was, the midwife.

Similarly, although during *Vignette 6: Almost untouchable*, Ursula has showered and is presumably clean, she is still considered a danger to the staff because of her leaking body. Ursula makes a comment about changing her pads. She queries the amount of her blood loss and if it is normal. Although the midwife responds that it is, she queries her about the number of pads she is wearing. When she learns that Ursula has used only three pads, she tells her to use all the pads in the packet, five. The practical reasons for using five of the thin pads, rather than three, are obvious. If Ursula uses three pads, she is more likely to need to change her pads more frequently, while it is more likely that she will soil her clothes, the bedding and the floor. This would entail more cleaning and the disposal of soiled linen for the midwife. If Ursula wears five pads at a time, she will reduce the risk of the midwife having to clean up after her. The midwives use a similar approach when providing care for Fay and for Hilary in *Vignette 7b: Labour and birth is dirty work* – "Big push", to ensure that "drips" of blood are prevented or reduced.

Ursula is also seen as a source of dirt. When she begins to bath her baby, however, the complexity of this issue develops further. She is not offered any protective apparel. She is encouraged to bath her baby with her bare hands. She is not offered protection because much of the material that is being washed off the baby originated with her. Ursula is constructed as dirty as her baby.

The dirty baby

There is a continuous reminder that the dirty baby is a product of the dirty woman. The baby in Vignette 6: Almost untouchable, is such a source of dirt that she requires a bath as part of her initiation process, that is, a ceremony of admission to the human race. The baby is 'cleaned' before it can be made presentable to other humans. For example, the grandparents although clearly pleased to see the baby so soon after her birth, do not touch her skin, they only touch the bunny rugs. While the baby is dried at birth, she may show signs of blood and other 'dirt' on her body. She does not become 'clean' or completely clean till she is bathed. That she is not presentable becomes obvious when neither the baby's father nor her grandparents are willing to clean her after they discover her "first poo". She is rewrapped with her "first poo"! Ulrich could consider that cleaning the baby after her bowel motion is not his job, but a job for either Ursula or the midwife. It is doubtful that Ulrich would expect Ursula to immediately commence the full care of the baby after such a long labour. Thus, it seems obvious that the dirty nappy was left for the midwife to attend. While it is understandable that the father does not do it, he probably has no experience of changing a dirty nappy, particularly one that contains the thick, sticky, blackish, green tar-like substance, both of the grandmothers, however, would be experienced at changing nappies. Yet neither offer, nor show the slightest inclination, to changing the nappy. Ursula's mother does assist with rewrapping the baby in her bunny rugs, but she avoids touching the baby's skin.

The baby's weight and measurements were important information to the family and initially they were "game" to do it themselves. Their keenness to know the baby's vital statics is outweighed, however, by their realisation that they would have to clean her bottom before they could weigh her and would possibly dirty their hands in the process. The father and the grandparents could have weighed the baby after wiping most of her "first poo" off her

bottom, but its presence was enough to stop them from determining her weight. They 'made do' with an estimated weight of about eight pounds.

That the baby is a source of dirt is very obvious throughout the vignette. She becomes presentable once she has been cleaned, that is, those products (blood, mucus, faeces, urine) which are on the body of the baby are removed. The boundaries of the baby are cleaned by removing these products. That the baby is considered dirty can be assumed by the way the family members are happy to pick her up while she is wrapped, but are reluctant to touch her body until she has been bathed. At the birth, Ursula reached for her baby while Ulrich placed his hands over those of Ursula when she was holding the baby on her abdomen. A few seconds later the midwife used a bunny rug to dry the baby. Ulrich then used the bunny rug to hold the baby immediately it was placed over her. He first touched the baby's skin when the midwife dragged the bunny rug away from the baby's upper body and placed it over the lower part of the baby's body exposing her face to her parents. At his first opportunity, Ulrich removed his hand from the baby and again either used Ursula's hand or the bunny rug to hold the baby. It is impossible to tell whether Ulrich held the cord while he was cutting it. The midwife was holding the cord for him and directing him where to cut. It is possible that the cord did not seem as dirty as the baby, because the cord bathes in 'the waters' or the liquor and usually looks clean.

Once the baby is naked, the midwife wants to weigh her, so she carries the baby over to the scales. Most importantly, because she is not wearing a protective apron, the baby is held well away from the midwife's body, so that she will not become contaminated by any body products on the baby. Similarly, when returning the baby to the resuscitation trolley, the midwife ensures she is held upright and away from the midwife's body (see illustration opposite).

During the bathing process, Ulrich uses his finger to point to the baby's ear, but does not touch her ear and quickly withdraws his finger. Towards the end of the bathing session, Ulrich touches the baby for about 12 seconds. It is as if he had to wait till the baby was clean before he could touch her. Similarly, although the baby was naked during her initial

examination, it is only after the bath has been completed and the clean baby is lying on the resuscitation trolley, that Ulrich decides to photograph her.

At one stage during the bathing process, the midwife picks up the baby and cuddles her because she is crying. It is worth noting, however, that although the baby was crying earlier, she was not cuddled until her face and hair were washed and she was wrapped in a bunny rug. It is obvious that the midwife felt it was safe to cuddle the baby at this stage, as the only parts of the baby's body she would be exposed to were those that had been cleaned.

Similarly in *Vignette 5:* "Would you like to feed him now?", when Neeta's midwife announces to everyone in the room: "Lets get you ready young Nick, now that you're nice and alert", she is confirming that the bath he has just had has refreshed him mentally and physically. He is "now ... nice", that is, cleaned, by having the blood and body products of his mother and himself removed from his outer layer. He has also been made more alert, or woken, by the bath. If the alertness was the only characteristic she was referring to, the midwife would have said something like: 'Lets get you ready young Nick, now that your nicely alert'. The use of 'and' in the original sentence indicates the midwife considered both the items necessary before the breast feed was initiated. The baby needed to be 'nice' or cleaned, before he could be touched by other people besides his parents, or before the midwife would initiate a breast feeding lesson.

Breast feeding is dirty

The most striking observation about the interaction in *Vignette 5: "Would you like to feed him now?"*, is how the first breast feed is done immediately following the midwife's bathing of the baby and the cleaning of the equipment used for the baby. She even uses the same gloves that she used for the cleaning of equipment, for this first breast feed. During the bathing process, the midwife was removing the dirt of birth from the baby, and during the cleaning process from the equipment used for the baby. There is no changing of gloves or washing of her hands before she begins instructing Neeta on breast feeding. The implication of this is that breastfeeding and breast milk are also considered dirty. The hurried action by the midwife following the 'add on' to the breast feeding lesson, reinforces

the perception of breast feeding as a dirty process, and a potential source of contamination to the midwife.

A similar incident occurred with Yvonne. Following the birth, the midwife, in the same protective equipment she wore for the birth, proceeded to clean the blood off Yvonne, then assisted her into bed. The midwife continued cleaning the birthing area, including the floor mat used for the birth, and the spots of blood from the floor. When she finished, the midwife then assisted Yvonne with breast feeding her baby. She was still in the protective equipment she wore for the birth and the cleaning.

Hilary`s situation appears different. Her independent midwife suggested that she could put the baby to the breast while waiting for the delivery of the placenta. The midwife tells Hilary that the baby can just "nuzzle" the breast, but helps Hilary position the baby at the correct angle without attempting to attach the baby. The midwife is wearing the only protective equipment she had on for the delivery – a pair of gloves. Later, when the independent midwife shows Hilary how to breast feed, she is not wearing gloves.

The other women the midwives assisted with breast feeding were: Elsie, Penny, Queenie, Saffron, Ursula, and Wendy. The midwives did not wear gloves. Prior to the era of universal/standard precautions breast milk was treated as relatively clean. Even the rituals surrounding breast feeding in the medicalised childbirth era, were aimed at preventing infection, rather than a perception of breast feeding and breast milk as dirty. The video tapes were collected during a transitional period when the midwives were coming to terms with what was required of them in the way of protective equipment through regulation. Most midwives had trouble remembering that they had to treat breast milk as a contaminating body fluid and should wear gloves.

Several women initiated breast feeding on their own: Fay, Oona, Rebekah, and Vera. Fay was assisted by her partner, while Oona was assisted by a female friend. Rebekah and Vera breast feed on their own. This may have been because they were eager to begin breast feeding and could see the baby was searching for the breast. It may have been because they did not want to disturb the midwives. They may have wanted to breast feed on their own.

Vera had breast feed her other children and so it was unlikely that she considered she needed any assistance.

The afterbirth

Following the delivery of the placenta and its examination, it is placed in a plastic bag as "They [Vera and Vince] are going to take the placenta home". However, the midwife is not content that the placenta is secure in the plastic bag and states: "And then I'll put it in another bag (pause) just in case." Presumably, in case there is a hole in the first bag. The second bag is not a normal plastic bag, but a contaminated waste bag which is of extra strength, not so flexible, a bright yellow in colour, labelled "contaminated waste" together with the internationally recognized black biohazard symbol on it. This behaviour appears to be powerfully symbolic as another ordinary plastic bag would have served the same purpose. However, by providing Vera and Vince with a yellow contaminated waste bag, they are implying several things. The placenta is officially labelled as "contaminated waste" and unless Vera and Vince remove it from this bag they will be constantly reminded of how the placenta is perceived by the majority of Australians and by the various governmental institutions. By using the contaminated waste bag with its official label, the Health Department and the medical profession, through the actions of the midwives, are demonstrating their power by shaping the community's world view of the placenta. By labelling the placenta as 'waste', the midwives are implying that the placenta is waste material, or rubbish, and does not need to be treated with respect. Similarly, the 'contaminated' in the label implies that the placenta is contaminated, while the reality is that for the majority of women there is only a slight risk of it actually being contaminated or infectious. The impression gained from the video tape is that the midwives appear to be acting in a magnanimous fashion in returning to Vera her placenta, as it is normally part of their role to contain its contaminating powers by destroying it. It is as if the placenta has been transformed by the institution from something that is Vera's to something that belongs to the institution, and therefore, the state. The yellow contamination bag supports Vince's reaction to the placenta: it is something he does not want to look at or touch. It is worth noting that one of the contradictions of the midwife's action is that although the placenta is officially labelled as "contaminated waste", the parents are neither given gloves for when they are handling the placenta, nor any instructions on how to deal with the 'contaminated' item when they return to their home.

What constitutes "yuck"?

In Vignette 4: "Yuck", Vera refers to the placenta, membranes and cord as "A lot more (pause) yuck" than she had remembered. It is as if she is surprised that it looks the way it does. According to *The Macquarie Dictionary* (A. Delbridge et al., 1997, p. 2470), "yuck = yuk" and has two meanings: the first is "an expression of disgust", while the second is "repulsive; disgusting. [? imitative of retching]". The next entry in the dictionary is for "yucky = yukky" and notes that it is a colloquial term for "disgusting, unpleasant, repulsive" (A. Delbridge et al., 1997, p. 2470). Vera's reaction is similar to the reaction from a participant in Oakley's (1979, p. 108) study; "ugh Imagine me having that!". Even the colloquial word 'ugh' is similar to 'yuck' for 'ugh' is defined as "exclamation expressing disgust, aversion, horror, or the like" (A. Delbridge et al., 1997, p. 2289). During the examination of the placenta, Vera attempts to achieve the best view of the process that she can, however, although she almost touches the umbilical cord, she never does, but she does touch the midwife's gloved hand. Presumably, she considered the bloody glove as less 'yuck' than the umbilical cord. In Vignette 7a: Labour and birth is dirty work - "I don't know what I want", Nick, although interested in the examination of the placenta seems to indicate that he too finds the placenta repulsive as he holds his hand over his mouth as if he is about to gag. Similarly, Queenie's response to seeing her placenta is "Ergh" which is defined as "an explanation of disgust, revulsion, etc" (A. Delbridge et al., 1997, p. 719).

It is not unusual for lay persons to consider the placenta 'yuck' or 'yucky'. For example, in the video, *Placenta: The child`s companion*, the two children, a boy and a girl, refer to the placenta using both of these terms several times (The Waikato Polytechnic, 1999). However, both children also use the same terms when referring to the blood on their gloves after touching the placenta. The boy, who is older uses a variety of terms for the placenta, and refers to the placenta as "meat", "looks disgusting", "that's disgusting", "look at all that blood" and "smells like guts". When the woman tells the children that the midwife is checking the placenta to see if it is a "nice healthy one or", her son completes the sentence

with "a yucky one". This is the antithesis of a description provided by an aspiring midwife: "a lovely 'huge and healthy placenta" (Pettigrew, 2001, p. 5).

The birth scene, but particularly the placenta, is defined as 'yuck' by Vince's comments and behaviour. The examination of the placenta is described by Vince as "looking at all the gory bits". *The Macquarie dictionary* (A. Delbridge et al., 1997, pp. 919 & 918) defines "gory" as "1. covered or stained with gore; bloody. 2. resembling gore. 3. *Colloquial* distasteful or unpleasant", while "gore" is defined as "blood that is shed, especially when clotted". The origins of "gore" is from "gor" in Old and Middle English, "goor" in Dutch, and "gor" in High German where the meanings were very similar: dung or dirt in English, filth in the European languages (A. Delbridge et al., 1997, p. 918). This indicates that the perception of a link between blood, clots and dirt or filth is a long standing one, while the characteristics of blood and the body substances seen during the birth, correspond to the characteristics of dirt described by Enzensberger (1972).

Vince tries to ignore what is happening when the placenta is examined and uses the black and white view finder to allow him to view the placenta and retain his composure. If the placenta becomes black, grey and white, the obvious link with blood is removed, while it would become more difficult to differentiate the various lobes of the placenta and its appearance of raw meat. Similarly, Vince commented that "all the muck" made him feel faint, an oblique reference to the repulsion he felt when looking at the bloody mess (blood, liquor, meconium, mucus and vernix caseosa) following the birth. One father, a doctor, commented that men, regardless of their preparation in the antenatal period, are unprepared for the "the pain, the mess, the blood, the distress" (The Parents Book Collective, 1986, p. 213). Earlier Vince acknowledged that the liquor "made me sick on three other occasions". He has not said what colour it was on each of the three previous occasions, but it's normally a clear straw colour with small flecks of skin, hair and vernix caseosa from the baby. The colour of the liquor could have been tinged with blood and be a pinkish colour, or could have contained meconium, but Vera described her previous labours as normal, so the colour was probably clear or pink. The colour of the liquor is not mentioned by Vince, so it is possible that it is just the sudden appearance of the fluid bursting from Vera's body, or the smell, or the form of the liquor – murky, wet, warm and uncontrolled – which is what

makes him feel sick. Vince's comment is followed by generalised laughter, possibly because the women in the room thought it was funny that a male confessed to a weakness. Another possibility is that they accepted and understood his comments, because that is how they feel about the "mess" as well. One woman described how when her membranes ruptured one of the midwives said to her: "Oh! Aren't you a dirty girl?" (Tracey, 1993, p. 90).

Vince was more tactful, however, when he pointed out to Vera: "You look like you've been through a massacre, you know. Are you going to hop back in the bath and have a scrub up?" He has not directly stated that she is bloodied and this makes him feel sick or faint, but the message still comes through clearly. Vera is dirty and she needs to be cleaned. All of these comments from Vince indicate that his remark about having the baby on the roadside would "have been rugged" were true. He may well have had trouble providing assistance to Vera because of his response to the normal body fluids and substances seen during the birth.

The midwife makes several comments that indicate she is not impressed with the dirtiness of birth, some of which is on her: "There's heaps of meconium"; "I am saturated"; "There's heaps of liquor", and "What a mess". The midwife tries to gather up as much of the free flowing fluids as possible with the suctioning equipment and she does remove part of her apparel when it is wet. The midwives officially label the placenta as "contaminated waste", while the videotapes themselves are described as "gory". Presumably because they focus on birth with its accompanying blood and body substances. When considering the various terms people used, there does not seem to be a great difference in their understanding of "yuck": Vera considered the placenta and the blood "yuck"; Vince talked about "the gory bits", "the muck", Vera looked liked she had survived "a massacre", while the liquor made him "sick"; and, the midwife considered the birth fluids were unpleasant, or 'messy', with the birth tapes being described as "gory".

"Mess" is a term also used by the women when they, or their bedding, is soiled with blood. Fay had dirtied her bed with her bloody vaginal discharge, then hid it, but obviously felt the need to confessing that she "made a mess on the bed". In the *Vignette 7b: Labour and*

birth is dirty work – "Big push" Hilary asked her midwife: "Am I a mess?". Her midwife had no problem understanding what she meant and replied: "Yes – down the bottom".

BIRTHING RITUALS INVOLVING THE FAMILY

Ritual, according to Davis-Floyd (1994, p. 324) "is a patterned, repetitive, and symbolic enactment of a cultural belief or value", the aim of which is the "alignment" of the individual's and the society's belief systems. Ritual works by the use of symbols which send messages to both those who preform and those who observe the rituals (Davis-Floyd, 1994). Work by Arnold Van Gennep (1908/1960), which was originally published in French, is considered one of the seminal and enduring works on 'rites of passage' (Hendry, 1999). Van Gennep (1908/1960, p. 10) believed that a rite of passage occurred whenever people move "from one situation to another or from one cosmic or social world to another". A rite of passage involved the passage to a new status, place, situation, or time, as occurs with birth, puberty, marriage, parenthood, social advancement, occupational changes and death. There are ceremonies which are undertaken at the time and they often include: "dressing up, sending cards, giving presents, holding parties, making and consuming special food, making resolutions [and] ordeals" (Hendry, 1999, p. 69). For Davis-Floyd (1994, p. 324) "A rite of passage is a series of rituals" (original emphasis) which change "society's perception of [the] individual and [the] individual's perception of themselves". Van Gennep (1908/1960, p. 11) believed that a rite of passage could be subdivided into "preliminal rites (rites of separation), liminal rites (rites of transition), and postliminal rites (rites of incorporation)," but he considered that the three subcategories were not necessarily equal or elaborate.

When watching the video tapes, it is evident that the women and their families are creating their own birthing rituals and celebrating their rite of passage within the rules of the institution, for example, the contaminated bag for the placenta. Other rituals are less confronting and better tolerated by the institution, for example, the partner assisting with the birth, or drinking champagne after the birth. There is also an emphasis on obtaining permanent records of the birthing rituals, either by still or video camera. The need for the parents to make their own birthing rituals was recommended by England and Horowitz

(1998) who consider that western societies have become baby focused while the mother has been pushed aside.

'Seeing' the 'other'

The use of the mirror allows the woman to 'see' her baby's birth and view her own genitalia, a view not usually seen by women. In my experience, the use of the mirror was initially discouraged by health professionals who denigrated the view ('messy', 'dirty' or 'not very nice'), or the woman for wanting to 'see', but it is now permitted and even encouraged. It is as if 'the private parts' of the woman's body became the property of the institutions, but is now being 'gifted' to her. Not all women, however, are interested in receiving this 'gift'.

The mirror was used in several ways. Several of the women (Neeta, Rebekah, Saffron, and Vera) used the mirror to improve or modify their pushing efforts, to view their baby's progress, or to view the birth. Nick held the mirror for Neeta, while Vince held it for Vera, although Vera redirected the angle of the mirror so she would have a better view. Saffron's mother held the mirror so Saffron could see (her partner was behind Saffron supporting her back). Kitzinger (1984, p. 218) provides a quote from one woman whose husband held the mirror for her so she could "see the first appearance of the baby's head". Rebekah was on a birth stool with the mirror positioned on the floor during the pushing stage. Again, Kitzinger (1984) gives an example of the use of a wardrobe mirror of allow the woman to view the birth.

Several of the midwives used the mirror as a means of continuing their 'clinical gaze' on the woman's perineum. This was most noticeable if the woman was on a birth stool, or kneeling, or in the bath. Rebekah's midwife initially used the mirror to observe the descent of the baby's head, but later asked Rebekah: "Can you see?". Similarly, Elsie's midwife was observing the baby's progess, but when Elsie became discouraged, saying "I can't", the midwife got her to look and see that she was doing 'it'. This midwife also used the mirror

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¹⁰¹ The study site originally had two of these large swinging mirrors, but they were withdrawn from service because they did not meet infection control guidelines.

to explain to Elsie why the pain was so bad when the head was almost delivered, and the need for Elsie's pushes to be slow, gentle ones to prevent tearing of her perineum. Foucault (1967/1997, p. 263) considered the 'mirror' as "an agent of demystification" and the interaction between Elsie and the midwife can be seen in this way. Ursula, who had a long difficult labour and was tired, was asked "Can you see? That's your baby coming out". This was followed by "Well done. Well done". Ulrich, appropriated the midwife's torch, to improve his view of the descending head.

The use of the mirror is advocated by *The maternity sourcebook* (Lesko & Lesko, 1984), *The complete mothercare manual* (McBride, 1986), and *The pregnancy book* (Field, Fisher, Greenwell, Harris, & Kendall, 1987, p. 123), with the latter considering that it is "important" that a mirror is used so the woman can "glimpse her baby's head as soon as it is visible", while Kitzinger (1984), suggests the parents have a mirror in their labour kit. Robertson (1990), the well known Australian childbirth educator, advises couples not to use a mirror, but for the woman to focus on the sensations created by the descent of the baby. Wendy was asked if she wanted to use a mirror. Unfortunately, the tape was turned off for this first look, but it seemed that Warwick was given the job of holding the mirror. When the tape was turned on again, the student midwife positioned the mirror saying "Have you seen your baby? Can you see?". Wendy waves the mirror away, saying: "Get it out now". It is evident that Wendy was not interested in using the mirror. The mirror is removed. Similarly, one woman described how a mirror was positioned for her, but she "didn't see" because she was too busy panting (Scott, 1997, p. 61).

According to Davis-Floyd (1992, p. 133) the use of the mirror during the birth allows the woman to be reflexive and "aware not only of the Other, the baby, but of herself giving birth to the Other". The mirror gives the woman some distance from the physicality of the birth, although other women are not interested in its use (Davis-Floyd, 1992). One woman, although initially reluctant to use the mirror, did so, found it helped her to focus and she noted: "I was overcome with the beauty of it. I felt connected to … everything — to life" (McDonald, 1992, p. 90). Another woman referred to seeing the breech birth of her baby in a mirror and found the experience "wonderful …. really, really lovely" (Tracey, 1993, p. 85).

Davis-Floyd (1992, p. 134) considers it is important that the woman participates in the birth as then the mirror reflects society's "dependance on women", but if the woman "is technocratically removed" from the birth process, she becomes a witness to the birth of the Other through society's agents, the medical profession, or, as occurred in the video tapes, the midwives. Therefore, it is important "who holds the mirror, and the ... context in which it is held" (Davis-Floyd, 1992, pp. 132-133). For example, one woman described her birth in which the midwife set up a mirror in front of her, then the midwife "kept on hitting my bottom with her finger going, "Push down here, push down here" (Amanda, 1994, p. 22). Clearly, in this example the midwife is directing the performance forcefully, while the woman is being dominated and controlled.

In the video tapes, although who holds the mirror is important, the context of the mirror's use is extremely important. For example, the midwives' usage of the mirror to support and encourage Elsie and Ursula through their baby's birth is critical. While several of the midwives used the mirror as a means of extending their 'clinical gaze', the video tapes demonstrated that the mirror can be incorporated into midwifery practice by using it to facilitate the woman's understanding of, and participation in the birth process, without technocratically removing her from the process.

"Are you going to do the honours?"

The cord cutting ritual, which was nearly always done by the midwife or doctor in western cultures, changed hands with the advent of the 'natural' childbirth movement. Cutting the cord became a job for the partner or other support persons. This was popularised in various consumer orientated texts (Arms, 1975; Balaskas, 1983; Kitzinger, 1984; Lang, 1972) and is now commonplace (England & Horowitz, 1998). There is great symbolism in cutting the umbilical cord, the act which physically breaks the connection between the mother and her child. For Raphael-Leff (1991, p. 287), the cutting of the cord is the "symbolic prototype of separations". If the cord was cut by the midwife or doctor, it was not recorded by either still or video camera, but if it was cut by the partner, the ritual is often recorded on the parents' or support persons' still or video camera. A good example of the importance

attached to the father's cutting the cord was seen in the videotape of Rebekah and Ryan, although a very similar incident occurs in Neeta's and Nick's videotape.

Rebekah, holding her baby close to her chest, is on the birth stool with Ryan sitting behind her supporting her back and hips. Although both Rebekah and Ryan were completely focused on the birthing process during the second stage, as soon as the midwife started to clamp the umbilical cord, the atmosphere changed. Rebekah asks, "Can Ryan cut the cord?". The midwife, while continuing to apply the second clamp to the umbilical cord, replies "Of course he can". The baby is crying loudly. Rebekah demands "My camera". The assisting midwife retrieves the camera from Rebekah's belongings. The midwife seems to be oblivious to the interaction between the assisting midwife and Rebekah. The midwife hands the scissors to Ryan and tells him to "Cut between the plastic [clamp] and the metal one [clamp]". Ryan is poised to cut the cord, but Rebekah stops the process by saying "Just before you do that", and moving her right hand out towards the camera held by the assisting midwife. She prepares the camera for the assisting midwife. The assisting midwife photographs Ryan cutting the baby's cord. The assisting midwife is about to take a second photograph of Ryan performing this ritual, but Ryan finishes and is holding the scissors up high. The midwife tells Ryan to "Pretend". Ryan complies and a second photograph is taken with him 'cutting the cord'. Presumably the second photograph is in case the first does not turn out and Rebekah and Ryan will have a backup photograph. It is clear that Rebekah has no qualms about stopping the cutting of the cord, so that it may be done and recorded the way she wishes. She is making her own birth traditions and memorabilia, but at the same time she is participating in the now commonplace symbolic partner involvement in the birth, something the institution permits.

From the NSW Health Department's perspective, obstetric procedures and cutting the baby's cord are a dangerous time for the staff. Therefore, they should wait for the cord to stop pulsating and cover the "site and the cutting instrument to prevent spurting of blood" (NSW Health Department, 1992, p. 28). Similar advice was provided by other major policy documents (Australian National Council on AIDS & Department of Community Services, 1990; National Occupational Health & Safety Commission & Worksafe Australia, 1995). If care is not taken when cutting the cord, the occupants of the room, the walls and the ceiling are easily sprayed with blood from the arteries and vein in the umbilical cord.

The physiological and psychological importance of waiting for the cord to stop pulsating was emphasised initially by R. D. Laing, a psychiatrist, in 1972 (Brook, 1983, p. 107), and two years later by Frederick Leboyer(1977, pp. 43-45), a French obstetrician, with the practice soon gaining wide recognition (Arms, 1975; Balaskas, 1983; Brook, 1983; Elkins, 1978; Kitzinger, 1984). As noted above, waiting for the umbilical cord to stop pulsating was considered a mechanism whereby the risk, to the health professional, of contamination or exposure to the cord blood by was reduced. It is rare for the 'natural' childbirth movement and the medical establishment to agree on anything. Yet despite their accord on this topic, of the women participating in the study, the cutting of the baby's cord was delayed for five minutes till pulsation ceased in three births: Elsie and Edgar, Kate and Kieran, and Neeta and Nick. In another birth, Ursula and Ulrich's, the midwife was waiting for the cord to stop pulsating, but after five minutes became concerned about the need to check Ursula's blood loss. The midwife told Ursula about the bleeding then continued: "We can cut this now. The cord's virtually stopped pulsating. It's very weak. I think this is a good time to do it". Like all the other parents, there is no comment, agreement or disagreement from either Ursula or Ulrich. They accept the midwife's assessment of the situation, or possibly, they do not feel able to argue with her expert opinion.

In *Vignette 4: Yuck*", the cord was cut shortly after the birth because of the meconium stained liquor around the baby. Although the hospital policy indicates that this should be done quickly whenever there is meconium stained liquor, the midwife did not do it herself when prompted by the assisting midwife, rather she gave Vince the opportunity to do it. Vince is asked if he is going to cut the cord, or "do the honours". Vince cut the baby's cord. The baby was then placed on the resuscitation trolley for examination by the paediatrician. The same phrase: "Are you going to do the honours?" was used by the midwife at the birth of Elsie and Edgar's baby. Because of the hospital policy in relation to the immediate care of babies with meconium stained liquor, the cord was cut relatively quickly by the midwife or doctor in several of the births: Hilary and Hugh, Jill and Jack, Penny and Patrick, and Queenie and Quincy. The times of cord cutting varied from 30 seconds to three minutes.

The midwives` hands are not always clearly viewed, either because of the woman's position, or the position of the staff or support people, or the quality of the videotape, but the midwives seem more concerned with using one of their hands to protect the baby during the cord cutting process. This is stated by the midwife during the birth of Elsie and Edgar's baby: "Now my hands are underneath, as you can see". This probably allows the person cutting the cord to not worry about the scissors hurting the baby. The midwife caring for Rebekah and Ryan informs them that "I'll protect his skin". Fay's midwife tells Fergus: "That's my finger" during the cutting procedure when he was positioning the scissors.

Possibly, because of the importance to the parents of cutting the baby's cord, none of midwives complied with the directive about covering the "cutting instrument" during this procedure. Perhaps they believe there would be no point in taking a photograph, if the cord being cut is not visible. Another explanation is that the midwives are so used to dealing with blood that it is not an issue for them. They can contain the blood by forcing, or 'milking' the blood from the cord vessels where the cut will be made. This means that the midwives do not have to wait for the cord to stop pulsating, nor do they need to cover the scissors. It is possible that the staff have forgotten the directive from the NSW Health Department about waiting for the cessation of cord pulsation, or they never knew it. Waiting for the cessation of cord pulsation is not mentioned in the Study Hospital's policy documents (1995, p. 13), but it does state the timing "of cord clamping is determined by the clinical situation and the mother's or accoucheur's wishes". This corresponds with what is seen in the videotapes.

Inspection of the afterbirth

Examination of the placenta by the accoucheur is one of the rituals of birth in Australia. It is a prime example where the authoritative knowledge of the accoucheur, in this instance the midwife, is explicit. The assumption is that the midwife has seen numerous placentas and is accurately describing the placenta, membranes and the umbilical cord, while checking to ensure that there are no parts missing. Often the woman and her family will never have seen a placenta prior to their current birth experience, or if they did, it was some years ago. Therefore, there is no question about who is the expert as this is being done.

An inspection and description of the placenta is undertaken by the midwife in *Vignette 4:* "*Yuck*". During Vera`s past births, this description was also made, but Vera acknowledged that "within a half hour Γ'd forgotten what it was like". To ensure that this did not happen again, Vera makes a special effort to ensure that it is recorded on their personal video camera. She also moves the midwife`s hand to obtain a better camera angle. As the children were one of Vera`s and Vince`s reasons for the videotaping, it is most likely that when their parents consider it appropriate, the children will be shown the placenta videotape. There is evidence to suggest that many women and their families are interested in viewing the placenta, membranes and cord (Colman & Colman, 1991; Malecki, 1982; Nilsson & Hamberger, 1990; O` Connor, 1995; P. O`Brien, 1974; Oakley, 1979; Pettigrew, 2001; The Waikato Polytechnic, 1999).

It has become common practice for the midwife, or the doctor, at the study hospital to show the woman and her family, if they are interested, the various features of the afterbirth. The other couples who inspected the placenta were: Elsie and Edgar, Fay and Fergus, Hilary and Hugh, Kate and Kieran, Neeta and Nick, Queenie and Quincy, and, Rebekah and Ryan. Ursula inspected her placenta, but Ulrich was in the Lounge Room showing the baby to family members. Three couples, Oona and Olly, Penny and Patrick, and, Yvonne and Yuri, were not asked if they wish to see the placenta. Because the videotape was turned off in Wendy and Warwick's room immediately following the birth of the first twin, it is not known if they were offered this service. Saffron was transferred to the delivery suite for suturing of a perineal tear and bleeding. The delivery trolley was removed at the same time, but it is doubtful if she or Shamus inspected the placenta.

There was one unusual incident in relation to the inspection of the placenta. Jill asks Jack: "Can I just see the placenta?" and points at it in the kidney shaped dish. Jack, the health professional, picks up the dish and takes it over to Jill. They both stare at the placenta in the dish. "Wow", says Jill, evidently awestruck by her first sight of the placenta. Jill's perception of the placenta as something extraordinary and miraculous is a dramatic contrast to the mainstream construction of it as "yuck", rubbish and dirty. The midwife sees them and says: "Have a look at it guys. Open up a bluie and …". The midwife waves her hand around but does not finish the sentence. Jack puts the dish with the placenta back on the

delivery trolley, gets a pair of gloves, then puts them on. He begins to examine the placenta. Unfortunately, the tape finishes at this point¹⁰². It is interesting that the midwife did not tell Jack to get some gloves, and only suggested the water proofed under-sheets. The gloves would be protection for Jack, while the water proofed under-sheets would contain the blood surrounding the placenta and limit the amount of cleaning the midwife would have to do.

Examination of the placenta by the parents is generally not discussed in the mainstream midwifery and obstetric textbooks, although Morrin (1997c, p. 410) suggests that the couple might "like to observe the midwife's examination of the placenta". This seems to be suggesting that the event is passively watched by the parents. From this discussion, it is clear neither Vera and Vince, nor Jill and Jack, are silent observers of the ritual. It must be acknowledged that there are some people, however, who cannot bear to look at the placenta. Vince, is probably one of these, although he admits that he did not mind viewing the afterbirth "through the black and white view finder". This probably allowed him to distance himself from the placenta with its look of 'raw meat' or liver, and the blood. One woman who was already vomiting following the birth, rejected an offer to view her placenta (Betty, 1994). This may have been because she did not feel up to it, or it could be that viewing the placenta would increase her nausea. According to Greenham (1986, p. 110) the growing "Natural and Homebirth Movement" has increased our awareness of our instincts and our interest in the placenta, while she claims that many women who birth in a horizontal position never see or touch their placenta.

"They are going to take the placenta home"

Vera and Vince requested on their birth plan that they take the placenta home. They were the only participants in the study to make this request, although the independent midwife offered Hilary her placenta to take home. It is not a frequent request, but a minority of Australian women ask to keep their placentas and take them home (McCracken, 2001; J.

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I was away at a conference. I had arranged with Jill and Jack that whoever was the midwife incharge in delivery suite when they were admitted, or whoever was providing their care, would do the videotaping. The midwives had problems recording the labour, so only one tape was usable.

Potts, 2001). There are several possible purposes for this action. The woman may wish for the other family members, particularly children, to inspect and learn about the placenta. The family may wish to preserve the placenta (Raphael-Leff, 1991). Often the families will have a ceremony in which the placenta is buried (Balaskas, 1983). The burial site may be in a special place (Parvati, 1978; Schott & Henley, 1996), as it is for Aboriginal women (Dugard, 1990; Stokes, 1999), or for women from more traditional cultures (Maiden & Farwell, 1997; Parvati, 1978; Priya, 1992; Trevathan, 1987). A tree or shrub is planted on top of the placenta and the plant belongs to that baby, or the placenta is buried beneath an existing tree (England & Horowitz, 1998; Greenham, 1986; Jackson, 1999; Kitzinger, 1993; The Waikato Polytechnic, 1999). In some countries, the type of tree is specified by the child's sex, for example, "in Switzerland an apple tree is planted for a girl, a nut tree for a boy" (The Body Shop Team, 1991, p. 156). Raphael-Leff (1991, p. 287) noted that burying the placenta in the garden existed in rural England "until recently", but gives no indication of the time, but possibly it was when most English women delivered at home. This seems appropriate as the placenta has been referred to as "the tree of life" (England & Horowitz, 1998; Kitzinger, 1987), while there a minor variations on this theme: "the baby's life support system" (Kitzinger, 1984; Stoppard, 1985), or "baby's lifeline" ("Your baby's lifeline," 1995, p.38), or, "its life support system" (Arms, 1994, p. 173). Clearly, the exploration of space has influenced our perception of the fetus who is now seen as a "space traveller in his capsule, complete with lifeline", that is, the umbilical cord (Nilsson & Hamberger, 1990, p. 107).

Prior to the fear of infection with AIDS and hepatitis B, it was not uncommon for people to take home their gallbladder, kidney or gall stones, tonsils, or appendix following their removal. It was not unusual for maternity staff to take home placentas, or unused bags of transfusion blood, for use in their gardens, usually for their rose bushes (personal experience and personal communication, R. Shaw, 20 April, 2001). These are no longer common practices, while patients who do want to take home their various body parts are required to demonstrate the reasonableness of their request. As a protective measure infectious or contaminating tissue cannot be returned to the patient, but if a request is made a hospital doctor will make a decision based upon: 1) the request is "credible/frivolous/unacceptable"; 2) the cost of making the tissue or organ 'safe'; 3) "the

aesthetic appeal of having a human organ/tissue in the community"; 4) the possibility of unacceptable behaviour in relation to the tissue or organ; 5) disrespecting humanity; 6) harming the reputation of the health institution; 7) "the risk of infection or contamination if the ... containers are broken"; and, 8) the significance of the request (details in Appendix 20) (Edwards, 2001).

It is clear from this communication that all body parts are considered potentially contaminating and dangerous to the community. If the institution cannot persuade the patient to change their mind, the request may be denied, or the body part is treated, or decontaminated, to the institution's satisfaction prior to its release. The phrase "aesthetic appeal of having a human organ/tissue present in the community" indicates that aesthetics plays an important part in how any request will be received. Other experts (Fujishiro, Higashi, & Hasselhorn, 1999, p. 215) are more sympathetic, however, and realise that there is a category of hospital waste where there are "ethical implications (placentas, parts of human body, e.g. following surgery or pathology examinations)". Apparently, taking home the placenta was an acceptable request to the midwives, and this policy was not yet enforced, so Vera and Vince did not have to go through the above process, however, they were certainly subjected to a level of criticism, for example, the yellow bag.

Raphael-Leff (1991, p. 350), has suggested that when showing the woman the placenta, the birth attendant ensures the woman knows "the placenta ... is hers and available" if she wishes to take it home. She suggests that the accoucheur brings up the topic as the woman and her family may be too deferent to ask for the placenta. Asking the woman about her preferred method of disposal of the placenta is also recommended by Schott and Henley (1996). A midwife from Darwin 103 noted that although they ask all their parturient women what they "want to do with their placenta very few women take them home" (Hicks, 1999). Because of their hospital stay, followed by their hostel stay, together with a placental storage problem, Hicks acknowledged that for Aboriginal women it was difficult for them to take their placentas to their homeland. This problem may be addressed by the local Aboriginal women as has occurred in the one region of New South Wales (M. Wilson,

¹⁰³ Darwin, the capital of the Northern Territory, has a large Aboriginal and Asian population.

Aboriginal Health Coordinator for the Area Health Service, personal conversation, 13 November 2000).

The rationale for asking the woman about the disposal of her placenta is twofold: 1. There is a new generation who are looking for their "psychological roots", or a "'natural' life"style with "their own birth ceremonies"; and 2. For immigrants who have been uprooted from their homeland and their own placenta, being able to follow their traditional customs in relation to the afterbirth is comforting (Raphael-Leff, 1991). The former is supported by recent Australian birth stories (McCracken, 2001; "Placenta planting," 2001), while the latter is supported by a statement in *Mamatoto* (The Body Shop Team, 1991, p. 108), which acknowledges that "in many non literate cultures", people may be unsure of their birth dates, "but know where their placentas are buried".

EVERYONE KNOW'S THEIR PLACE

This segment revolves around how the various participants in the study behave, thus demonstrating their knowledge of the hospital, its` organisation and the level of power and status held by the doctors and the midwives. The women and their families know how they are expected to behave and fit in with these expectations.

The doctor as the person in charge

The hierarchical structure of Australian childbirth and the power of the medical profession is seen in *Vignette 3: "Dress up"*. There is a senior medical officer, the registrar, who dictates the type of analgesia Wendy should have for labour and birth. He even directs the general practitioner in how he wants the birth of the first twin conducted. That the general practitioner accepts this position, is evident in his response to the midwife when she asks him about the stirrups. His response is "Not sure" because he does not know exactly what the registrar wants for the birth of the second twin, but the registrar's choice will probably influence how he conducts the delivery of the first twin. The general practitioner although he has diagnosed that Wendy is fully dilated and ready to push, does not stay with her. He leaves that job to the midwife while he has a coffee break. The registrar is not informed until he is required for the delivery. His more important work, therefore, is not unnecessarily interrupted.

In the videotapes there are two women, Wendy and Queenie, whose births are conducted by doctors. The doctors at these births are the people in control of the birth process. Another example occurs with Jill. Her baby is delivered by her midwife, however, the obstetric consultant in-charge for the day and the registrar are also present. It is obvious when viewing this tape that the consultant was the person in charge. The midwife conducted the delivery, but under the management of the obstetrician who has determined Jill has only a few more minutes, after which she will be transferred from the birth centre, and he will preform a forceps delivery.

In *Vignette 2: Getting on with business*, the registrar knocks on the door, but fails to wait for any instructions about entering. She enters the room as if she owns it. It is her space. The registrar acknowledges the midwife, her assistant, and immediately goes to assess the information generated by one of the major tools of her trade: the electronic fetal monitoring machine. The registrar and the midwife discuss the results of the graph from the electronic fetal monitoring machine. There is no acknowledgement by the doctor that there is anyone else in the room. The couple are ignored by the registrar until she is ready to talk to them.

Throughout the vignettes there are examples of authoritative touch and as Kitzinger (1997, p. 223) stated the "primary example" of diagnostic touch is the vaginal examination. It is worth noting that Smellie (1752/1974, p. 180) described vaginal examinations as "touching". When reading his treatise it is clear that he thought of 'touching' as an "examination" (Smellie, 1752/1974, p. 181), yet he retained the euphuism, possibly because he thought this best described, or possibly reminded the obstetrician of, the importance to women of any touching of their genitals. Eighty years later the term "touching" was still in use, while both a standing and a sitting position were acceptable and provided "the same success" (Maygrier, 1834/1969, p. 89) (see illustration opposite). Interestingly, "touching" is the term used by caregivers more recently as an explanation of what they will be doing during a vaginal examination (Bergstrom, Roberts, Skillman, & Seidel, 1992).

The next most common form of authoritative touch is probably an abdominal palpation, both of which occur in *Vignette 2: Getting on with business*. The application of the fetal scalp electrode is considered manipulative touch as the fetus/baby is manipulated during

the application process. They are performed by the doctor when the midwife requested a review of Jill's labour progress. Although the midwife could have done all these procedures, she deferred to the doctor's acknowledged position as the person in charge. In the absence of the doctor she would have taken this role herself.

When the vaginal examination commences, Jill flinches but immediately apologises for it. Jill probably equated her flinching with poor patient behaviour, and thus it required an apology. Apologising to care givers was a "frequent" occurrence in the parturient women in Hunt and Symonds` work (1995, p. 107). They did not, however, provide a reason for this behaviour. It is evident that the person with the power in this interaction is the registrar. In normal circumstances if someone flinches, the person who caused the flinch would be the one to apologise, that is, the registrar. The registrar, however accepts the apology from Jill. She does not suggest that the flinching was her fault because she was either too quick and Jill was not expecting her touch, or she was rough.

A possible reason for Jill's flinch can be found in the work of Rubin (1984, p. 74) who has suggested that during labour the woman's bodily boundaries become diffuse, are inadequate as boundaries and that "peripheral stimulation ... and sudden noise or hard, sharp, or sudden touch on the skin" is transmitted as pain. It is unlikely that the temperature of the registrar's fingers was the cause as the rubber gloves insulate against heat transference. It is possible that Jill flinches simply because the registrar is touching her genitalia. That is, she is touching the boundaries, or the margins of Jill's body, in an area that is normally forbidden to strangers and hidden from sight.

An alternative explanation is provided by Savage (1987, p.104), who when discussing the insertion of a suppository, considered that it resulted in the "violation of ... body-image[,] ... the integrity of his body-boundary[,] ... an assault on ... his sense of privacy and dignity". This explanation is applicable to a vaginal examination. Savage (1987, p.104) considered that these types of procedures provide the health professional with "specific" knowledge about the patient which is withheld from all, or most other people. This can be considered a method of extending the 'clinical gaze'. Mayes (1987, p. 61), a well known Australian obstetrician and textbook author, acknowledged this when he commented on his examining

fingers in a portrait: "We could have painted an eye on one of them". Further insight has been provided by Angelini (1978, pp. 42, 44) who described a labouring woman who was concerned by threats to her body boundaries either by "loss of contents from within", or "intrusive procedures from outside the body" which included vaginal examinations.

According to Bergstrom et al. (1992, p. 13), during a vaginal examination, the parturient woman was not an active participant but was expected to be "passive, permitting, and not obstructing the examination's progress". This is exactly what occurred when the registrar directed Jill to "Pop your ankles together and let your knees go floppy". The required non obstructing aspect of Jill's position was further emphasised by the doctor using "the back of her sterile gloved examining hand to get Jill to drop her legs even further", an example of directive touch. In the video tapes, commands and directions are given by touch, which I have described as directive touch and adds another facet to Kitzinger's (1997) concept of authoritative touch. Jill obeys the command, thus demonstrating her acceptance of the doctor as the person in charge. As Emerson (1970) remarked, the woman must discard her modesty during the vaginal examination and make her genitals freely available to strangers. Similar comments are made by Henslin (1997). The level of control held by the doctor over Jill is obvious in this relationship when it is appreciated that the basic model of the doctor-patient relationship is one of "activity - passivity" and that the prototype of this model is the "parent - infant" relationship (Szasz & Hollender, 1987, p. 175). Jill passively lies on the bed while the doctor palpates her abdomen, or preforms the vaginal examination. The doctor stands over Jill as she palpates her abdomen, then sits on the bed to do the vaginal examination. Both positions confirm that the doctor is the person with the power in this interaction. This subordinate positioning of Jill, according to Weiss and Meadow (1983), will increase her anxiety levels during the examination.

Emerson (1970, p. 82) and Henslin (1997, p. 114) commented on the use of an "innocuous" phrase rather than the vulgar phrase, "spread your legs", thus continuing the non sexual emphasis in the vaginal examination. The registrar's business like approach to the assessment of Jill (inspecting the graphic printout from the monitor, together with the abdominal and vaginal examinations) is another way of defining for Jill and her partner that the assessment is a medical event and not a sexual one. According to Emerson (1970, p.

84), medical staff involved in a vaginal examination must display "a brisk, no-nonsense show of efficiency". The midwife supports this role by dramatically changing her behaviour from chatting with the couple to one where she is concentrating on supporting and assisting the registrar.

It was notable that during the vaginal examination, following Jill's apology, there was "silence except for the small moans coming from Jill". It is not unusual for the examiner to be silent during the examination. For the novice examiner, the silence may be because they are concentrating on the examination, and trying to accurately determine their findings. During a vaginal examination to facilitate visualising what they are feeling, some midwives and doctors close their eyes, or fix their eyes on a particular spot. Again, this practice is usually confined to inexperienced examiners. A more experienced and communicative examiner can talk about the results of the examination as they do the examination. The registrar is a senior member of the medical staff and, therefore, is assumed to be experienced. Yet, it is clear in this vignette that the registrar is reluctant to divulge any information to the couple, or perhaps simply does not consider this information relevant or important to them.

On completion of the examination, the registrar takes her time giving the parents any information. Silence was one of the techniques used by midwives when thwarting the woman's need for information (M. Kirkham, 1982). The registrar records her findings in Jill's chart, thus communicating her findings first, to her absent colleagues. Bergstrom et al. (1992) have described how following a vaginal examination done by a doctor, he leaves the room so he can share the findings with a colleague, but fails to discuss them with the woman. This vignette example is even more insulting, as the colleague is not being spoken to directly, but is symbolically being addressed through the inanimate medical chart. If Jill has her baby before a change of medical staff occurs, it is possible that none of her colleagues will even read what she has written. Yet this task is more important to her than informing Jill and Jack of Jill's vaginal examination findings.

The most minimal of information, "Three", is only obtained after Jack asks for the dilation of Jill's cervix. This is all the information they are given. This is a classic example of the

"verbal asepsis", a term considered appropriate by Kirkham (1989, p. 125), and Hunt and Symonds (1995, p. 107). The conversation is stopped by a "linguistic non-touch technique" (M. Kirkham, 1989, p.125), or "sterilised" (S. Hunt & Symonds, 1995, p. 107), or to use a colloquialism, 'the conversation is killed'. It is evident that there is going to be no more information volunteered to the couple. Jill watches the registrar and finally after nearly two minutes, she has the courage to ask: "So you can (pause) feel the [baby's] head on PV (small laugh) and when you put the thing on?" She seems embarrassed, daring to question the doctor, but has even made the effort to use the language of obstetrics in order to get an answer. Jill could not, however, remember what "the thing" was called.

This lack of provision of information to the woman and her family is partly the result of the use of an "inaccessible and incomprehensible" high level of technology during the birthing process (Jordan, 1987, p. 38). For Jordan, whoever controls the artifacts, or instruments of the birth, controls the birth and any information about it. Jordan (1987), has noted that once the birth changes from a low technology to a high technology process, the control of the flow of information also changes. This vignette, although occurring in a moderately high technology environment, suddenly becomes a very high technology environment and demonstrates this change through ownership of the information.

It is worth noting that Kirkham (1989), found in her study an inhibiting effect on junior staff in the presence of senior staff. It is evident that the communication between the midwife and the couple also ceased in the presence of the registrar, however, she does act as "the bridge" while the registrar is occupied with Jack. Jack, perhaps emboldened by the information Jill received, asks his own question about the fetal/baby's blood pH. He receives some information, but it is minimal and given rapidly. The registrar exits the room without saying anything to anyone. She does not give thanks to the midwife for her assistance, or acknowledge the couple. The registrar is the person in charge and controlling what is happening with the patient, she focussed on getting through her work as quickly as possible and evidently did not consider it necessary to acknowledge anyone as she left the room.

There was a postscript to this incident. Jill and Jack were asked to view their full labour tape as I wished to present their vignette at a conference, and I needed their consent to do so. When I returned to their home to pick up the tape, Jill talked about her vaginal examination and how she remembered standing and staring at the doctor, debating with herself how to get more information from her than "Three". Jill also informed me that it was much better when the midwife did the vaginal examination. When asked what she meant, Jill explained that the midwife did the examination to determine if she was fully dilated, but it was quick, she did not have to change her position to facilitate the examination, and she was reassured that it was "time to push". Clearly, Jill recognised the power held by the doctor and her own vulnerable position in the hierarchy. Like other women (H. Callaghan & Duff, 1995), Jill preferred her vaginal examination to be done in her labouring position. Unfortunately, the standing or "erect" position for vaginal examination is not commonly used today. Perhaps, it is considered undignified for the doctor to kneel at the woman's feet (see illustration opposite). The vaginal examination of Jill by the midwife would probably 'fit' Kitzinger's (1997, p. 229) description of diagnostic touch which "maintain[ed] the spontaneous physiological process, reduce[d] anxiety, and ... [provided] information and emotional support. The vaginal examination by the independent midwife in Vignette 7b: Labour and birth is dirty work – "Big push" would also fit this description, while it also included an example of manipulative touch when the midwife pushed the cervix back.

The midwife as the doctor's assistant

Throughout *Vignette 2: Getting on with business* it is never stated but it is evident that the midwife is the person who is doing the mundane minute by minute observations of the labouring woman. These observations are being done on a regular pattern as directed by obstetric practice. That is, the midwife is using her midwifery "art of surveillance" (Foucault, 1977/1991, p. 172) to ensure that any deviations from normal are detected and reported to the medical staff. As Bowler (1994, p. 65) noted, it is ironic that the midwives are searching "for signs that would place a woman under direct medical (doctor) control". This has in fact occurred in this vignette and the midwife requested a review by the registrar. Kirkham (1989, p. 132), has suggested another way of viewing this situation: the woman is a work object and the midwife is the menial "shop floor worker" who processes

the work, but most importantly, does not control the process, at least when a doctor is present. The process is controlled directly by the medical personnel, and indirectly through the implementation of the various policies, routines, procedures and rituals of childbirth.

The midwife in *Vignette 2: Getting on with business* assists the registrar by collecting and opening the required packages prior to the vaginal examination. Throughout the interaction, the midwife continues to provide assistance to the registrar. There is no social chatting in this vignette, while there are periods of silence. All the conversation between the registrar and the midwife is limited and business related. It is almost in 'shorthand'. Both the doctor and the midwife know what is required of them in this situation. Emerson (1970, p. 81) claimed that the "special language" used during vaginal examinations permits the "depersonalization and desexualization of the encounter". Conversation with the couple is limited to the process of assessing Jill's progress. This is contrary to the situation prior to the entry of the registrar into the room, when the couple and the midwife were together on the floor chatting, interacting and behaving on a very different level.

The midwife's attention/allegiance is focussed on the registrar rather than Jill and Jack, while she assists the registrar during the vaginal examination, and attaches the woman to the machine once the fetal/baby scalp electrode has been applied. The midwife is the worker who does the dirty work throughout this interaction, but not only does she do the physical dirty work, she also cleans up the 'mess' created by the poor communication skills of the registrar. At the end of the interaction, she is the one who is standing at the sink cleaning the equipment.

The midwife as the person in charge

The midwife is both the doctor's assistant and his/her second in command. If there is no doctor present, however, the person in charge is the midwife. This can be seen in all the vignettes. For example, the midwife in *Vignette 1: "No naughty bits"* demonstrates this in how she walked into the room and immediately changed the position of the bed, despite having had a discussion with the Vera on this topic. She considered it her space to organise and reorganise as she wished. The midwife also considered it her right to change Vera's position whenever she wanted and attempted to dictate Vera's behaviour during her labour.

At times the midwife used her hands on Vera's body to direct her in a particular direction or position. Another example of what I have called directive touch.

In the discussion in *Vignette 4: "Yuck"* about "the vet gloves", Vera comments that she has seen the vet in a TV show put his arm "up inside" the calf. She queries the midwife about the possibility of this being done to her. The midwife's response is a laugh, but she fails to make any comment or provide any reassurance to Vera that this will not happen to her. Failure to respond to Vera's question means that Vera is left wondering if this is going to happen to her. This form of blocked interaction was noted by Kirkham (1989) and is a source of stress for the labouring woman. Schott and Henley (1996, p. 162) support Kirkham's position, but consider that labouring women have three main stressors which may increase their anxiety: "being cared for by a succession of strangers, worries about preserving modesty, and inability to communicate their needs and fears". From the two vignettes about Vera, it is evident that she has been introduced to 'a succession of strangers', while her modesty was clearly an issue for her. The midwife's failure to respond to Vera's anxiety about the long gloves probably means she experienced all three stressors.

The midwife does not respond to Vera's questions in two other incidents. The first incident occurs when Vera asks if the reason the baby looked so white was because of the vernix. The response she receives, "He's nice and pink now", ignores Vera's question. The second incident occurs when Vera asks if the placenta "is ... ready to come?". Despite the lack of an answer, Vera complies with the midwife's instructions regarding pushing the placenta out. At one stage the midwife walks over to the resuscitation trolley to look at the baby, but fails to make any comment on the baby's condition. Vera's relationship or possible anxiety about the baby is ignored. There is a similar incident with the assisting midwife when she informs the midwife what was done to the baby, but does not include Vera in the conversation although Vera is beside the midwife. It is as if Vera and her baby are objects to be worked upon, but any real interaction only occurs with the health professionals cooperation.

There is not a great deal of chatting *Vignette 5: "Would you like to feed him now?"*. Most of the talking is done by the midwife in her role as the educator and breast feeding expert. Although there is no medical jargon used, there is the use of technical terms, such as colostrum, nipple, and uterus, together with the abbreviated talk by the midwife. An example of this is: "You've really got to extend his mouth, and put a bit on the nipple". Unless Neeta was concentrating on this conversation and linked what was said by the midwife, with what was done by the midwife, she may have had difficulty in understanding what the midwife was telling her. These instructions translate to: you need to get baby Nick to widely open his mouth, you express some colostrum from the breast, and get some colostrum on his tongue. Once baby Nick has a taste of the colostrum, he should search for the nipple and easily attach to the breast. The midwife, however, does facilitate Neeta's understanding of the breast feeding process by using her own body to demonstrate what she means.

The midwife completely controls the interactions occurring during this vignette. For example, it is clear that Neeta was seeking reassurance about her ability to breast feed when she commented: "I have no idea about this". The response she received: "Quite alright. No one will ever know", was not adequate for her as she again stressed her lack of knowledge, then reframed the original question as a comment a few seconds later. Neeta stressed her lack of experience with breast feeding by referring to her lack of experience with the breast feeding bra. There is no response from the midwife on this topic, instead she queries Neeta about the colostrum, emphasising her technical expertise and expertness. The topic is effectively closed by the midwife, another example of 'verbal asepsis'. Later, an indirect appeal by Neeta for information on the baby's ability to feed is ignored, but Nick's direct question to the midwife is immediately addressed. According to Adams (1989), some of the characteristics of a midwife who uses a directing style of communication are discouraging questions and not responding to questions.

A small research study by Adams (1989) on communication in the second stage of labour, demonstrated that midwives use seven communicative styles: innovating, encouraging, directing, educating, questioning, socialising and professional. Adams described three main categories: directing, educating, and encouraging. Much of the communication,

however, was both educational and encouraging, so these were combined into educating/encouraging. Adams (1994) noted that the continuum of styles of communication from direction through to education/encouragement was found in each of her samples. Although the breast feeding occurs during a different stage of labour, the fourth stage ¹⁰⁴, it is clear that the midwife in the *Vignette 5* uses all the styles in the continuum except the professional one. The major communication styles she uses are directing and educating, while questioning and encouraging are used minimally. The innovating style can be seen in the midwife's use of her hands and her body to explain how breast feeding is linked to the 'after pains', the contractions she will experience when breast feeding. The midwife looks very comfortable using her hands in this manner. It is as if, for her, this is the easiest way of explaining what is occurring. The socialising style is only used when the midwife considers the breast feeding lesson has ended.

Vignette 5, although brief, is a good example of the midwife as the professional expert who skilfully uses her manipulative touch with Neeta and her baby to achieve a breast feed. The midwife is the person in the room with the authoritative knowledge in relation to lactation. By examining this vignette, it becomes clear how the midwife uses her authoritative knowledge which, to use Rapp's (1997, xii) words, "isn't produced simply by access to complex technology, or an abstract will to hierarchy. It is a way of organizing power relations in a room that makes them seem literally unthinkable in any other way". When she considered it appropriate, the midwife decided that the breastfeeding could occur. This followed the initial baby bath. Although Neeta is asked if she "Would you like to feed him now?", and she answers in the affirmative, the midwife finishes what she is doing before she commences the lesson. The midwife follows her own agenda. She is the person who establishes and maintains the power throughout this interaction. Similarly, although the

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The fourth stage of labour is the period immediately following the delivery of the placenta, when the mother begins to adapt to her non pregnant state and the baby begins to adapt to life outside the womb. The time varies according to different 'experts': one hour (S. McKay, 1993; M. G. Ross & Hobel, 1992; Varney, 1997); one to four hours (Olds et al., 1980; Sellers, 1993a); or the time spent on the labour ward following delivery (Silverton, 1993). For other 'experts', this stage does not exist (S. Hunt & Symonds, 1995; Morrin, 1997a; Sweet, 1992).

midwife asks Neeta to "Pick a side [breast]" for the commencement of the breast feed, the midwife makes the choice by pointing to Neeta's left breast. Neeta signals her acceptance of the situation by releasing the bra clip for her left breast.

When examining the videotape it is evident that the reason the midwife chose the left breast was because it gave her easy access to both Neeta's breast and baby Nick. Throughout the lesson, the midwife uses technical terms and imparts general information about the baby and breast feeding which demonstrate her expert status. She uses her expert knowledge about maternity care to maintain her authoritative position in the room, while the use of 'the royal we' can be seen in several ways, though all possibilities indicate that the power within the room resides in the midwife. The midwife makes statements which are both reassuring to the parents, gives her 'official stamp of approval', and reinforces her powerful position as the breast feeding expert. Thus, the communicative style used most frequently by the midwife is that described by Adams (1989) as educating/encouraging, but there is also a large component which is directive.

The use of 'the royal we' occurred in two other vignettes. Fay is told by the midwife: "We might hop out of the bath". The midwife, however, is not in the bath, although Fay is. This is actually an order despite the use of the word 'might'. Fay resists the order, but qualifies her reply: "No. I can't move. I can't move at the moment". Although the midwife offers Fay reassurance that "We'll just take our time", the result is that Fay will leave the bath, it will just happen more slowly than the midwife anticipated. The person with the power in this interaction is the midwife. In *Vignette 7a: Labour and birth is dirty work* — "I don't know what I want", the midwife tells Neeta and Nick that "We're not far away. The baby's head is just sitting there". This could be interpreted as either Neeta is not far away from giving birth to her baby, and/or the midwife is not far away from delivering Neeta's baby. Regardless of the interpretation, the midwife is the person with the power to deliver the baby, Neeta becomes almost irrelevant.

In *Vignette 5: "Would you like to feed him now?"*, when the breastfeeding lesson commences, the midwife controls the process by positioning both Neeta and the baby where she wants them. This is very much a "hands on", or interventionist, medical approach by the midwife who expects the woman to passively accept what she is told (H. Callaghan,

1996, p. 57). There are no questions from Neeta regarding breastfeeding, nor is she offered the opportunity to clarify her understanding of the process. Neeta and her family accept this approach and appear to be happy and comfortable with it.

An almost identical scenario occurs in *Vignette 6: Almost untouchable*. The midwife is the person with the undisguised authoritative knowledge throughout, while she initially uses manipulative and restraining touch with the baby, but later changes to a supportive touch so Ursula can bath her baby. Although Ursula has summoned the midwife to attend to the baby's bath, the timing of the bath, the sequence of events during the bath, and the examination follow the midwife's agenda. She is specific in her instructions, is clearly supervising Ursula's efforts, and ensuring the baby is cleaned adequately. Ursula and Ulrich co-operate fully with this process and are acknowledging the midwife's position as the person with the authoritative knowledge. It is this person, the one with the authoritative knowledge, who is considered clean in relation to all the others present during the bathing process.

The woman's place

The registrar in *Vignette 2: Getting on with business* approaches Jill and Jack only after she has checked the fetal monitoring machine and talked with her second in command, the midwife. But she does not wait until she is facing them, instead she starts talking to them when she is behind them. She makes no real effort to obtain an informative response from Jill. She translates Jill's "Oh, OK", into "Managing — Good", but she can have no idea if this is true, or if she is worried about anything. Once the brief preliminaries are over, the registrar very quickly provides the couple with minimal information and asks if she can put the 'clip', or fetal/baby scalp electrode, on the baby's head. While it is probable that Jack, because of his professional knowledge, knows what a 'clip', or fetal/baby scalp electrode means, including the advantages and disadvantages of the application of the 'clip', it is very possible that Jill understands none of it. Jill agrees to the 'clip', although neither of the parents question anything, or ask for clarification.

This interaction has similarities to the study of women experiencing chronic pelvic pain described by Grace (1995): they have difficulty in communicating with the doctor, they receive scant information and they are not informed of their options. It is not surprising,

therefore, that a study by McIntosh (1988, p. 167) of communication in labour found that approximately $^{1}/_{5}$ of women complained about the "lack of explanation of what was happening and being done to them". Another way of describing what is happening for Jill and Jack is to use Kirkham's (1983b, p. 81) phrase, they are "labouring in the dark".

After talking to Jill, the registrar then queries the midwife about Jill's contractions. This is done across Jill and even though it is her bodily function that is being discussed, she is not involved in the discussion, or encouraged to participate. Her opinion about her contractions is considered worthless. Jill does not really exist as a person to the registrar. She appears to be treated as a contracting uterus which contains a fetus/ baby. The fetus / baby is the primary focus of the registrar. The registrar would rather have the opinion of her second in command, the midwife, the information she can glean from the fetal monitor, and the information she will obtain from the abdominal and vaginal examination, than any information from Jill. A similar comment was made by Bergstrom et al. (1992). Jordan (1987) noted equivalent responses in her study and considered that the decision making process in a high technology birth is located in the technology itself and with its owners and users.

The approach used by the registrar is referred to as a ritual dispossession by Kitzinger (1993) who considered that the medical staff symbolically assert that they know more about the woman's body then she does. Interestingly, the example Kitzinger provides for this is a vaginal examination in labour. Similar comments were made by Bergstrom et al. (1992) while ignoring the woman and her family was noted by Jordan (1992) in her analysis of the interactions during the second stage of labour. A woman in a similar situation described herself as not being the focus of the medical team, but rather "the process creating the data" and later "I was the machine. The end product was the baby" (England & Horowitz, 1998, p. 91).

Silence during vaginal examinations has been demonstrated in other research (Bergstrom et al., 1992), while Emerson (1970, p. 83), considered that communication was "constrained" and was part of the coping mechanisms for the examiner who depersonalised the patient into a work object. By refraining from conversation, the examiner is not reminded that

she/he is dealing with a person, while by using technical terms the staff are able to desexualise and depersonalise the procedure. Embarrassment by the women (Broadmore, Carr-Gregg, & Hutton, 1986; Farooqi, 1992; Vella, 1991), by medical students (Abraham, 1995; Emerson, 1970), and the examining doctors (Laird, 1992) is not uncommon during a vaginal examination, while a quote from a nurse experienced in taking cervical smears demonstrates the vulnerability of the health professional (Savage, 1987). For Savage (1987, p. 105), a reason for the ambiguity surrounding these types of examinations is that they place the sexuality of both the patient and the examiner "on the line". She is not alone in her opinion. The use of gloves during all examinations "is essential" according to the Medical Council of New Zealand, while the College of Physicians and Surgeons of Ontario classify the examination or touching of the genitals without gloves as "sexual impropriety" (Daniels, Spittal, & Duff, 1995, pp. 286, 288). An explanation of this belief is provided by Henslin and Biggs(1995, p. 207), who believe that the use of gloves during a vaginal examination provides the examiner with an "insulator" and therefore, the examiner can claim that they were not really touching the genitals. Clearly, the using of gloves have other important functions besides their role in infection control. They symbolise the beginning and the end of a procedure; they are magical and prevent "sexual impropriety"; and they depersonalise and desexualise the patient.

According to Kirkham (1983b), labouring women used various tactics to gain information during labour. This included laughing at themselves, which Jill did, thus stressing their inferior position within the hospital system and their acceptance of this position (M. Kirkham, 1983b). Although the registrar responds with more information, it is the midwife who ensures that Jill comprehends what she was told, and what it means in relation to the syntocinon infusion. The midwife is acting as the "bridge" or mediator between the medical world and the world of the woman giving birth and "... is the point of translation and communication between both worlds" (Barclay, 1985, p. 14). Jordan (1992, p. 6) has used a similar concept: "the liaison (not to say interface) between the woman and the physician". A less "palatable" way of describing the encounter was provided by Hammond (1993, p. 26): the midwife sifts through "the wreckage" of this encounter and attempts to correct the doctor-patient relationship.

The most obvious indication of the woman's lowly position is seen in the second stage of labour when the midwives use words and phrases, such as, "Good girl" (Fay, Neeta, Oona, Queenie, and Wendy), "That's the girl" (Neeta), and "Clever girl" (Wendy). The use of the term "girl" in relation to women, who are demonstrating that they are mature females and about to produce a child of their own, is ironic, insulting, degrading, and illustrates how little control the women really have over the labour process in a hospital. As one institution (The University of Newcastle, 1998, p. 9) has noted: "The term 'girl' is never appropriate in the workplace when referring to an adult". 'Girl' originally was used for children of both sexes, but eventually was used only for female children, then it was extended to include women who were "young, sexually available dependent or inferior in status" (Tuttle, 1987, p. 127). Although some women are referred to as a 'girl' by their family or close friends, the use of the term by relative strangers is patronising and demeaning (C. Miller & Swift, 1980). Lakoff (1975, p. 25) considered that the use of 'girl' is possibly a euphemisim for 'lady' and "removes the sexual connotations lurking in woman ... [but] girl brings to mind irresponsibility" (original layout). Tuttle (1987) considered that the use of this term had been reduced, however, it is often heard during labour, particularly in the second stage of labour. The use of the term, "good girl", may be explained as a form of approval for the women's ability to push, but it is difficult to imagine a man being referred to as a "good boy" when he announces to family and friends that his partner is either pregnant, or has just given birth.

There are similar problems with the use of "Darl" (Fay). Various authors have commented on "terms of endearment" (S. Hunt & Symonds, 1995, p. 81; Kramarae & Treichler, 1985, p. 166), or "baby talk" (Bastian, 1992, p. 93; Leap, 1992, p. 60), or "baby language" (M. Kirkham, 1983a, p. 44), with all agreeing on its demeaning aspect. Hunt and Symonds (1995) provided a list of 23 "terms of endearment" used when midwives talk to labouring women. Some terms in Hunt and Symonds (1995, p. 82) list are: "love", "darling", "poppet", "sweetheart", "baby", "dear", "honey". Many of these terms either state, or infer that the woman is a baby or a child, and thus should be dominated and controlled by the adult present, that is, the midwife. They also relieve the health professional of the necessity of remembering the woman's name. This is particularly useful if the unit is busy and the midwife is caring for several women. As noted in *A feminist dictionary*:

How one person chooses to address another is a profound signal of, ... social, cultural or political affiliations, kinship relationship, equality or asymmetry of power, emotional intimacy or distance, length of relationship, individuality, approval or disapproval, respect or disrespect, love or hatred (Kramarae & Treichler, 1985, p.166).

Touch between the women and their midwives consisted mostly of diagnostic touch, and manipulative touch, with some directive touch, and physically supportive touch occurring. The blessing touch is not seen while the comfort touch is used rarely. Comfort touch is provided by the woman's partner and family. Restraining touch, and punitive touch is not seen. As Kitzinger (1997) noted, touch and how it is used demonstrates the level of power held by the various actors. The videotapes show this subtle, but persistent exercise of power by the health professionals over the women.

Montagu (1986) provides some understanding on this reluctance to touch others. She refers to Rubin who had problems with nursing students and their inability and reluctance to touch the skin of the pregnant woman, particularly her abdomen, to assess her contractions. The students described the skin as "soft and rubbery; smooth and firm like marble, only warm" (Montagu, 1986, p. 132). The students had to be taught to use touch effectively. It may be that the students did not like the feel of the fetus / baby moving beneath the woman's skin. It may be that the contradictions inherent in their description are the reason for their reluctance to touch the pregnant woman's abdomen. It may be due to the size of the woman's abdomen. These possibilities are linked to what Enzensberger (1972) referred to as the origins of dirt and its' characteristics.

Similarly, implications of the characteristics of dirt Enzensberger (1972) can be seen in research by Weaver (1990, p. 159) who found that obstetric nurses avoided, or restricted the use of touch in particular situations: "when caring for another nurse's patient, when a patient had a communicable disease, when a patient lacked good hygiene, or when touch was deemed distracting". Weaver does not say in which year she conducted her study, but the article was accepted for publication in 1989. This would mean that the study was probably done several years before 1989, possibly 1984 to 1987. This time frame is important as the implications of HIV/AIDS for health professionals were only beginning to

be realised around the late 1980s and early 1990s. It is unlikely that the nurses in Weaver's study were concerned about HIV/AIDS when the study was conducted. The women who were considered dirty, or diseased, or out of bounds, were avoided. The analysis of the video taped data shows that labouring women are treated as dirty because of their leaking bodies, but the women are also considered as contaminating. Thus, the increasing avoidance of blessing, comfort and physically supportive touch in labour is probably related to the perception of women's bodies as dirty and diseased. When diagnostic and manipulative touch is used, staff often used gloves to protect themselves from the women.

The baby as a patient

The baby is identified and tagged as occurred in *Vignette 6: Almost untouchable*. Jowitt (1993, p. 173), refers to this identification label as the baby's "gift tag" when she is presented to her parents. The baby's vital statistics are recorded for her parents on the baby's cot card and for the hospital via its charting system. This is the commencement of a lifetime of surveillance by the powerful institutions of medicine and various governmental agencies. When the bathing, the initial examination including the taking of the baby's measurements, and the giving of the injection of vitamin K is completed, the baby is dressed, wrapped and given to Ursula. The baby is now cleaned or sanitized to a level acceptable to the institution. Jowitt (1993, p. 173), refers to this as the baby being "giftwrapped", then presented to the mother while she considers that the hospital acts as "loco parentis" for both the mother and infant.

The examination of the baby

The baby is examined in *Vignette 6: Almost untouchable*, for any variations of normal for a newborn baby and for any abnormalities, some of which are mentioned previously in the section on the sources of dirt. For Foucault (1977/1991, p. 184), the examination is a combination of an "observing hierarchy [and] a normalizing gaze, a surveillance that makes it possible to qualify, to classify and to punish". Foucault considered the examination as "highly ritualised", a powerful ceremony and a method of establishing the truth, while it subjectated and objectified those subjected to the "normalizing gaze" (Foucault, 1977/1991, pp. 184-185). The examination of the baby is also the focus of the clinical or medical gaze (Foucault, 1975, 1976).

Porter (1998, pp. 219-220), has provided a more recent example of this "normalizing gaze". His son, Ewan, was born in 1992, weighed 9lb, and received the 'benefit' of the midwife's expertise who, using a tape measure and a statistical table, decided Ewan was too tall and therefore, abnormal. As a result of this label, several health professionals (midwives, general practitioners, health visitors and a paediatrician) became involved, while various tests and procedures were done on Ewan, including taking blood samples. At the second paediatric consultation, Porter was present for the first time. Although the paediatrician decided that the abnormal features and tallness were probably the result of familial traits, she still wanted to continue to monitor the baby's development. This example demonstrates the power that is inherent in the simple examination of a newborn. Initially, the midwife decided the baby was too tall, however, once the baby came under a more intense focus of the medical gaze, his features were defined as abnormal and required further investigation. Even when the paediatrician recognised that the abnormal features were probably normal within the family, she wished to continue monitoring the baby's development.

In *Vignette 6: Almost untouchable*, the baby is measured using a neonatal measuring board, or to give it its technical name, a neonatometer. The midwife did this part of the examination by positioning the board in the baby's cot, then placing the baby into the appropriate position on the board. It is worth noting that in the vignette and in Porter's example, only one person holds the baby in position and determines the baby's length. This is the most common way of measuring the baby's length, but according to one textbook, two people should be involved in measuring the baby's length, while the final result should be the average of three measurements (Levene, Tudehope, & Thearle, 1993)! This seems to suggest that the baby's length probably does not have much relevance at all and is likely to be very difficult to measure accurately.

The support persons' place

Prior to the vaginal examination of Jill in *Vignette 2: Getting on with business*, she was in a kneeling position. It is possible to do a vaginal examination and apply an electrode to the baby's head in this position, but for most health professionals it would be difficult (although the independent midwife in *Vignette 7b: Labour and birth is dirty work* – "*Big*

push" did a vaginal examination in this position). It is clear that Jack expected that Jill could stay in her kneeling position during the procedure. When it becomes evident that the registrar is going to do the procedure in the bed, he does not query her decision. He just says: "Oh, OK" and walks away. He lost power and authority, and no longer has the power of a health professional to discuss, or question this decision. He has not been recognised as a colleague, and has been relegated to the position of parent where he has deferred to the doctor. This seems to have a negative impact on him and he stays away from Jill, unless he can see she needs him. Jordan (1992) has described a similar scene where the husband is intimidated by the medical team, while one woman described how her husband was "pushed aside" and intimidated by staff (The Parents Book Collective, 1986, p. 132).

When the baby first latches onto the breast, in *Vignette 5: "Would you like to feed him how?"*, the grandmother makes an inaudible comment, points firstly towards her watch, then secondly towards Neeta's breast. The most obvious interpretation is that she is suggesting timing the breast feed, something which was probably done when she had her own children. There is no response to her comment. The grandmother then moves back from the bedside, as if she does not belong there. If this interpretation is correct, the grandmother's knowledge of breast feeding has been dismissed, not even worthy of comment. As Jordan (1993) noted although different knowledge systems may exist in parallel, usually one system will gain legitimacy while the others are devalued or dismissed. This is probably what occurred. Another interpretation of the grandmother's actions are that she was commenting on the time it had taken for the first breast feed to occur. This seems unlikely as the midwife would have defended the delay because the comment would imply she was not a satisfactory worker.

ESTABLISHING A PLACE

There is limited verbal communication in *Vignette 1: "No naughty bits"*. Yet, the non verbal component of the communication is obvious and very important. Probably the most obvious non verbal communication is the effort Vera and Vince made to rearrange the room to suit their needs. The admitting midwife had informed the new midwife about Vera and Vince's preparation of the furniture in the room. The admitting midwife documented in the combined midwifery medical notes: "O/A [On admission] ... [Vera] arranged room set up

for participation in the Discourses of Labour Study". Vera also told the new midwife and checked to see if she was happy to be videotaped. Unfortunately, the new midwife "forgot" Vera's and Vince's request. These communications should have been sufficient to ensure that the bed was not moved. The new midwife, however, automatically moved the bed to its usual position for birth, that is, against the wall. There was no discussion about changing the bed's position, it was just done, indicating that the midwife considered it her right to do so. As far as she was concerned the room was hers to arrange and she did not need to consult with the couple. Similarly, Vera and Vince, although they realised what the midwife had done, they did not take her to task, they just changed the room back to how they wanted it. To have confronted the midwife may have resulted in some unpleasantness, but most importantly, her refusal to allow them to change the room again. Their approach left the midwife's pride and authority intact, but gained them what they wanted.

The comment, "Where there is power, there is resistance", by Foucault (1976, p. 95) aptly describes the behaviour of Vera and Vince, but particularly Vera, in the *Vignette 1: "No naughty bits"*. When examining *Vignette 1: "No naughty bits"*, from the perspective of Foucault, it is evident that the interactions can be explained using his concepts of power and resistance. The main aim of everyone in the vignette is the safe birth of Vera and Vince's baby with minimal morbidity to either Vera or the baby. For the midwife, the objectives leading to her achieving this aim, involve following the rituals which she has learnt and developed during previous births. These rituals are not essential to a safe birth, but rather are what the midwife has come to accept as 'normal' during the birth process. An example of these rituals is the midwife's placement of the bed against the wall of the birth centre room, without considering it necessary to consult the couple. Most women forget about their modesty during labour, therefore, for many midwives, there is no need to attempt to preserve it, or minimise the exposure of the woman's breasts or genitalia. This is how Vera's new midwife operated.

Vera and Vince wanted something different. They knew from their previous birth experiences what the possibilities were for this birth. They negotiated and struggled with the environment and with the personnel to achieve what they wanted. Similar negotiations were seen by Bradby (1999) in her study on migrant childbearing women in Bolivia who

cooperated to subvert the system. Vera and Vince were creative as evidenced by Vera's use of the bikini. Vince played a vital supportive role in assisting Vera, for example, trialing various positions for the bed and Vera, dimming the lights, bringing Vera her bikini, repositioning the bed and mat, and following her instructions during the labour and the birth. Vera had the most difficult role as she had to contend with the physical demands and pain of labour and birth, yet continually consider how to achieve her objectives of not exposing her breasts or genitalia.

Vera resisted the efforts of her midwife to change her behaviour repeatedly. Initially, there is the episode with the towel during and following the vaginal examination when Vera maintained her grip on the towel, thus preventing any "naughty bits" being captured on the video tape. Secondly, there is the attempt to rearrange the bed, once the bed change was noted by Vince. This included moving the mat to the corner of the bed rather then at a right angle to the bed where the midwife had placed it. There was no discussion with the midwife, but Vince followed Vera's instructions and moved the bed and the mat back to the position they wanted. Unfortunately, "it was not quite right", Vera informed me, when I visited the family to give them their copy of the video tape. When I looked at the tape again, I had to agree that it was not the original position she had chosen. It was out of position by about a foot.

The next episode of resistance was when Vince dimmed the lights, even though the midwife had turned them on earlier. Fourthly, following the birth of the baby, the midwife tells, and tries to move Vera to a position in which she faces her. Vera does not move until she is ready, that is, she has put on her nightdress and covered her breasts. Following the birth, Vera asks the midwife to rearrange how she will be positioned when she is examined for any trauma. After this episode, the midwife finally acknowledges Vera's resistant behaviour by asking her what position she wants to lie in, now that everything she needs to do has been done. Thus, Foucault's claim that resistance will change the relations of power is supported. Vera has a final moment of resistance: the midwife is trying to cover Vera's lower body, but she takes her time and ensures that her modesty remains intact.

It is interesting that Vera and Vince have used only those items in the birth centre room that they owned or did not feel intimidated by. For example, Vera's clothing, the towel, the lights, and the bed, are the only items they manipulated. While the linen, the bed and the lights are items considered to be essential to a modern birth scene, they are not the high-tech artifacts referred to by Jordan (1987). These items are ones that all Australians are familiar with and have access to. If the scenario was different, and rearranging the bed involved rearranging a high-tech fetal monitoring machine, or even the delivery trolley, it is doubtful if Vera and Vince would have moved these high-tech artifacts for they are "in principle inaccessible and incomprehensible to nonspecialsists" (Jordan, 1987, p. 37).

This interpretation is supported by the discussion I had with Vera and her family when giving them their copy of the video tape. I told Vera that I thought of this video as "X marks the spot", but she informed me that "it was not quite right". Apparently, she had looked for something to mark the floor but could not find anything suitable. Vera had not wanted to ask the staff for something to mark the floor, thus acknowledging the staffs' position of power during the labour process. The birth centre room, however, did contain items, such as various types of sticking tapes, she could have used to mark the floor. These items were in the cupboards and out of sight. The cupboards contain most of the equipment used during the birth. Vera did not look in these cupboards suggesting that she considered them out of bounds.

Maintaining modesty through personal control

In labour and during the birth in a hospital, it is extremely difficult for the woman to maintain her modesty and prevent her nude, or partially nude body from being gazed upon by people whom she does not consider intimate family members or friends. Women who have experienced childbirth and midwives often comment that 'modesty goes out the window' when you are in labour. A similar comment was made by one woman about her behaviour during labour (Ros, 1994), while a textbook considered that the woman's modesty should not be a priority during the second stage of labour (K. V. Smith, 1993), and a consumer orientated book noted that the woman was "no longer modest" during the transition stage of labour (Lesko & Lesko, 1984, p. 218). In *Vignette 1: "No naughty bits"*, Vera manages to maintain her modesty most of the time. It is obvious that although Vera

trialed her ideal birthing positions for herself and the bed, neither her first midwife nor myself, believed that she would be able to maintain this control for the labour, regardless of its length. Vince, her partner, however, had a better understanding of her level of determination and character, when he disagreed with us about where Vera would have her baby: "X marks the spot".

SUMMARY / CONCLUSION

Throughout this chapter the focus has been on how the labouring women, their babies and support people are managed by the institution and its staff during the labour process. The practices surrounding the women while they are in labour demonstrates that their uncontrollable, leaking bodies are a danger to the health care professionals and to society. The products of the woman's body, including the newborn baby, are dirty and dangerous. Thus, surveillance and control of the women, their babies, and their support people is essential. Everybody involved in the birth knows their place in the hierarchal structure. Birth is controlled by the medical profession and the institution of the hospital, either directly or indirectly. In many instances, it is the midwife who does the surveillance and controls what happens during the birth. Throughout the woman's labour, the acceptance of the authoritative knowledge of the health professionals by the family is evident. Similarly, the women and their families accept that the delivery suite and the birth centre are not their own place and they react accordingly. They accept the hierarchal structure of the hospital and their lowly position within it. Although there are examples of resistance to the power structure within the hospital by the women, they are careful not to offend the health care professionals.

CHAPTER 9

LABOUR AND BIRTH IS DIRTY WORK

Introduction

In this chapter the discussion revolves around the discourses and the discursive practices connecting birth, dirt and work. The chapter explores the concept that the women, both as parturients and as midwives are involved in dirty work. In the previous chapter the discussion revolved around how the labouring women were constructed as dirty, while the midwives were concerned with managing the dirt of birth and maintaining the cleanliness of both the women and their babies, and the environment. Here, the relationship between dirty work and the labouring women and the midwives is explicated, while the marginality of the childbearing women is investigated.

From the discussion on dirty work in Chapter 3, it is evident that the characteristics of dirty work are varied. Dirty workers are those people who: work in jobs closely related to 'dirt'; or, maintain the cleanliness of the body together with other items, or areas dirtied by body products; or, are engaged in physically hard or difficult work; or, work under difficult conditions; or, are in boring jobs, requiring minimal skill; or, are in low-prestige employment; or, are unable to determine when, where, and what they work at; or, work with those who are not socially acceptable; or, work with those who are on the margins or boundaries of society. Many of these characteristics can be applied to the women as they labour to bring forth their babies who are also marginal beings.

LABOUR AND BIRTH IS DIRTY WORK FOR THE WOMAN

As described in Chapter 8, parturient women may be considered dirty as their bodies are leaking uncontrollably. They have no control over when or how much fluid and/or body products they loose from their vagina (liquor, blood, mucus, vernix, meconium), their stomach (gastric contents), their skin (sweat), and occasionally their bladder (urine), bowels (faeces), and their breasts (colostrum). As one woman noted when she saw her liquor was meconium stained: "That freaked me out Green is such a horrible colour. When it's

associated with your body, green means putrefaction" (Amanda, 1994, p. 21). It may be difficult, or sometimes impossible, to prevent the woman's body fluids from overflowing any containment measures, particularly if she is bleeding excessively, or she is carrying an abnormally large amount of liquor. It is certainly impossible to eradicate the odour of the parturient woman. This was acknowledged by one woman (Moody, 1996, p. 14) who commented that she "was enveloped by a peculiar smell, ... and it worried me a lot". The smell is usually a mix of blood, sweat and liquor, but it may include the smell of stale urine, vomit, the sweet or fruity breath, or 'starvation breath' associated with a lack of food intake, and faeces.

Many of the characteristics of dirty work can be seen in the labouring woman. As one woman remarked: "if you want to have children you have to do a bit of the dirty work" (McDonald, 1992, p. 3). Like other dirty workers pregnant women cannot determine the commencement of their labour as it is unpredictable, yet it is something that almost everyone who becomes pregnant anticipates experiencing. It does not require a particular level of intelligence, nor any experience, although experience as shown by Vera, can alter not only the experience but her capacity to manage it. All it requires is that the woman's genital tract is relatively 'normal'. In Australia few women are able to choose where they will labour and give birth as it is usually dictated by their family finances and circumstances, and their geographical location. Motherhood is poorly valued and has low status in western societies (Comer, 1980; McDonald, 1992; The Parents Book Collective, 1986; Price, 1990; Richardson, 1993). McDonald (1992) considered it was the poor status of women in our society which allowed health professionals to disregard women's autonomy and dignity during labour.

That labour and birth is hard physical work has been recognised by many professional and lay writers (R. Ellis, 1977; Jowitt, 1993; Kitzinger, 1991; Peterson, 1984; A. Robertson, 1990; Tew, 1990). Rothman (1984, p. 20) graphically described pushing in her labour: "It was like moving a grand piano across a room: that hard, but that satisfying, to feel it moving along". Some mothers described labour in terms which indicated it was "hard work" (Irene, 1994; McDonald, 1992; Noble, 2001), or "bloody hard work" (McDonald, 1992, p. 120), while a parents` guide to labour is called *Hard labour* (Lennane & Lennane,

1977), with others (Brook, 1976; England & Horowitz, 1998; Hazle, 1986) using an 'athletic' theme to describe labour and the woman referred to as a "marathon runner" (Brackbill, Rice, & Young, 1984; Rubin, 1984). Some health professionals (Diamond, 1996; Grant, 1990; Oxorn, 1986) have used various phrases when describing labour, but they often include similar terms.

It is evident when reading *Vignette 7*, that Neeta is physically working hard to have her baby. Although Neeta has just been in the shower, is lying in the bed and supposedly in a resting position, Nick is constantly wiping the sweat from Neeta's face, refreshing the cloth she sometimes leaves on her forehead, giving her ice chips to suck, and water to drink. Neeta's midwife also acknowledged that the pushing was hard physical work and that Neeta was tired when she commented: "I'd appreciate another push if you could manage it". The midwife caring for Fay is much more explicit about the connection between work and labour. She regularly told Fay to "Have a rest" after each contraction, indicating that she had been working hard. This midwife frequently uses the phrases "good work", "You're working hard", and "Excellent work".

Like dirty workers, for most women, giving birth is both hard and difficult work and is made more difficult by the pain and distress that accompanies labour. In *Vignette 7* the labouring women experienced pain. They verbalised their pain, or they agreed with their midwife about the sensations they were experiencing, but they all moaned or screamed with some of their contractions. At the beginning of *Vignette 7*, Neeta was clearly overwhelmed with her labour, she was irritable, and sharp with both the midwife and her partner. As Angier (1999, p. 309) commented "A woman giving birth is a famous Wicked Bitch of the Nest". Neeta was discouraged and not coping well. She could not decide what she wanted. Neeta required a lot of support and encouragement from her partner and the midwife before she focussed on the work required of her – delivering her baby. All the women knew when they had a contraction and reacted to it by grunting, pushing or vocalisation.

A shower or bath for the maternal body

Following the birth, the women are offered a shower, and occasionally a bath if they are in the birth centre. This removes the dirt of birth from their bodies. The cleansing was initiated by the midwifery staff in most instances, although Vince suggested that Vera needed a "scrub up" very soon after the birth. It was impossible to determine who initiated the shower for Ursula. She had been moved to the delivery suite for repair of her perineal tear¹⁰⁵. On her return to the birth centre in a wheel chair, she was taken immediately to the combined shower / toilet area to "do a wee", but stayed there and had a shower.

The data in Chapter 7 shows the woman's shower or bath is done with minimal assistance from the midwife who may help in organising the woman's clothes, toiletries and sanitary pads. The woman's assistant in the shower is usually her husband, but at times she showers alone. If the woman decides on the bath, her assistant is her partner. While the woman is in the shower or the bath, the midwives clean the room and the equipment, thus avoiding the risk of being dirtied by the woman's leaking body. Often there is no midwifery staff in the room for most of the time the woman is washing herself.

There were three women who were offered a bath. One was Elsie, but she chose to have a shower. The assistant midwife caring for Rebekah, when she saw the bath being refilled following the birth asked her: "Are you going to hop in the bath with the baby?". Rebekah agreed, so Ryan, in his underpants, joined Rebakah and their baby in the bath. Saffron and Shamus also bathed with their baby. There was an exception to the initiation of a maternal wash by the midwives. This occurred with Yvonne and Yuri who had planned for 'three in a tub' and did not wait for directions from the midwifery staff. While the midwives were removing the dirty equipment from the room, Yuri organised the support people to assist Yvonne into the bath, then he and the baby joined her in the bath.

¹⁰⁶ Some of the more inexperienced medical staff were uncomfortable doing the perineal repairs in the birth centre as it did not have a 'theatre' light, the bed height could not be changed, and the women were positioned on the bed, or on a 'wishbone'. The latter is a Y shaped board, the base of which is partially inserted under the side of the mattress with the V section providing an area for the woman to rest her legs. If the person doing the perineal repair felt they needed better access, light or an adjustable height, the woman was moved to the delivery suite for the repair process.

What is interesting about these behaviours is that once the woman has delivered, she is considered the most appropriate person to attend to her own hygiene needs. If for some reason she cannot shower or bath soon after birth, the midwives are content to wait till she can. Once she can manage her ablutions, it seems that her body products are of little concern to the midwives, except when using the sanitary pads. Perhaps this is related to the woman's sex and that women are considered as natural 'cleaner-upers', or it could be a reflection of how society now encourages any one with a disability / illness to be independent. The assistance is given by the partner who is not protected with gloves, plastic apron or protective eye-wear, while the shared bath means that the woman, her partner and their baby are all exposed to each other's body products.

There is the possibility that the woman, her partner and the baby are all considered as dirty as each other and, therefore, it does not really matter to the staff that the partner and the baby are not protected. Another interpretation is that the focus of the protection is on the health care workers and is not really aimed at the woman or her family. It could be argued that some midwives do not really see the woman, or her baby, as dirty. The midwives are following policies and protocols, or simply too busy to help, but not really thinking about the underlying principles, that is, that all body products are considered contaminating.

Women on the margins

One of the characteristics of dirty work was that it often involved working with people considered to be on the margins or boundaries of society. Parturient women are a classic example of a group on the margins, or as Shildrick (1997, p. 35) referred to them as: "a paradigm case of breached boundaries". This marginal position was recognized by one woman who noted that she "travelled through that nine and a half months like an alien being, just me and my baby in our cocooned existence" (Lamprell, 1991a, p. 219), while others have described the fetus/baby as "a scheming alien" (Kitzinger & Kitzinger, 2001, p. 60). Parturient women are individuals, yet within themselves they contain the potential for another being. It is through the process of birth that 'the other' will come into being and be formally accepted into his or her family and community. The woman's bodily boundaries are continually changing during her pregnancy with the changes peaking as her labour progresses. Prior to each contraction there is often movement by the fetus/baby which will

alter the boundaries, or margins of the woman's body. Each contraction changes the shape of the woman's abdomen – her enlarged abdomen will harden, rise, then fall in a pattern dictated by her uterine contractions. With each contraction, there is often a discharge of mucus, blood and liquor from her vagina. As the fetus moves down the birth canal and the birth approaches, the vagina, labia, perineum and anus are stretched and bulge.

The changing margins of the woman's body are identified by the midwives and the women in *Vignette 7*. Various phrases are used by Neeta and her midwife to describe the phenomena: "I'm gonna burst"; "It [the baby]'s starting to come up now"; "Just let it [the baby] sit there and let it [the perineum] stretch up", the baby is "on view now [between your labia], "Open your pelvis up; "Edge the baby's head up [over the perineum]"; "What's all that? Is that it [the baby]'s head?".

Hilary`s midwife makes fewer comments in relation to Hilary`s changing bodily margins, but she also monitors the descent of the baby. With each contraction she leans forward for a better view and assesses Hilary`s progress. The midwife tells Hilary and/or her partner: "Bubby`s actually not that far away. I`m just going to put pressure on your cervix at the front Hopefully with the next push the cervix will stay up", "Bubby`s just in there [behind the perineum]", "She`s getting a little bit further with each one [contraction]".

Following the birth, Hilary has a tear which "looks odd". She is definite that she does not want her perineum to look "odd". Fay also had a tear which was "hanging a bit" and wanted a stitch as she did not "want any hanging bits". There are several possible reasons for Fay's decision to have the tear repaired, and for Hilary not wanting her perineum to look "odd". They do not want to be different to other women, or they do not like the idea of the margins of their body being irregularly shaped, or the repair of their labia and perineum will ensure that their self image of their bodily margins is one of intactness. Fay and Hilary may be like the women in Lumley and Astbury's (1980, pp. 127-128) study who "dislike" the idea of a "highly significant part" of their bodies requires repair. There is also the possibility that the women would equate an abnormal shape of their genitals with an expectation that intercourse would be difficult. This was clearly an issue for Hilary as she queried her midwife on the topic. Painful intercourse as a result of an episiotomy or a tear

has been well publicised (Brackbill et al., 1984; Inch, 1989; Kitzinger & Walters, 1981; Lumley & Astbury, 1980; Stoppard, 1985).

Defective body boundaries following childbirth were discussed by Rubin (1984, p. 75), who noted that the healing of an episiotomy or tear could take two or three weeks, while a caesarean section would take six to eight weeks. During this time she commented that the woman may feel as if "everything inside is falling out on movement", or with some of the activities of daily living, such as, elimination and laughing (Rubin, 1984, p. 75). Kitzinger (1986, p. 106) has noted that the woman needs to relearn her body again as there has been "a loss of part of the body (... the fetus ...) ... and the genitals [are altered] after a woman has passed through the dramatic experience of birth". Some women have also described a loss of being pregnant (Johns, 1991; Wolf & Crowe, 1992), which is sometimes referred to as "placenta loss" (Brook, 1983, p. 270).

Following the baby's birth, the woman's body margins are changed again. The most obvious example of this is the vaginal orifice which is altered, stretched and possibly torn by the descent of the infant. Even if the perineum is not torn or cut during the birth, the genital tract is usually tender or sore, and often swollen and bruised. In *Vignette 7* there are comments about the woman's changed bodily margins. For example, as Neeta delivers her placenta the midwife comments: "No bones", a reference to the baby's human form, particularly the bony head which is usually the most difficult part of the baby for the woman to deliver. Hilary reacts to the delivery of her placenta with: "Arghh". Her midwife explains: "It is a bit of a shock when it happens It's the mopping effect [on the genital tract] of the you know afterbirth". When the midwife assesses Neeta's condition, she palpates Neeta's uterus, "clamp[s] down on the top of the uterus" and informs her that she will show her how to do this later 106. The doctor who sutured Fay's tear showed her how to do this. Neeta and Fay need to be shown how to differentiate their uterus from the soft flabby muscles and organs of their abdomens. For the first time mother this is a totally

¹⁰⁶ In the study hospital the women are taught to palpate their own abdomen, massage or 'rub up' their fundus, observe their vaginal loss, and recognize what is not normal. The aim of this policy was to educate the women and to empower them.

new experience and she would have difficulty in finding the uterus without assistance. The changes to the margins of the postpartum woman's body are dramatic:

The woman was full. She is now empty. Her abdomen was firm and rounded. Now it is flat – but flabby as a collapsed cream puff Before the birth her body was closed. Now it is open. And in the early postpartum weeks it is leaking blood, clots, mucus, perhaps urine, too Her body is raw, vulnerable and exposed to the gaze and handling of others. (Kitzinger, 1986, p. 103)

Postnatally the women, but particularly the first time mothers, are still on the margins. They have a new role in their family (regardless of whether they have had children before) which they need to learn. During this period they are still doing dirty work and they are still on the margins of mainstream society. This will be discussed further in Chapter 10.

Being on the margins

One of the difficulties of writing this material was how to refer to the fetus/baby. I felt that I should be using either one term or the other, that is, 'fetus' or 'baby'. Yet this did not feel right, probably, I thought, because of my midwifery background. My midwifery, and therefore medical, background tells me that the fetus/baby is an embryo for the first eight weeks of the pregnancy, then a fetus till it is born, when it becomes a baby, or neonate, or infant. Yet, I know that when talking to women and their families, I always try to use terms that are more familiar to them such as: 'baby', or 'bub' or 'he or she', and occasionally 'it'. I am not comfortable with the latter term and try not to use it, but sometimes 'it' slips out. When I think about the way the parents refer to the baby, they tend to use the same, or similar words: 'baby', 'buby', 'bub', 'it', 'Junior', or a nickname. If the parents know the sex of the baby, from either amniocentesis or scan, they will often use the correct pronoun, or the intended name, but only if they have told their family. Similar behaviour is described in a birth story by Linton-Mann(1991). I came to realise that my dilemma about what to call the fetus/baby exists simply because we do see the fetus/baby as being on the margins and that the combined term reflects our indecision about who or what this 'other' being is. Douglas (1966/1992) would probably consider that by settling on a particular technical interpretation, medicine has dealt with the ambiguity, but has also extended its own expertness and territory.

As Douglas (1966/1992, p. 95) noted, marginal beings like an unborn child are often considered to be both "vulnerable and dangerous" because of their ambiguous future. Recently, I cared for a couple who came to the delivery suite because the woman could not feel any movements from her baby. As we walked to the room, the partner was talking about how active a baby Max was. The woman was quietly anxious about Max because of his changed activity levels. I was unable to find a fetal/baby heart beat and fetal/baby death was diagnosed by an ultrasound scan. The couple were devastated. They were asked by the doctor what they wanted to do, stay in hospital or go home. The woman's response was immediate and adamant: "Get it out now. Get it out now". Her partner added as if in explanation: "It's not Max anymore. It's just a shell." For this couple their baby Max had been transformed into a "shell". He was no longer a person with his own name but became "it". For the couple there was no ambiguity about Max, he no longer existed, instead there was a "shell" of their dead son inside the woman's body and they wanted "it" removed. The vulnerability of the woman and her fetus/baby is obvious in this example.

The baby/fetus can also be considered as matter out of place, while many of the characteristics of the newborn baby are those of dirtiness. As such, the baby/fetus is dirty and the woman has to do dirty work to birth her dirty baby.

LABOUR AND BIRTH IS DIRTY WORK FOR THE MIDWIFE

Just as the women have no control over when and where they labour, neither do the midwifery staff. The midwives are rostered to work in a variety of shifts covering the 24 hours of the day and each day of the week. They are expected to be on call and can be sent anywhere within the general or maternity hospital. Similarly, the recognition and remuneration of the work of midwives in Australia is poor. Many people label midwives as nurses, thus making the specialised work of midwives invisible. For example, an analysis of birth stories in Australian mainstream women's magazines found that midwives were mentioned once (H. Callaghan, 1995). This also creates the impression that doctors, especially obstetricians, are directing the work of midwives. A different perspective is provided in women's personal birth stories. The midwife is an important person in many stories, but this is more obvious in births that occur in birth centres (H. Callaghan, 1997)

and in the home (Blines, 2001; Noble, 2001) where midwives are usually the primary care provider.

As noted in Chapter 3, the concept of 'dirty work' requiring less skill than other work is debatable, while the remuneration and status related to the job is not only about the 'dirtiness' of a job, but about the public recognition and prestige of the occupation of the person doing the job. In childbirth both obstetricians and midwives assist women during a normal birth. It can become a routine process, yet a normal birth is literally 'dirty work'. Both midwives and obstetricians require the same knowledge and skill to assist the woman during a normal birth, yet there is no doubt that the obstetrician receives the higher level of recognition, status and reward, and is deferred to by midwives and parents. The obstetrician is generally called late in second stage, catches the baby and walks away, leaving the bloody mess to be cleared away by the midwife. The midwife is capable of doing all the work related to normal childbirth, but importantly she always does all the 'dirty work'.

In both sections of *Vignette 7* all the midwives demonstrate the work aspect in relation to their care of the woman and her family. The woman is not left alone during transition and the final stages of her labour, while it seems that caring for the woman in labour can be emotionally and physically draining. For example, it is evident that Neeta's midwife was concerned and stressed by the baby's low heart rate. The different postures assumed by the midwives, particularly in the birth centre, as they provide care means that they have to be relatively fit and able to assume awkward positions.

The midwife as the dirty worker

Cleaning up is one of the main functions of the midwife following the birth, and reminds me of the joke told in medical school: the fourth stage of labour is referred to as the "clearing up" stage and is assigned by medical staff to the midwives and nurses as they "leave that [job] to the women" (Oakley, 1976, p. 32). In the vignettes, it is evident that the midwives accept that a major part of their role is the containment and management of the dirty work and contamination associated with birth. They do not have to be told to do the work related to the dirt or the contamination, they just organise their midwifery work so

that they incorporate the dirty work into their care. The automatic nature of this aspect of the midwives` work can be seen in how the midwife in *Vignette 3* discards the student midwife`s opened packet of gloves even though there is a glove in the packet, indicating that someone is going to use the other glove. Other strategies the midwives use include the prevention of the spread of the body products, preparation for the dirty processes related to birth, containment of the contamination, and cleaning of the dirt from the woman, her baby, sometimes her support people, the equipment, and the environment.

In *Vignette 2* there is a good example of one of the strategies used by the midwives. The midwife prepares Jill for the examination so that she will be in the optimum position for the registrar to examine her vaginally, and to contain any contaminated body fluids/products. The preparation of Jill is done in two stages. Firstly, the bed is prepared so that most, and if possible, all the fluids/body products, including the newly contaminated lubricant, that escape from Jill's vagina will be contained on the blue under-sheets, thus preventing the dirtying of the bed. All the fluids or discharge should collect on the waterproofed undersheets. Secondly, for this to occur, the midwife has to ensure that Jill's buttocks are positioned in the centre of the water proofed under-sheets.

The strategies for the preparation and containment of the dirt of birth are also seen in *Vignette 4*. The midwife appears to be ever mindful of the dirty work associated with birth and prepares the birthing area so that she will maximise the collection of blood and other body fluids, thus reducing the amount of cleaning she will have to do. She uses a clean white draw sheet to cover the vinyl mat that the woman will kneel on. The midwife then adds the waterproof under-sheets. This provides a main catchment area, the under-sheets, and an overflow area, the drawsheet covering the vinyl mat. Her actions are similar when she positions Vera on the birth stool for the delivery of the afterbirth: she is containing the blood and other fluids thus making it easier for her to clean the birth stool when it is no longer required, and she has provided an overflow area for the kidney dish. During the examination of the afterbirth, the midwife removes it from the kidney dish, leaving the blood behind, thus reducing the likelihood of splashing anyone. She places the afterbirth in a large stainless steel bowl which sits on a towel on the floor. Again she has created a main catchment area and an overflow area. The assisting midwife uses the same approach when

she prepares the bed for Vera by placing the waterproofed under-sheets on the bed where she anticipates the midwife will want to position Vera when she checks her genital area for any birth trauma.

Another strategy used by the midwives to prevent the dirt of birth occurring is when they cut the umbilical cord. It is done in such a way that the cord blood does not splatter, splash, or spray the people in the room, or the room itself. This is discussed in greater detail in the sections "Are you going to do the honours?" and A 'clean cut'. Similarly, if the woman's blood loss is more than normal, or the afterbirth has not delivered quickly, the midwives are reminded to give the woman an injection of the artificial hormone, syntocinon, which will decrease her risk of haemorrhage (Enkin et al., 1992). That is, they move from the physiological, or expectant management of the third stage of labour, to the active management of third stage of labour. This is both a safety issue and a method of containment of the dirt of birth.

Following the birth in *Vignette 4*, after the baby has been taken over to the paediatrician, the midwife starts to clean up the birthing area. Although she prepared her work area, she was not totally successful in containing the contaminating fluids due to the sheer volume of liquor and meconium that was released during the birth. The midwife uses the towel she was kneeling on to soak up some of the body fluids. She picks up the baby sucker, but removes the end piece of tubing, or the small bore catheter, then using the wider diameter of suction tubing, removes the major part of the free flowing contaminating body substances (blood, liquor, mucus, vernix, meconium), from around the delivery area. The midwife rolls up the wet towel and drapes to confine as much of the body fluids and substances as she can. Later after Vera is on the birth stool, she collects some of the clots from the birth area and places them in the kidney dish, a more secure form of containment. The midwife, while waiting for the small amount of bright bleeding that usually occurs as the placenta separates, places a kidney dish in the strategic spot to catch and contain as much of this blood as possible. When the midwife moves Vera to the birth stool she takes the kidney dish with her to continue collecting this blood.

The midwives clean up after themselves and the medical staff. For example, the assisting midwife from *Vignette 4* discards the paper wrapping from the gloves into the contaminated rubbish bin. Although the glove wrapping is not contaminated and there is a normal rubbish bin, she does not use it, implying that everything about the birth is considered contaminating or dirty. The assisting midwife cleans up after the midwife and around the birth area. She drops the towels on the floor where they will collect more of the contaminating fluids and reduce the likelihood of anyone slipping on the wet floor. Even when the delivery is done by a doctor as in the birth of Queenie and Quincy's baby, it is the midwives who clean the birthing room. The doctor does assist the midwife in removing the woman from the stirrups, and assists the midwife in reassembling the bed, but he does not do any cleaning work, or remove dirty items, such as the delivery trolley. The assistance given by the medical staff to the midwife is often done out of necessity – there is no other health professional available to offer assistance. The doctor is protected from the contaminating level by the presence of, and the actions of the midwife.

Although the paediatrician is there to ensure that the baby does not aspirate any meconium stained liquor, the assisting midwife is the person who immediately attends to the suctioning of body fluids from the baby's nose and mouth once the head is born. For the paediatrician to have done the suctioning would have brought him unnecessarily into close contact with the body substances. The second midwife has a dual role as the midwife's assistant and as the neonatal person's assistant. When the baby is born, the assisting midwife passes the suctioning apparatus to the midwife who is now in a better position to do it. Later, after the baby has been dried of the birth fluids, blood, liquor and mucus, she disposes of the soiled clothes into the contaminated linen trolley. As soon as the paediatrician has finished with the baby and the resuscitation trolley, the assisting midwife begins the cleaning process by discarding the items in the appropriate contaminated waste receptacles. The paediatrician may dispose of his own personal protective equipment, but the assisting midwife cleans up his work area. She replaces the equipment used for the baby on the delivery trolley while discarding the contaminated cloths in the contaminated linen trolley.

When the assisting midwife leaves the room for the first time, she removes her gloves but leaves her plastic apron on. She is apparently going to check on the other women in labour. Normally the protective apparel is removed when a task is finished. The midwife, by leaving her apron on, is suggesting that she will be required to do more dirty work in another room. The implication is that the contamination from one birth is the same as the contamination from another. She returns, still wearing her apron, puts on a clean pair of gloves and assists with the cleaning process. Contaminated linen and under sheets are disposed of, the vinyl mat is taken over to the bath and washed. When she has finished, she removes her gloves and apron, indicating that she no longer requires her protective equipment and leaves the room.

The midwife's continual cleaning role is alluded to in *Vignette 4* when the assisting midwife leaves the room, and it is described in the introduction to *Vignette 5*. The midwife has just completed cleaning the neonatal resuscitation trolley, the baby by bathing him, and the equipment used for the baby's bath. All of this was done with the same pair of gloves, indicating that all jobs had the same level of dirtiness. During the vignette, the midwife is concentrating on instructing Neeta how to breast feed. The midwife's actions, particularly when she realises that she was unprotected for the 'add on' segment of the lesson, indicates that breast feeding is a dirty business. Yet breast feeding is considered the domain of the midwife (Page & Percival, 2000; Sheridan, 1997).

The continual cleaning role is also seen when the midwife assembles her equipment for the baby's bath in *Vignette 6*. She brings into the room, not only the equipment she will use for the bath, but the equipment she will use to clean up after she has completed her task. Throughout the vignette, the midwife continues to focus on cleaning up as she works. She disposes of the wrappings and empty soap container as she goes through the bathing process. At the end of the vignette, there is a long paragraph where the midwife is concentrating on cleaning up after the baby's bath and her examination. She indicates that she has completed the bathing process when she removes and gloves and disposes of them in the rubbish bin.

The grandmother from *Vignette 5* recognizes the position of the midwife as the dirty worker when she offers to make a cup of coffee for the midwife because: "You've been working hard". This is almost a classical description of dirty work. Not only has the midwife been constantly caring for the woman and her family, but she prepared for the birth, she was the accoucheur, then was required to clean up the bloody mess following the birth. She has washed the baby, cleaned the baby bathing equipment, and the resuscitation trolley, and shown Neeta how to breast feed. In the last paragraph of this vignette, the midwife talks about heating food and bringing a meal tray to the room. The description concludes with the midwife removing the covered food plate from the room: these are the actions of a servant, thus indicating that the midwife does both dirty work that is lowly, and dirty work that is specialised.

Similarly, the midwife as the worker who does the dirty work is acknowledged by Ulrich and agreed upon by Ursula. Ulrich comments: "A very thankless job this one, [midwife`s name], doing the washing and all that. It is sort of like (pause)". The midwife laughs: "Like all the actions are over with now". All the adults concerned, clearly consider that the high point of the day – the birth – has been and gone. Now a different midwife is left to complete the mundane chores associated with the birth: the cleaning of both mother and baby.

The general cleaning aspect of the role of the midwives is evident in *Vignette 6*. When Ursula is ready to have the baby bathed and rings the buzzer, a midwife, but not Ursula's midwife, responds to her call. When Ursula's midwife does return she apologises and explains: "I was cleaning a bath and I didn't hear the buzz". Although cleaning the bath is a domestic chore, when there is no housekeeping staff available, for example on the night shift, their work is done by the midwives. This indicates the midwives' subordinate position within the hospital system: not only do they do their own work, but they pick up the other cleaning work normally done by another group of less specialised dirt workers, the housekeeping staff.

To assist women to push in labour, is not always a clean job. The woman may need physical support, or she may be vomiting and require cleaning. The woman may require

cleaning around her genital area due to her vaginal loss of blood, mucus and liquor, especially if the amount is excessive or sticky. The woman's bowels may open when she is pushing and the midwife will be required to remove the faeces. Both vomiting and bowel movements leave an odour in the room which is difficult to disperse. The midwives will have to accept this, or try to unobtrusively remove it, or disguise it with a perfumed aerosol spray. The midwife and the student midwife are the workers in *Vignette 3* with the student being the 'general dogsbody'. Clearly, the power relationship is a dirt relationship. The higher the person's status, the further they are removed from contact with the dirty work. The lower the worker's status, the closer they are to the dirty work.

Protection of the health care workers

Protecting the health care worker has become a major concern for various governmental bodies with the possibility of disease being transmitted from one person to another by blood and other body substances. The possibility of a health care worker suing their employer for acquiring such diseases seems to be the motivation for legislation around this topic. Amendments were made to various health professional Acts (See Appendix 2) to ensure that health professionals followed infection control guidelines. How the staff implement these guidelines is the focus of this section.

"Dress up"

Most of the staff prepare themselves for the birth without saying anything to the labouring women. *Vignette 3* is an example of this lack of verbal communication. Occasionally, something may be said to the women and their families during the second stage of labour. For example, Neeta's midwife told her: "I'm just getting dressed up in all the garb that we always wear. Don't be afraid of it". Slight variations of the phrase, "dress up" are used by the staff to describe their preparation of themselves for the birth of the baby. For example, someone may comment on the midwife's appearance as she walks in the corridor: "She [the midwife]'s started to dress up". The midwife conducting a birth may instruct a student to: "Dress up, now", or say: "We'll dress up now", while the midwife caring for a woman may come to the midwife in-charge of the shift and say: "I am getting dressed up", or "I'm dressing up now", indicating that she will be busy with a birth and unavailable for other work. The "dress up" phrase is used most frequently by the staff when talking amongst

themselves. In the parenting education classes, the educators inform the participants that delivery suite and birth centre staff will "dress up" in particular clothing for the birth. Each parenting education class is shown samples of the various forms of protective clothing and instructed that the special clothing is for their protection, the protection of the staff, and to prevent cross infection.

The "dress up" by the staff is done in stages. Sometimes it is completed quickly – in a few minutes. Other times it may be done over a long period – up to an hour. It is often interspersed with other jobs. For example, in Vignette 3 the student midwife has her plastic sleeves on, looks as if she is about to put on her gloves, but she is directed to find the doctor and give him a message. On her return to the room, she puts on one sterile glove, but before she can get the second glove on, she is sent to find a mirror. On her second return to the room, she finds that the midwife has been tidying up and the glove has been discarded. The student midwife obtains another glove, unsterile, and puts it on. The general practitioner begins his preparations for the birth by putting on a green plastic apron as he talks to Wendy and Warwick. The midwife has a pair of gloves on from when she assisted at the vaginal examination. Five minutes later when the tape is turned on again, the student midwife has added a plastic apron to her outfit. The midwife, in between assisting Wendy with her pushes, puts on one plastic sleeve, then makes a telephone call requesting the presence of a paediatric person, and then adds her second sleeve. Later, she adds the apron and her protective glasses. She also ensures that the student midwife's eyes are shielded by the protective eye-wear. The general practitioner added the plastic sleeves and his sterile gloves while the tape was turned off. The general practitioner used his own spectacles instead of the protective eye-wear provided by the hospital. The sterile gown was added to his ensemble. It is worth noting that his outfit, as soon as it was put together, was unsterile. This was due to the order of dress and his method of dressing. For example, his sterile gloves should have been put on last, while his sterile gown is incorrectly positioned and was done up at the back by himself. Probably the only reason he wore the sterile gown was to protect his own normal clothes. Interestingly, when I spoke to him about using a slide from this birth, I told him I was interested in how things had changed in the way we dressed for birth. His response was amazingly insightful: "Oh, it's all about us now, isn't it?".

The medical staff are more likely to dress for the birth in a single episode, as they have a midwife who will attend to their needs and the needs of the parturient woman. The doctor who preformed the forceps delivery on Queenie, dressed in this manner while talking to Queenie and Quincy. He was originally in 'theatre scrubs', and wore his own prescription glasses. His only protective equipment was a plastic apron and the sterile gloves. He probably did not bother with the sterile gown as it would not have mattered to him if his clothes were dirtied with birth fluids or not. If dirtied, he would just change his clothes.

The paediatric staff tend to wear minimal personal protective equipment, presumably because they feel they are at a distance from the 'free' contaminating body fluids which occur during the birth. The midwifery staff also act as a protective layer for them during the birth. Paediatric staff attended six births in the study. One staff member wore gloves and an apron, but four others wore only gloves. The remaining paediatric person probably wore gloves, as the sound of the packet being opened could be heard, and the assisting midwife, who already wore gloves, discarded the packet in the contaminated rubbish bin. When his hands were finally seen, he was about to leave the room, and was, as expected, gloveless.

The phrase, "dress up" has connotations of playfulness and a lack of seriousness about the procedure. It reminds me of children playing "dress up" with cast off adult clothing and suggests that staff are going through the motions because they have been directed to do so. This is supported by the two definitions found in *The Macquarie Dictionary* (A. Delbridge et al., 1997, p. 649), either "to put on best clothes", or "to put on fancy dress, costume or guise". During the period when it was considered that a surgical standard of cleanliness was essential for the birth, staff had to do, as part of their preparations to delivering the baby, a surgical scrub of their hands and forearms. This was referred to as a "scrub up" (described in Chapter 6) and was mandatory. In contrast to such strictness, the "dress up" does not seem serious and often does not include the washing of the accoucheur's hands. This has changed over the period of the research and staff are now more committed to the wearing of their protective apparel. It may be due to the on-going inservice on infection control, or the improved knowledge of the staff about the various fines (Study Area Health Service, 1998a, 1998b, 1998c; Study Hospital, 1998) that they can incur, or it maybe that

the staff needed time to accept the dramatic changes in the dress code for birth, or it may be a combination of both factors. The following example indicates how regulation and penalty rather than professional and scientific concerns dominate. I acted as the assisting midwife for a delivery in 1999. The midwife, as she dressed for the birth, informed the woman: "I have to wear this, because if I don't, they could fine me \$50,000 and I could lose my house".

The women and their families appear to accept whatever the staff wear. This is possibly related to the experience of the other women in their family. For example, many current parturient women would have been born in the period when childbirth was associated with many of the obvious trappings of surgery, such as, sterile gowns, theatre caps, masks, theatre boots, sterile surgical drapes and theatre gowns. There are numerous books (Kitzinger, 1982; Knepfer & Johns, 1989; Nilsson & Hamberger, 1990; Stoppard, 1985) and magazines (*Australia`s Parents; Mother & Baby*) available which demonstrate that staff wear special clothes for the birth, while medicalised childbirth has featured on the internet, in television series and in movies. An alternative reason is that the couple are relatively powerless within the institution of the hospital, and would consider it improper to question the staffs` manner of dress.

'A clean cut'

When viewing the births on the videotapes, it is evident that the scissors used for the birth are not sterile, rather they are surgically clean. All the fathers who cut the cord did so without gloves. Only one of the fathers who assisted with the birth, Olly, wore gloves for the birth. On the instructions of the midwife, Olly took his gloves off immediately afterwards, prior to cutting his baby's cord. According to the guide, *Care in normal birth*:

Cleanliness is a first and foremost requirement. There is no need for the form of sterility commonly used in an operating theatre, but nails must be short as well as clean and hands must be carefully washed with soap and water. Attention should be paid to the personal hygiene of birthing women and birth attendants the use of the "three cleans" (hands, perineal area, umbilical area) need to be maintained or expanded Cutting the cord should take place with sterile instruments (World Health Organization, 1996a, p. 19 & 33)

None of the fathers were asked to wash their hands prior to the birth, yet as demonstrated by the vignettes, the possibility of the partners being involved and assisting during the birth is a real possibility. They are acting as apprentice birth attendants, even though it would be considered that they have a minor role. In Olly's case, it is assumed the gloves will be protective, yet he is instructed to remove them prior to cutting the cord! The implication is that the gloves were for the protection of Olly, rather than for Oona or her baby.

When viewing the videotapes showing the umbilical cord being cut, I am reminded of a statement by Jane Sharp, the first English midwife to write a textbook. She believed that "A Midwives skill is seen much if she can preform this rightly It is no matter what you cut it off with, so it be sharp to do it neatly" (Sharp, 1671/1999, pp.164 & 166). The directions given to the partners seem to be aimed at achieving this neat cut, or as it would probably be described today, 'a clean cut'. There is a second reason why 'a clean cut' is appropriate terminology: the midwives manage to keep the cord cutting process clean by preventing the contamination, or dirtying of the area with blood. This is supported by the meanings given to 'neat': "In good order or clean condition; Not diluted or mixed with other substances; Performed with skill and apparent ease" (Word Perfect, 1999). The phrase, 'a clean cut', came to prominence early in the debate on perineal trauma when the episiotomy, or "a clean-cut" was considered better than a ragged or uneven perineal tear (Quigley, 1923 cited in I. D. Graham, 1997, p. 44). It seems that 'a clean cut' has a long tradition in midwifery and medicine.

Other examples of protective measures

In *Vignette 5* the midwife's ingrained training to assist the breast feeding process, overrode her relatively newly acquired knowledge concerning the policies and procedures on the isolation of body fluids and body substances and the requirement to use protective equipment. Once the midwife realised her error, she washed her hands immediately, the required first aid treatment following an exposure to body fluids, and abruptly left the room. The midwife has handled the woman's breast, particularly her nipple, possibly colostrum, and the baby's mouth without the protection of gloves. She has possibly been exposed to body fluids: colostrum from Neeta's breasts and saliva, and/or mucus, and/or blood from baby Nick's mouth.

The midwife's gloves in the same vignette were sterile initially. The fact that the gloves were sterile, rather than clean, suggests that the sterile gloves symbolically provide greater and longer protection for the midwife than that obtained by using surgically clean gloves. The protection is provided over several different processes: bathing, cleaning and breast feeding. The removal of the midwife's gloves normally would indicate the end of the process, symbolically, ritually and practically.

The rationale for the midwife to wear "the vet gloves" is that they are long and provide protection for the wearer from the fingertips to the shoulder. They are used by the midwifery staff if the women are in the bath as Vera was in *Vignettes 1* and 4. If the women labour in the bath it is assumed that the bath water is contaminated as it is in contact with the woman's vagina and any body products she, or the baby, are excreting. A large kitchen strainer, or 'pooper scooper', is used to remove the obvious pieces of debris, such as, mucus, blood clots and meconium.

In *Vignette 6* during her preparations for the baby's bath, the midwife ensures that she is protected. She puts on a pair of plastic sleeves and ensures that they cover the sleeves of her uniform. The midwife then applies a pair of sterile gloves and makes sure that the cuffs of her gloves cover the bottom part of the plastic sleeves. She is attempting to seal her hands and her arms, thus preventing these parts of her body from being in contact with either the baby, or the contaminating bath water. She has chosen sterile gloves because they are a tighter fit than the non sterile gloves, particularly around the wrist. The sterile gloves are more likely to stay in place during the bathing process, giving the midwife better protection.

The assisting midwife in *Vignette 4* without gloves, prepares to hold the plastic bag so the placenta can be dropped into it, however, the midwife notes she has no gloves on and takes over the procedure. Similarly, in *Vignette 3*, the midwife ensures that the student midwife wears a pair of protective goggles. One aspect of work practices which became explicit with the new focus on infection control was the responsibility that health care workers had to their own health "and the health and safety of any other person" (Australian National

Council on AIDS & Department of Community Services, 1990, p. 10). However, there are also contradictions and inconsistencies in how the midwives operate.

Contradictions and inconsistencies

There are many instances where the behaviour of the staff is inconsistent and/or illogical in relation to practices around cleanliness and sterility. For example, in *Vignette 4* the midwife places the sterile gloves on the floor before she puts them on. When she does put them on, she tears the glove but she continues to work before calling for assistance. As the midwife noted, she was "saturated" to her shoulders during the birth by the liquor that was expelled with the baby. The midwife could have changed as soon as the baby was born, or as soon as the baby's cord was cut. The assistant midwife could have taken over for a few minutes. The midwife did neither. Instead she waited for nearly seven minutes before removing her soiled sleeve. Even though she does finally remove the wet sleeve, she does not wash the contaminating fluid off her body.

It would be sensible to wait for the cord to stop pulsating before cutting it in most situations and to cover the site as the cut is being made. Besides being the recommended practice, this would protect both the staff and the family from being sprayed with blood. The parents would soon get used to a different view of the cord being cut. They would still be able to see that the partner was doing the cutting even if the specific area of the cord could not be seen.

In *Vignette 4*, it is interesting that although the midwife uses the extra long gloves to provide adequate protection for herself when monitoring the baby while Vera is in the bath, when Vera gets out of the bath, the midwife, without gloves, assists Vera to dry herself and to remove her bikini. Logically, if the water is contaminated, then so is anything that is in it, including Vera and her bikini. The midwife should be wearing gloves but without any hesitation she has gone to Vera's assistance. Vera's bikini is black, however, so any dirt on it is hidden rather than obvious. The midwife treats Vera and her bikini as if they were clean. Evidently, if the contaminating products cannot be seen, the person or object is treated as if clean.

When breast feeding is initiated by the midwifery staff in the video tapes, they may or may not wear gloves for the process. During the study this was related to the staff's difficulty in accepting the need to wear gloves for this procedure. Staff are increasingly likely to wear the protective gloves when assisting with breast feeding. I have since seen midwives wearing protective eyewear when helping women to express their breast milk.

Safety issues for the woman and her baby

Most midwives and obstetricians would accept that sterility during a vaginal birth is impossible to achieve, although many textbooks still advocate aseptic techniques for the birth (Morrin, 1997b; Sellers, 1993a; Silverton, 1993; Varney, 1997). Aseptic techniques are not seen to be followed in any of the birth tapes. According to the World Health Organization (1996a), however, cleanliness is the primary requirement during birth.

In *Vignette 4* the midwife's sterile gloves are unsterilised, and some would argue 'dirty', almost immediately when she places them on the floor in their paper wrapping. Throughout the vignette, the midwife repeatedly moves from supposedly sterile items to non sterile items or people and back again. Similarly, the assisting midwife, wearing unsterile gloves, removes the instruments required for the cutting of the cord from the 'sterile' delivery tray. Vince replaces the scissors he used to cut the cord back on the delivery trolley. Towards the end of this segment, the midwife covers the delivery set with the cover which has been in contact with the floor. The delivery set will be used when Vera's tear is sutured. At best the equipment used during the birth is surgically clean. It could be argued that in *Vignette 4* this was not achieved and there was a real risk of exposing Vera and/or her baby to infection.

In the same vignette, the midwife's hair is a source of irritation to her during the birth yet she has made no real attempt to contain it, or asked her midwifery colleague to fix it for her. This may be related to her vanity about her hair, but it also suggests that it is no longer necessary to keep hair from contaminating the birthing area. A current textbook where the focus is on the "Basic practices of medical asepsis" includes the following dictum: "Use practices of personal grooming that help prevent spreading microorganisms. Examples include shampooing the hair regularly, keeping it short or pinned up to limit the possibility

of carrying microorganisms on the hair shafts ..." (C. Taylor et al., 1993, p. 508). Hair, according to some policy documents (NSW Health Department, 1998, 1999c), is no longer considered a problem as a description of clinical waste includes the phrase "human tissue (excluding hair, teeth and nails)".

When determining the baby's weight in the imperial system, the midwife in *Vignette 6* picks up the weight conversion chart with her gloved hands and uses a finger to follow a column on the chart. She makes no attempt to either protect the chart from her presumably dirty fingers, or later, to clean the chart. The chart is used by midwifery staff continually and frequently by the support persons. It could become a source of cross infection, particularly to the families who are not protected. There is a similar problem with the baby scales.

There are problems with the use of the sterile gloves by the doctor in *Vignette 2*. Although the doctor wears sterile rubber gloves for the vaginal examination, she does not maintain their sterility. The doctor knows she is going to be undertaking an exposure prone procedure, that is, the application of the fetal/baby scalp electrode. An invasive and exposure prone procedure occurs when there is the possibility of direct contact between the skin of a health care worker and a sharp instrument in a body cavity, or a confined site which is poorly visualised (National Health and Medical Research Council & Australian National Council on Aids, 1996; NSW Health Department, 1999a). These procedures have been associated with the transmission of hepatitis.

Although the doctor has washed her hands, this did not occur immediately before the vaginal examination. There is the possibility of perforation of the rubber gloves occurring during the application of a fetal/baby scalp electrode, or less likely, during the vaginal examination. The recommended practice is to wash and dry hands immediately prior to and following all patient procedures (New South Wales Parliament, 1995a), and the application and removal of gloves (NSW Health Department, 1999b). This is to minimise any problems if the gloves have a hole in them, or are perforated during a procedure and to minimise cross infection. Thus, practically, ritually and symbolically, the putting on and the removal of the gloves, should indicate the beginning and the end of a procedure.

Preceding and immediately following the removal of gloves the health professional's hands should be washed. This does not occur for the commencement of this procedure. Similarly, although the doctor puts on sterile gloves, she almost immediately unsterilises them. The examination, however, is continued without any consideration for changing into fresh sterile gloves. When the midwife offers the doctor a sterile fetal/baby scalp electrode, immediately the registrar touches it, it must be considered unsterile, because her gloves are unsterile. Nevertheless, the procedure continues uninterrupted. The application of a fetal/baby scalp electrode is always accompanied by trauma to the fetal/baby's scalp, and therefore, there is always a risk of an infection to the fetus/baby who is particularly vulnerable at this period. The actions of the examiner indicate this is not of consideration during the procedure. The protection provided by the gloves is directed at the operator, rather than the woman and her fetus/baby. At the commencement of this procedure, the equipment is sterile, but there is no real effort to maintain sterility, thus increasing the risk of infection to the woman and/or her baby.

There are similar problems in *Vignette 5*. The sequence of events for this interaction is illogical in relation to the principles of infection control and fails to provide adequate care to the woman and her baby. The midwife should have used a fresh pair of gloves for the bathing, another pair for the cleaning, and for the breast feeding, while hand washing should have been attended immediately before and after changing the gloves for each process. The gloves are only removed at 'the end' of the breast feeding lesson when they are disposed of in the contaminated rubbish bin. What this means is that while the baby was cleaned by his bath, he has possibly been contaminated or dirtied by the gloves which have also been used to clean the baby resuscitation trolley. Neeta could also have been contaminated by the process. Even lay people would find something strange about the way the cleaning was done and incorporated into the breast feeding process.

SUMMARY / CONCLUSION

In this chapter, the relationship between birth, work, and women, both as mothers and midwives, has been explored. It is evident from the data on the video tapes that the labouring women are doing hard physical work under difficult conditions, thus fitting the definition of a dirty worker. The birthing women, however, share other characteristics with

dirty workers – they are on the margins of society; are unable to determine how, when or where they will labour; the end product, the baby, is itself dirty; while motherhood has low status and value within Australian society. Because the labouring woman is continually leaking she is considered dirty, and when she has given birth, she is encouraged to clean up her own body dirt. The midwives are in a similar situation. They cannot determine how, when or where they work, are almost invisible, have low status and are poorly valued. The midwives are continually doing dirty work as they care for the woman's leaking body and the dirty baby following birth. The protection of health care workers is a priority for the midwives and takes precedence over ensuring cleanliness of the birthing environment. There are, however, contradictions and inconsistencies in the behaviour of the health care workers. For the women, as labourers and midwives, labour and birth is dirty work, both literally and figuratively.

CHAPTER 10

BIRTH DIRT

Introduction

In this chapter, I draw together the material from the previous chapters and make explicit the connections between women, birth, dirt, work, and power relationships. I argue that 'birth dirt' exists, but, its form will vary depending on the time, the place, and the culture, although it is always centred around the physical reality of birth. It may overlap with "sick dirt" (Littlewood, 1991, p. 168) on some occasions, but it is different. I use Douglas' (1966/1992) work as a framework to integrate analysis from the various sources of data. This is related to how Douglas 'sees' pollution as functioning at two levels, and being the source of power and a danger to a society. The purification of the environment and the organisation of the form and function of pollution are also discussed. Incorporated into the synthesis is the centuries old construction of woman as both 'dirty' and 'the other', while the use of costumes and their role in reinforcing the powerful position of the wearer is explored. The paradoxical positioning of the midwife is briefly discussed, while the various ways of sanitising the birth are described. Throughout the thesis, it is evident that particular individuals, body parts or substances are considered especially dirty. Some of the implications of the study are identified.

BIRTH DIRT: THE THEORY

Following on from Littlewood's (1991, p. 178) "sick dirt", it is evident from the data presented in this study that "birth dirt" also exists. The term "sick dirt" is insufficient to explain the dirt of childbirth as in most instances the woman is not ill, and even if the process is abnormal it is rare for the dirt of abnormal childbirth to be the same as the dirt of a sick person. The childbirth process is limited by the physiological process and definite time constraints and occurs in healthy women. The period of gestation, the labour and delivery period, and the postpartum period in which the woman adapts to her new body and role are also predetermined and known. This time frame is a minium of six weeks, but is extended depending on the time the woman breast feeds. The exact time frame may vary in

ILLUSTRATION 10.1 BREAST FEEDING MADONNA



A well known example of the Madonna breast feeding baby Jesus. This one was painted by Peter Paul Rubens and is entitled, The Holy Family beneath an Apple Tree, circa 1630/32

different cultures and different times, but it is constructed around the physical reality of childbirth. The rare instances when "birth dirt" would overlap with "sick dirt" would occur when the woman experienced an illness related to the pregnancy, for example, hyperemesis¹⁰⁷, endometritis¹⁰⁸, breast abscess¹⁰⁹, abdominal abscess, wound infection. Even when women experience morning sickness it is not considered as a real sickness, rather it is seen as a confirmation of the pregnancy and new life. It is tolerated and laughed about in Anglo western society.

Birth dirt exists, but its` nature will vary depending on the times, the place and the culture. Who and what is clean or dirty similarly varies and will depend on and similarly create the discourses surrounding birth in the particular time, place and culture.

The variation in birth dirt can be seen within Australia. While investigating 'dirt', its origins and its various characteristics, I was struck by the great difference in the way most white Australians perceive physical and symbolic dirt and the totally different manner in which the indigenous Australian population perceive it. The majority of white Australians would react to dirty or contaminating people, body products and items the way the people in the study reacted. In traditional Australian Aboriginal cultures, however, dirt, or the earth, or the land, is considered sacred and is part of many rituals. In traditional Aboriginal childbirth, or 'borning', there are many examples of a different approach to dirt. Traditional birthing practices varied, depending on the times and the cultural group, but the use of 'dirt' (sand, ash, smoke, charcoal, ant-nest soil, and earth), the native flora, and items found in the environment, was common place (H. Callaghan, 2001). The baby was usually born into a depression in the ground, with the cord being cut with a sharp implement (stone, fingernail, shell, piece of fern), and the placenta being treated as both sacred and dangerous requiring special burial and/or preservation rites (H. Callaghan, 2001). In traditional Australian Aboriginal society these components are considered essential elements of the

¹⁰⁷ Hyperemesis gravidarum is excessive vomiting of pregnancy requiring treatment.

¹⁰⁸ Endometritis is an infection of the endometrium, the lining of the uterus.

¹⁰⁹ An abscess is a collection of pus and may be found in any body space or cavity (Sweet, 1992).

healing and spiritual requirements surrounding childbirth, yet most of these ingredients would be considered dirty by most white Australians.

The dirt of birth

Although during the labour and delivery process, all body products are assumed to be contaminating, or dirty, there are particular body parts, or organs, or individuals which are treated as if they are particularly dirty. These are derived from or are unique to the woman's body.

Female genitalia and modesty

During labour the woman's reproductive passages, but particularly the genitalia, are a primary focus of the health professionals' attention or gaze. This can be a cause of embarrassment for some women who, like Vera, consider these body parts should be hidden as they are "the naughty bits" or dirty. The famous sexologist and psychologist, Havelock Ellis (1936, p. 80), considered modesty was related to the woman's "fear of arousing disgust, ... due to the close proximity of the sexual centre to the points of exit of those excretions which are useless and unpleasant". It is not uncommon for the woman's bowels to move involuntarily during the pushing stage of labour (Brackbill et al., 1984). For one long term hospitalised patient, her vagina became the only area she could keep private (Fassett & Gallagher, 1998). Jowitt (1993) points out that there are taboos on defecation and sex in that they are perceived as behaviours done in private. She claims that the "the second stage of labour feels exactly like defecation" and places the woman at a "psychological disadvantage" (Jowitt, 1993, p. 148). For Carter (1995, p. 113) women are responsible for maintaining their modesty and privacy through "careful 'reading' of individual situations, [and] taking into account their own confidence". Using Carter's terms, both labouring women and midwives read the situation and maintained the woman's modesty and privacy by carefully positioning individuals in the birthing rooms.

Vera's vignette demonstrates how her breasts and genitalia are considered by many people as "naughty bits" or dirty. As Schott and Henley (1996, p. 150) have noted modesty may be considered an "old fashioned concept" but many women are concerned "about keeping their skirts down, their knickers up and their knees together", so their genitalia is not exposed. In an English study done on vaginal examinations in an antenatal clinic, a similar

comment was made by an interviewee, while another participant talked about women "immodestly" exposing themselves (Moyes, 1977, p. 290). The need of the labouring woman for modesty and privacy during labour, is sometimes forgotten by health professionals in modern Australia. Yet, for those women who are shy, or young, or private, or come from a different ethnic background, or a particular religious community, modesty is an essential part of their normal life. For example, women who practise Judaism or Islam (Dugard, 1990), or are from a traditional culture, such as Australian Aboriginal (Duncan, 1986) or south Asian (Schott & Henley, 1996), are expected to maintain their modesty at all times during childbirth. Examinations in childbirth, particularly those related to the woman's breasts and vagina can be a source of distress, discomfort and embarrassment for some women (Henslin & Biggs, 1995; Menage, 1993; Schott & Henley, 1996). Interestingly, only one textbook, *Culture, religion and childbearing in a multiracial society. A handbook for health professionals* (Schott & Henley, 1996), discussed in detail ways in which the woman's modesty could be protected in labour.

That childbirth has a sexual component has been stressed by many authors (Kahn, 1995; Kitzinger, 1985; Odent, 1984; Raphael-Leff, 1991; Rich, 1986), although Jones and Dougherty (1994, p. 267), comment that sexuality as a subject is "taboo" in a scientific and industrial society.

In books on childbirth, the exposure of women's bodies, but particularly their breasts, genitals, and reproductive system, has gradually increased since the development of scientific medicine and photography. Current textbooks (Beischer, Mackay, & Collditz, 1997; Hacker et al., 1992; Liu & Fairweather, 1985; A. W. F. Miller, Hanretty, Callander, & Ramsden, 1997) display clinical drawings and photographs in which women and their bodies are segmented, magnified, isolated and objectified. During the height of the medicalisation of childbirth period, the women were offered a "clean nightdress" (Myles, 1969, p. 280) but this was usually a theatre or hospital gown, often very poor at covering their bodies and frequently unattractive. Its supposed aim was to ensure that the woman did not bring 'germs' into the labour room, rather than protect the woman's modesty. The absence of clothing worn by women in labour seemed to occur as part of the backlash against the medicalisation of childbirth and is very obvious in some consumer orientated

books (Odent, 1976/1984; Odent, 1984; Lang, 1972; Balaskas & Balaskas, 1983; Gaskin, 1977; Peterson, 1984).

Baby dirt

In Chapter 7 in the vignettes, and in the analysis in Chapter 8, it is evident that the newborn baby is also being treated as dirty. When observing a newborn baby, it is evident that he is covered in material which corresponds to many of the characteristics of dirt provided by Enzensberger (1972). For example, the baby is always born wet and may be slippery or greasy from the vernix; he may be covered in splashes of urine or in threads of bloody mucus; from the intestinal tract, the baby may excrete meconium, which is a thick, sticky, dark greenish, black, tar like substance; the newborn baby may be described as 'spitty' or 'mucusy', that is, drooling mucus from his mouth and sometimes his nostrils; the baby's hair is often saturated with liquor, mucus, blood, and sometimes meconium, which hardens in the hair and is difficult to remove; the newborn baby has a distinctive smell and while not offensive, it is often a strange new smell to some of those present at the birth; and finally, the baby could be considered to have wormed his way out of a hole, the vagina, while babies are know to wriggle and twist. One father described his newly born, but dirty son: "He was covered in muck, of course" (Bell, 1991, p. 117).

Although all the women videotaped during the birth were happy and eager to touch and hold their baby, this was not true for most of the fathers. It is not surprising, therefore, that some parents, including mothers, do not want to touch their baby until it has either been wrapped, wiped clean, or bathed. On the videotapes, enfolding of the baby by the father and the support people only occurred when the baby had been wiped clean and wrapped. The baby is considered dirty but not from their dirt and so they wait till he or she is cleaned, either partially or totally.

For those women who have given birth to a dead baby, it may be even more difficult to embrace the baby. Galvin (1986) although she had the opportunity to nurse her stillborn son, regretted only touching him and not nursing or cuddling him. Stillborn babies, even when of a normal appearance and gestational age, may have other dirt characteristics besides those of sliminess. For example, the baby's colour may be excessively pale or bruised while the skin may be sloughing off, or as Dyer (1996, p. 89) describes it, "rotting

away". Dyer (1996) considers the parents are fearful about the appearance of their stillborn baby, especially if it has been dead for sometime. The deterioration in the skin is a sign in our society of death, decay and disease: all of which we treat as dirty. These women will often give the baby to someone else when the baby's body becomes cold. The coldness is indicative of death and dirt. If the family wish to view the baby again at a later time, it has to be retrieved from the morgue where it is kept refrigerated, almost frozen, and so midwifery staff will dress the baby in warmed bunny rugs to remove some of the coldness and make it easier for the family to handle the baby.

The newborn baby can be considered dirty for several less obvious reasons. He is a prime example of Enzensberger's (1972) pollution whose origin is intermingling: firstly by the intercourse of his parents, then secondly by living inside his mother for approximately the next nine months. A similar argument is posed by Martin (1999, p. 126): the pregnant woman is a "paradigm case of boundary transgression as well as the forbidden mixing of kinds". When in the uterus the fetus/baby is in close proximity to his mother and comes into contact with her body, particularly her genital tract, during the birth process when he is expelled, or excreted. The baby may be exposed to maternal faeces during the birth. According to Odent (1976/1984, p. 86), there is confusion between the genital and the rectal tracts which results in midwives instructing women in the second stage of labour: "Push, as if you were crapping", while "'expulsion', the technical term, has connotations of driving out, being rid of". Thus, the newborn baby must be driven out, or got rid of, supporting Enzensberger's (1972) views of the newborn baby as polluted because of contact with his mother and because he is excreted from her body. The phrases, "being rid of", or "got rid of" imply that what is being viewed so negatively is dirt.

Because of his abhorrence to slimy things Sartre (1943/1984) would consider the newborn baby as dirty. When examining the healthy newborn baby from the perspective of Kubie's (1937) hierarchy of the body, the entire body of the baby is soft, wet, and slimy. By this same hierarchy, a baby that is 'overdue' or 'overcooked', with wrinkled and peeling skin would be considered dirtier than the normal healthy term baby. Similarly, a premature infant may be covered with a profuse amount of very fine hair called lanugo¹¹⁰ (R. Thomas

Lanugo is the fine hair that covers the body of the fetus/baby while in the uterus. If the baby is born at

& Harvey, 1997) and may appear to be like "a little old man" (Members of Special Care Parents, 1988, p. 9), both additional characteristics of dirt, thus making these babies dirtier than the normal term baby. The newborn baby may have experienced trauma from the birth resulting in abrasions, bruising, swellings, minute spots or petechiae¹¹¹, fractures, or even paralysis, while milk spots or milia¹¹², are present on the face of 40-50% of babies, and stork marks¹¹³ are present on the face or neck of 30-50% of babies (R. Thomas & Harvey, 1997, pp. 5-8). These variations on the normal newborn when seen through Kubie's eyes, indicate that these babies are dirtier than a normal healthy term baby. Mongolian blue spots are "almost universal for non Caucasian" babies (R. Thomas & Harvey, 1997, p. 1) and can be another reason for describing a non white baby as dirty. Halliday (2000, p. 8), when discussing the issues related to the adoption of overseas children by Australians provided a telling quote from one parent: "A boy looked at her and said, 'Yuk, her skin is the colour of poo', and I was horrified, thinking, 'Why do they think of poo and not chocolate or coffee?" Although these blemishes are either temporary, or a variation of normal, often even the most loving of parents will bemoan their presence and the resulting negative appearance of their baby. Even so, if permanent defects occur, the infants and their parents are often stigmatised (Darling & Darling, 1982). These blemishes and permanent defects fit both Enzensberger's (1972) eighth characteristic of dirt and Goffman's (1963/1973) spoiled identity.

term, it has usually disappeared (Sweet, 1992).

Petechiae are "small spots caused by minute subcutaneous haemorrhages, seen ... sometimes on the face of the normal newborn child, due to venous congestion during delivery" (Sweet, 1992, p.208).

[&]quot;Milia are fine white spots seen on the nose and cheeks [and] occasionally are mistaken for infection" (R. Thomas & Harvey, 1997, p. 5).

Stork marks are simple birthmarks and are bright pink marks seen on the eyelids, the nose, the mouth area, the forehead, and the nape of the neck. Most disappear spontaneously during the first year of life. Those on the nape of the neck are usually permanent (R. Thomas & Harvey, 1997)

The variations of normal in the newborn baby has led Rubin (1984, p. 105) to describe the normal healthy newborn baby as an "enigma" to the mother because her "impressions oscillate between beautiful and ugly, attractive and repulsive, alert and responsive or limp like a rag doll". Interestingly, Rubin (1984, p. 46) describes the woman's fantasies in the second trimester of pregnancy result in her imagining her child as a light complexioned angel, regardless of the family colourings, but as labour and birth come closer, the image alters to a child who is "darkly colored [sic], covered with hair, and screaming — an animal". Thus, the earlier fantasy can be described as cleaner than the later feared fantasy. The "enigma" of the newborn baby and these two different images by Rubin demonstrates the polarisation of clean and dirty.

Body 'waste'?

Chapter 7 and Chapter 8 argue that all body products are treated as dirty constantly, however, the placenta is also treated as a waste product which has a 'use by date'. As noted earlier, the dirtiness of the placenta and menstrual fluid in comparison to 'normal' blood was noted by a male participant in Laws' (1990) study on menstruation. What is implied by this comment is that there is something about the afterbirth and menstrual blood which makes them both dirty and dirtier than ordinary blood. It cannot be the colour as they are all the same colour. It could be the texture: the afterbirth is an organ sometimes covered with clotted blood, while menstrual blood may contain tissue and blood clots. The origin of both of these items is the uterus and it is possible that the image of where they have come from is enough to have him classify them as dirty. A similar attitude was noted by Good (1998, p. 70) who found that in Iran menstrual blood was labelled "dirty blood" while the fetus after the first couple of months was considered to eat the retained menstrual blood, thus improving the woman's health. The newborn baby, however, required bleeding to remove the "dirty blood" ¹¹⁴ (Good, 1998, p. 70).

The shedding of the lining of the uterine wall has been described as "horrible things coming out", while others saw it as an "excretory mechanism", and the removal of "impurities"

This article was originally published in 1977. A note in the 1998 version says this tradition is "seldom practiced [sic] today" (Good, 1998, p. 70).

(Laws, 1990, p. 33). This may be related to the language used to describe the mechanism. For example, Sweet's (1997, p. 33) description uses words which accentuate the notion of menstrual blood as being dead tissue and therefore dirty: "degenerates", "necrosis", "sloughs off", and "expelled". The shedding of the lining of the uterine wall is the reason given by Angier (1999) for our perception of menstrual blood as dirty. So a possible reason, for describing the afterbirth as dirty, is that the placenta and membranes are also attached to the uterine wall and are shed following the birth of the baby. For Wawn (1937, p. 78) "labour ... [is] a magnified menstruation", while the girlfriend of one of the participants in Laws' (1990, p. 101) study referred to her periods as "giving birth". Although these descriptions appear to be rare, they do make some sense and explain why the afterbirth is considered dirty. Early labour pains, or contractions, are sometimes described as period type pains (Close, 1975; Isbister, 1963), while both the shedding of the lining of the uterus and the placenta are a required normal physiological process with a desired time frame. If fertilization of the woman's ovum does not occur, the endometrium is shed as it is no longer required, while the placenta can be considered as a waste product once the baby is born – it has reached its use by date.

A health system or 'scientific' definition of contaminated waste is difficult to find. There is a definition of contaminated waste in the study site's policy documents on infection control but it is very brief: "All body substances (eg. human tissue, limbs, placenta etc) are classified as contaminated, thus any disposable item or product that has been in contact with a body substance is disposed of as contaminated waste" (Study Area Health Service, 1991, p. 45). The New South Wales *Nurses Act 1991 – Regulation (Relating to infection control standards)* (1995b, p. 4) discusses the management of contaminated waste before discussing what it is, indicating that the priority is the disposal of the waste.

In the glossary of an influential government publication on *Infection control in the health care setting* (National Health and Medical Research Council & Australian National Council on Aids, 1996, p. 153), contaminated waste is described as "clinical and related waste". A later publication is more specific in their definition of clinical waste:

that which has the potential to cause injury, infection or offence, and includes sharps, human tissue waste, laboratory waste, animal waste

resulting from medical, dental or veterinary research or treatment that has the potential to cause disease; or any other waste, arising from any source, as specified by the establishment (National Health and Medical Research Council, 1999b, p. 7).

This definition is mirrored in other documents (NSW Health Department, 1998, 1999b, 1999c) and they all use the phrase "potential to cause ... offense". These definitions support Douglas's (1966/1992), claim that western concepts of dirt are actually what we have rejected from various symbolic systems and is related to matters of hygiene, or etiquette, or aesthetics. This is made explicit in the *National guidelines for waste management in the health industry* (National Health and Medical Research Council, 1999b, p. 9) when it is stated that the disposal of clinical waste is guided by "public expectations and *aesthetic considerations*" (my emphasis). A similar comment is made in an infection control policy document (NSW Health Department, 1992).

Since 1996 the NSW Health Department has replaced the term 'contaminated waste' with the term, 'clinical waste', but the change in the wider community has been slow and most still use the term, 'contaminated waste'. An infection control practitioner in a large hospital believes changing the terminology was related to the "hysteria" surrounding the use of the term 'contaminated waste' and eventually all hospital equipment will be relabelled (S. Berenger, personal conversation, 6 February 2001).

An alternative view of the afterbirth, particularly in non western cultures, is that it and the baby have a special relationship. Angier (1999, p. 91) considers that the uterus and the placenta "mother" the baby in a way that will never be repeated while the afterbirth is referred to as the baby's "life force" in Bangladesh (Jackson, 1999, p. 58). In many cultures, in fact, the afterbirth is considered a person (Trevathan, 1987) and is described as companion (The Waikato Polytechnic, 1999), or grandmother (Parvati, 1983), or "birth friend" (Trevathan, 1987, p. 107), or "baby's friend" (The Body Shop Team, 1991, p. 108), or a sibling (Priya, 1992; Trevathan, 1987; Watterson, 1998). For Irigaray (1991, p. 40), there is no real representation of the placenta in Western cultures, although it is "the first house to surround us, whose halo we carry with us everywhere". Perhaps more importantly, the correct disposal of the placenta is linked to the future of the baby, or the woman's childbearing abilities (Kitzinger, 1993; Priya, 1992; Trevathan, 1987).

Trevathan (1987, p. 106), from her analysis of a variety of cultures, noted the only practice that was close to universal was "the proper disposal of the placenta and umbilical cord", except in western societies where it was treated as rubbish and ignored. comment was made by Lang (1972, no pagination), while Nathanielsz (1992, p. 65) considered that it is "thrown away" as it is no longer useful and described it as "the body's only throw-away organ". Trevathan (1987, p. 106) was not explicit in what she considered "proper", but commented that of the 200 cultures in the Human Research Area Files, there are only seven cultures in which the afterbirth is "thrown away without regard". Other authors have noted that in non western cultures that "the way the placenta is treated is almost as important as the way the child is treated" (The Body Shop Team, 1991, p. 108). In most cultures the placenta is buried (Trevathan, 1987) in a variety of places, according to the local customs and beliefs: inside or near the house, or in the fields, or the bush, or near a tree, or in a river (Lefèber, 1994), or inside a boab tree (Purdie, 1999). The afterbirth may also be sunk in a river, or burnt, or it may be preserved, or kept in a pot in the house, or hung in a palm tree or on a totem pole, or a piece of cord may be used as a charm (Lefèber, 1994).

It is rare for midwifery or obstetric textbooks to discuss the disposal of the placenta. One exception is Silverton (1993). However, the only reason it is mentioned in her book is because she was writing about home birth and the midwife may not know what to do with placenta. Silverton suggested burying it, burning it, or taking it to the hospital for disposal. Taking the placenta to the hospital was not a new practice as it is mentioned by a Scottish midwife during her midwifery training in 1939 - 1940 (Chapman, 2000). By taking the placenta to the hospital, the midwife is able to avoid doing the dirty work of digging the hole for placenta, particularly as during the winter months this may have been difficult if the ground was frozen. Sellers (1993a) provided another mention of placental disposal and noted that any burial should be deep to prevent animals devouring the placenta. Even mainstream consumer birth books rarely mention disposal of the placenta.

Colostrum, breast milk and lactating breasts

Chapter 7 and Chapter 8 demonstrate that breast feeding is dirty and the colostrum is a contaminating fluid. Kitzinger (1979, p. 207), has expanded upon the links between breast milk and "unclean secretions": she considered the flow of breast milk is often uncontrolled during the early phases of lactation; it may jet out at "socially inconvenient" times; it is a "waste product" and requires removal; it is a body fluid excreted like sweat, and its flow is uncontrollable like pus or mucus. According to Giles (1997), there is a taboo against seeing things coming out of our bodies, but there are no problems with eating in public. She does not continue with this argument, yet it is obvious that breast feeding is a bodily function which is excretory for the woman, but it is a consuming function for the infant. As breast feeding is considered dirty, or animalistic, or undignified, often breast feeding women are expected to express their breast milk or feed their baby in the toilets, or nappy change rooms, if there is no mothers' room available. They can be asked to cease feeding their baby, or to remove themselves from public places ("Magistrate slated on breastfeeding order," 1994; O'Rourke, 1994). Lomer (1999, p.49), noted that an Adelaide study demonstrated that two-thirds of restaurants and half of the shopping centres in the survey disapproved of "breast feeding in their public spaces". She commented that some members of the public want to impose on the spot fines for women who breast feed in public! Breastfeeding is sometimes referred to by the euphuism of 'nursing'. The Nursing Mothers Association of Australia, the national association of consumers involved with breast feeding and, to a minor degree, bottle feeding, commenced in 1964. Reiger (2001) claims the name was a way of being discrete because the use of the word 'breasts' was taboo on some radio programs, while the members encountered disgust, embarrassment and hostility from the public. This association has finally changed its name to the Breast Feeding Association of Australia in 2001!

Breast feeding may be considered to belong to the private sphere of life and as such it is inappropriate to do it in public. Breast feeding in public may be considered "indecent" (Montagu, 1986, p. 72). There are few workplaces which provide facilities for women to either breast feed their babies or to express their breast milk. In western society the breasts are considered as sexual objects, the property of the woman's partner, and therefore they should be hidden from sight except when on display in the 'right' place, such as, in the media, on the beach, in the pool, or, in the privacy of the home. This is despite the fact

that when the woman is breast feeding very little of the breast is exposed. It is almost as if the definition of humans as mammals, a species that suckles their young has been forgotten. Breast feeding in public may be considered as evidence that the baby has "stolen" the woman's body from his father (Kitzinger, 1985, p. 227). Breast feeding has been considered as an act of humiliation by some Christians and was considered a reminder of "the Fall from Grace" (M. Potts & Short, 1999, p. 158). Lomer (1999) has suggested that because the breasts of a lactating woman do not fit the ideal image of desirable breasts, they are seen as distasteful. Others in the community may consider artificial feeding as the 'norm' and breast feeding as abnormal. For Montagu (1986, p. 72), artificial milk formulae, are a symbol of 'progress', with some pediatricians assuring the parents that "bottlefeeding ...[is] as good as breastfeeding, and often even better".

Colostrum and breast milk, since the improved understanding of the modes of transmission of hepatitis, and HIV, however, is no longer seen as a 'clean' body fluid, but is considered to be as potentially contaminating as all other body substances (National Occupational Health & Safety Commission & Worksafe Australia, 1995). Midwives, who assist women who are breast feeding, are expected to wear protective apparel. This may be gloves only, but if there is a risk of milk spraying the midwife, she also needs to wear protective eyewear.

Jackson (1999, p. 74) refers to colostrum as "nature's vaccine" and stresses its importance in providing passive immunity to the newborn baby. Odent (1992, p. 72) repeatedly makes the same claim, and refers to colostrum as "an army able to suppress any kind of infection". The newborn baby has entered "the world of microbes", and is better able to combat infection if her gut has been colonised by microbe and virus "satellites" from the mother (Odent, 1992, p. 72).

Breast milk was symbolic of "all that is clean, fresh, wholesome, pure and good" (M. Potts & Short, 1999, p. 146). Hence, the common saying, 'the milk of human kindness'. Statues of ancient goddesses breast feeding were considered religious symbols that all was well in the world (Yalom, 1998). A continuation of this theme were the statues of the Madonna breast feeding baby Jesus, usually referred to as "Virgo lactans" (Fildes, 1986, p. 45) or

"Maria lactans" (M. Potts & Short, 1999, p. 146), or "Madonna-del-latte" (Yalom, 1998, p. 41). These were common during the 14th to the 16th centuries, but began to disappear when the breast became an erotic symbols for men's pleasure in the 15th century (Yalom, 1998). As noted earlier, breast feeding in public is offensive to many people, although the possibility of the breast actually being visible is slight.

Several authors consider breast feeding as 'natural' and a fundamental requirement for women and their babies (Kitzinger, 1979; Minchin, 1985; Montagu, 1986; Odent, 1992; Palmer, 1988; Stanway & Stanway, 1978). For the milk formulae companies, breast milk is considered the "gold standard" (15th Nestlé Nutrition Workshop, 1989, forward). However, even women who breast feed, but leak milk from their breasts in public are often embarrassed (Britton, 1998). This may be due to the stain on their clothes, as all stains are considered 'dirty'. The women may perceive it as evidence of their lack of control of their body which is on display to everyone who sees the stain.

From this discussion, it is obvious that both the lactating breasts, the colostrum, and/or the breast milk issuing from them, are perceived as 'dirty', or harmful or offensive, by many in the community. Several decades ago, therefore, it should not have been unexpected that health professionals considered the breasts had to be cleaned before the baby was fed (Bailey, 1975; J. Towler & Butler-Manuel, 1973) and the equipment used during this process had to be sterile (The Royal Women's Hospital Melbourne, 1970). Potts and Henley (1999) claim that breast feeding, as a result of the civilizing process, is the most altered part of our reproductive lives. This claim may be debated as many would consider the labour process to be the most altered. Regardless of this debate, the 'symbolic load' attached to colostrum, breast milk and breast feeding is complex and at times difficult to determine and this complexity was confirmed in this study.

Power relationships exhibited in labour

From the discussion on dirty work and the hierarchical structure of Australian childbirth, it is clear that, as Enzensberger (1972) noted, dirt relationships are power relationships. From the discussion in Chapter 4, it is also clear that historically women were usually considered 'dirty'. Women's bodies were constructed as dirtier than men's.

Dirt is used as a means of control by those in power (Enzensberger, 1972). Those who control childbirth in Australia are the medical profession and institutions, such as the various health departments, who together have determined who and what is contaminated or contaminating, and how this contamination should be contained. At a local level, that is the hospital, the hospital medical staff and other health professionals, including midwives, carry out the dictates of these two groups. Enzensberger (1972) believed that if a person carried dirt they were powerful. While this is true, for example, with someone robbing a shop with a syringe loaded with blood, it is different for a woman in labour. Physically, she is not in peak condition when in established labour and will have difficulty in concentrating because of the pain of labour. Usually she will not be able to think coherently about how she can control her situation. She is vulnerable and dangerous as was suggested by Frazer (1978) and Douglas (1966/1992). Conversely she has become powerful because of contemporary conceptions of dirt make all the rituals surrounding birth necessary to protect the health professionals. This powerfulness is recent, new, and reverses previous constructions. The subordinate position of the women and their families is evident in the vignettes, while a major focus of the work of the midwife is the controlling, containing and cleansing the 'dirt' surrounding birth.

An English study on interactions in labour by Kirkman (1994), found that the person who controlled the labour was the person in charge of the territory on which the woman laboured. It is evident from the data presented in this thesis that the doctor is in charge with the midwife working as assistant, and in charge only in the absence of the medical staff. An Australian study, which examined midwives` perceptions of care, found that even when the midwife was following a midwifery model of care which encompassed sharing control with the woman, if she was practising in a hospital, it was not always possible for her to follow the model completely due to the institutional policies and infrastructure (H. M. Callaghan, 1990).

The concept of touch as never being neutral (Kitzinger, 1997) and also expressing hierarchal status is important in this study. For the women in my research, of the eight forms of touch, they experienced all except punitive touch. The partner and support people

used the blessing, comfort, and physically supportive touch frequently. The midwives and doctors used physically supportive touch occasionally, diagnostic, manipulative, restraining and directive touch regularly, thus indicating a high level of power and control over the women. The health professionals usually provided physically supportive touch only for brief periods prior to the woman being supported by her partner or family. The women, like the newborn baby who is unwashed, are rarely touched without the barrier of gloves.

Pollution as both a danger and a power

Earlier it was noted that Douglas (1966/1992, p. 120) considered the bodily orifices as vulnerable and whatever came from them symbolised both "danger and power". She considered that contact with the refuse from the body orifices was also dangerous and carried a "symbolic load" (Douglas, 1966/1992, p. 3). A current and powerful example of this "danger and power" is exemplified by blood which is considered life saving when given as a blood transfusion, but as potentially harmful and contaminating if a person is inadvertently splashed with the woman's blood during the birth. The difference is that the blood given as a transfusion has been screened by various medical authorities, is placed in a clear plastic bag, and is designated as 'clean' from infectious agents. We know the blood does come from somebody's body, but that body is not visible during the transfusion process. There is an assumption that the donor possesses a 'clean' body and 'clean' blood and that the blood was checked to ensure that it is 'clean'. The perception of cleanliness has been sullied, however, by recent reports of a young woman becoming infected with the HIV virus following a blood transfusion (Hodge, 1999; Lunn, 1999; Saltau, 1999). The parturient woman's blood has usually been screened to a limited degree, six or more months ago. There has been time for it to become infectious or 'dirty'. If contamination of the health professional's body with the woman's blood or body substances does occur during a birth, there is no way that the woman's open and flowing body can be ignored or forgotten. If the blood is infected with a hepatitis or HIV virus, it would be considered extremely dangerous regardless of method of exposure.

An example of the 'symbolic load' attached to the excretions of the body can be seen in the way breast milk and breast feeding women are sometimes perceived and treated. According to Montagu (1986, p. 71) many people in western cultures consider breast feeding "beneath human dignity" and something "only animals do". Breast feeding and breast milk may be considered by some as 'dirty'. Some people may consider it inappropriate for a woman to leave breast milk in the refrigerator. It is sometimes not considered real food. Giles (1997, p. 152) has described how she tasted her expressed colostrum which was "warm as melted butter", then offered some to her husband: "He takes two steps back and pulls a face, as if I'd offered him a dead frog".

Pollution and purification

As discussed in Chapter 3, Douglas (1966/1992), believed that pollution functions at two levels in society: an expressive level and an instrumental level. At the first or expressive level, the commonly held beliefs and social pressures are used to influence other people's behaviour. The dominant societal belief in the contagiousness of blood and body substances is continually being promoted by various health institutions and the media. There is an expectation that health professionals will use protective apparel. If the health professionals know that the patients, including the labouring women, will be expecting them to wear the protective apparel, this becomes another incentive for the staff to follow the governmental and hospital policies in relation to infection control.

The second or instrumental level at which pollution functions occur when there is a violation of the law which threatens what is considered the ideal in society, with the violation itself being a danger both for the society and the transgressors (Douglas, 1966/1992). Douglas considered this produced two effects: 1. the threat of danger forces the person to maintain the desired social order; and, 2. the enforcer is also reminded of the necessity to maintain the social order. This second level approach can be seen in the New South Wales Government's Occupational Health and Safety Act 1983, the various professional regulations and the Infection Control Policy 95/13, which indicate that if you have someone working under your direction, you are responsible for your staff complying with safety policies (Study Area Health Service, 1998a). Failure to do so could result in a \$55,550.00 penalty. The junior worker is liable to a fine of \$3,355.00 for not complying with the regulations and is warned that "your health & [sic] safety is your responsibility" (Study Area Health Service, 1998b). Just as Douglas indicated, moral values are upheld and the rules are defined by a belief in the contagion, which in this instance is through blood and body substances.

Douglas (1966/1992) considered that because we want to avoid dirt, we become creative and organise our environment so that this avoidance becomes easier by creating environments (form) that suit the desired function and minimise the need for purification rituals. This unification of form and function can be seen in the data chapters of this thesis. The focus of the health professionals in each era is different. Most importantly, however,

'the relations of power' remain the same — the control and surveillance of the childbirth process, and of the women, including the midwives.

In Chapters 5 and 6, the discussion revolves around the earlier periods of medical science, though Chapter 5 is concerned with the early period of obstetric science as it was developing. Doctors were creating a space for themselves in maternity care, an area not previously recognised as theirs, and considered by their medical colleagues as a 'dirty' area (Donnison, 1988; Oakley, 1976). To become acceptable to the women and their medical colleagues, this group had to prove that they were as good as the doctors who worked in medicine and surgery, and better than the midwives. They developed their own ways of seeing (the clinical gaze), and standards, then marketed them as superior. Although they might not agree on the causes of puerperal sepsis, they were fairly united in their opposition to the midwives who were labelled as 'dirty' (Castigilioni, 1927/1941; O'Hara, 1989). They promoted themselves as 'scientific' with the ability to perform life saving procedures due to their ownership of the obstetric forceps. There was a proliferation of hospitals, including lying-in hospitals, in which they could develop their science, especially if they had access to a morgue. While the conditions in the hospitals were often poor and unhygienic, the doctors could study puerperal sepsis and other diseases. With the acceptance of the 'germ theory' the doctors continued being scientific and became 'clean', while the denigration of midwives continued. Because concepts of asepsis were believed to have produced improved outcomes for childbirth, policies and procedures relating to them became entrenched.

During my midwifery training (Chapter 6), the maternity units and hospitals were built and organized in such a way as to enhance unity of form and function. The focus was on searching for sepsis, preventing its entry into the hospital, the women, the babies and the midwifery staff. The doctors appeared to be excluded from this personal search for sepsis, but instead were keen to extend their clinical gaze through the use of interventions in childbirth, but especially labour. Rituals were developed which coped with the demands of keeping the women, the babies and the environment 'clean'. The labour wards were built with admission and/or preparation rooms, first stage rooms, operating theatres and delivery rooms; the wards had separate nurseries which included infant milk storage and small

preparation areas; the special care nursery had a formula room; the antenatal clinic had cubicles in which the women were seen and a waiting area. The labour ward was treated, and kept clean, as if it was an operating theatre. The women and their families were segregated and directed to particular areas depending on either their perceived dirtiness, or cleanliness, or their vulnerability to dirt. Visiting by family and friends was restricted, while the babies were isolated from their families but freely accessible to the hospital staff, and with restricted access only by the parents. The baby could be seen at set times during the visiting hours, but only through the glass of the nursery windows. Each of these different areas and practices were seen as necessary if the rituals related to cleanliness and an infection free status for the woman and her baby was to be maintained. The rituals associated with the required functions of each area were quickly learnt and internalised, for example, the continual scrutiny of the women and their babies, the shaves and enemas of labour ward, the breast trays and cord trays on the postnatal wards. To facilitate unity, it was necessary for everybody to know their relative position of importance and status with the hospital. As student midwives we soon learnt where we fitted in that hierarchical structure.

More recent hospital designs have included maternity wards without ordinary nurseries, only special care or intensive care nurseries, and birth centres, either attached to the main hospital or as free standing units. The study site is designed in this way. The focus in this era of universal / standard precautions is the prevention of contamination by blood and body substances, and a continuation and extension of the clinical gaze on the women and their babies (Chapter 7). The focus is no longer on preventing sepsis, it is on preventing cross infection, especially of the health care workers. The hospital equipment is designed to make it easy to keep the birthing area free from material which would increase the risk of cross infection. For example, the trolleys used in delivery suite for the birth are made of stainless steel and are easily wiped clean. Much of the equipment is disposable and therefore does not require cleaning. There are mobile linen trolleys, and easily moved contaminated and normal rubbish bins. These are all lined with the appropriate plastic bag, so that the contents can be disposed of without touching the contaminated or dirty items. There are plastic covers for the mattresses and pillows so these do not become contaminated or dirty with blood or body substances, and are easily cleaned. Although

these existed during my midwifery training, they were used sporadically. There are disposable draw-sheets and under-pads to minimise the need to wash the blood and body substances from the linen, and to aid in the collection of these products. The floors and walls are made of materials which are easily cleaned. The staff wear theatre clothes so that if by chance they do become contaminated with blood or body substances, they can easily change into a clean outfit.

Medical staff need to control the women and their babies, and the midwives, if they are going to control the birth process, the dirt of birth and remain the dominant professional force in childbirth.

The midwife: mediator and paradox

The midwife is the dirty worker, so can consider herself as dirty. This has been demonstrated throughout the thesis in different cultures and different times. Yet, she simultaneously has a role as being the mediator between the childbearing woman and the institutional rituals surrounding pollution and cleansing. According to McDonald (1992, p. 160), the midwives "are the front line, representing the institution's efficiency, sterility and high seriousness". The midwives protect the institution and its staff from the dirt of birth. Within the institution the midwife has an important role, but her position in the hierarchal structure is subordinate. In the context of providing care to women, she is sometimes more powerful than at other times, but this depends on the absence or presence of medical staff. This is the paradox: the midwife is both dirty and clean, powerless and powerful. She is the manager of the dirt and is responsible for controlling, containing and cleansing the dirt of birth.

Costumes / uniforms in the childbirth encounter

During the childbirth encounter, one of the main items used by the health professionals which demonstrates their ownership of authoritative knowledge, and enhances their position is the use of costumes, that is, uniforms or scrub suits. The self employed midwife and midwifery has existed for centuries (Donnison, 1988), but midwifery in Australia was subordinated and incorporated into nursing (Willis, 1983).

Nursing has its roots in the carers who volunteered

their services to the poor, and the religious orders, particularly those practised by males on the battlefields (Maclennan, 1996). Even modern nursing is considered to have begun with Florence Nightingale in the Crimean War in 1853-1856 (Summers, 1997, p. 198). The nurses` uniform played a part the in evolution of new the nursing profession by clearly identifying the new nurses, who were promoted as clean and professionally competent, from the old nurses who were considered dirty, unkempt and disorderly

(Barber, 1997; Poplin, 1994). The uniforms of Nightingale's nurses were based on household servants uniforms of 19th the century (Maclennan, 1996, p. 202), while the continued use of the term 'civvies' for normal clothes by some midwives and nurses reflects the military influence on nursing the profession and the continued symbolism attached the uniform.

Uniforms are a style of dress consistent in form and character, unvarying, standardised. They are distinctive, unlike general fashion, due to their sameness. Uniforms indicate social assimilation, obedience to an authority, establish the wearer's occupational identity to the external world, locality of employment, seniority, and they prevent autonomy and independent action (Maclennan, 1996, p. 201)

Roche (1994, p. 228), who analysed the birth of the modern military uniform, would agree with the above statement, but he also saw the uniform as a means of imposing various "disciplines" on the wearer. For him the uniform gave the wearer prestige, but it also disciplined the wearer by shaping the wearer's behaviour and habits, including to a

particular political position, while transforming the "individual[`s] strength into a collective power" and "demonstrating omnipotence" (Roche, 1994, p. 229). Roche (1994, p. 232) considered the uniform as essential to army medicine and a "vehicle of collective hygiene". While the social conditions have changed, the midwife`s uniform can still be considered "a vehicle of collective hygiene", as the midwife is the health worker most closely linked to maintaining the cleanliness of the delivery room. Intriguingly, Roche (1994, p. 239), considered that the two underlying principles for using uniforms were "to separate, in order to inculcate the military ethos and instil a sense of hierarchy; to unite, so as to demonstrate a common adherence, encourage *esprit de corps* and promote harmony between the specialised arms". Thus, for Roche the uniform is a mechanism which has great similarity to Douglas`(1966/1992, p. vii) "gestures of separation, classifying and cleansing" and is a means of creating social order.

During the study, the most commonly worn uniform was the theatre scrub suit. These are recognised and standardised globally wherever western style medicine is practised. They are a specialised form of uniform, worn by a small percentage of hospital staff. They bestow a certain amount of status, seniority and prestige to the wearer because of its association with operating theatres, the epicentre of modern medicine. With the seniority comes an increased level of autonomy, a topic that is particularly relevant to midwifery and midwives.

Lawler's (1991) research indicated that for some nurses, it was the uniform which permitted them to access the patient's body, was an essential part of their identity, and made it possible for nurses to do their work, while for some it would have been impossible to do the work without it. Similar comments were made by participants in another study (Savage, 1995). The flaw in this argument is that most doctors never wear a uniform and still manage to do their work and demonstrate their authority. This may be due, however, to the view that the work of a nurse, or a midwife, is much more intimate, revolves around cleansing the body, and maintaining it in a state of cleanliness by removing its dirty byproducts, such as, faeces, urine, vaginal and other discharges. This position is supported by the comments of a doctor in the work of Wicks (1999, p. 135) who did not wash patients and considered it "hard work" and "unpleasant". Both of these terms suggest that why he did not want to do it was because he considered it dirty work.

Another important aspect about the wearing of uniforms is that it allows the wearer to distance themselves from the general public, their patients or clients or customers, and, if necessary, hide their true feelings behind the professional and institutional facade. It also allows the wearers to 'close ranks' against the outsiders, in this thesis, the women and their families.

Sanitising the birth

The woman's labour and birth can be sanitised in several ways. This sanitising may be described as any method that 'cleans up' the birth process, that is, removes or reduces the dirt of birth, and/or the dirty work aspects of labour. In the vignettes it is evident that the midwives continually, almost automatically, clean the birthing area. This is the most obvious way in which the birth is sanitised. The ultimate method of sanitisation, however, is an elective caesarean section.

The woman, with her doctor, may choose a date on which she requests her caesarean section. If she is a private patient, she is more likely to have her wishes granted with the baby being born on the desired day. The woman does not experience the pain and distress of labour, and has a general, spinal or epidural anaesthetic. As Shand (1991, p. 21), commented about the her caesarean section, "I didn't feel anything at all". Following the cleansing of the woman's abdomen with an antiseptic solution, a clear adhesive plastic dressing, containing pockets, is placed over the incision site. The operation is preformed through the adhesive dressing. When the first incision is made in the uterus, the assisting midwife/nurse commences the aspiration of the body substances (liquor, blood, mucus, vernix, hair, urine and possibly meconium). Although some of the body substances may escape the suctioning process, the excess is caught in the pockets from which it is unable to escape. At the completion of the operation, the captured body substances are discarded appropriately. Thus, the uncontrollable flow of blood and body substances usually seen during a vaginal birth is prevented.

Like an operative delivery, an instrumental delivery (forceps or vacuum extraction) will reduce the amount of work done by the woman. The use of analgesia in the form of a

mixture of nitrous oxide and oxygen, or intramuscular injections, or an epidural block can 'clean up' the labour by reducing or removing the work, distress and pain elements for the woman. If the woman does not use pharmacological methods of pain, the midwife will need to support her in the non-pharmacological methods she has decided to use. This can be taxing work. As one student midwife noted: "... pain relief, you'd love them to take something ... they make your job more difficult" (Begley, 2001, p. 31). For this midwife at least, the use of analgesia can reduce the woman's need for and dependance upon the midwives, thus reducing the midwives' work load.

Most mainstream textbooks sanitise the labour by either ignoring, or minimising, the woman's work as an aspect of labour, instead they focus on the clinical aspects of labour and birth, such as, the stages of labour, the anatomy and physiology as it relates to the progress of labour, the mechanisms of labour, pain relief, and the strength, frequency and duration of the contractions (Beischer & Mackay, 1986; Brucker & Zwelling, 1997; Hickman, 1985; M. D. Humphrey, 1995; W. F. O'Brien & Cefalo, 1996; Oxorn, 1986; Rosevear & Stirrat, 1996; M. G. Ross & Hobel, 1992). It is as if by focussing on the work done by health professionals in managing labour, the work women do to deliver their baby can be ignored.

One text does not even acknowledge the woman's role in pushing in second stage and considers uterine contractions as the "source of power" during the birth process (Burroughs, 1992, p. 171). The use of this phrase, and similar phrases, such as the "power of labour" (Turley, 1993, p. 219), when discussing the contractions, suggest that the labour power and the energy it requires, are divorced or separated from the woman. Another textbook continually uses the terminology of production, never mentions the woman, but instead relates the discussion to the uterus and the uterine contractions: "uterine work", "not working at maximum capacity", "contractions become more efficient and uterine work increases", "capacity to work", "ability to work", "maximal work output" (Liu & Fairweather, 1985, p. 22). Martin (1992, p. 58) considered that the approach used in obstetric textbooks was a "narrow conception" of physics and reduced a "complex and interrelated process" to simple "time and motion studies".

This literal sanitisation of the women's labour, is another way of emphasising the knowledge and power of the medical profession and the women's need of their skill and expertise. It emphasises the powerless of the women during the childbirth process.

Women, both giving birth and as midwives, continue to be constructed as the dirtier sex. Because of women's different anatomy and physiology, including the ability to give birth, and therefore, the ability to produce body products such as, menstrual blood, baby, lochia, liquor, colostrum, that are also unique to women, they are considered dirtier than men. Anatomically, there is no denying that women have an extra orifice. Some may even consider that the lactating breasts provide multiple 'exit holes' for body products. The result is that labour and birth are dirty work for women, both as the mothers and as midwives. This research would seem to indicate that regardless of what women do or achieve, they will always be the dirty workers, and seen as the most appropriate group to do the dirty work related to the home and the body. The reality for the midwives being focused on managing the dirt of birth, means that they are less likely to focus completely on the women they provide care for. Instead of being with women, they are more aligned 'with dirt'.

The analysis in this thesis demonstrated the authoritative knowledge of the medical and midwifery staff, and how they use it to maintain their powerful positions in interactions with the women and their families. The powerful messages the women and their families receive can be seen in their behaviour, which is submissive to the hospital environment. Similarly, the social institutions of motherhood, fatherhood, the family, medicine and midwifery are played out in labour and birth data presented in this thesis. Ideologies, relating to 'natural childbirth', breast feeding, cleanliness and dirtiness, the perfect baby, and medical childbirth, are played out in the vignettes. In the videotapes the woman, her baby, and her family are seen as contaminating to varying degrees. Because of the continual potential severity of the contaminating ability of the woman, she is the person who needs to be most constrained. The baby, while dirty at birth, and a source of continual contamination, simply because of size and developmental age, is not a huge contamination problem. The baby can also be seen as a product of the hospital, as it was the management of the woman in labour and birth by the medical and /or midwifery staff which resulted in

the birth of the baby. The baby formally becomes a patient at birth and begins a lifetime relationship with medicine. The partner or other family members may become contaminating when their hands become soiled with blood during the labour, or the birth, or postnatally.

It is worthwhile noting that in Australia and many other countries, legislation has not been implemented which would specifically ensure the safety and protection of women. This provides us with an indication of how poorly valued women are in our society. Yet, what can only be called a draconian approach is used to preserving the wealth of the state and its workers and protect them from the threat of diseases, such as hepatitis, HIV/AIDS.

Because of the way Australian society, and most western societies, perceive disease, dirt, contamination, pollution, and impurities, we have constructed a health system that is aimed at coping with disease and dirt originating from the body. The failure of antibiotics to cope with serious infective illnesses, such as, hepatitis, and HIV/AIDS, together with the evolution of antibiotic resistant bacteria, has led to the development of containment strategies directed at the prevention of the transmission of diseases, and the protection of health care workers. The research conducted in this thesis demonstrates this only partly and inadequately explains the discourses and practices around birth dirt.

The result of this expansion of categories of diseases resulting from body dirt is the proliferation of protective apparel for health care workers and other services (police, ambulance, emergency) whose personnel may come in contact with body substances. The cost of the protective apparel is enormous and is included in the various service budgets – no extra money is provided. This means that there is less money available for other health and service requirements. Much of the protective apparel is disposable, manufactured from plastics, vinyl and rubber, and packaged in plastic or paper. The elimination of these materials is also a problem. Waste material is usually either buried or burned. Both methods create their own problems. Landfill may be associated with leaching into the ground water, while restricted public access needs to be controlled (National Health and Medical Research Council, 1999b), while incineration may be associated with

environmental pollution. As discussed in Chapter 3, it seems evident that as Enzensberger (1972, p. 41) noted "the more rigid the system, the greater the quantity of dirt it produces".

CONCLUSION

This thesis is about women and their bodies and how they have been constructed by society, but particularly by medicine. A wide range of theorists have informed the analysis. Some of the more important concepts related to the study provided an essential framework for the study and an understanding of the material presented. Feminism and its relationship with research, but particularly with my research was particularly helpful, as was authoritative knowledge, especially as it applies to childbirth. The importance of how health professionals present themselves to patients and dress in the childbirth encounter reinforced the unassailable power of authoritative knowledge.

Foucault is often associated with discourse analysis and his ideas were taken into account for both the visual and written material. The use of the visual in the social sciences was particularly helpful in the analysis as was managing data derived from film. I presented a discussion on the way in which analysis of visual data has been described by experts from various disciplines. Two authorities from different disciplines were instrumental and provided the blue-print for the analysis undertaken using a synthesis of the approaches by John Collier and Malcolm Collier (1986) and Ian Parker (1992). The preliminary analysis of the visual data led me to examine other data, but this time the sources were books, both professional and consumer orientated.

The concepts of pollution, defilement, contamination, and dirt and the work of theorists from a variety of disciplines have been crucial to this thesis, although the work of Mary Douglas (1966/1992) was the starting point for the discussion. It was only when I understood how western thought has categorised what is 'dirty' or 'clean', that I could make sense of what I was seeing on the video tapes.

Douglas considered that the western concept of pollution was really just one way of separating and classifying our world with what has been rejected from various symbolic systems. She pointed out that our current ideas are more related to notions of hygiene, etiquette and aesthetics while the connection between dirt and germs followed the acceptance of the germ theory. Enzensberger (1972) was important in developing a more practical way for 'seeing' what dirt was about. He did this by detailing the characteristics of dirt and noting how we apply these characteristics to people and their behaviours. For Douglas (1966/1992, p. 10), dirt is culturally bound, and is figuratively "in the eye of the beholder", while for Kubie (1937) dirt was a fantasy which was based upon a perception of the body as a dirt factory. He pointed out that there was a hierarchy of dirtiness, but most importantly, he acknowledged that woman was almost universally constructed as dirtier than man.

The dangerous nature of the body margins` was confirmed in my data as whatever crossed the margins of the body becomes "refuse" (Douglas, 1966/1992, p. 120). The relationship between dirt and power was profound, pervasive, and played out in dress, behaviours, and language. The types of work that have been described as dirty were noted, indicating that dirty workers are unable to control when, where or how they work, they are often poorly paid, have low status, work with 'dirt', however it has been defined in society, work with people who are on the margins of society, or do heavy physical work. It was not surprising to find that some examples are related to house and body work.

We have come to accept that anything that is dirty must be cleansed or purified through ritual and this was discussed with particular relevance to the health care system. The relationship between dirt, germs and asepsis was found to be less important in science than symbolic behaviour.

This research confirms that women are constructed as dirty and this was aligned to their normal physiological functions of menstruation, childbirth and production of colostrum. Because women were considered dirty, historically men would not involve themselves in childbirth except in extreme cases. Naturally, the midwives were women and so were 'doubly dirty'. However, when men decided to enter midwifery, there was opposition from both midwives, medical men and women. Other doctors considered the man-midwife as dirty because of his occupation and the new professional group, obstetricians, had to prove

that they were worthy of the title doctor – they had to become 'scientific'. The midwives were denigrated as dirty and lost ground to the new professional group.

There are two chapters (Chapter 5 & Chapter 6) in the thesis which relate to birth and dirt in specific historical periods. It took over 100 years for the medical profession to accept the contagiousness of the disease and that the health professionals (doctors and midwives) had carried the disease from one patient to another, making hospitals a dangerous place for birth. I have argued that some doctors have never really accepted their culpability in this childbirth disaster and have managed to put the blame on midwives. Once the germ theory was accepted, the medical profession dictated the various rituals considered necessary to prevent puerperal sepsis. Protective apparel was gradually developed for health care workers with only face masks being introduced for the benefit of the patient.

Reflections on my midwifery training (Chapter 6), commenced in 1970, described a period with a high level of medicalisation in childbirth. This reflection was important in the development of the theory on birth dirt because it allowed me to compare and contrast constructions of birth dirt and how these changed dramatically over different time frames. During my midwifery training we focused on searching for sepsis and preventing its appearance. There were numerous rituals associated with cleansing the maternal and newborn body. Birth was treated as if it was a surgical operation with intense and constant scrutiny of the maternal body. The women were treated as passive dependant children who needed assistance during labour and birth. Postnatally, surveillance of the women continued, but now it included their babies. There was segregation of the women and their babies from each other and from the rest of their family, while strict timetables that had to be followed. This was done in a futile attempt to keep things clean.

The video tapes demonstrated who and what is currently considered clean and dirty in Australian childbirth. It is evident from these examples, that the discourses and discursive practices surrounding birth, indicate that the woman and all her body products, including the baby, are dirty. The focus of the health care workers, both midwives and doctors is on protecting themselves from the contaminating blood and body substances which are released during labour and birth. This is a profound shift in how dirt is perceived and who

is to be protected over a 30 year period. The exception to the change of focus was the independent midwife who treated any contamination very casually. Because of this, the home birth scene would be an interesting area to investigate the dimensions of birth dirt in that subculture.

Women are constructed as powerful and dangerous, but particularly to the health professionals. The rituals that the parents participate in are an acknowledgement that the birth is a rite passage for the families. However, these rituals follow the hospital script. Because of their perceived dirtiness, the women and their families are kept in their place, while it is obvious that the doctor is in charge of the birth process. When the doctor is not present, it is the midwife who takes control and manages the birth, the woman, and her family.

The discourses and discursive practices surrounding the women and the midwives as the labour progresses show the woman is dirty for several reasons: she is continually leaking throughout her labour; she is on the margins; she is about to deliver / excrete a dirty being who will also be on the margins; and, she is doing hard physical work. Following the birth the woman needs to be cleaned, but now she is considered the most appropriate person to do it. Similarly, the midwife is doing dirty work and incorporates the dirty work into her midwifery work. She controls, contains and cleans the dirt that occurs during the birth. Because of the focus on dirt, there is a corresponding focus on protecting the health care worker from the dirt. Because of the midwives` role in relation to dirt, they act as a protective layer for those health professionals who have more status and power than they do. The contradictions and the inconsistencies displayed by the health professionals in relation to the contaminating blood and body products are noted.

The findings of the study define birth dirt and show how at times it may overlap with "sick dirt" (Littlewood, 1991, p. 168). Birth dirt exists but its exact nature will vary depending on the time, the place, the culture and the discourses which surround birth. However, whoever does the dirty work will be in a subordinate position. The midwife is a mediator and in a paradoxical position of powerful and powerless in relation to birth dirt. Her importance is managing the birth dirt by controlling, containing and cleansing birth. The

methods of sanitising birth have been made evident in this research and require subordination of women, as mothers and midwives, through dress, behaviour, discourses and practices to keep the most powerful safe.

APPENDICES

All material which could lead to the identification of the participants and the study site has been removed

COUPLES WHO PARTICIPATED IN THE STUDY

Elsie and Edgar

Elsie had booked into the birth centre. Elsie was 33 years old and was a secretary. Edgar was 32 years old and was in the Royal Australian Air Force. Their baby boy was born in April 1998 in the birth centre following the spontaneous commencement of her labour. Elsie had a normal vaginal birth which was video taped. Three tapes were obtained from Elsie's labour.

Fay and Fergus

Fay had booked into the birth centre. Fay was 25 years old and was a waitress. Fergus was 24 years old and was a chef. Their baby girl was born in March 1998 in the birth centre. Fay was admitted with ruptured membranes and in early labour. Fay had a normal vaginal birth with a labial tear requiring suturing. The birth was video taped with four tapes obtained from Fay's labour.

Gemma and Grant ⊗

Gemma had booked into the birth centre. Gemma was 28 years old and described herself as a housewife. Grant was 31 years old and was a boiler worker. Their baby girl was born in December 1997. Gemma was admitted in early labour and progressed slowly. During labour her membranes were ruptured and she commenced intravenous syntocinon to augment labour. Her liquor was heavily stained with thick meconium, suggesting that the baby may be distressed. The baby was electronically monitored. Gemma was transferred to the delivery suite for an epidural. Approximately 24 hours after she had commenced contractions, Gemma was transferred to the operating theatre for a caesarean section. The birth was not video taped. The baby was a girl. Five tapes were obtained from Gemma's labour.

Hilary and Hugh

Hilary had booked into the birth centre and was cared for by an independent midwife who had visiting rights in the hospital. Both Hilary and Hugh were 30 years old. Hilary was a clerk and Hugh was self employed. Hilary was five days past her due date when she and Hugh arrived at the birth centre in November 1997. Fay was labouring. They were met by their independent midwife. Fay progressed steadily, but never had contractions more frequent than four minutes apart. Fay had a normal vaginal birth of a baby boy. Fay had a labial tear which required suturing. The birth was video taped with three tapes obtained from Fay's labour.

Isla and Isaac 🔞

Isla had booked into the delivery suite. Both Isla and Isaac were 25 years old. Isla described herself as unemployed, while Isaac was a marine technician in the Royal Australian Navy. Their baby girl was born in November 1997. Isla's baby was presenting breech or bottom first, however, she was keen to have a vaginal birth. An attempt to turn the baby had been made but this was unsuccessful. Isla was planning to have a supported squat breech birth. She was admitted in labour and progress steadily. Isla progressed to 10 centimetres, but despite pushing well for over an hour, her baby did not descent. Isla was transferred to the operating theatre for a caesarean section. The birth was not video taped. Six tapes were obtained from Isla's labour.

Jill and Jack

Jill had booked the birth centre. Both Jill and Jack were 27 years old. Jill was a physiotherapist and Jack was a doctor. Their baby girl was born in August 1997 in the birth centre. Jill was admitted following the spontaneous rupture of her membranes. The liquor was heavily meconium stained indicating possible fetal distress. Four hours after her admission, Jill commenced on an intravenous syntocinon infusion to induce labour. Because of the meconium the baby was being monitored electronically using the external method. Jill commenced labour and she progressed rapidly to a supported standing birth in the birth centre. Jill was transferred to the delivery suite for the repair of extensive bilateral vaginal wall tears. The birth was video taped. Three tapes were obtained from Jill's

labour, but only one tape had recorded the events. (I was overseas and the taping was done by her midwife.)

Kate and Kieran

Kate booked into the birth centre. Kate was 28 years old and was a technician in a pathology laboratory. Kieran was 27 years old and worked as a security officer. Their baby girl was born in June 1997 in the birth centre. Kate was admitted in spontaneous labour to the delivery suite as there were no beds available in the birth centre. Kate laboured in the delivery suite for seven hours before being transferred to the birth centre. Approximately nine hours later, Kate had a normal vaginal birth which was video taped. Eight tapes were obtained from Kate's labour.

Lizzie and Leroy \otimes

Lizzie was booked into the birth centre. Lizzie was 34 years old and was a chef. Leroy was 32 years old and was a police officer. Their baby boy was born in April 1997. Lizzie had been diagnosed with gestational diabetes and a large baby. Lizzie was induced with a foley catheter to open the cervix, then prostaglandin jell to ripen the cervix. This was followed by the artificial rupturing of Lizzie's membranes (ARM) and an intravenous syntocinon infusion. The liquor was heavily meconium stained indicating possible fetal distress. Lizzie's baby was monitored electronically. Lizzie became very distressed, the fetal distress worsened and eight hours after the ARM, Lizzie was transferred to the operating theatre for a caesarean section. The birth was not video taped. Four tapes were obtained from Lizzie's labour, but the camera position was poor with the camera directed at the walls and ceiling. (I was away and the video taping was done by the midwife in charge of the shift.)

Moria and Martin ⊗

Moira was booked into the delivery suite. Moira was 25 years old and worked as a shop assistant. Martin was 26 years old and was a mechanic. Moria was admitted in April 1997 in possible early labour but was discharged after a couple of hours when her contractions had ceased. One tape was obtained on this admission, but was discarded as Moria was not

in labour. When next admitted in labour, Moira did not identify herself as being part of the *Discourses of labour study*.

Neeta and Nick

Neeta was classed as a 'high risk' patient because of her bicornuate or heart shaped uterus, and was booked into the delivery suite. She was 27 years old and was a taxation officer. Nick was 30 years old and was a fitter and turner. During the initial discussion with them about the study, Nick was horrified to think that the staff could say "No" and the videotaping would not be able to proceed. His response was; "But it's **our** labour". Neeta developed pre eclampsia during the last five weeks of her pregnancy, and was induced because of it at 39 weeks gestation. Her membranes were ruptured and she was commenced on a syntocinon infusion. Neeta progressed well and had a normal vaginal birth of a boy approximately seven hours later. She had some labial tears requiring suturing. The birth was video taped. Four tapes were obtained from Neeta's labour.

Oona and Olly

Oona had booked into the birth centre. She was 24 years old and described herself as unemployed. Olly was 25 years old and in the Royal Australian Air Force. Their baby was small and growth retardation was suspected. Some abnormalities were seen when the baby's heart rate was monitored externally, and on the baby's blood flow on ultrasound. Oona had prostaglandins to ripen her cervix. She had intermittent contractions overnight. In the morning her waters were ruptured and an intravenous syntocinon infusion was commenced. Because of her history the induction was done in the delivery suite as the baby would require continuous monitoring in labour. Oona laboured well and progressed to a normal vaginal birth of a baby girl in January 1997. Oona had bilateral labial tears which required suturing. The birth was video taped with eight tapes obtained from Oona's labour.

Penny and Patrick

Penny was booked into the delivery suite. Penny suffers from thalassemia and required 12 blood transfusions during the pregnancy. Penny and Patrick were both 25 years of age. Penny worked as a child carer, while Patrick was a travel consultant. Penny was induced at 41 weeks by having her membranes ruptured and an intravenous syntocinon infusion

commenced. Penny laboured well and had a spontaneous vaginal birth of a baby girl in January 1997. Penny had labial grazes which did not require suturing. The birth was video taped and five tapes were obtained from her labour. A week after the birth, Penny had her spleen removed.

Queenie and Quincy

Queenie was booked into the birth centre. Queenie was 32 years old and was a veterinary nurse. Quincy was 37 years old and was a fitter and turner. Queenie presented to the birth centre in January 1997 in early labour and a couple of hours later her membranes ruptured spontaneously. Queenie vomited several times and was unable to manage with the nitrous oxide and oxygen mixture she was using for pain relief. She requested an epidural and was transferred to the delivery suite. Six hours after the epidural, Queenie commenced an intravenous infusion of syntocinon because of slow progress and incoordinate contractions. Approximately four hours later Queenie's cervix was fully dilated. She pushed for just over two hours with little progress. Queenie then had a an episiotomy and Neville Barnes forceps delivery of a baby girl. The birth was video taped and nine tapes were obtained from her labour.

Rebekah and Ryan

Rebekah was booked into the birth centre. Rebekah was 26 years old and a secretary. Ryan was 25 years old and was a motor mechanic. Rebekah was admitted to the birth centre in January 1997 for an induction of labour at 41 weeks. Once her membranes were ruptured, Rebekah immediately began contracting. She progressed rapidly to a normal vaginal birth of a baby boy. Rebekah had labial tears which did not require suturing. The birth was video taped with five tapes obtained.

Saffron and Shamus

Saffron was booked into the birth centre. Saffron was 29 years old and was a beauty therapist. Shamus was 32 years old and was a castor operator. Saffron was admitted in established labour in January 1997. Saffron progressed rapidly and had a normal vaginal birth of a baby boy. She had a perineal tear which required suturing, and an intra and post

partum haemorrhage of a litre. She commenced an intravenous infusion of syntocinon after the delivery. The birth was video taped with five tapes obtained.

Tigan and Terrence ⊗

Tigan was booked into the birth centre. Tigan was 34 years old and was a secretary. Terrance was 30 years old and was a valuer. Tigan presented to the birth centre in December 1996 with ruptured membranes, but she was not contracting. Several hours later, Tigan started to labour. She progressed rapidly to a normal vaginal birth of a baby girl. The birth was not videoed, but two tapes were obtained.

Ursula and Ulrich

Ursula was booked into the birth centre. Ursula was 22 years old and was a nursing student. Ulrich was 33 years old and was audio engineer. Ursula and Ulrich presented to the birth centre in December 1996. Ursula was ten days past her due date and had been offered an induction of labour. She was given prostaglandin gel, commonly referred to as 'the gel,' to ripen her cervix¹¹⁵. Ursula experienced contractions following 'the gel' and thought she was in labour. The midwife thought the contractions were "prostin¹¹⁶ pains", that is, painful contractions which are the result of the prostaglandins, but fail to initiate labour. Ursula required an intramuscular injection of pethidine to relieve the pain. This gave her a couple of hours of rest. Approximately 22 hours after 'the gel' was inserted, Ursula requested her membranes be broken and this was done. Ursula's contractions ceased and three hours later she commenced an intravenous infusion of syntocinon, a synthetic form of the oxytocic hormone used to initiate labour contractions. Ursula's labour was slow and she required another dose of pethidine to assist with her labour pain. Approximately 35 hours after the induction process was commenced, Ursula had a normal vaginal delivery of her baby, a girl. Ursula was moved to a delivery suite room for suturing of a perineal tear. The birth was video taped and 15 tapes were obtained. Ulrick thought he had turned off the camera a couple of hours after the birth. This material was erased, leaving 11 tapes.

¹¹⁵ The cervix is a "constricted portion or neck of the uterus" or womb (Sweet, 1992, p. 48).

Vera and Vince

Vera was booked into the birth centre. Vera was 39 years old and had three other children. She was a clerk in the Australian Taxation Office. Her partner, Vince was 37 years old and was an engineer. Vince and Vera arrived at the birth centre, on her due date, in December 1996 with a decreased number of movements from her fetus/baby and possibly in labour. The couple knew that they had come to the hospital too early, but Vince was worried because they had a drive of an hour from their home in a rural area to the hospital and he was concerned that the baby would be born on the roadside. Vera's other children had been born following several hours of "not serious contractions" with an hour or less of strong contractions. Vera's labour pattern was much the same as with her other children. She progressed rapidly with her membranes rupturing in the second stage of labour. The liquor was meconium stained indicating possible fetal distress with the hospital policy requiring that neonatal intensive care staff be present at the birth. Vera had a normal vaginal birth of a baby boy which was video taped. Four tapes were obtained from Vera's labour.

Wendy and Warwick ⊗

¹¹⁶ Prostin is one of the pharmaceutical trade names for the prostaglandin gel.

Wendy was booked into the delivery suite. Wendy was pregnant with twins, the result of being on an IVF program. Wendy was 25 years old and worked in the Department of Social Security as a clerk. Warwick was 32 years old and worked for the State Rail Authority. Wendy was admitted in November 1996, a couple of days prior to her due date. She was accompanied by her partner Warwick. She was induced by having her membranes ruptured combined with an intravenous infusion of syntocinon, an artificial form of the hormone oxytocin. The first twin was in the normal position of a cephalic or head presentation, while the second twin was a breech or bottom presentation which is considered abnormal. Because of this, an obstetrician was to be present for the births, however, he was not available, so the registrar¹¹⁷ in the delivery suite became the 'specialist' on call for Wendy. The registrar had strongly recommended that Wendy have an epidural for labour and birth, which she did. Wendy's twins were being monitored externally and electronically. The general practitioner delivered the first twin, a girl (normal vaginal birth), and this was video taped. The registrar delivered the second twin, a boy, an assisted breech birth, which was not videoed as the doctor had declined to participate in the study. Wendy had an episiotomy which was repaired. Five tapes were obtained from Wendy's labour.

Xenia and Xavier ⊗

Xenia was booked into the birth centre. Xenia was 22 years old and Xavier was 28 years old. Both were unemployed. Xenia presented herself to the birth centre in November 1996 with the spontaneous onset of her labour. Xenia laboured well. She progressed to a normal vaginal birth of a baby girl which was not videoed. There was a change of midwifery staff, with no midwives agreeing to participate in the study. Two tapes were obtained from Xenia`s labour.

Yvonne and Yuri

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Registrar: This is a doctor who is employed by the hospital in a speciality area. Usually s/he will have several years of experience and either have completed or nearly completed the training program for their speciality, in this case, obstetrics and gynaecology.

Yvonne was booked into the birth centre. Yvonne was 22 years old and was unemployed. Yuri was 27 years old and was a receptionist. Yvonne arrived at the birth centre in November 1996. She was in strong labour and progressed rapidly to a spontaneous vaginal birth of a baby boy. The birth was video taped and three tapes were obtained from her labour.

Zahira and Zachary

Zahira was booked into the birth centre. Zahira was 24 years old and a registered nurse. Zachary was a third year nursing student and was 28 years old. Zahira was induced at 42 weeks gestation by prostaglandin jell, followed by the artificial rupture of her membranes and an intravenous syntocinon infusion. Zahira found the pain difficult to cope with and requested an epidural. She was transferred to the delivery suite for the epidural. The epidural was never effective and Zahira became very distressed. Sixteen hours after her membranes were ruptured, Zahira was three centimetres. She was transferred to the operating theatre for a caesarean section of a baby boy. The diagnosis was failed induction and maternal distress. The birth was not videoed, but nine tapes were obtained from Zahira's labour.

THE ERA OF UNIVERSAL / STANDARD PRECAUTIONS

The term, 'universal precautions,' is commonly used by most health care workers, including the delivery suite and birth centre staff. It is an abbreviation for "universal blood and body fluid precautions" (NSW Health Department, 1995, p. 2) and included all body substances (Australian National Council on AIDS & Department of Community Services, 1990). 'Universal precautions' were introduced in 1985 by the US Centers [sic] for Disease Control and Prevention (CDC) to prevent transmission of HIV/AIDS to staff, and emphasised the application of "Blood and Body Fluid Precautions to all persons regardless" of their health status (National Health and Medical Research Council & Australian National Council on Aids, 1996, p. 10). The definition the CDC used for 'universal precautions', however, was narrower than the one adopted in Australia. It included blood, only body fluids which had been implicated in the transmission of blood borne diseases, and where the risk of transmission was unknown (National Health and Medical Research Council & Australian National Council on Aids, 1996). The American definition is based on the possible sources of infection, while the Australian definition avoids any ambiguity by rejecting all blood and body substances. The Department of Health in London, adopted the same stance as the Australian health authorities (Bott, 1999). The classifications reflect the different governmental perceptions on how to ensure adequate separation of what is potentially infectious.

For the Australian Government, the principle of universal infection control guidelines was considered the "ideal standard," but required that health care facilities develop their own guidelines depending on their situation, legal responsibilities, and their clientele (Australian National Council on AIDS & Department of Community Services, 1990, p. 12). Various national, state and international institutions produced circulars, journals, and documents that have been used to develop the various local policies, processes and procedures in relation to universal precautions. The following is an example of a local definition for universal precautions:

[It] require[s] all health care workers to assume that all blood and body substances be considered potential sources of infection, despite diagnosis or perceived risk.

Each health care worker needs to evaluate their own interaction with the patient. Use personal protective equipment, as **appropriate**, based on anticipated contact with blood and body substances. (Study Area Health Service, 1994, Section 1, p. 11) (original layout and emphasis)

The second paragraph of this quote is identical to one used several years earlier, but the earlier quote actually described examples of the various forms of body substances: "blood, faeces, urine, wound drainage, oral secretions, vaginal secretions, tissue etc" (Study Area Health Service, 1991, Section 1, p. 11). Although the 1994 manual refers to universal precautions as a method of infection control with the aim of reducing the spread "of infectious agents between patients and health care workers," in a brochure designed to spread the message on universal precautions, the rationale for its introduction is arguably self interested. It is intended that there will be a reduction in "the risk of transmission of blood-borne pathogens to health care workers" (Study Hospital, 1996). This brochure included the key elements of the "universal blood and body substance precautions":

- Hand washing and hand care are considered to be the most important measures in infection control. Intact skin is the best natural defence against infection.
- All HCW's [health care workers] must check their skin integrity before commencing any patient care. Apply a 70% Alcohol Solution to the surface of both hands, and then cover any breaks in your skin integrity with a waterproof occlusive dressing.
- Use personal protective equipment as provided for use when contact is anticipated with another person [sic] blood/body substance is anticipated.
- Dispose of all sharps immediately after use. Dispose of all sharps safely.
- All disposable products contaminated with blood and body substances are to be disposed of in accordance with the A.H.S. [Area Health Service] Waste Streaming Policy.
- All laboratory specimens are handled as potentially infectious. Specimens are to be transported in leakproof containers/bags.
- Linen contaminated with blood/body substances and all linen originating from a patient with a known infectious disease, must be laced into an impervious bag before being placed into a linen hamper.
- Contaminated reusable equipment is rinsed at point of use and forwarded to H. S. U. [Hospital Sterilising Unit] for cleaning, decontamination and reprocessing. (Study Hospital, 1996)

Clearly, the focus in this leaflet is on protecting the staff rather than the patients, though this interpretation and focus has shifted over recent years. A similar emphasis was provided by other governmental bodies, for example, Worksafe Australia (1990).

In New South Wales amendments were made to the Nurses Act 1991 and the Medical Practice Act 1922 in 1995, while in the following year amendments were made to the Physiotherapists Registration Act 1945, the Podiatrists Act 1989, and the Dentists (General) Regulation 1996. All of these amendments were in relation to infection control standards. In the amendment of the Nurses Act 1991 – Regulation, it became a legal requirement that nurses, including midwives, "must comply with the infection control standards" as specified in the revised act. According to this act, both vaginal and caesarean births, together with any childbirth procedure were bleeding may occur, are defined as an "invasive procedure" (New South Wales Parliament, 1995b, p. 2).

The term 'universal precautions' in Australia was considered ambiguous, confusing, generated a "false sense of security," and it was possible that health care workers would consider the use of gloves made hand washing unnecessary (National Health and Medical Research Council & Australian National Council on Aids, 1996, p. 11). Because of this concern, the Infection Control Working Party which developed the current guidelines has recommended the adoption of "standard precautions", that is, work practices which provide a "basic level of infection control" (National Health and Medical Research Council & Australian National Council on Aids, 1996, p. 11), while according to the NSW Health Department (1999b, p. 3), they incorporate the current "best practice [of] infection control". Standard precautions include: good hygiene practices, particularly washing and drying hands before and after patient contact, the use of protective barriers, ... appropriate handling and disposal of sharps and other contaminated or infectious waste, and the use of aseptic techniques (National Health and Medical Research Council & Australian National Council on Aids, 1996, p. 11). These precautions encompass the main aspects of universal precautions, blood and body fluid precautions and body substance isolation (NSW Health Department, 1999b, p. 3). "Additional precautions" are used if the patient is known, or suspected to be infected, with a transmittable disease which may be spread by direct or indirect contact, or by droplets, or by air, or by a combination of these avenues. It is worth noting that the original change in terminology was recommended in 1996, but it has taken till 1999 for the NSW Health Department to publish their guidelines for the implementation of the changes. It was a year later that this new message was being disseminated to health

care workers while the infection control practices are still referred to as 'universal precautions'.

Protective attire

Protective attire, or personal protective equipment, may consist of any of the following items: cloth gowns or those made from impervious material, plastic aprons, plastic sleeves or those made from impervious material, protective eye wear, or face shields or masks, or protective footwear. It is generally accepted that these should be accessible and available for all health care workers (NSW Health Department, 1995; Worksafe Australia, 1990). According to Australian authorities, such as, the Department of Community Services (1990, p. 14), the type of protective attire worn should depend upon "the probability of exposure to blood or body fluids [and] the amount of blood or body fluid encountered," while consideration should be given to the type of contaminating body substance and the possible routes of transmission for an infection (National Health and Medical Research Council & Australian National Council on Aids, 1996, p. 46). According to the NSW Health Department (1998, p. 28), the protective attire is the lowest level of a "hierarchy of hazard controls" and should only be used if it has been impossible to alter work practices, or reduce, or eliminate the risks to workers through engineering controls.

Protective eye-wear may be of several types: prescription or non prescription safety glasses, face shields, full face visors or surgical helmets (Study Area Health Service, 1994). These must be worn whenever there is the possibility of the health care working being splashed with blood or body substances. The selection criteria for the protective eye wear was that it should be a "close comfortable fit," provide good vision without fogging the glass or distorting images, sturdy and reusable when cleaned and disinfected (Study Area Health Service, 1994, section 1, p. 24).

Discourses of Labour Study Closed Circuit Video System

To start system:

- 1. Adjust the camera and ensure it is showing the correct room.
- 2. Turn on the microphone in the room.
- 3. The monitor must be on AV (use 'TV/video' button to switch over to correct function.
- 4. Video recorders must be on AV.
- 5. Press or signal 'Record' for video recorder no. 1. A red 'rec' button will show on the front panel (does not matter if recorders 2 & 3 commence recording).
- 6. Allow to record for a minute or so. Stop recording and rewind. Press 'TV/video' on the monitor to switch functions. Use channel 1. Play tape. Check equipment isworking, particularly the microphone.
- 7. Rewind tape. Press 'TV/video' on monitor to switch functions. The monitor should show 'AV'.
- 8. Press or signal 'Record' for video recorder no. 1. A red 'rec' button will show on the front panel.
- 9. Set the timer record for the other two machines.
- 10. Note time when change of tapes is due.

-oOo-

TAPE SETTINGS SHEET

Tapes: These last for approximately 3 hours and 7½ minutes. Record the starting time and date on the Tape Setting Sheet for the first tape. Use the closest ¼ or ½ hour for the time. Don't worry about an overlap on the tapes. Record when the tape is due to finish. Work out the times when the other tapes will be due to start and finish. There is a desired minium overlap of 5 minutes on each tape. Examples:

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Tape 9 Star		Date	
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Tape 10	Start time		Date
	Finish time		Date
Tape 11	Start time		Date
	Finish time		Date
Tape 12	Start time		Date
	Finish time		Date
Tape 13	Start time		Date
	Finish time		Date
Tape 14	Start time		Date
	Finish time		Date

Discourses of labour study

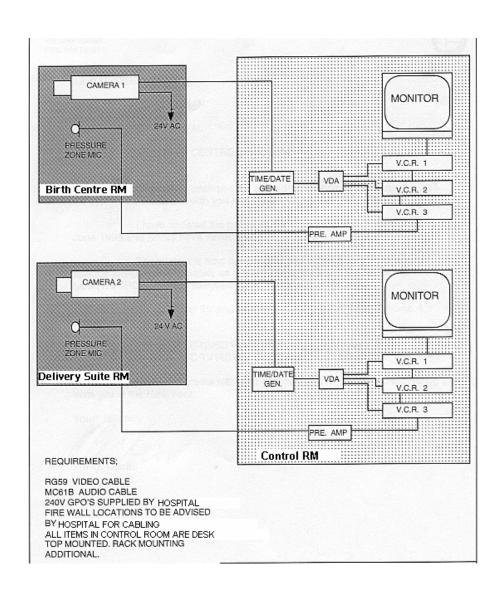
To stop system temporarily, ie, woman or another participant wishes to have private time / or someone not in the study has to enter the room

- 1. Press stop on the video recorder currently showing the red 'rec'.
- 2. Do not touch any of the other video recorders.
- 3. When the **private time is over**, press or signal 'Record' for the same video recorder.
- 4. Notify Helen.

To stop system permanently, ie, woman wishes to withdraw from the study / or the woman has left the unit / or midwife has declined to participate

- 1. Turn off the microphone in the room (does not matter if you don't do this, it just saves the batteries).
- 2. Press stop on the video recorder currently showing the red 'rec'.
- 3. Press 'timer' on other video recorders to cancel the future recordings.
- 4. Notify Helen

APPENDIX 15 CLOSED CIRCUIT VIDEO SYSTEM



This was the original plan, but due to financial constraints the second monitor, VCR and camera were not included. Instead, there was a switch which allowed the camera to operate in either room. The camera was moved depending on whether the woman was in the delivery suite or birth centre.

Memo

To: Midwives in Delivery Suite

Re: Discourses of Labour Study

From: Helen Callaghan

The women who have agreed to participate in this study will soon be coming to Delivery Suite or the Birth Centre for their babies` birth. The protocol I have devised is as follows:

- 1. The rooms that are set up for the video recording are Room X in Delivery Suite and room Y in the Birth Centre. The equipment controls are in the **Control Room**, which must be kept locked always.
- 2. If the rooms are unavailable when the women come in they will be lost to the study.
- 3. If there is not sufficient staff who are willing to be in the study, the women will be lost to the study.
- 4. A sign on the door will identify the room being used.
- 5. There are instructions about turning off the video in the Control Room. This is in case 1) the woman requires private time, or,
 - 2) if she decides to withdraw, or,
 - 3) if any person who needs to enter the room does not wish to be videoed.
- 6. I have asked the women to let me know when they are going to the hospital. If the women have not contacted me, could you please ring me on my home telephone no. xxxxxxxxx. If I am not at home, my telephone will be diverted, probably to my mobile telephone.

- 7. If the woman has given written consent, her chart will have a sticker on it stating 'The discourses of labour study'.
- 8. I will come in and commence the recording of the video and ensure it is working before I leave the unit. I will come back at the required time to change the tapes.
- 9. I will notify the various medical staff that a participating woman has arrived in the unit.
- 10. Please notify me if
 - 1) there are any problems with the study,
 - 2) the women or other participants have requested that the video be turned off,
 - 3) any of the participants withdraw from the study.
- 11. Please contact me if you have any queries about this protocol.

Thank you for your assistance in this matter. I greatly appreciate it.

Helen Callaghan Date: 13.9.1996

Memo

To: Midwives in Delivery Suite

Re: Discourses of Labour Study

From: Helen Callaghan

The women who have agreed to participate in this study will soon be coming to Delivery Suite or the Birth Centre for their babies` birth. The **revised protocol** is as follows:

- 1. The rooms that are set up for the video recording are Delivery Suite Room X and Birth Centre Room Y. The equipment controls are in the **Control Room**, which must be kept locked always.
- 2. If the rooms are unavailable when the women come in they will be lost to the study. If there are **no Birth Centre rooms** available for the women who requested it, and Room X is available, they may be offered the use of Room X.
- 3. If there is not sufficient staff who are willing to be in the study, the women will be lost to the study.
- 4. A sign on the door will identify the room being used.
- 5. There are instructions about turning off the video in the Control Room. This is in case
 - 1) the woman requires private time, or,
 - 2) if she decides to withdraw, or,
 - 3) if any person who needs to enter the room does not wish to be videoed.
- 6. I have asked the women to let me know when they are going to the hospital. If the women have not contacted me, could you please ring me on my home telephone no. xxxxxxxx. If I am not at home, my telephone will be diverted, probably to my mobile telephone.

- 7. If the woman has given written consent, her chart will have a sticker on it stating 'The discourses of labour study'.
- 8. I will come in and commence the recording of the video and ensure it is working before I leave the unit. I will come back at the required time to change the tapes.
- 9. I will notify the various medical staff that a participating woman has arrived in the unit.
- 10. Please notify me if
 - 1) there are any problems with the study,
 - 2) the women or other participants have requested that the video be turned off,
 - 3) any of the participants withdraw from the study.
- 11. If the women commence labour in the Birth Centre but are transferred out, if possible transfer them to Rm. X. I will need to be notified so I can switch the camera over.
- 12. If the woman goes to theatre for a Caesarean Section, if possible, could her baby be returned to the room with the camera? This will give the couple some pictures of the baby.
- 13. I will leave an updated list of the women who have signed consent forms.
- 1.4 Please contact me if you have any queries about this protocol.

Thank you for your assistance in this matter. I greatly appreciate it.

Helen Callaghan Date: 27.10.1996

Tips for Improving the Quality of the Sound

- Mechanical sounds are exaggerated by the microphone and are often picked up more easily than human voices. Therefore, if using anything mechanical, such as a CTG machine, please have the volume down low. If possible, do not have the machine directly under the microphone, as this is the best pick up point.
- ➤ If using the radio, could you have it at a soft level and away from the microphone.
- ➤ Keep the door closed when participants are in the rooms. The microphone will pick up people talking in the corridor as well as people in the rooms.
- Try not to look towards the floor when talking, as this makes it more difficult for the microphone to pick up the sound.
- When the minor operations light is on a particular area, eg, during catheterisation, the light is so bright, that the area is whited out.

Have fun.

RE: DRAFT DOCUMENT ON PARENTS TAKING THEIR PLACENTAS HOME

I have developed release of bodies procedure, the bodies of babes are also addressed in this procedure.

There is also a protocol for guiding the consent of the hospital to the release of the baby's body to parents; that addresses local council regulations on home burial, etc.

On rare occasions the parents of a pre 20 week still born have requested return of the fetus/birth products to them for burial and this has been carried out according to the 'Return of new born baby body to parent' protocol.

There are protocols as well that address the return of 'souveniers' [sic], body parts, tissue to patients. On rare occasions a patient will request to have an amputated artifact/tissue returned to them. Usually some treatment of the part/tissue for transport, for logevity [sic], for storage is necessary. Treatments are carried out by the morturay [sic] staff.

This type of request is considered in a number of ways. Ie*.....

It is explained to the patient that infectious/contaminated tissue cannot be returned to them to protect both them and the community. The material must be isolated and destroyed using an incineration process.

The rostered pathologist will discuss requests for return of tissue with the treating doctor and can consider the request as credible/frivolous/unacceptable. The request can be accepted/refused by the rostered pathologist.

Requests are considered:.....

On the balance of common sense and....

*the cost of treating the tissue to make it suitable for take away by patients is taken into

*the aesthetic appeal of having a human organ/tissue in the community that may be subject to un-acceptable behavior [sic] bringing the dignity of humanity into disrespect.

*the risk of bringing health care into disrepute.

*the risk of infection and contamination if the conservation pots or containers are broken etc.

*The significane [sic] to the requesting party.

The treating Doctor and Social worker are part of the discussion team. Patients are susually [sic] discouraged from this type of request.

If a request for the return of tissue is considered to have credible/ religious connotations this is dealt with appropriately and with sympathy. The tissue will be treated by the mortuary to ensure transport/storage/longevity, and signed out to the patient. A record of the return of tissue is made in the patients medical records.

Hope this hel[p]s [sic]

(Edwards, 2001)

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All material which could lead to the identification of the participants and the study site has been removed

APPENDIX 1

COUPLES WHO PARTICIPATED IN THE STUDY

Elsie and Edgar

Elsie had booked into the birth centre. Elsie was 33 years old and was a secretary. Edgar was 32 years old and was in the Royal Australian Air Force. Their baby boy was born in April 1998 in the birth centre following the spontaneous commencement of her labour. Elsie had a normal vaginal birth which was video taped. Three tapes were obtained from Elsie's labour.

Fay and Fergus

Fay had booked into the birth centre. Fay was 25 years old and was a waitress. Fergus was 24 years old and was a chef. Their baby girl was born in March 1998 in the birth centre. Fay was admitted with ruptured membranes and in early labour. Fay had a normal vaginal birth with a labial tear requiring suturing. The birth was video taped with four tapes obtained from Fay's labour.

Gemma and Grant 😣

Gemma had booked into the birth centre. Gemma was 28 years old and described herself as a housewife. Grant was 31 years old and was a boiler worker. Their baby girl was born in December 1997. Gemma was admitted in early labour and progressed slowly. During labour her membranes were ruptured and she commenced intravenous syntocinon to augment labour. Her liquor was heavily stained with thick meconium, suggesting that the baby may be distressed. The baby was electronically monitored. Gemma was transferred to the delivery suite for an epidural. Approximately 24 hours after she had commenced contractions, Gemma was transferred to the operating theatre for a caesarean section. The birth was not video taped. The baby was a girl. Five tapes were obtained from Gemma's labour.

Hilary and Hugh

Hilary had booked into the birth centre and was cared for by an independent midwife who

had visiting rights in the hospital. Both Hilary and Hugh were 30 years old. Hilary was a clerk and Hugh was self employed. Hilary was five days past her due date when she and Hugh arrived at the birth centre in November 1997. Fay was labouring. They were met by their independent midwife. Fay progressed steadily, but never had contractions more frequent than four minutes apart. Fay had a normal vaginal birth of a baby boy. Fay had a labial tear which required suturing. The birth was video taped with three tapes obtained from Fay's labour.

Isla and Isaac ⊗

Isla had booked into the delivery suite. Both Isla and Isaac were 25 years old. Isla described herself as unemployed, while Isaac was a marine technician in the Royal Australian Navy. Their baby girl was born in November 1997. Isla's baby was presenting breech or bottom first, however, she was keen to have a vaginal birth. An attempt to turn the baby had been made but this was unsuccessful. Isla was planning to have a supported squat breech birth. She was admitted in labour and progress steadily. Isla progressed to 10 centimetres, but despite pushing well for over an hour, her baby did not descent. Isla was transferred to the operating theatre for a caesarean section. The birth was not video taped. Six tapes were obtained from Isla's labour.

Jill and Jack

Jill had booked the birth centre. Both Jill and Jack were 27 years old. Jill was a physiotherapist and Jack was a doctor. Their baby girl was born in August 1997 in the birth centre. Jill was admitted following the spontaneous rupture of her membranes. The liquor was heavily meconium stained indicating possible fetal distress. Four hours after her admission, Jill commenced on an intravenous syntocinon infusion to induce labour. Because of the meconium the baby was being monitored electronically using the external method. Jill commenced labour and she progressed rapidly to a supported standing birth in the birth centre. Jill was transferred to the delivery suite for the repair of extensive bilateral vaginal wall tears. The birth was video taped. Three tapes were obtained from Jill's labour, but only one tape had recorded the events. (I was overseas and the taping was done by her midwife.)

Kate and Kieran

Kate booked into the birth centre. Kate was 28 years old and was a technician in a pathology laboratory. Kieran was 27 years old and worked as a security officer. Their baby girl was born in June 1997 in the birth centre. Kate was admitted in spontaneous labour to the delivery suite as there were no beds available in the birth centre. Kate laboured in the delivery suite for seven hours before being transferred to the birth centre. Approximately nine hours later, Kate had a normal vaginal birth which was video taped. Eight tapes were obtained from Kate's labour.

Lizzie and Leroy 😣

Lizzie was booked into the birth centre. Lizzie was 34 years old and was a chef. Leroy was 32 years old and was a police officer. Their baby boy was born in April 1997. Lizzie had been diagnosed with gestational diabetes and a large baby. Lizzie was induced with a foley catheter to open the cervix, then prostaglandin jell to ripen the cervix. This was followed by the artificial rupturing of Lizzie's membranes (ARM) and an intravenous syntocinon infusion. The liquor was heavily meconium stained indicating possible fetal distress. Lizzie's baby was monitored electronically. Lizzie became very distressed, the fetal distress worsened and eight hours after the ARM, Lizzie was transferred to the operating theatre for a caesarean section. The birth was not video taped. Four tapes were obtained from Lizzie's labour, but the camera position was poor with the camera directed at the walls and ceiling. (I was away and the video taping was done by the midwife in charge of the shift.)

Moria and Martin ⊗

Moira was booked into the delivery suite. Moira was 25 years old and worked as a shop assistant. Martin was 26 years old and was a mechanic. Moria was admitted in April 1997 in possible early labour but was discharged after a couple of hours when her contractions had ceased. One tape was obtained on this admission, but was discarded as Moria was not in labour. When next admitted in labour, Moira did not identify herself as being part of the *Discourses of labour study*.

Neeta and Nick

Neeta was classed as a 'high risk' patient because of her bicornuate or heart shaped uterus, and was booked into the delivery suite. She was 27 years old and was a taxation officer. Nick was 30 years old and was a fitter and turner. During the initial discussion with them about the study, Nick was horrified to think that the staff could say "No" and the videotaping would not be able to proceed. His response was; "But it's **our** labour". Neeta developed pre eclampsia during the last five weeks of her pregnancy, and was induced because of it at 39 weeks gestation. Her membranes were ruptured and she was commenced on a syntocinon infusion. Neeta progressed well and had a normal vaginal birth of a boy approximately seven hours later. She had some labial tears requiring suturing. The birth was video taped. Four tapes were obtained from Neeta's labour.

Oona and Olly

Oona had booked into the birth centre. She was 24 years old and described herself as unemployed. Olly was 25 years old and in the Royal Australian Air Force. Their baby was small and growth retardation was suspected. Some abnormalities were seen when the baby's heart rate was monitored externally, and on the baby's blood flow on ultrasound. Oona had prostaglandins to ripen her cervix. She had intermittent contractions overnight. In the morning her waters were ruptured and an intravenous syntocinon infusion was commenced. Because of her history the induction was done in the delivery suite as the baby would require continuous monitoring in labour. Oona laboured well and progressed to a normal vaginal birth of a baby girl in January 1997. Oona had bilateral labial tears which required suturing. The birth was video taped with eight tapes obtained from Oona's labour.

Penny and Patrick

Penny was booked into the delivery suite. Penny suffers from thalassemia and required 12 blood transfusions during the pregnancy. Penny and Patrick were both 25 years of age. Penny worked as a child carer, while Patrick was a travel consultant. Penny was induced at 41 weeks by having her membranes ruptured and an intravenous syntocinon infusion commenced. Penny laboured well and had a spontaneous vaginal birth of a baby girl in January 1997. Penny had labial grazes which did not require suturing. The birth was video taped and five tapes were obtained from her labour. A week after the birth, Penny had her

spleen removed.

Queenie and Quincy

Queenie was booked into the birth centre. Queenie was 32 years old and was a veterinary nurse. Quincy was 37 years old and was a fitter and turner. Queenie presented to the birth centre in January 1997 in early labour and a couple of hours later her membranes ruptured spontaneously. Queenie vomited several times and was unable to manage with the nitrous oxide and oxygen mixture she was using for pain relief. She requested an epidural and was transferred to the delivery suite. Six hours after the epidural, Queenie commenced an intravenous infusion of syntocinon because of slow progress and incoordinate contractions. Approximately four hours later Queenie's cervix was fully dilated. She pushed for just over two hours with little progress. Queenie then had a an episiotomy and Neville Barnes forceps delivery of a baby girl. The birth was video taped and nine tapes were obtained from her labour.

Rebekah and Ryan

Rebekah was booked into the birth centre. Rebekah was 26 years old and a secretary. Ryan was 25 years old and was a motor mechanic. Rebekah was admitted to the birth centre in January 1997 for an induction of labour at 41 weeks. Once her membranes were ruptured, Rebekah immediately began contracting. She progressed rapidly to a normal vaginal birth of a baby boy. Rebekah had labial tears which did not require suturing. The birth was video taped with five tapes obtained.

Saffron and Shamus

Saffron was booked into the birth centre. Saffron was 29 years old and was a beauty therapist. Shamus was 32 years old and was a castor operator. Saffron was admitted in established labour in January 1997. Saffron progressed rapidly and had a normal vaginal birth of a baby boy. She had a perineal tear which required suturing, and an intra and post partum haemorrhage of a litre. She commenced an intravenous infusion of syntocinon after the delivery. The birth was video taped with five tapes obtained.

Tigan and Terrence ⊗

Tigan was booked into the birth centre. Tigan was 34 years old and was a secretary. Terrance was 30 years old and was a valuer. Tigan presented to the birth centre in December 1996 with ruptured membranes, but she was not contracting. Several hours later, Tigan started to labour. She progressed rapidly to a normal vaginal birth of a baby girl. The birth was not videoed, but two tapes were obtained.

Ursula and Ulrich

Ursula was booked into the birth centre. Ursula was 22 years old and was a nursing student. Ulrich was 33 years old and was audio engineer. Ursula and Ulrich presented to the birth centre in December 1996. Ursula was ten days past her due date and had been offered an induction of labour. She was given prostaglandin gel, commonly referred to as 'the gel,' to ripen her cervix¹. Ursula experienced contractions following 'the gel' and thought she was in labour. The midwife thought the contractions were "prostin² pains", that is, painful contractions which are the result of the prostaglandins, but fail to initiate labour. Ursula required an intramuscular injection of pethidine to relieve the pain. This gave her a couple of hours of rest. Approximately 22 hours after 'the gel' was inserted, Ursula requested her membranes be broken and this was done. Ursula's contractions ceased and three hours later she commenced an intravenous infusion of syntocinon, a synthetic form of the oxytocic hormone used to initiate labour contractions. Ursula's labour was slow and she required another dose of pethidine to assist with her labour pain. Approximately 35 hours after the induction process was commenced, Ursula had a normal vaginal delivery of her baby, a girl. Ursula was moved to a delivery suite room for suturing of a perineal tear. The birth was video taped and 15 tapes were obtained. Ulrick thought he had turned off the camera a couple of hours after the birth. This material was erased, leaving 11 tapes.

Vera and Vince

Vera was booked into the birth centre. Vera was 39 years old and had three other children. She was a clerk in the Australian Taxation Office. Her partner, Vince was 37 years old

¹ The cervix is a "constricted portion or neck of the uterus" or womb {Sweet, 1992 #298, p. 48}.

² Prostin is one of the pharmaceutical trade names for the prostaglandin gel.

and was an engineer. Vince and Vera arrived at the birth centre, on her due date, in December 1996 with a decreased number of movements from her fetus/baby and possibly in labour. The couple knew that they had come to the hospital too early, but Vince was worried because they had a drive of an hour from their home in a rural area to the hospital and he was concerned that the baby would be born on the roadside. Vera's other children had been born following several hours of "not serious contractions" with an hour or less of strong contractions. Vera's labour pattern was much the same as with her other children. She progressed rapidly with her membranes rupturing in the second stage of labour. The liquor was meconium stained indicating possible fetal distress with the hospital policy requiring that neonatal intensive care staff be present at the birth. Vera had a normal vaginal birth of a baby boy which was video taped. Four tapes were obtained from Vera's labour.

Wendy and Warwick 8

Wendy was booked into the delivery suite. Wendy was pregnant with twins, the result of being on an IVF program. Wendy was 25 years old and worked in the Department of Social Security as a clerk. Warwick was 32 years old and worked for the State Rail Authority. Wendy was admitted in November 1996, a couple of days prior to her due date. She was accompanied by her partner Warwick. She was induced by having her membranes ruptured combined with an intravenous infusion of syntocinon, an artificial form of the hormone oxytocin. The first twin was in the normal position of a cephalic or head presentation, while the second twin was a breech or bottom presentation which is considered abnormal. Because of this, an obstetrician was to be present for the births, however, he was not available, so the registrar³ in the delivery suite became the 'specialist' on call for Wendy. The registrar had strongly recommended that Wendy have an epidural for labour and birth, which she did. Wendy's twins were being monitored externally and electronically. The general practitioner delivered the first twin, a girl (normal vaginal birth), and this was video taped. The registrar delivered the second twin, a boy, an assisted breech birth, which was not videoed as the doctor had declined to participate in the study.

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³ Registrar: This is a doctor who is employed by the hospital in a speciality area. Usually s/he will have several years of experience and either have completed or nearly completed the training program for their speciality, in this case, obstetrics and gynaecology.

Wendy had an episiotomy which was repaired. Five tapes were obtained from Wendy's labour.

Xenia and Xavier ⊗

Xenia was booked into the birth centre. Xenia was 22 years old and Xavier was 28 years old. Both were unemployed. Xenia presented herself to the birth centre in November 1996 with the spontaneous onset of her labour. Xenia laboured well. She progressed to a normal vaginal birth of a baby girl which was not videoed. There was a change of midwifery staff, with no midwives agreeing to participate in the study. Two tapes were obtained from Xenia`s labour.

Yvonne and Yuri

Yvonne was booked into the birth centre. Yvonne was 22 years old and was unemployed. Yuri was 27 years old and was a receptionist. Yvonne arrived at the birth centre in November 1996. She was in strong labour and progressed rapidly to a spontaneous vaginal birth of a baby boy. The birth was video taped and three tapes were obtained from her labour.

Zahira and Zachary

Zahira was booked into the birth centre. Zahira was 24 years old and a registered nurse. Zachary was a third year nursing student and was 28 years old. Zahira was induced at 42 weeks gestation by prostaglandin jell, followed by the artificial rupture of her membranes and an intravenous syntocinon infusion. Zahira found the pain difficult to cope with and requested an epidural. She was transferred to the delivery suite for the epidural. The epidural was never effective and Zahira became very distressed. Sixteen hours after her membranes were ruptured, Zahira was three centimetres. She was transferred to the operating theatre for a caesarean section of a baby boy. The diagnosis was failed induction and maternal distress. The birth was not videoed, but nine tapes were obtained from Zahira's labour.

THE ERA OF UNIVERSAL / STANDARD PRECAUTIONS

The term, 'universal precautions,' is commonly used by most health care workers, including the delivery suite and birth centre staff. It is an abbreviation for "universal blood and body fluid precautions" {NSW Health Department, 1995 #1754, p. 2} and included all body substances {Department of Community Services, 1990 #1756}. 'Universal precautions' were introduced in 1985 by the US Centers [sic] for Disease Control and Prevention (CDC) to prevent transmission of HIV/AIDS to staff, and emphasised the application of "Blood and Body Fluid Precautions to all persons regardless" of their health status {National Health and Medical Research Council, 1996 #1681, p. 10 }. The definition the CDC used for 'universal precautions', however, was narrower than the one adopted in Australia. It included blood, only body fluids which had been implicated in the transmission of blood borne diseases, and where the risk of transmission was unknown {National Health and Medical Research Council, 1996 #1681}. The American definition is based on the possible sources of infection, while the Australian definition avoids any ambiguity by rejecting all blood and body substances. The Department of Health in London, adopted the same stance as the Australian health authorities {Bott, 1999 #1741}. The classifications reflect the different governmental perceptions on how to ensure adequate separation of what is potentially infectious.

For the Australian Government, the principle of universal infection control guidelines was considered the "ideal standard," but required that health care facilities develop their own guidelines depending on their situation, legal responsibilities, and their clientele {Department of Community Services, 1990 #1756, p. 12}. Various national, state and international institutions produced circulars, journals, and documents that have been used to develop the various local policies, processes and procedures in relation to universal precautions. The following is an example of a local definition for universal precautions:

[It] require[s] all health care workers to assume that all blood and body substances be considered potential sources of infection, despite diagnosis or perceived risk.

Each health care worker needs to evaluate their own interaction with the patient. Use personal protective equipment, as **appropriate**, based on anticipated contact

with blood and body substances. {Study Area Health Service, 1994 #2526, Section 1, p. 11} (original layout and emphasis)

The second paragraph of this quote is identical to one used several years earlier, but the earlier quote actually described examples of the various forms of body substances: "blood, faeces, urine, wound drainage, oral secretions, vaginal secretions, tissue etc" {Study Area Health Service, 1991 #2536, Section 1, p. 11}. Although the 1994 manual refers to universal precautions as a method of infection control with the aim of reducing the spread "of infectious agents between patients and health care workers," in a brochure designed to spread the message on universal precautions, the rationale for its introduction is arguably self interested. It is intended that there will be a reduction in "the risk of transmission of blood-borne pathogens to health care workers" {Study Hospital, 1996 #2537}. This brochure included the key elements of the "universal blood and body substance precautions":

- 1. Hand washing and hand care are considered to be the most important measures in infection control. Intact skin is the best natural defence against infection.
- 2. All HCW's [health care workers] must check their skin integrity before commencing any patient care. Apply a 70% Alcohol Solution to the surface of both hands, and then cover any breaks in your skin integrity with a waterproof occlusive dressing.
- 3. Use personal protective equipment as provided for use when contact is anticipated with another person [sic] blood/body substance is anticipated.
- 4. Dispose of all sharps immediately after use. Dispose of all sharps safely.
- 5. All disposable products contaminated with blood and body substances are to be disposed of in accordance with the A.H.S. [Area Health Service] Waste Streaming Policy.
- 6. All laboratory specimens are handled as potentially infectious. Specimens are to be transported in leakproof containers/bags.
- 7. Linen contaminated with blood/body substances and all linen originating from a patient with a known infectious disease, must be laced into an impervious bag before being placed into a linen hamper.
- 8. Contaminated reusable equipment is rinsed at point of use and forwarded to H. S. U. [Hospital Sterilising Unit] for cleaning, decontamination and reprocessing. {Study Hospital, 1996 #2537}

Clearly, the focus in this leaflet is on protecting the staff rather than the patients, though this interpretation and focus has shifted over recent years. A similar emphasis was provided by other governmental bodies, for example, Worksafe Australia {, 1990 #1755}.

In New South Wales amendments were made to the Nurses Act 1991 and the Medical

Practice Act 1922 in 1995, while in the following year amendments were made to the Physiotherapists Registration Act 1945, the Podiatrists Act 1989, and the Dentists (General) Regulation 1996. All of these amendments were in relation to infection control standards. {#1745; #1746} {#1747; #1748; #1749} In the amendment of the Nurses Act 1991 – Regulation, it became a legal requirement that nurses, including midwives, "must comply with the infection control standards" as specified in the revised act. According to this act, both vaginal and caesarean births, together with any childbirth procedure were bleeding may occur, are defined as an "invasive procedure" {New South Wales Parliament, 1995 #1745, p. 2}.

The term 'universal precautions' in Australia was considered ambiguous, confusing, generated a "false sense of security," and it was possible that health care workers would consider the use of gloves made hand washing unnecessary {National Health and Medical Research Council, 1996 #1681, p. 11}. Because of this concern, the Infection Control Working Party which developed the current guidelines has recommended the adoption of "standard precautions", that is, work practices which provide a "basic level of infection control" {National Health and Medical Research Council, 1996 #1681, p. 11}, while according to the NSW Health Department {, 1999 #1698, p. 3}, they incorporate the current "best practice [of] infection control". Standard precautions include: good hygiene practices, particularly washing and drying hands before and after patient contact, the use of protective barriers, ... appropriate handling and disposal of sharps and other contaminated or infectious waste, and the use of aseptic techniques {National Health and Medical Research Council, 1996 #1681, p. 11. These precautions encompass the main aspects of universal precautions, blood and body fluid precautions and body substance isolation {NSW Health Department, 1999 #1698, p. 3}. "Additional precautions" are used if the patient is known, or suspected to be infected, with a transmittable disease which may be spread by direct or indirect contact, or by droplets, or by air, or by a combination of these avenues. It is worth noting that the original change in terminology was recommended in 1996, but it has taken till 1999 for the NSW Health Department to publish their guidelines for the implementation of the changes. It was a year later that this new message was being disseminated to health care workers while the infection control practices are still referred to as 'universal precautions'.

Protective attire

Protective attire, or personal protective equipment, may consist of any of the following items: cloth gowns or those made from impervious material, plastic aprons, plastic sleeves or those made from impervious material, protective eye wear, or face shields or masks, or protective footwear. It is generally accepted that these should be accessible and available for all health care workers {NSW Health Department, 1995 #1754; Worksafe Australia, 1990 #1755}. According to Australian authorities, such as, the Department of Community Services {, 1990 #1756, p. 14}, the type of protective attire worn should depend upon "the probability of exposure to blood or body fluids [and] the amount of blood or body fluid encountered," while consideration should be given to the type of contaminating body substance and the possible routes of transmission for an infection {National Health and Medical Research Council, 1996 #1681, p. 46}. According to the NSW Health Department {, 1998 #1761, p. 28}, the protective attire is the lowest level of a "hierarchy of hazard controls" and should only be used if it has been impossible to alter work practices, or reduce, or eliminate the risks to workers through engineering controls.

Protective eye-wear may be of several types: prescription or non prescription safety glasses, face shields, full face visors or surgical helmets {Study Area Health Service, 1994 #2526}. These must be worn whenever there is the possibility of the health care working being splashed with blood or body substances. The selection criteria for the protective eye wear was that it should be a "close comfortable fit," provide good vision without fogging the glass or distorting images, sturdy and reusable when cleaned and disinfected {Study Area Health Service, 1994 #2526, section 1, p. 24}.

INFORMATION SHEET FOR PREGNANT WOMEN

A STUDY OF THE DISCOURSES OF LABOUR

RESEARCHER: Helen Callaghan TELEPHONE: Work xxxxxxxx Home xxxxxxxx

SUPERVISORS

Professor Lesley Barclay Dr Deborah Lupton

Professor of Nursing (Family Health) Associate Professor of Cultural Studies and Cultural Policy

University of Technology, Sydney & Charles Sturt University

Southern Sydney Area Health Service Bathurst Telephone: 02-3502789 Telephone: 063-384093

ABOUT THE STUDY

This study examines the communication patterns of labour and birth in a delivery suite and a birth centre. The focus of the study will be on the communication, interaction and the use of language that occurs between the woman and her support people and the health professionals. The overall aim of the study is an improved understanding of women's experience of birth and has the potential to improve care for labouring women. The information will be collected by video camera and, if additional information is required, by photocopying your labour notes from the hospital chart. The study is being conducted by a PhD student enrolled at The University of Technology, Sydney.

WHO CAN BE IN THE STUDY?

Women from an English speaking background over the age of 18 years who are having their first baby. Any support person and health professional who is present during the labour and the birth of participating women may also be involved.

WHAT WILL HAPPEN TO YOU DURING THE STUDY?

The care you receive in labour will not be altered. Your experience of labour will be videoed. The camera will be fixed in the labour room and controlled from outside the room. The camera does not require another person to be present in the labouring room. The control room will be locked when unattended. Filming will commence when you are allocated a room with a camera and stop when you leave the Delivery Suite or the Birth Centre. The room being used will be identified with a sign on the door stating *video camera in use* and *research in progress*.

If anything happens during the labour that makes you change your mind about participating you may ask to have the camera turned off. You may also withdraw from the study at any time. If the room with the camera is occupied on your admission to hospital, you will not be able to participate in the study.

BENEFITS OF BEING PART OF THE STUDY

As a' thank you' for being involved in the study, you will be given a videotape of your labour experience. The video will be approximately 20 minutes in length and will focus on you and your support people.

All health professionals who participate in the study will be offered the opportunity to review their role in your labour.

The information obtained will assist other women to have a 'better birth'. (Continued over page)

WHAT HAPPENS TO THE INFORMATION COLLECTED?

The videotapes will be labelled with a number and stored in a locked cupboard. A master copy of names of the people in the study will be kept in a separate locked cupboard. The photocopied notes will be labelled with the same number as the videotapes. These notes will be stored in a different locked cupboard. The videotapes and the photocopied notes will be kept for five (5) years after completion of the study and then destroyed.

The tapes and photocopies of labour will be viewed only by the researcher/student and probably the supervisors of the study. As part of the student's assessment by the University, a brief collage of labour tapes (approximately 30 minutes in length) may be seen by the examination panel. There will be no identification of the people on the tape. *This tape will not be seen publicly.*

A short videotape (approximately 30 minutes in length) of extracts from the labours of the women who participated may be used for educational and presentation purposes. There will be no identification of the people on this tape. Your permission will be sought if an extract from your labour is considered appropriate for this videotape.

If the labouring woman, or a support person, or a health professional, withdraws from the study, the information collected about that person will be destroyed.

Copyright of the videotapes remains with the researcher.

THE POSSIBLE RISKS OF BEING IN THE STUDY

These are:

- Possible stress due to being videotaped.
- > The potential to be videoed in difficult situations.
- > If there are mechanical problems and a videotape is not obtained, there will not be a memento videotape.

WHAT IF I CHANGE MY MIND ABOUT BEING IN THE STUDY?

If you decide that being part of the study is not appropriate for you, you may withdraw at any time. Any information collected from your labour will be destroyed. Withdrawal from the study will not affect the care you are given.

/ QUESTIONS OR C IAN (TELEPHONE -	· · · · · · · · · · · · · · · · · · ·	

PREGNANT WOMAN'S CONSENT TO PARTICIPATE IN RESEARCH

A STUDY OF THE DISCOURSES OF LABOUR

RESEARCHER: Helen Callaghan TELEPHONE: Work xxxxxxxx Home xxxxxxxx SUPERVISORS

Professor Lesley Barclay Dr Deborah Lupton

Professor of Nursing (Family Health)

Associate Professor of Cultural Studies and Cultural Policy

University of Technology, Sydney & Charles Sturt University

Southern Sydney Area Health Service Bathurst Telephone: 02-3502789 Telephone: 063-384093

This study examines the communication patterns of labour and birth in a delivery suite and a birth centre. The focus of the study will be on the communication, interaction and the use of language that occurs between the woman and her support people and the health professionals. The overall aim of the study is an improved understanding of women's experience of birth and has the potential to improve care for labouring women. The information will be collected by video camera and, if additional information is required, by photocopying your labour notes from the hospital chart. The study is being conducted by a PhD student enrolled at The University of Technology, Sydney.

Participation in the study will not affect the care you are given in labour. Your experience of labour will be videoed. The camera will be fixed in the labour room and controlled from outside the room. The camera does not require another person to be present in the labour room. The control room will be locked when unattended. Filming will commence when you are allocated a room with a camera and stop when you leave the Delivery Suite or the Birth Centre. Your labouring room will be identified with a sign stating *video camera in use* and *research in progress*.

It is essential that you read and understand the accompanying information sheet which gives details of the study and any risks that may be involved. Please ask the researcher (Helen Callaghan) to answer any questions you have before signing the consent form. You may telephone (work: xxxxxxxxx or home: xxxxxxxxx) the researcher at any time.

All information gained from the study will remain confidential and personal identifying information will be deleted from all records when the study is complete.

(Continued over page)

PREGNANT WOMAN'S CONSENT FORM

A STUDY OF THE DISCOURSES OF LABOUR

I have been asked to participate in the above research project and give my consent by signing this form. I understand that:

- > The research project will be carried out as described in the Information Sheet for Pregnant Women, a copy of which I have retained.
- ➤ I realise I do not have to participate and can withdraw from the study at any time. I do not have to give a reason for the withdrawal of my consent.
- ➤ I have read and understood the Information Sheet for Pregnant Women and had all my questions answered to my satisfaction.
- > If 1 wish to raise matters of concern or complaints with an independent body I can contact:
 - 1. The Research Ethics Officer, Research Office, The University of Technology Sydney, PO Box 123, Broadway, 2007, or, telephone 02-3301279;

SIGNATURE:......DATE:......DATE:

2. The Quality Assurance Officer, SAREC, C/- SAHS, Locked Bag No. 1, Study Town, NSW, or, telephone xxxxxxxx

PLEASE PRINT FIRST NAME LAST NAME
TELEPHONE NO
CONSENT FOR THE EDUCATIONAL VIDEO Sections of videotape for review:
I have / have not reviewed sections of videotape on which I am present. It is planned that these sections will be used in a collage of the video tapes of labour. This tape will be used only for educational and presentation purposes. I give / do not give my consent to the inclusion of these sections in the collage video tape.

SIGNATURE:.....DATE:.....DATE:

INFORMATION SHEET FOR SUPPORT PEOPLE

A STUDY OF THE DISCOURSES OF LABOUR

RESEARCHER: Helen Callaghan
TELEPHONE: Work xxxxxxxx
Home xxxxxxxx

SUPERVISORS

Professor Lesley Barclay Dr Deborah Lupton

Professor of Nursing (Family Health)

Associate Professor of Cultural Studies and Cultural Policy

University of Technology Sydney & Charles Sturt University

Southern Sydney Area Health Service Bathurst Telephone: 02-3502789 Telephone: 063-384093

ABOUT THE STUDY

This study examines the communication patterns of labour and birth in a delivery suite and a birth centre. The focus of the study will be on the communication, interaction and the use of language that occurs between the woman and her support people and the health professionals. The overall aim of the study is an improved understanding of women's experience of birth and has the potential to improve care for labouring women. The information will be collected by video camera and, if additional information is necessary, by photocopying the labour notes from the hospital chart. The study is being conducted by a PhD student enrolled at the University of Technology, Sydney.

WHO CAN BE IN THE STUDY?

Women from an English speaking background over the age of 18 years who are having their first baby. Any support person and health professional who is present during the labour and the birth of participating women may also be involved.

WHAT WILL HAPPEN TO YOU DURING THE STUDY?

The care provided to participating labouring women will not be altered. Your presence during the woman's labour will be videoed. The camera wilt be fixed in the labour room and controlled from outside the room. The camera does not require another person to be present in the labouring room. The control room will be locked when unattended. Filming will commence when the participating labouring woman is allocated a room with a camera and stop when she leaves the Delivery Suite or the Birth Centre. The room being used will be identified with a sign on the door stating *video camera in use* and *research in progress*.

If anything happens during the labour that makes you change your mind about participating you may ask to have the camera turned off. You may also withdraw from the study at any time. If the room with the camera is occupied on your admission to hospital, you will not be able to participate in the study.

BENEFITS OF BHNG PART OF THE STUDY

As a' thank you' for being involved in the study, the pregnant woman will be given a videotape of her labour experience. The video will be approximately 20 minutes in length and will focus on the pregnant woman and her support people.

All health professionals who participated in the study will be offered the opportunity to review their role in the woman's labour. (Continued over page)

BENEFITS OF BEING PART OF THE STUDY (Continued)

The information obtained will assist other women to have a 'better birth'.

WHAT HAPPENS TO THE INFORMATION COLLECTED?

The videotapes wilt be labelled with a number and stored in a locked cupboard. A master copy of names of the women in the study will be kept in a separate locked cupboard. The photocopied notes will be labelled with the same number as the videotapes. These notes will be stored in a different locked cupboard. The videotapes and the photocopied notes will be kept for five (5) years after completion of the study and then destroyed.

The tapes and photocopied notes of labour will be viewed only by the researcher/student and probably the supervisors of the study. As part of the student's assessment by the University, a brief collage of labour tapes (approximately 30 minutes in length) may be seen by the examination panel. There will be no identification of the people on the tape. *This tape will not be seen publicly.*

A short videotape (approximately 30 minutes in length) of extracts from the labours of the women who participated may be used for educational and presentation purposes. There will be no identification of the people on this tape. Your permission will be sought if an extract containing your image is considered for this videotape. If the labouring woman, or a support person, or a health professional, withdraws from the study, the information collected about that person will be destroyed.

Copyright of the videotapes remains with the researcher.

THE POSSIBLE RISKS OF BEING IN THE STUDY

These are:

- Possible stress due to being videotaped.
- > The potential to be videoed in difficult situations.
- > If there are mechanical problems and a videotape is not obtained, there will not be a memento videotape for the pregnant woman/mother.

WHAT IF I CHANGE MY MIND ABOUT BEING IN THE STUDY?

If you decide that being part of the study is not appropriate for you, you may withdraw at any time. Any information collected about you will be destroyed. Withdrawal from the study will not affect the care given to the labouring woman.

IF YOU HAVE ANY QUESTIONS OR CONCERNS ABOUT THE STUDY, WRITE THEM DOWN AND CONTAC
THE RESEARCHER, HELEN CALLAGHAN (TELEPHONE - WORK: xxxxxxxx OR HOME: xxxxxxxxx) TO TAL
ABOUT THEM.

SUPPORT PERSON'S CONSENT TO PARTICIPATE IN RESEARCH A STUDY OF THE DISCOURSES OF LABOUR

RESEARCHER: Helen Callaghan TELEPHONE: Work xxxxxxxx Home xxxxxxxx

SUPERVISORS

Professor Lesley Barclay Dr Deborah Lupton

Professor of Nursing (Family Health) Associate Professor of Cultural Studies and Cultural Policy

University of Technology Sydney & Charles Sturt University

Southern Sydney Area Health Service Bathurst Telephone: 02-3502789 Telephone: 063-384093

This study examines the communication patterns of labour and birth in a delivery suite and a birth centre. The focus of the study will be on the communication, interaction and the use of language that occurs between the woman and her support people and the health professionals. The overall aim of the study is an improved understanding of women's experience of birth and has the potential to improve care for labouring women. The information will be collected by video camera and by photocopying the labour notes from the hospital chart of the pregnant woman. The study is being conducted by a PhD student enrolled at The University of Technology, Sydney.

Participation in the study will not affect the care the labouring woman is given in labour. Your involvement in the participating woman's labour will be videoed. The camera will be fixed in the labour room and controlled from outside the room. The camera does not require another person to be present in the labour room. The control room will be locked when unattended. Riming will commence when the participating pregnant woman is allocated a room with a camera and stop when she leaves the Delivery Suite or the Birth Centre. The labouring room will be identified with a sign on the door stating *video camera in use* and *research in progress*.

It is essential that you read and understand the accompanying information sheet which gives details of the study and any risks that may be involved. Please ask the researcher (Helen Callaghan) to answer any questions you have before signing the consent form. You may telephone (work: xxxxxxxx or home: xxxxxxxx) the researcher at any time.

All information gained from the study will remain confidential and personal identifying information will be deleted from all records when the study is complete.

(Continued over page)

SUPPORT PERSON'S CONSENT

A STUDY OF THE DISCOURSES OF LABOUR

I have been asked to participate in the above research project and give my consent by signing this form. I understand that:

- ➤ The research project will be carried out as described in the Information Sheet for Support People, a copy of which I have retained.
- ➤ I realise I do not have to participate and can withdraw at any time. I do not have to give a reason for the withdrawal of my consent.
- ➤ I have read and understood the Information Sheet For Support Persons and had all my questions answered to my satisfaction.
- > If I wish to raise matters of concern or complaints with an independent body I can contact:
 - 1. The Research Ethics Officer, Research Office, The University of Technology Sydney, PO Box 123, Broadway, 2007, or, telephone 02-3301279;

SIGNATURE:.....DATE:.....DATE:.....

2. The Quality Assurance Officer, SAREC, C/- SAHS, Locked Bag No. 1, Study Town, NSW, or, telephone xxxxxxxxx.

PLEASE PRINT FIRST NAMELAST NAMEADDRESS
TELEPHONE NO
CONSENT FOR THE EDUCATIONAL VIDEO Sections of videotape for review:
I have / have not reviewed sections of videotape on which I am present. It is planned that these sections will be used in a collage of the video tapes of labour. This tape will be used only for educational and presentation purposes. I give / do not give my consent to the inclusion of these sections in the collage video tape.
SIGNATURE: DATE:

INFORMATION SHEET FOR HEALTH PROFESSIONALS

A STUDY OF THE DISCOURSES OF LABOUR

RESEARCHER: Helen Callaghan TELEPHONE: Work xxxxxxxxx Home xxxxxxxxx

SUPERVISORS

Professor Lesley Barclay Professor of Nursing (Family Health) University of Technology Sydney & Southern Sydney Area Health Telephone: 02-3502789 Dr Deborah Lupton Associate Professor of Cultural Studies and Cultural Policy Charles Sturt University Bathurst Telephone: 063-385093

ABOUT THE STUDY

This study examines the communication patterns of labour and birth in a delivery suite and a birth centre. The focus of the study will be on the communication, interaction and the use of language that occurs between the woman and her support people and the health professionals. The overall aim of the study is an improved understanding of women's experience of birth and has the potential to improve care for labouring women. The information wiH be collected by video camera and, if additional information is required, by photocopying the labour notes from the hospital chart of participating women. The study is being conducted by a PhD student enrolled at The University of Technology, Sydney.

WHO CAN BE IN THE STUDY?

Women from an English speaking background over the age of 18 years who are having their first baby. Any support person and health professional who is present during the labour and the birth of participating women may also be involved.

WHAT WILL HAPPEN TO YOU DURING THE STUDY?

The care you provide in labour will not be required to be changed in any way. Your involvement in the woman's labour will be videoed. The camera will be fixed in the labour room and controlled from outside the room. The camera does not require another person to be present in the labouring room. The control room will be locked when unattended. Filming will commence when a participating pregnant woman is allocated a room with a camera and stop when she leaves the Delivery Suite or the Birth Centre. The room being used will be identified with a sign on the door stating *video camera in use* and *research in progress*.

If anything happens during the labour that makes you change your mind about participating you may ask to have the camera turned off. You may also withdraw from the study at any time. If the room with the camera is occupied when a participating woman is admitted to hospital, you will not be able to participate in the study.

BENEFITS OF BEING PART OF THE STUDY

As a' thank you' for being involved in the study, the participating mother will be given a videotape of her labour experience. The video will be approximately 20 minutes in length and will focus on the participating woman and her support people.

All health professionals who participate in the study will be offered the opportunity to review their role in the woman's labour. This review process may be done on your own or with the researcher present.

(Continued over page)

BENEFITS OF BEING PART OF THE STUDY (Continued)

The information obtained will assist other women to have a 'better birth'.

WHAT HAPPENS TO THE INFORMATION COLLECTED?

The videotapes will be labelled with a number and stored in a locked cupboard. A master copy of names of the people in the study will be kept in a separate locked cupboard. The photocopied notes will be labelled with the same number as the videotapes. These notes will be stored in a different locked cupboard. The videotapes and the photocopied notes will be kept for five (5) years after completion of the study and then destroyed.

The tapes and photocopies will be viewed only by the researcher/student and probably the supervisors of the study. As part of the student's assessment by the University, a brief collage of labour tapes (approximately 30 minutes in length)may be seen by the examination panel. There will be no identification of the people on the tape. **This tape will not be seen publicly.**

A short videotape (approximately 30 minutes in length) of extracts from the labours of the women who participated maybe used for educational and presentation purposes. There will be no identification of people on this tape. Your permission will be sought if an extract containing your image is considered appropriate for this videotape.

If the labouring woman, or a support person, or a health professional, withdraws from the study, the information collected about that person will be destroyed. Copyright of the videotapes remains with the researcher.

THE POSSIBLE RISKS OF BEING IN THE STUDY

These are:-

- Possible stress due to being videotaped.
- The potential to be videoed in difficult situations.
- If there are mechanical problems and a videotape is not obtained, there will not be a memento videotape, or the opportunity for health professionals to assess their skills.

WHAT IF I CHANGE MY MIND ABOUT BEING IN THE STUDY?

If you decide that being part of the study is not appropriate for you, you may withdraw at any time. Any information collected relating to you will be destroyed.

CONSENT ISSUES

Consent from health professionals will be sought in stages. Initially, consent will relate to permission to videotape the health professional at work with the participating women and their support people. Any health professional whochooses to view a videotape in which they participate may then withdraw permission for its use. The third stage ofconsent relates to permission to use sections of the video, in which the health professional is present, in an educational video. Consent may be withheld or withdrawn at any stage.

IF YOU HAVE ANY QUESTIONS OR CONCERNS ABOUT THE STUDY, WRITE THEM DOWN AND CONTACT HELEN CALLAGHAN (TELEPHONE - WORK: xxxxxxxxx OR HOME: xxxxxxxxxx) TO TALK ABOUT THEM.						

HEALTH PROFESSIONAL'S CONSENT TO PARTICIPATE IN RESEARCH A STUDY OF THE DISCOURSES OF LABOUR

RESEARCHER: Helen Callaghan

TELEPHONE: Work xxxxxxxx Home xxxxxxxx

SUPERVISORS

Professor Lesley Barclay Professor of Nursing (Family Health) University of Technology Sydney & Southern Sydney Area Health

Telephone: 02-3502789

Dr Deborah Lupton Associate Professor of Cultural Studies and Cultural Policy **Charles Sturt University Bathurst**

Telephone: 063-385093

This study examines the communication patterns of labour and birth in a delivery suite and a birth centre. The focus of the study will be on the communication, interaction and the use of language that occurs between the woman and her support people and the health professional/s. The overall aim of the study is an improved understanding of women s experience of birth and has the potential to improve care for labouring women. The information will be collected by video camera and by photocopying the labour notes from the hospital chart. The study is being conducted by a PhD student enrolled at The University of Technology, Sydney.

Your involvement in the labour of participating women will be videoed. The camera will be fixed in the labour room and controlled from outside the room. The camera does not require another person to be present in the labour room. The control room will be locked when unattended. The camera will commence filming when the participating woman is allocated a room with a camera and stop when she leaves the Delivery Suite or the Birth Centre. This will not affect the care you are giving in labour. The labour room of participating women will be identified with a sign stating video camera in use and research in progress.

It is essential that you read and understand the accompanying information sheet which gives details of the study and any risks that may be involved. Please ask the researcher (Helen Callaghan) to answer any questions you nave before signing the consent form. You may telephone (work: xxxxxxxx or home: xxxxxxxx) the researcher at anytime.

All information gained from the study will remain confidential and personal identifying information will be deleted from all records when the study is complete.

(Continued over page)

HEALTH PROFESSIONAL'S CONSENT

A STUDY OF THE DISCOURSES OF LABOUR

I have been asked to participate in the above research project and give my consent by signing this form. I understand that:

- The research project will be carried out as described in the Information Sheet for Health Professionals, a copy of which I have retained.
- I realise I do not have to participate and can withdraw at any time. I do not have to give a reason for the withdrawal of my consent.
- I have read and understood the Information Sheet for Health Professionals and all my questions have been answered to my satisfaction.
- If I wish to raise matters of concern or complaints with an independent body I can contact:
 - 1. The Research Ethics Officer, Research Office, The University of Technology Sydney, PO Box 123, Broadway, 2007, or, telephone 02-3301279;
 - 2. The Quality Assurance Officer, SAREC, C/- SAHS, Locked Bag No. 1, Study Town, NSW, or, telephone xxxxxxxx.

CONSENT TO BE VIDEOTAPED: I consent to the videotaping of myself during my involvement with the participating women.

SIGNATURE:	DATE:
PLEASE PRINT FIRST NAMEADDRESS	LAST NAME
CONSENT TO ANALYSE THE VII Sections of videotape for review:	DEOTAPES
I consent / do not consent to the incl	lusion of those sections of the videotape/s of the participating women's
SIGNATURE:	DATE:
CONSENT FOR THE EDUCATION Sections of videotape for review:	NAL VIDEO
will be used in a collage of the vide	s of videotape on which I am present. It is planned that these sections eo tapes of labour. This tape will be used only for educational and not give my consent to the inclusion of these sections in the collage
SIGNATURE:	DATE:

Discourses of Labour Study Closed Circuit Video System

To start system:

- 1. Adjust the camera and ensure it is showing the correct room.
- 2. Turn on the microphone in the room.
- 3. The monitor must be on AV (use 'TV/video' button to switch over to correct function.
- 4. Video recorders must be on AV.
- 5. Press or signal 'Record' for video recorder no. 1. A red 'rec' button will show on the front panel (does not matter if recorders 2 & 3 commence recording).
- 6. Allow to record for a minute or so. Stop recording and rewind. Press 'TV/video' on the monitor to switch functions. Use channel 1. Play tape. Check equipment isworking, particularly the microphone.
- 7. Rewind tape. Press 'TV/video' on monitor to switch functions. The monitor should show 'AV'.
- 8. Press or signal 'Record' for video recorder no. 1. A red 'rec' button will show on the front panel.
- 9. Set the timer record for the other two machines.
- 10. Note time when change of tapes is due.

TAPE SETTINGS SHEET

Tapes: and date Don`t	on		the first tape. Use the clo			
out the	times when	•	the tapes. Record when es will be due to start and Examples:	•		
	Tape 1 Tape 2	Finish time Start time	1930	Date Date	12/12/96	
		Finish time	2235	Date		etc
Гаре 1	Start time Finish	h time	Date	Date		
Гаре 2	Start time		Date			
	Finish	h time		Date		
Гаре 3	Start time		Date			
	Finish	h time		Date		
Гаре 4	Start time		Date			
	Finish	n time		Date		
Гаре 5	Start time		Date			
	Finish	h time		Date		

Tape 6 Star	t time	Date	
	Finish time		Date
Tape 7 Star	t time	Date	
	Finish time		Date
Tana & Star	t tima	Date	
Tape 8 Star		Date	
	Finish time		Date
Tape 9 Star	t time	Date	
r	Finish time		Date
	Timsh time		——————————————————————————————————————
Tape 10	Start time		Date
	Finish time		Date
Tape 11	Start time		Date
	Finish time		Date
Tape 12	Start time		Date
	Finish time		Date
Tape 13	Start time		Date
	Finish time		Date
Tape 14	Start time		Date
	Finish time		Date
Tape 15	Start time		Date

Finish time	Date

Discourses of labour study

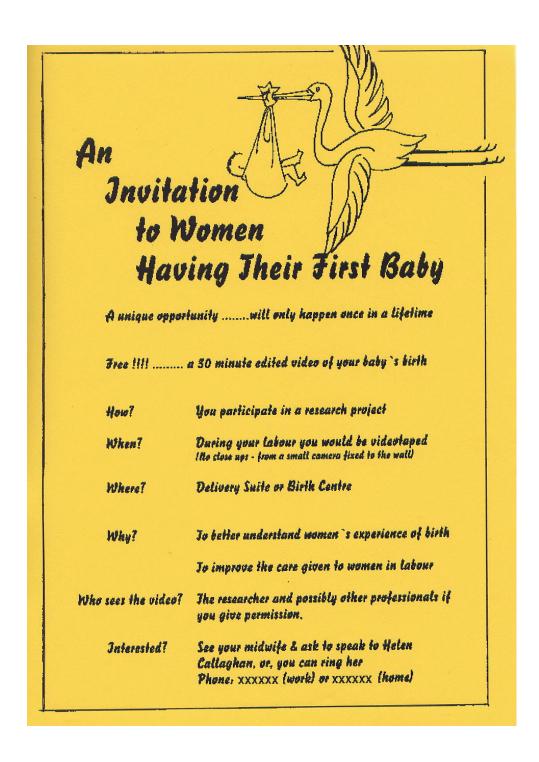
To stop system temporarily, ie, woman or another participant wishes to have private time / or someone not in the study has to enter the room

- 1. Press stop on the video recorder currently showing the red 'rec'.
- 2. Do not touch any of the other video recorders.
- 3. When the **private time is over**, press or signal 'Record' for the same video recorder.
- 4. Notify Helen.

To stop system permanently, ie, woman wishes to withdraw from the study / or the woman has left the unit / or midwife has declined to participate

- 1. Turn off the microphone in the room (does not matter if you don't do this, it just saves the batteries).
- 2. Press stop on the video recorder currently showing the red 'rec'.
- 3. Press 'timer' on other video recorders to cancel the future recordings.
- 4. Notify Helen

APPENDIX 12 POSTER ADVERTISING THE STUDY



Original size was A4

APPENDIX 13 FLYER ADVERTIZING THE STUDY



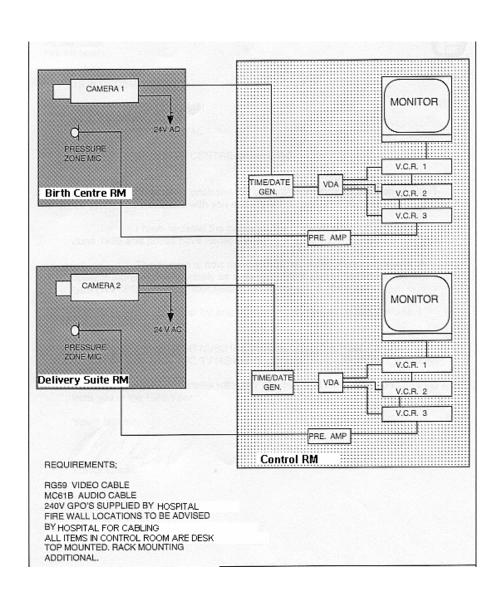
The original handout was in A4 size

APPENDIX 14 REMINDER NOTE FOR THE STUDY



Original size was A5

APPENDIX 15 CLOSED CIRCUIT VIDEO SYSTEM



Memo

To: Midwives in Delivery Suite

Re: Discourses of Labour Study

From: Helen Callaghan

The women who have agreed to participate in this study will soon be coming to Delivery Suite or the Birth Centre for their babies` birth. The protocol I have devised is as follows:

- The rooms that are set up for the video recording are Room X in Delivery Suite and room Y in the Birth Centre. The equipment controls are in the Control Room, which must be kept locked always.
- 2. If the rooms are unavailable when the women come in they will be lost to the study.
- 3. If there is not sufficient staff who are willing to be in the study, the women will be lost to the study.
- 4. A sign on the door will identify the room being used.
- 5. There are instructions about turning off the video in the Control Room. This is in case
 - 1) the woman requires private time, or,
 - 2) if she decides to withdraw, or,
 - 3) if any person who needs to enter the room does not wish to be

videoed.

APPENDIX 16 (CONTINUED)

- 6. I have asked the women to let me know when they are going to the hospital. If the women have not contacted me, could you please ring me on my home telephone no. xxxxxxxxx. If I am not at home, my telephone will be diverted, probably to my mobile telephone.
- 7. If the woman has given written consent, her chart will have a sticker on it stating 'The discourses of labour study'.
- 8. I will come in and commence the recording of the video and ensure it is working before I leave the unit. I will come back at the required time to change the tapes.
- 9. I will notify the various medical staff that a participating woman has arrived in the unit.
- 10. Please notify me if
 - 1) there are any problems with the study,
 - 2) the women or other participants have requested that the video be turned off,
 - 3) any of the participants withdraw from the study.
- 11. Please contact me if you have any queries about this protocol.

Thank you for your assistance in this matter. I greatly appreciate it.

Helen Callaghan Date: 13.9.1996

Memo

To: Midwives in Delivery Suite

Re: Discourses of Labour Study

From: Helen Callaghan

The women who have agreed to participate in this study will soon be coming to Delivery Suite or the Birth Centre for their babies` birth. The **revised protocol** is as follows:

- 1. The rooms that are set up for the video recording are Delivery Suite Room X and Birth Centre Room Y. The equipment controls are in the **Control Room**, which must be kept locked always.
- 2. If the rooms are unavailable when the women come in they will be lost to the study. If there are **no Birth Centre rooms** available for the women who requested it, and Room X is available, they may be offered the use of Room X.
- 3. If there is not sufficient staff who are willing to be in the study, the women will be lost to the study.
- 4. A sign on the door will identify the room being used.
- 5. There are instructions about turning off the video in the Control Room. This is in case
 - 1) the woman requires private time, or,
 - 2) if she decides to withdraw, or,
 - 3) if any person who needs to enter the room does not wish to be videoed.

APPENDIX 17 (CONTINUED)

6. I have asked the women to let me know when they are going to the hospital. If the women have not contacted me, could you please ring me on my home telephone no. xxxxxxxx. If I am not at home, my telephone will be diverted, probably to my mobile telephone.

7. If the woman has given written consent, her chart will have a sticker on it stating 'The discourses of labour study'.

8. I will come in and commence the recording of the video and ensure it is working before I leave the unit. I will come back at the required time to change the tapes.

9. I will notify the various medical staff that a participating woman has arrived in the unit.

10. Please notify me if

1) there are any problems with the study,

2) the women or other participants have requested that the video be turned off.

3) any of the participants withdraw from the study.

11. If the women commence labour in the Birth Centre but are transferred out, if possible transfer them to Rm. X. I will need to be notified so I can switch the camera over.

12. If the woman goes to theatre for a Caesarean Section, if possible, could her baby be returned to the room with the camera? This will give the couple some pictures of the baby.

13. I will leave an updated list of the women who have signed consent forms.

1.4 Please contact me if you have any queries about this protocol.

Thank you for your assistance in this matter. I greatly appreciate it.

Helen Callaghan Date: 27.10.1996

Tips for Improving the Quality of the Sound

- Mechanical sounds are exaggerated by the microphone and are often picked up more easily than human voices. Therefore, if using anything mechanical, such as a CTG machine, please have the volume down low. If possible, do not have the machine directly under the microphone, as this is the best pick up point.
- If using the radio, could you have it at a soft level and away from the microphone.
- ➤ Keep the door closed when participants are in the rooms. The microphone will pick up people talking in the corridor as well as people in the rooms.
- > Try not to look towards the floor when talking, as this makes it more difficult for the microphone to pick up the sound.
- When the minor operations light is on a particular area, eg, during catheterisation, the light is so bright, that the area is whited out.

Have fun.

APPENDIX 18 WARNING SIGN FOR THE DOOR



Original was in A4 size

Tips for Improving the Quality of the Sound

- Mechanical sounds are exaggerated by the microphone and are often picked up more easily than human voices. Therefore, if using anything mechanical, such as a CTG machine, please have the volume down low. If possible, do not have the machine directly under the microphone, as this is the best pick up point.
- If using the radio, could you have it at a soft level and away from the microphone.
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- When the minor operations light is on a particular area, eg, during catheterisation, the light is so bright, that the area is whited out.

Have fun.

RE: DRAFT DOCUMENT ON PARENTS TAKING THEIR PLACENTAS HOME

I have developed release of bodies procedure, the bodies of babes are also addressed in this procedure.

There is also a protocol for guiding the consent of the hospital to the release of the baby's body to parents; that addresses local council regulations on home burial, etc.

On rare occasions the parents of a pre 20 week still born have requested return of the fetus/birth products to them for burial and this has been carried out according to the 'Return of new born baby body to parent' protocol.

There are protocols as well that address the return of 'souveniers' [sic], body parts, tissue to patients. On rare occasions a patient will request to have an amputated artifact/tissue returned to them. Usually some treatment of the part/tissue for transport, for logevity [sic], for storage is necessary. Treatments are carried out by the morturay [sic] staff.

This type of request is considered in a number of ways. Ie*.....

It is explained to the patient that infectious/contaminated tissue cannot be returned to them to protect both them and the community. The material must be isolated and destroyed using an incineration process.

The rostered pathologist will discuss requests for return of tissue with the treating doctor and can consider the request as credible/frivolous/unacceptable. The request can be accepted/refused by the rostered pathologist.

Requests are considered:.....

On the balance of common sense and....

*the cost of treating the tissue to make it suitable for take away by patients is taken into

*the aesthetic appeal of having a human organ/tissue in the community that may be subject to un-acceptable behavior [sic] bringing the dignity of humanity into disrespect. *the risk of bringing health care into disrepute.

*the risk of infection and contamination if the conservation pots or containers are broken etc.

*The significane [sic] to the requesting party.

The treating Doctor and Social worker are part of the discussion team. Patients are susually [sic] discouraged from this type of request.

If a request for the return of tissue is considered to have credible/ religious connotations this is dealt with appropriately and with sympathy. The tissue will be treated by the mortuary to ensure transport/storage/longevity, and signed out to the patient. A record of the return of tissue is made in the patients medical records.

Hope this hel[p]s [sic] {Edwards, 2001 #1976}