Antenatal Education: Meeting Consumer Needs
A Study in Health Services Development

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A thesis submitted in accordance with the requirements for admission to the Degree of Doctor of Philosophy

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University of Technology, Sydney

March 2005

Certificate of Authorship and Originality

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 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.

Jane L. Svensson

Acknowledgements

Pervading this thesis is the notion that expectant and new parents are on a journey. This research and the production of a thesis has taken me on a very challenging but rewarding journey…a journey which has been supported by many people.

Firstly I would like to thank my supervisor Lesley Barclay for her unending support and guidance and for offering me opportunities as they arose, in particular the 'Breastfeeding Project'. Lesley has taught me an enormous amount about academic writing, and preparing grant applications, for which she is to be thanked.

Secondly I would like to thank Margaret Cooke for her friendship, support and encouraging words when I have needed them most, even when she was overseas. I look forward to many more statistical discussions. The support provided by Virginia Schmied, in particular during the production of Breastfeeding and You: A Handbook for Antenatal Educators must also be recognised, as should her friendship along the route. I also thank the other members of the student meetings, in particular Caroline Homer, Athena Sheehan, Sue Kruske and Sue Kildea, as we shared our toils and troubles.

This research would not have been possible without the expectant and new parents who participated in it. In particular I want to thank the nine couples who allowed me into their lives over a twelve month period in 1998/9. Although they have pseudonyms in the text their distinct personalities remain clear in my mind. The relative ease to gain samples for this research demonstrates the interest expectant and new parents have in antenatal education.

Pseudonyms have also been used for all the antenatal educators and the experts who participated in each stage of this study. Their support of my work is appreciated.

At the beginning of the research I was a Parent Educator at Hospital B and I was supported by my manager Pauline Green, and by colleagues including Maureen Ryan and Valerie Smith. Indeed even when I left the hospital to become the Health Education Coordinator at Hospital A they continued their support.

Sue Katz, my manger at Hospital A, is to be thanked for allowing me to continue to combine full-time work with part-time study and allowing me leave when required. Joy Heads must be thanked for her many coffees along the route, Yvonne Paul, the librarian, for her interest in my work and Vanessa Madunic for her support and friendship.

Funding for this research has come from several sources, all of which were greatly appreciated. The UTS research department provided an incentive grant in the beginning, the Commonwealth Department of Health and Aging provided the funding for the Breastfeeding project and the evaluation of the same. The Faculty of Nursing, Midwifery and Health provided a completion scholarship at the end. I could not have undertaken this venture without these resources.

No doctoral research occurs within a bubble although I am certain many close friends at the end were wondering. I thank my parents and my brother for not placing unnecessary family commitments upon me and more importantly for tolerating my frequently narrow view of life. Also my father for reading my numerous drafts of this thesis in his retirement from academia. Bronny Handfield and Lyn Hayes for their unending support especially when chronic tiredness had set in. And last but not least Frank for his warmth and reassurance over the years.

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Abstract

This research situated antenatal education within a health promotion framework to determine a consumer-based approach to improving antenatal and postnatal education purported to prepare for parenthood. Research, both published and unpublished, criticises current structured educational programs and first time parents are reported to experience high levels of stress and unhappiness.

Stage One of this study was a multiple source, multiple methods needs assessment conducted at two large, metropolitan hospitals in Sydney. The aim of the needs assessment was to explore the needs, interests and concerns of first time expectant and new parents, their changing nature during the childbearing year, ascertain learning processes that best suited their needs, and plan effective antenatal education around the results. Repeated in-depth interviews, focus groups, participant observation and surveys were used to collect data from expectant and new parents. Focus groups, surveys and participant observation were used to collect complementary data from educators, midwives and Child and Family Health Nurses who work with expectant and new parents. The third source of data analysed was documentary, that is program outlines and session plans of three comparable hospitals.

The needs assessment demonstrated that to effectively prepare women and men for their childbearing experience, a range of strategies, programs and learning activities were required. This resulted in the design of a '*menu*'[1] approach to antenatal and postnatal education with an emphasis placed on '*life as a mum and a dad*', and the '*world*' of their baby. The results also demonstrated a significant difference existed between the actual learning needs and priorities of expectant and new parents and those perceived to be their needs by the professionals. Expectant and new parents questioned the group facilitation skills of educators and identified methods to improve practice.

Three strategies identified by these expectant and new parents as priorities were designed, implemented and an evaluation of each was undertaken in Stage Two of this study. The strategies were:

[1] The actual words used by a number participants are included in italics.

1. Seven session Having a Baby program for first time parents.
2. Group skills training program for antenatal and postnatal educators.
3. Breastfeeding resource package for antenatal educators.

Stage Three of this research was an empirical study. A repeated measures randomised control trial was undertaken to test the effectiveness of the new Having a Baby program. In particular whether women and men who attended this program had improved perceived parenting self-efficacy, knowledge, and decreased worry about the baby eight weeks after birth compared with those who attended the conventional antenatal education program. The new program placed the labour and birth experience as a microcosm of the childbearing experience, and incorporated learning activities designed to enhance the confidence of pregnant women and their partners during their adjustment to parenthood. Perceived parenting self-efficacy[2] was the measure by which parenting confidence, and therefore adjustment to parenthood, was measured

The randomised control trial demonstrated that the perceived parenting self-efficacy of women and men in the experimental group was higher than those of control group participants at approximately eight weeks after the birth, with the difference being statically significant. The labour and birth outcomes of both groups, and their demographic details, were similar.

Evaluation of the group skills training program for antenatal and postnatal educators and the breastfeeding resource package for antenatal educators were undertaken. Data collected from focus groups, interviews and surveys demonstrated the effectiveness of these strategies.

The findings of this research question the validity of conventional antenatal classes and confirm the need for training and mentoring of antenatal educators. Effective, high quality antenatal education operating within budget allocation, facilitated by group skills trained educators, can produce superior postnatal outcomes.

[2] The Parent Expectations Survey (Reece, 1992) is a validated measure used to determine perceived self-efficacy with women and men.

Prologue

One day you're not, the next day you are. All of a sudden you're someone's mum or dad.

You've taken out your lifetime ticket on the emotional roller coaster of parenthood – the thrilling surge of love-filled highs and the desperation of no-idea-what-to-do-next lows.

Breastfeeding doesn't always work, babies can take months to settle and sleep well, and seriously sleep-deprived parents can slide into what seems like permanent blues.

Becoming a parent is a serious new job – you're on duty 24 hours a day, you've probably got the most demanding boss you've ever had and most of us have precious little training for the task.

Angie Kelly
Journalist, Good Weekend
Sydney Morning Herald, June1999

There are few significant life events that are embarked upon without preparation, and yet it appears that life with a baby, possibly one of the most significant, lacks appropriate preparation in contemporary Australian society. The continual cries made to me, whilst working as a Antenatal Educator in a Sydney hospital, from women and men at antenatal education program reunions that they '*wish we had known how hard it* (being a parent) *would be in the first few weeks*' were fundamental in my decision to conduct this research. This was in addition to the increasing number of program evaluation forms submitted to myself stating '*we would like more on life after birth*'.

I am an experienced midwife who became involved in antenatal education on completion of a Masters in Public Health in 1991. For me, pregnancy seemed a logical time for women and men to want information on a large range of issues so I was astounded to find most hospitals were only offering antenatal education in the final

weeks of pregnancy. Another concern, from my health promotion perspective, was that existing programs had been poorly evaluated with most programs being developed using a top down approach. Process evaluation forms were being used more as a token evaluation gesture than for program development. Thirdly, I began to see evidence of the dissent and division within those teaching, with midwives and physiotherapists both claiming antenatal education as their own domain.

Through the 1990s I began to investigate the numerous facets of antenatal education and became actively involved in the National Association of Childbirth Educators (NACE). It was through NACE I became aware of the number and potential scope of the antenatal education coordinator positions in New South Wales. Many of these positions were established due to recommendations of the NSW Ministerial Taskforce Review of Obstetric Services (1989) which presented its findings in 1989. The positions were filled with individuals who were enthusiastic but were provided with little training or a clear understanding of what the role of a coordinator involved.

It appeared that many coordinators and educators felt uncomfortable with what was required of them and the need for support was identified. Proactive coordinators, including myself, formed the NSW Network of Parent Education Coordinators in 1992 and we began quarterly meetings. Further we attended specific antenatal education training programs and then became trainers ourselves. The 1990s became a time of great change, with great emphasis being placed on evidence based practice. More research was required to inform antenatal education practice and I believed it was part of the coordinators role to undertake or promote such research, to ensure that high quality effective programs were being implemented. My doctoral research was born.

Six years later, my first major research journey is complete. The journey has not been straight or easy, and there have been many interesting side tracks along the way. The journey has also opened many doors for further exploration and research which is already in the process of development. Indeed in this thesis I have had to restrict myself in the amount that is written and have limited myself to describing the evaluation of only one of the programs that were developed as a result of my research.

Along the route some have reflected whether I have been too close to the field to provide unbiased results. Prior to and during the doctoral research I have kept a professional dairy which allowed me to clearly identify my assumptions and to test them out during interviews with both clients and other health professionals. Nevertheless, it is impossible to be totally unbiased. I do, however believe my professional experience and my public health training has helped rather than hindered the research and its interpretation.

In this thesis I have used the term antenatal education to encompass the following terms: childbirth education, prenatal education, parent education and antenatal classes. My investigation was not however limited to the antenatal period, rather it encompassed the childbearing continuum from preconception to the early postnatal period.

Chapter One: Introduction

The goal of the thesis was to design effective antenatal education for women and their partners during the childbearing year, (i.e. pregnancy and the first few months after birth), and test one strategy identified by them as being a priority. This thesis describes the methodology and results of a needs assessment of expectant and new parents, and health professionals. The results of the needs assessment were used to inform the design of antenatal education programs and strategies, and resources for educators. The thesis also describes the results of a randomised controlled trial which evaluated the effectiveness of one of the new programs compared with a conventional antenatal education program.

This chapter provides an overview of the context within which antenatal education is provided to new parents in Australia. Some of the important social changes relating to family and childbirth which have occurred in the last century are described. The social meaning and experience of motherhood and fatherhood in today's society and the impact the media has in shaping our ideas about childbirth and parenting are also briefly examined.

The confusing and often idealised media discourses about childbirth and the decreasing level of support available to parents suggest that antenatal and parenting education may have a role in improving support, and facilitating learning and adjustment to childbirth and parenting. What kind of role antenatal education has and how effective it is, will be explored in this thesis. This chapter provides a brief guide and introduction to the thesis.

1.1 Giving Birth in Contemporary Australia

Families, the basic units in human society, have undergone significant changes in structure through the 20th century. In Australia, at the time of Federation, families frequently had extended kin and unrelated people living with them. In the decades following World War II, nuclear families became more common. While this remains the case, social changes in the later part of the century brought increasing diversity to the kinds of family structures that exist within Australian society and the level of support available.

In 2001, 14.8 million Australians lived with at least one other family member, making up 4.9 million families in total (Australian Bureau of Statistics, 2003a). While families comprising couples with children remain the most prevalent type of family, Australian Bureau of Statistics data reveals that the increase in the number of these families was relatively small (3%) between 1986 and 2001. In comparison, the number of one parent families increased by 53% (Australian Bureau of Statistics, 2003a).

Many broad social trends have affected families. The Australian population increased more than fivefold over the past century. It changed from youthful to aging and from Anglo-Celtic to multicultural in its makeup (Weston, Stanton, Qu, & Soriano, 2001). In addition, approximately 20 years have been added to life expectancy and women are on average giving birth later in their life. Other factors that have affected family trends include education and employment patterns, economic recessions, wars, migration, technological advances especially in reproductive technology, changes in gender roles, welfare support trends, globalisation and changing social attitudes (Weston et al., 2001). Gilding, in his account of family life in Australia in the 21st century, claims that 'nowadays individuals pursue their own selfish goals at the expense of the family. The most obvious losers are children' (Gilding, 2001:10).

Motherhood has been described in many ways. There can be a sense of elation, pride, relief, exhilaration and a sense of power at having achieved a woman's rite of passage (Maushart, 1999). However, as the number of childbearing women from nuclear families increases, there can be a sense of 'aloneness' for the new mother in her physical separation from her baby and from others (Rogan, Schmied, Barclay, Everitt, & Wyllie, 1997).

Women traditionally prepared for and learned about childrearing through wisdom gained from their extended families and their community. Today, the majority of women do not live in the same or adjoining suburb as their immediate family; often work until approximately four weeks prior to the birth; and they come from nuclear families themselves. They also face financial, social, environmental and political challenges different from their forebears (Gilding, 2001).

The media has a significant impact on our understandings about parenthood. Indeed hardly a day passes without a motherhood, fatherhood or parenthood article being published in the media. Some examples are: '*Motherhood: These days, from the moment you get pregnant, everybody has an opinion on what you should and shouldn't do. It's time we gave mothers a break.'* (Sunday Life, May 2000); '*Parenting: the ultimate challenge for thrill-seekers.'* (Tempo, August 1999); '*The baby challenge: Awkward, confused, insecure? You must be a career girl who is now a new mum.*' (Tempo, August 1999) and '*all parents need to do a parenting program'* (SMH, April 2002).

Newspapers, magazines, journals, books, the internet, radio and television are not only transmitters of information but, increasingly in contemporary society, they play a role in shaping our ideas and indeed our lives (Maushart, 1999). The media has power as it permeates all of our senses, it presents celebrities as 'experts', it sensationalises issues and is often controversial. The media can present bewildering messages. For example, in one article we may be told that parenthood is '*the best thing'* that could happen to a person and in another paragraph it is synonymous with '*a prison sentence…full of misery and no support*' (SMH, May 2003). It is often difficult and time consuming to untangle the information available and the veracity of that information.

Women's expectations and role as a mother and their responses to their baby will be influenced by their life exposures and health. Pregnancy is a time when foundations for this role can be laid. However, anecdotal evidence demonstrates that for many women today, the preparation for childbirth does not reduce the shock of their changed role, with minimal time spent during pregnancy working through ambivalences, feelings and expectations. There is increasing concern about postnatal depression and family disintegration. It is argued that adjustment to parenthood requires time to assimilate and learn and should begin prior to childbirth (Maushart, 1999; Tracey, 1993; Wolf, 2001). Antenatal education sessions have the potential to provide a means for this to occur.

The way a father reacts to his son or daughter will also be influenced by personal factors, such as beliefs, experiences, and expectations. It will also be affected by the way the mother and baby unit function. Tracey, a psychologist who has studied

maternal-infant behaviour, claims that in the early days there may be an illusion of oneness or 'symbiosis' which protects a mother and the baby, at the expense of the father (Tracey, 1993). For some fathers it can feel as if the baby shares his mother's skin until he gets to know his own. This can take time and if it happens the process should not be hurried. Shattering the illusion too quickly can strip the baby of his security and leave him with a sense of agony beyond his capacity to understand (Tracey, 1993).

Until recently men rarely spoke about the emotional impact of childbirth and life with a new baby. To say that you felt lost in the early weeks would be considered strange as little was said about newborn behaviour. Tracey suggests that for fathers to admit that they really did not know what to do, would be unmanly and to burst into tears of joy or sheer exhaustion, would just not happen (Tracey, 1993). Today, in many cultures, men are beginning to talk more openly and willingly share their experiences. Some are talking about the joy, the wonderment, the tiredness, the demands and even their concerns about being a father (Barclay & Lupton, 1999).

For many, becoming a father is difficult because men lack role models and the popular media constantly reminds them that they must share the load. In addition, many work environments struggle to become family friendly. As with the mothers, the magnitude of the changes a baby brings will vary enormously but there is a greater acknowledgement of the adjustment that fathers must make when becoming a parent (Barclay & Lupton, 1999; Downey, 1994).

Riding an emotional roller coaster is an analogy many couples now use to describe parenthood in contemporary Australia. It illuminates the highs and lows women and men may experience and, when unravelled, it describes the confusion they may feel. The large and complex changes that are associated with parenthood today require time and understanding in a similar way to other major life changes. This research assumes that effective antenatal education can make a difference and tests this assumption.

1.2 Rationale for this Research

This researcher became aware of several inherent problems with antenatal education[3] while employed as an Antenatal Educator in the early 1990s, at one of the largest Metropolitan hospitals in Sydney. In summary these points capture the background to the study:

- Research in Australia and overseas indicated that the effectiveness of antenatal education was variable. Australian research criticising antenatal education was increasing (Barclay, Everitt, Rogan, Schmied, & Wyllie, 1997; Lumley & Brown, 1993; O'Meara, 1993b).
- The research indicated that antenatal education was often not meeting the needs of women and not perceived as relevant to men (Barclay, Donovan, & Genovese, 1996). It recommended that programs should include more on parenting (M. Nolan, 1997b; Schneider, 2001).
- Under-resourcing of Parent Education Centres had led to limitations of design and implementation of programs, with structure, content and learning activities being developed from process evaluation, not impact or outcome evaluation data (Svensson & Handfield, 2001b).
- Programs were not grounded in health promotion theory or adult learning and antenatal educators were largely untrained (O'Meara, 1993a; Robertson, 1995).
- In many locations early pregnancy programs were ceasing operation due to lack of program bookings. Coordinators said this was due to women and their partners being disinterested in a program in the early weeks of pregnancy, however their evidence was anecdotal and not research–based.
- There was minimal recent research investigating the role and performance of antenatal educators (Schneider, 2001). Others had suggested strategies to improve the effectiveness of antenatal education (Corwin, 1998) but health services development research overseeing the implementation and evaluation of strategies was also minimal as described in Chapter Three.

[3] Chapter Three provides the background to the development of these problems.

1.3 Research Questions

These problems resulted in the development of the following research questions.

- What were the interests, concerns, and priorities of first time expectant and new parents during the childbearing year?
- What were the interests, concerns and priorities of first time expectant and new parents during the childbearing year as perceived by health professionals?
- Could the adjustment to parenthood be made easier for first time expectant and new parents at two large metropolitan hospitals in Sydney through antenatal education?
- What role do health professionals play in this process?
- What affects would implementation of evidence-based, educational strategies and a needs assessment based program design have on adjustment to parenthood?

Prior to the commencement of this research ethics approval was obtained from the following research ethics committees: University of Technology, South Eastern Sydney Area Health Service and Central Sydney Area Health Service. Examples of approval letters are provided in Appendix One.

To decrease potential bias in evaluating the results because of the author's involvement in the design of the project, a working party was established for each stage of this research. Each working party met monthly and progress reports were sent to all members. In additional I had regular meeting with my supervisors. The data collected throughout the study was checked by an independent researcher for accuracy in data entry and interpretation. In addition the randomisation of the educators and the couples in the RCT was conducted by an independent researcher.

1.4 Outline of this Research

Green and Kreuter's (1991) PRECEDE-PROCEED model of health planning was used as the framework for exploring the issues related to antenatal education and answer the questions listed above. The health promotion framework and the PRECEDE-PROCEED model are described in more detail in Chapter Two.

The first stage of this research, (Chapters Three to Six), was a needs assessment which incorporated the first five phases of the PRECEDE-PROCEED model, i.e. the analysis

of sociocultural, epidemiological, behavioural, environmental, educational and policy and administrative factors. This stage consisted of a literature review and a multiple source, multiple methods needs assessment to determine the learning needs of first time expectant and new parents during the childbearing year. It explored how their needs and priorities changed over time and strategies they identified as being important at differing points during this period were also investigated.

The second stage, (Chapter Seven), was the development of a number of programs, strategies and resources based on evidence and the results of the needs assessment, and is synonymous with the implementation and process evaluation phases of the PRECEDE-PROCEED Model.

The third stage of the research, (Chapters Eight and Nine), consisted of empirical research which evaluated the impact of one of the new programs developed from the needs assessment. A pre-test post-test randomised control trial tested the effectiveness of a new '*Having a Baby*' program compared to conventional antenatal education. The aim of the trial was to test whether perceived parenting 'self-efficacy' of women and their partners was higher eight weeks after birth.

An impact evaluation of both a breastfeeding resource for antenatal educators and a basic group skills training program for educators were also conducted and described but are not reported in detail in this thesis.

1.5 Structure of the Thesis

Chapter Two situates antenatal education within a health promotion framework and discusses the five action areas identified in the Ottawa Charter and their relevance to antenatal education. The PRECEDE-PROCEED program-planning model used in this research is also described. An overview of needs assessment is provided and the data sources used in this research are outlined.

Chapter Three commences with a description of childbirth outcomes in contemporary New South Wales. It then traces the development and challenges of hospital-based antenatal education in Australia. The chapter argues that current programs are not

evidence-based or grounded in adult learning, or similar theory or skills, they do not meet consumer needs, and are not preparing women and their partners for parenthood.

In Chapter Four, the multiple sources, multiple methods needs assessment is described. The three data sources are identified and sampling, methods of data collection and data analysis are explained. A particular feature of this needs assessment was the longitudinal nature of data collection from couples which provided an understanding of the changing needs, interests and concerns of expectant and new parents.

Chapter Five provides the results from the needs assessment of expectant and new parents. Their concerns, interests and priorities are identified during the childbearing year and strategies by which they could be addressed. Chapter Six commences with the results from the health professionals who were primary care providers of expectant and new parents. Chapter Six concludes with a comparison between antenatal education program documentation from three hospitals of comparable size to those that participated in the needs assessment.

Chapter Seven incorporates and translates the important features discovered in the needs assessment into the development of a new antenatal education program, a basic group skills training program for educators and a breastfeeding resource for educators. The design of each strategy is presented, as is the implementation and process evaluation. This chapter concludes with an overview of other programs and strategies developed from the needs assessment.

Chapters Eight and Nine report on the randomised control trial undertaken to test the effectiveness of the new antenatal education program. The randomised control trial used a pre-test, post-test design to determine whether the new program improved adjustment to parenthood when compared to the conventional program. Both women and men were included in this study. Chapter Eight describes the method of the randomised control trial and it provides the results from the women who participated. Chapter Nine presents the results from the men who participated.

Chapter Ten discusses the conclusions of this research, the implications for practice are also discussed and described along with recommendations for further research.

1.6 Summary

This chapter has outlined the goal of this research and provided an overview of the context within which antenatal education is provided to new parents in Australia. The problems with current antenatal education were introduced and the research questions described. This chapter concluded with an introduction to the thesis.

Chapter Two: Health Promotion Framework

2.1 Introduction

Antenatal education is a health promotion activity that can have an impact not only on the pregnant couple, but also on the health of future generations. This chapter defines health promotion and outlines the five health promotion action areas identified in the Ottawa Charter. The relevance of each action area to antenatal education is then discussed. Program planning models are listed and the PRECEDE-PROCEED model is described to provide a framework for this research. The principles of needs assessment are identified and applied to the methods used to examine some of the factors defined by the PRECEDE-PROCEED model.

2.2 The Ottawa Charter of Health Promotion

The Declaration of Alma-Ata, formed during an International Conference on Primary Health Care, argues health is not the opposite of illness (World Health Organisation, 1978), rather it is an optimal state of physical, mental and social wellbeing. Health is a fundamental human right which requires people to participate individually or collectively in health care planning and implementation, and governments are responsible for the provision of adequate health and social measures (World Health Organisation, 1978).

The Ottawa Charter, a seminal document arising from the first International Conference on Health Promotion in 1986, built on this notion stating that 'health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being' (World Health Organisation, 1986:1). Health is to be seen as a resource of everyday life and not an objective of living (World Health Organisation, 1986). The Charter states that health promotion strategies and programs be adapted to 'local needs and possibilities of individual countries' (World Health Organisation, 1986:1), with health being placed on the agenda of policy makers in all sectors and at all levels. Health improvement within society requires advocacy for health, improving resources and mediation through intersectoral collaboration.

Of importance to antenatal education, and indeed information provision per se, is that information provision through a rational, logical approach is no longer seen as the key

to health promotion, 'instead the focus has shifted to providing opportunities for people to learn skills in order to practise the desired behaviour' (Ritchie, 1991:161). 'Skills of self-assertion, negotiation, decision-making and conflict resolution have gained importance in the health context and are also included' (Ritchie, 1991:161). Education for health is assuming greater importance, with the training of health professionals becoming a necessity (Ritchie, 1991).

The Ottawa Charter for Health Promotion has provided guidance and inspiration for health promotion activities since its proclamation, with subsequent international conferences, (Adelaide 1988; Sundsvall 1991; Jakarta 1997 and Mexico 2000), and meetings clarifying the relevance, meaning and confirming the utility and importance of the five health promotion action areas outlined in the Charter. These action areas are:

- build healthy public policy;
- create supportive environments;
- strengthen community action;
- develop personal skills;
- reorient health services.

Each action area is inextricably linked and all have relevance to antenatal education, with an examination of each action area reinforcing the need for a review of current practice. Educational strategies grounded in health promotion theory recognise that health behaviours are affected by, and are in response to, the environment and society. They do not occur in isolation nor can they be learned through structured lectures which are frequently the most common strategy used in current antenatal education programs.

2.2.1 Healthy Public Policy

Encompassed in the notion of health being a state of optimal physical, mental and social wellbeing is the recognition that health is affected by many factors including education, financial status and environment. As such health should be valued by and a concern of policy makers in all sectors and at all levels (World Health Organisation, 1986:2). Policy makers should be accountable for the health consequences of their decisions, with the Adelaide Recommendations stating policy makers 'should pay as much attention to health as to economic considerations' (World Health Organisation, 1988:1).

Barriers to the implementation of healthy public policy should be identified in addition to strategies for overcoming them.

The 2nd International Conference on Health Promotion focussed on healthy public policy. The priority areas identified at the conference included creating supportive environments reinforcing the influence environment can have on health, and supporting the health of women.

This conference identified that women's networks and organisations are vital primary health promoters throughout the world and yet they receive little recognition and financial support. The conference recommended that the power of 'women's wisdom' be recognised, their voices 'harnessed' and that 'women's networks' be regarded as 'models for the process of health promotion organisation, planning and implementation' (World Health Organisation, 1988:3). The conference also recommended that educational institutions respond to the 'emerging needs of the new public health by reorienting existing curricula to include enabling, mediating and advocating skills' (World Health Organisation, 1988:5).

Antenatal education policy in Australia, discussed in Chapter Three, is only encompassed within health policy, not workplace, education or any other sector, and even then it is under-resourced. Indeed the translation of policy into practice is increasingly becoming limited with very few hospitals now offering antenatal education throughout the childbearing year. Furthermore, within these programs there is an underutilisation of women's wisdom and women's community networks.

Inequity in access to programs remains, with limited number of programs being offered to minority groups such as culturally and linguistically diverse couples, and young women. Many programs are now charging fees so are no longer available to people who cannot pay. However, this research does not address the minority groups because it was deemed important to get the model for the majority population correct first. The process of needs assessment demonstrated in this research could be, and arguably should be, duplicated with groups with unique characteristics and settings.

2.2.2 Supportive Environments

A supportive environment is of paramount importance for health. Health, society and the environment are interdependent and inseparable with health behaviours providing a composite response. The guiding principle being the need for 'reciprocal maintenance', with the world, nations, regions and communities taking care of each other, our communities and our natural environment (World Health Organisation, 1986).

The Third International Conference on Health Promotion in 1991, referred to as the Sundsvall Statement, identified that millions of people continued to live in extreme poverty and deprivation in an increasingly degraded environment in both rural and urban areas. This conference emphasised the social, political and economic dimensions of a supportive environment. That is, the way norms, customs and social processes affect health; the political dimension which requires a commitment to human rights, peace and shifting resources from the arms race; and the economic dimension including sustainable resource allocation (World Health Organisation, 1991).

The Sundsvall Statement on Supportive Environments for Health (World Health Organisation, 1991) highlighted the need for the creation of supportive environments, as it is a practical proposal for public health action at the community level. Examples provided at the conference demonstrating that supportive environments 'enable people to expand their capabilities and develop self-reliance' (World Health Organisation, 1991:3). The Sundsvall Statement reinforcing several of the Adelaide Recommendations, including 'that women's community-based organisations have a stronger voice in the development of health promotion policies and structures' (World Health Organisation, 1991:2).

Australia is a relatively wealthy nation in comparison with developing countries and it has low morbidity and mortality associated with childbirth. Nevertheless, the social context of Australian society often means that new families are isolated and have little support (Gilding, 2001). It has been argued that this context is causing increasing levels of poor health and distress after the birth of a baby including increasing postnatal depression, child abuse and family disintegration. Many argue that antenatal education and support (NSW Department of Health, 1989; Senate Community Affairs References

Committee, 1999) can provide early intervention and empower parents to develop their own skills and supports within the community.

In addition, the rhetoric of hospital-based antenatal education coordinators and educators in Australia since the early 1990s has been that they provide a supportive environment in their antenatal education programs. Many believe that having a maximum of ten couples in a program, incorporating small group activities in their sessions and providing refreshment breaks constitute a supportive environment. Experience demonstrates however, that an increasing number of programs are becoming institutionalised and with couples being prepared for the institution rather than developing life skills and community support (Barclay, Andre, & Glover, 1989). A lack of appropriate training and mentoring of educators appears to be a fundamental problem and one to be investigated in this research.

Given the potential importance of antenatal education to the developing family (Health Department Victoria, 1990; Senate Community Affairs References Committee, 1999) it is also concerning to find that the majority of education programs operate on a cost recovery basis in Australia. Research (Svensson, 1999) indicates that, even in this economic climate, eighty percent of primiparous couples attend programs, but anecdotal evidence demonstrates that in many organisations the income gained is channelled into general revenue and not returned for much needed resources.

2.2.3 Strengthen Community Action

Community action works through involving communities in 'setting priorities, making decisions, planning strategies and implementing them to achieve better health'. 'At the heart of this process is the empowerment of communities, their ownership and control of their own endeavours and destinies' (World Health Organisation, 1986: 2). The Jakarta Declaration (World Health Organisation, 1997), prepared during the 4th International Conference on Health Promotion, reinforced the need for community action recommending that social, cultural and spiritual resources be harnessed by innovative methods.

The timing of this Jakarta Declaration was significant as it was almost twenty years since the Alma-Ata Declaration and ten years after the Ottawa Charter. This conference

primarily reflected on health promotion practice and strategies emphasising that comprehensive and consumer-based strategies are the most effective and sustainable. Priorities for the 21st century being:

- Decision makers to be firmly committed to social responsibility;
- Increase investments for health development;
- Consolidate and expand partnerships for health;
- Increase community capacity and empower the individual;
- Secure an infrastructure for health promotion (World Health Organisation, 1997).

Community action in relation to antenatal education appears to have decreased over the last fifteen years with the demise of many independent educator and non government run practices and hospital-based programs becoming more institutionalised. Increasing levels of postnatal distress and the increasing incidence of isolation in the early postnatal period appear to be a consequence of weakened community networks.

2.2.4 Develop Personal Skills

Within the concept of health promotion, social justice and equity are pre-requisites for achieving better health and wellbeing of populations. Democracy and respect for human rights are inherent qualities of social justice and equity (Restrepo, 2000). Hence it is not possible to develop a welcoming and healthy environment without the participation of individuals and communities. The health sector in many countries has however neglected to respond adequately to the expressed needs of the people (World Health Organisation, 2000).

The utilisation of new technologies and strategies for communication can strengthen community organisations and groups. An important factor is to identify and involve stakeholders at each level. That is stakeholders from different sectors, organisations, voluntary and professional associations. For this to be effective, health workers need to redefine their role. Health promotion projects that stimulate community capacity building have great potential for local development (Restrepo, 2000).

Through the 1990s antenatal education increasingly became programs that were attended during the final weeks of pregnancy, rather than throughout the childbearing

year. The potential to develop personal skills through antenatal education is therefore limited.

2.2.5 Reorient Health Services

International meetings subsequent to that in Ottawa did not address the reorientation of heath services as a central concern until the Fifth Global Conference in Health Promotion in Mexico City in 2000 (Lopez-Acuna, Pittman, Gomez, Machado de Souza, & Fernandez, 2000). It was at this conference that the Framework for Countrywide Plans of Action for Health Promotion was tabled. The purpose of this document was to provide a framework for developing countrywide plans of action for the five action areas identified in the Ottawa Charter. The operational strategy for planning programs and initiatives being the needs assessment (World Health Organisation, 2000).

Traditionally antenatal education programs have been developed top down with process evaluation being the basis for program change. The comprehensive needs assessment in this research aims to rectify this situation by reorienting a health service to the needs of the client user.

2.3 Program and Strategy Planning Models

A number of highly credible approaches to health promotion and program planning have developed. For example Green and Kreuter's (1991) PRECEDE-PROCEED model, the Planned Approach to Community Health (PATCH) (Center for Disease Control, 1987), Ewles (1985) seven stage model, the Health Education/Promotion Planning Model (Dignan & Carr, 1987) and Ross and Mico's (1980) Model for Health Promotion Planning. As Nutbeam states 'the emphasis on structure and sequence in health promotion planning has been important in establishing the credibility of health promotion as a form of public health action, and as a distinct discipline in the health sciences' (Nutbeam, 1998:28).

The PRECEDE-PROCEED model (L.Green & Kreuter, 1991) was selected for this research as it helps to unravel the wide spectrum of complex determinants of a particular health issue and the quality of life associated with it. Ignoring any of these factors can potentially omit dimensions critical to the design of comprehensive and

effective intervention programs. PRECEDE is used to identify and focus the complex factors in adjustment to parenthood, with PROCEED providing a methodology for the implementation and evaluation of innovative strategies. An identification of reinforcing, enabling and predisposing factors allows an understanding of the interrelationship with health services.

The PRECEDE-PROCEED model, as shown in Figure 1 is a nine stage cyclical process providing a continuous linking of planning, implementation and evaluation of health promotion strategies.

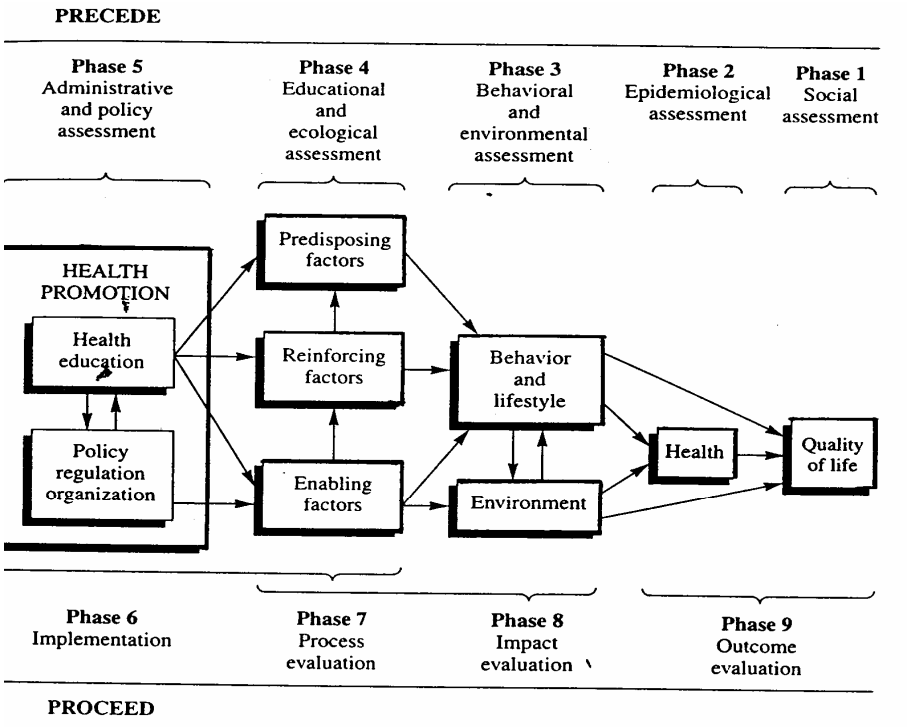


Figure 1: PRECEDE-PROCEED model of program planning

A description of the nine phases of the model follows:

Phase One, termed social diagnosis, requires an investigation of the quality of life of the target population. A social analysis entails a description of the socio-cultural situation of the population. This was done in Chapter One of this thesis.

Phase Two is an epidemiological diagnosis which examines the outcomes and assessment of the health of the target population. This diagnostic step is also used to

prioritise health conditions to target in the intervention. The epidemiology of childbirth outcomes is provided in Chapter Three. An analysis of the effectiveness and outcomes of antenatal education is also provided in that chapter.

Phase Three of PRECEDE is a behavioural and lifestyle diagnosis and an environmental assessment. The behavioural diagnosis examines the internal or changeable factors linked to the health problems of interest. The environmental assessment is a similar analysis of factors in the immediate physical and social environment. Each of the modifiable health behaviours or environmental factors are rated during the behavioural diagnosis according to importance and changeability. In this research, a multi source – multiple methods needs assessment was used to gain this information. The longitudinal design of the needs assessment allowed an examination of how behaviours and lifestyle changed during the childbearing year. The methods of the needs assessment are described in Chapter Four and the results in Chapters Five and Six.

Phase Four of PRECEDE requires further prioritisation to arrive at intervention targets. First an inventory of predisposing, reinforcing and enabling factors is created. Within each category factors are rated by importance based on prevalence, their immediacy, and necessity, or consideration that although factors may have a low prevalence they must still be present for the behaviour to change. Predisposing factors include individuals or groups attitudes, perceptions and beliefs that facilitate or hinder motivation for change. Reinforcing factors are the rewards and feedback the individual receives from others following adoption of the behaviour. Enabling factors are those that can help or hinder the desired behavioural changes. These factors are essentially the vehicles or barriers created by societal forces or systems.

Phase Five provides an administrative and policy diagnoses and includes an assessment of the organisational and administrative capabilities and resources needed for the design and implementation of the program. Limitations and constraints are assessed with the appropriate strategy or method selected. In this research, the inclusion of experts in the needs assessment (Chapter Six) and an analysis of the literature on policy related to antenatal education (Chapter Three) ensured this phase occurred, and barriers to implementation were identified.

Phase Six is the first of the four phases of PROCEED and is called the implementation phase. Chapter Seven of this thesis describes the program selected for implementation at Hospital A and the process by which it was designed. Two resources required for the conduct of the program are also outlined.

Process evaluation, which is Phase Seven of the model, refers to the continuous observation and checking to determine whether program activities are occurring at the time and rate required for the stated objectives of the program. Sources of data for process evaluation include reflective journals, program attendance records, session plans and program agenda setting result sheets. Chapter Seven outlines the methods by which process evaluation data was collected in this research.

Impact evaluation, which is the third phase of PROCEED, differs from process evaluation in that it measures the immediate effects of a program and normally involves the measurement of the program objectives. As Green (1978) recommends in his Guidelines for Health Education in Maternal and Child Health 'ideally the evaluation of a specific educational component should not depend on comparing a group of patients who receive only that method, with a group of patients who receive nothing'. 'The comparison should be between a group receiving a comprehensive health education program and another group who receive everything except the component to be evaluated' (L. Green, 1978:23). Chapters Eight and Nine of this thesis describe the randomised control trial conducted to determine the effectiveness of a new antenatal education strategy compared to a conventional program.

Outcome evaluation, which is the final phase of the PRECEDE-PROCEED model, is concerned with the longer term effects of the program and usually corresponds with the program goal. As shown in Figure 1, outcome evaluation also allows an examination of the quality of life and as such PRECEDE-PROCEED is a cyclical planning process. The main strength of this planning process is the ability to create an evidence-based multi-level intervention that is customised to the needs and interests of the target population.

In this research the outcome evaluation data from the new program, the method of which is described in detail in Chapter Eight, was collected at approximately eight weeks after birth. This medium length timeframe was selected for logistical reasons and

that it would be difficult to control for the variability of experiences in the postnatal period, if data was collected later.

2.4 Needs Assessment

The importance of conducting a needs assessment and involving stakeholders in planning health promotion has been confirmed in the literature (World Health Organisation, 2000). This next section briefly defines what a needs assessment is and the principles and methods for conducting needs assessment.

2.4.1 Definition

A needs assessment is a key element in planning services as it identifies, examines, justifies and selects gaps or deficiencies to be closed (Peterson & Alexander, 2001). Needs assessment differs from evaluation, although both are concerned with gaps in performance. Needs assessment is a proactive planning tool that determines gaps between current results and those that should be achieved. Evaluation measures the relevance, adequacy and appropriateness of current programs/services. Needs assessment is an important step in a cycle of performance improvement because if properly conducted it defines the objectives and establishes a course of action for the subsequent design, development, implementation and evaluation of a program or service (Peterson & Alexander, 2001).

2.4.2 The Concept of Need

A large amount of literature has developed around the concept of need and how it has been interpreted and used (South Australian Community Health Research Unit, 1991). One of the most quoted analyses of need, still found useful 30 years after it was developed, is that of Bradshaw's (1972) concept of social need. Bradshaw (1972) argued that how needs are defined may reflect the values and perspectives of different groups. He presented a 'taxonomy' of need and argued that there are four different dimensions or types of need, based on how the need is identified. These were 'felt', 'expressed', 'normative' and 'comparative need'. Felt need is what people say when asked what they need, for example the responses to a needs survey. Expressed need occurs when people turn their felt need into action. For example when people put their names on a waiting list. Normative need is need as defined by an expert or a

professional. Comparative need is derived by comparing the characteristics and resources of different areas. For example if a community with a certain set of characteristics has access to certain services and a similar community does not have access to such services, then the latter community is said to be in need.

In this research, 'felt' and 'expressed' needs were identified by the expectant and new parents, 'normative' by the experts and 'comparative' needs by precedence. Frequently it is the latter two methods of determining needs that have been used as a basis for planning health services (South Australian Community Health Research Unit, 1991). Precedence has never been a satisfactory basis for establishing services, as there is always variation between communities which can impact on a service. Expert opinion can also be misleading, as they may not have a deep understanding, or indeed any understanding of the community needs as they approach this through their own perspective and area of expertise. Experts may not be aware of the dissatisfaction of consumers, and the priorities of the experts may not be the priorities of the community they serve (Ramirez & Shepperd, 1988). The community must be involved in a need assessment.

2.4.3 Needs Assessment Principles

The distinguishing features of a needs assessment are:

- it begins with the people themselves, frequently referred to as the community;
- the focus is the collective needs of the community rather than the needs of individuals added together. This allows for negotiation between different groups within the community to determine the best interests of the community as whole (Watson, 2002); and
- triangulation of data is required.

Data Sources

The community participating in a needs assessment is either geographically located, for example a village or housing estate, or a community of interest that may or may not inhabit the same local area (Peterson & Alexander, 2001). For example, people with disabilities or an ethnic minority group. Needs assessments can occur in communities of varying sizes and varying levels of community organisation, development and degrees of social cohesion. They can be undertaken by the community itself,

professionals, health authorities, statutory agencies, voluntary agencies or indeed a partnership of two or more of these.

The community under investigation in the needs assessment conducted for this research was a community of interest, that is childbearing women and their partners who attended two large metropolitan hospitals in Sydney in 1999. The experts selected were primary care providers of expectant and new parents with their first baby. Precedence, known as comparative need, was antenatal education program documentation collected from three hospitals of comparable size to those under investigation and epidemiological data. Sample sizes of each data source are detailed in Chapter Four. The epidemiological data is presented in Chapter Three.

Data Collection Methods

The data collection methods for a needs assessment can take many forms, with no one type of method or data set being necessarily more legitimate than any other (South Australian Community Health Research Unit, 1991). In many situations neither quantitative or qualitative methods will provide sufficient understanding of the wider social context of the community, but a combination of methods is required. Quantitative methods are useful in gauging how widespread a particular phenomenon seems to be, while qualitative research enables deeper exploration of social response and need. An advantage of qualitative methods, such as interviews and focus groups, is their suitability for probing the how and why questions of human behaviour or response at a 'deeper' level (Ortiz, 2001). They can be a tool for seeing and understanding the world through the eyes of others. To be effective however, it is important that the researcher has rapport with the group he or she is studying. Rapport and acceptance are the keys to productive research, but they also pose inevitable difficulties for the researcher. For example in-depth interviews or group discussion risk becoming 'therapy sessions' with suppressed feelings and inner thoughts being unloaded when rapport is established and trust is high (Ortiz, 2001).

The decision to use combine qualitative methods occurred following an exploration of the methods available, the aim and objectives of the study and the community under investigation, with consideration of the advantages to be gained from the triangulation of methods (Mays & Pope, 2000; Minichiello, Aroni, Timewell, & Alexander, 1999).

Quantitative methods, surveys and demographic data, were used to complement the data and increase the descriptive power of the results. The data collection methods are detailed in Chapter Four.

2.5 Summary

This chapter has defined health promotion and identified and applied, to antenatal education, the five domains of action specified in the Ottawa Charter. These critical domains are: build healthy public policy; create supportive environments; strengthen community action; develop personal skills; and reorient health services. It also described how the PROCEDE-PROCEED model for program planning was used to guide a needs assessment process and identify factors which are likely to influence antenatal education.

Chapter Three: Historical Context of Antenatal Education

3.1 Introduction

This chapter examines the epidemiological data on childbirth outcomes, maternal mental health, and family cohesion. It traces the development of hospital-based antenatal education in Australia and examines the research which investigates the effectiveness of antenatal education.

3.2 Childbirth Outcomes in New South Wales

In 2003 there were 86,414 babies born to 85,032 women in New South Wales. The number of teenage mothers continued to decline, decreasing from 4,099 (4.8%) in 1999 to 3,386 (4%) in 2003. Correspondingly the number of mothers aged 35 years and over increased from 14,668 (17.1%) in 1999 to 16,447 (19.3%) of all confinements in 2002 (NSW Department of Health, 2004). The mean maternal age rose from 29.6 to 30.2 years over the five year period. Indeed fertility of women aged 35-39 years has more than doubled over the last two decades from 25 babies per 1,000 women in 1983 to 54 babies per 1,000 women in 2003 (Australian Bureau of Statistics, 2003b).

One in four mothers were born overseas, most commonly in the United Kingdom (2.8%), New Zealand (2.5%), China (2.2%), Vietnam (2.2%) and Lebanon (2.0%). The rate of normal vaginal birth fell from 68.6% percent in 1999 to 62.8% in 2003. Over the five years the caesarean section rate increased from 19.7% to 26.5%, and the rate of instrumental delivery remained stable at approximately 10.5 per cent (NSW Department of Health, 2004). Caesarean section continued to be more common among privately insured mothers than those who are public (NSW Department of Health, 2004).

In 2003, as in previous years, there were large variations in the age distribution and ethnicity of women giving birth between health areas. In South Eastern Sydney Area Health Service (SESAHS) and Central Sydney Area Health Service (CSAHS), where this research was conducted, the rates of women aged 12-19 years were 1.4% (SESAHS) and 2% (CSAHS). The rates of women 35 years and older were 25.1% in SESAHS and 26.7% in CSAHS. There was a higher precent of women from English speaking background having a baby in SESAHS (76.1%) compared to those in CSAHS

which was 61.1%. In both of these Health Areas the women from North East Asia were the second largest group of women giving birth (NSW Department of Health, 2004).

The rates of intervention during childbirth for both of these Health Areas were high, but comparable to the state-wide average in NSW. In 2002 28.8% of women in SESAHS had a caesarean section compared to 26.8% in CSAHS. The percentages for instrumental delivery were 13.2% in SESAHS and 12.7% in CSAHS, with a state-wide average of 10.7% (NSW Department of Health, 2004). Furthermore, there was evidence that the high level of intervention was associated with the medicalisation of childbirth, the increasing perception of risk of childbirth and the increasing use of pharmacological pain relief such as pethidine and epidurals (Roberts, Tracy, & Peat, 2000).

The use of pharmacological pain relief varied between hospitals in NSW with between 3.8% and 62.5% requesting epidurals depending on the hospitals in which they gave birth and 10.3% and 41.3 % having pethidine injections. Women who attended private hospitals were more likely to have these interventions (NSW Department of Health, 2004). The use of pethidine and epidurals during childbirth has been found to have negative impact on infants (Kumar & Paes, 2003) and on breastfeeding outcomes (A. Smith, 1997).

The factors which influence women's choices and decisions about the interventions they receive during childbirth are complex. Nevertheless, there is potential for effective antenatal education, which influences women's understanding about the benefits and consequences of pain relief and empowers them to make informed choices, can impact on childbirth decisions and outcomes (Senate Community Affairs References Committee, 1999).

As outlined in Chapter One, pregnancy and the birth of a child bring strong psychological, physical and social changes to a couple's life. Growth into parenthood begins before the birth and their relationship goes through a change as they redefine their roles in society and in their relationship. Indeed it has been shown that a good relationship is the most important resource for managing change (Sepa, Frodi, & Ludvigsson, 2004; Tarkka, Paunonen, & Laippala, 1999). A negative experience,

particularly if there is jealousy and feelings of being left out of the relationship can lead to spousal estrangement and even separation (Sepa et al., 2004).

In Australia there is concern about the distress experienced by families and poor adjustment to the parenting and family role after birth. The social distress is demonstrated, for instance, in mental health statistics, divorce rates and level of child abuse. About 10% of Australian women are diagnosed with having postnatal depression but rates as high as 20-40% have also been described (Beyondblue National Postnatal Depression Program, 2004). In 2001, there were 55,300 divorces granted in Australia, the highest number granted in the last 20 years. Furthermore, since 1981, divorce rates while fluctuating, have shown an increasing trend (Australian Demographic Statistics, 2002). Child abuse rates are also high. In Australia during 1990-91, there were 49,721 cases of child abuse and neglect reported and investigated by State and Territory Welfare Departments. Forty-five per cent of these cases were substantiated and a further 7 per cent were assessed 'child at risk'.

The factors influencing family stress and support are many and complex. Social factors related to women's roles and responsibilities, such as socio-economic status, social support and networks, adequate housing and exposure to violence and discrimination strongly influence their health and well-being. Indeed there is a strong and consistent body of evidence linking income, educational level and employment status with health outcomes for women for a wide range of health problems (Marmot, 2000; Turrell & Mathers, 2000). While it is impossible for antenatal education to impact on all these factors, the use of appropriate educational activities has the potential to assist parents to begin to develop life skills such as informed decision making, problem solving and communication. Furthermore, antenatal groups have the potential to begin to develop community networks which prevent isolation and are the foundation for family support. As such antenatal education has the potential to act as an important element in the raft of strategies required to support families in today's society.

3.3 Brief History of Antenatal Education

As the Industrial Revolution developed in the early nineteenth century employment opportunities moved from the countryside into towns and many families lost their cohesiveness. Urban overcrowding brought deterioration in living conditions,

inadequate sanitation and a lack of clean water supply. Out of this situation emerged the establishment of lying-in-hospitals to care for 'less fortunate' women (Oakley, 1986). Governments began to take responsibility for public hospitals so that antenatal and postnatal issues shifted from an informal personal and community concern to governmental administration.

The practices of childbirth have necessarily changed as the social and hygienic conditions of the populace have changed. Until the early eighteenth century a midwife and/or physician provided care for the upper classes around birth whilst mothers, sisters and other female relatives assisted with postnatal care. At the other end of the economic scale, 'untrained' family members and friends from the village guided women in their antenatal and postnatal experiences. In both of these groups, childbirth and parenting were essentially 'social events', centred in the home, with family and friends in attendance (Lindell, 1988). The knowledge required for birth and postnatal care of the infant came from 'women's wisdom' (Donnison, 1988) accumulated after having attended births and helping to raise babies and small children (M. Nolan, 1997a). There were no generational boundaries in these tightly knit support groups nor was their quality control of the information provided.

During the Victorian era a middle class of influential businessmen emerged with wives who suffered a different kind of social deprivation to that of the poor. These women were separated from their family network through early marriage and moving to distant towns, and could not easily integrate with their neighbours. Servants and social custom guided their role as child-bearer, mother and provider (Fildes, 1988). Desperate to gain knowledge of themselves as women, they turned to the written word (M. Nolan, 1998). The popularity of the journal *Enquire Within about Everything* reflected Victorian women's search for control over their own lives and their sexuality. From this journal, the women learnt about what to expect in childbirth and how to bring up their babies and children from male authors who were primarily doctors and ministers (M. Nolan, 1997a).

In the twentieth century, an increasing number of women were giving birth in hospital and the medical discipline of obstetrics became stronger (Barclay et al., 1989). As a result, the influence of midwives declined as did women's control over birth. The

medicalisation of the birth process accelerated post World War II where, for example in the United States of America, the Armed Services paid for maternity care if women veterans and veteran's wives gave birth in hospital (Haire, 1999). Access to the wide range of biotechnology encouraged women to become dependent on health professionals and their technical tools (Ondeck, 2000). As women exchanged the social support of their families and control of the birth experience for the perception of increased safety offered by the medical system, their dependence on professionals to teach them increased dramatically (Barclay et al., 1989). The knowledge and wisdom shared amongst women in previous generations was deemed to be irrelevant. The medical profession did not, however, share its knowledge with women for whom it cared (M. Nolan, 1997a) and they assumed an authoritative role with the capacity to tailor learning to their own ends (Barclay et al., 1989).

Historical records state that formal antenatal education emerged in the early 1900s, however the classes organised by the American Red Cross addressed public health issues such as nutrition and basic hygiene. They did not prepare women for the birth experience. Grantly Dick-Read's classic works *Natural Childbirth* (1933) and *Childbirth Without Fear* (1944) were two of the first pieces of work to do this.

When Dick-Read was a student caring for women in the East End of London he was fascinated to see women give birth without the use of drugs (Thomas, 1997). When he questioned how this was possible, he realised that the women were very accepting of labour and its associated pain. 'Well doctor it wasn't meant to hurt was it?' (Rankin, 1986: 4). Dick-Read became concerned, in the 1930s and 40s, by the inability of obstetricians to stand by and allow the natural and uninterrupted course of labour to proceed. In 1944 he wrote:

> 'In the past textbooks in obstetrics have used the word 'pain' to mean normal uterine contractions so often that doctors began to believe that the pains of labour are the same as normal uterine contractions. Pain hurts; normal uterine contractions do not. In fact, uterine contractions will seldom give rise to any pain whatsoever if unassociated with fear and tension' (Dick-Read, 1944:22).

Dick-Read claimed the pain of labour was largely due to tension, brought on by fear, which was due to ignorance. He began to teach his women what happened when a baby

was born, how to relax and breathe deeply to help the body with the job in hand (Rankin, 1986). In *Childbirth Without Fear* Dick-Read stated that 'if the birth is to be in a hospital, the training program preferably should be given in that hospital by the personnel who will be providing the care, a concept designed to increase the confidence of the patient and also the hospital personnel' (Dick-Read, 1944: 40). Dick-Read listed the resources required to provide the program, stated that the room should be large enough to train at least fifteen couples, and that there should be four distinct parts to this type of antenatal education.

1. Eight two-hour sessions in early pregnancy;
2. Eight two-hour sessions in late pregnancy;
3. In-service training given during the hospital postpartum stay;
4. Four two-hour ABC (After Baby Comes) sessions for new mothers and their babies (Dick-Read, 1944).

Dick-Read's educative approach, with an emphasis on breathing and relaxation, became the basis for many antenatal education programs of this era and resulted in the formation of the Natural Childbirth Association, later to become the National Childbirth Trust, in the United Kingdom (M. Nolan, 1998). In the United States, Dick-Read's approach was later modified by Robert Bradley, an obstetrician who brought in the concept of the father as a 'coach' for the labouring woman (Simkin & Enkin, 1989). Bradley (1965). introduced husbands into the labour room believing that the husband could help the woman carry out her breathing and relaxation routines.

Psychoprophylaxis, an alternative to Dick-Read's 'Natural Childbirth' and normally associated with Fernand Lamaze, originated in Russia in the late 1940's (Velvovsky, Platnov, Ploticher, & Shugom, 1960) when Russian physicians applied Ivan Pavlov's work on conditioned reflexes to labour pain (Lamaze, 1956). Psychoprophylaxis promoted that through focusing attention on breathing and touching, or concentrating on a focal point outside the body through conscious relaxation, women could send counter signals to the cerebral cortex that would block pain signals from the uterus (Monto, 1996; Velvovsky et al., 1960). This recognition of uterine contractions being painful was the differing factor in these two approaches.

Introduced to the west by Lamaze and Velley in 1952, Lamaze simplified the psychoprophylactic method, recommended that antenatal preparation should include instruction in relaxation based on breathing patterns (Karmel, 1981; Lamaze, 1956) and marketed 'Painless Childbirth' through lectures and books (Lamaze, 1956). In practice, 'Painless Childbirth'(Lamaze, 1956), like 'Natural Childbirth' (Dick-Read, 1944), required attendance at lectures or group discussions and training in voluntary muscular relaxation as well as specific breathing techniques (Simkin & Enkin, 1989). Indeed as *Naissance*, a French childbirth video produced in 1952 identifies 'seven lessons make up the preparation for parenthood' (Anonymous, 1952). 'The days of being a passive recipient in labour are over. One must first know the physiological mechanisms of labour and then learn the relaxation and breathing techniques' (Anonymous, 1952). These principles contributed to the broadening of the term 'natural childbirth' and to the institutionalisation of formal childbirth instruction endorsing natural or physiological childbirth.

Organisations such as, the National Childbirth Trust, the American Society for Psychoprophylaxis in Obstetrics, International Childbirth Education Association and, in Australia the Association for the Advancement of Painless Childbirth, were formed by an increasing number of motivated women to help them achieve their goal. These organisations, aimed at informing women and reforming services, were initially subject to much resistance from medical staff, midwives and hospitals (Reiger, 2001). The organisations were predominantly consumer-driven and in many areas they were responsible for the development of independent, community-based antenatal education programs. The philosophy of these programs was around birth as a natural process and the rights and responsibility of consumers (Zwelling, 1996). In an attempt to further revive the century old sharing of women's wisdom, these motivated women also published books for 'the lay public about pregnancy, personal birth experiences, relaxation and breathing techniques for pain management, and breastfeeding' (Zwelling, 1996: 426).

As a response, arguably to community led challenge, hospitals themselves increasingly became involved in developing antenatal education. However hospital programs would be used to maintain the status quo rather than challenging it (Barclay et al., 1989), which had been the thrust of consumer based organisations. Physiotherapists were the

coordinators and facilitators of the majority of the public hospital programs in Australia at this time (Svensson, 1999), teaching psychoprophylaxis to their patients and insisting the women gain their doctor's permission prior to attending their antenatal education sessions (Reiger, 2001). As Reiger found in interviews with professionals, the expertise of the physiotherapists was acceptable to the medical profession 'partly because they had a greater recognition through doing a university course, but also because physiotherapists mixed socially with doctors, often sharing their private school backgrounds' (Reiger 2001: 202).

By the late 1970s tensions in the hospitals began to surface as the focus of antenatal education moved from the uterus and the teaching of specific relaxation methods, and midwives came to realise that their expertise concerning pregnancy and birth was not being acknowledged. Midwives began to seek a more holistic approach to maternal care, and consequently greater involvement in antenatal education, however their progress was slow. As Thelma Matson a midwife at the Royal Women's Hospital in Melbourne since the early 1950s said in an interview with Kerreen Reiger, a sociologist researching the childbirth movement, in 1985:

> 'midwives have lost a tremendous opportunity. You see, I think midwives handed over to physiotherapists too much, because I don't think the physiotherapist really is the person to be teaching them about labour. I think midwives should be doing it and should have done it. Reiger asked… Why did that happen? How did the physios get in on it? Well I think that midwives were unrealistic; they didn't foresee the fact that having given it away, they weren't going to get it back again. I think that many midwives, of course although clinically were very sound, didn't have the knowledge' (Reiger, 2001:203).

As Reiger states Thelma Matson 'went on to relate this to problems in midwifery training which was neither systematic enough nor orientated to emphasising the breadth of midwifery care' (2001: 203). 'The primary aim of midwives was to care for pregnant women, whereas physiotherapy training equipped them to transfer new skills to patients' (Reiger 2001:203). Physiotherapists were, therefore, more fitted to the educative role than nurses or midwives (Ritchie, 2001).

During the 1980s the pursuit of midwives to 'reclaim their territory' became more evident, with an increasing number being involved in hospital-based antenatal education, often as part of a team with physiotherapists (Svensson, 1999). For many it appears their initial role was to provide the 'mothercraft section' in an antenatal program (Rogers, 1991) and in several hospitals, such as King George V Memorial Hospital for Mothers and Babies, midwives were used 'to provide information on pregnancy management, care in labour and hospital tours' (Rogers, 1991). From personal communication with hospital coordinators it appears that many of these midwives were midwifery educators, who encompassed antenatal education as one component of their role in the hospital (Boucher, 1999; P. Green, 1996).

The programs offered by the community based 'independent educators' were more innovative than those provided by a hospital. They also moved from teaching women prescribed skills, however they did not have to conform to the 'rules' of the hospital and actively encouraged their clients to be assertive. In addition, having been influenced by the work of internationally renowned 'childbirth experts', such as Sheila Kitzinger, Michel Odent and Janet Balaskas, independent educators place a greater emphasis on the psychological, sexual and sociological significance of childbearing. Medically focussed hospital programs have found these concepts difficult to implement.

The overwhelming emphasis of many of the programs described has been on the process of childbirth and managing pain during labour. Although providing social support has been identified as a positive outcome associated with antenatal education programs, it was often not a clearly identified goal of such programs. The importance of using and developing community support networks, as recommended by the Ottawa Charter, has been under-utilised in programs in Australia.

Another important aspect of many antenatal education programs since their inception by Dick–Read and Lamaze, is the concept of education 'classes' with the emphasis on experts teaching rather than group facilitation and the learning of participants. The rhetoric about group facilitation has begun to become evident in antenatal education programs. Nevertheless, educators are more likely to use didactic teaching strategies rather than group facilitation and peer learning strategies which are more likely to

empower individuals. It is argued later in the thesis this is largely a result of inadequate training of educators.

The transfer of knowledge in the notion of expert teacher was commonly accepted in the 1940s when Dick-Read introduced his program. However recent research and innovations in adult learning suggest that learning and skill development are more effective when a more active process is used which involves participants using information in new ways to problem solve in novel situations which are personally relevant. Furthermore the focus on experts providing information works against the notion of women's wisdom and empowering women and families.

3.4 Review of Antenatal Education Programs

3.4.1 Effectiveness of Antenatal Education Programs for women

Antenatal education has been extensively investigated, although many of the studies have small sample sizes and design limitations, such as the use of inappropriate control groups. For instance, many studies on the effects of antenatal education have compared attendees with non-attendees, whereas a more appropriate comparison would be between those who comply with the skills/strategies learned and those who are noncompliant (Lindell & Rossi, 1986).

The effectiveness of antenatal education has been consistently questioned by research. Studies, such as Nordholm and Muhlen (1982), Sturrock and Johnson (1990), Lumley and Brown (1993), and Bennett, Hewson, Booker and Holliday (1985) found no correlation between antenatal education and the need for less medical intervention during labour and birth. Bennett et al. (1985), Beck et al. (1980), Charles, Norr, Block, Meyering and Meyers (1978), and Davenport-Slack and Boylan (1974) found there was no relationship between preparation and obstetrical variables, such as length of labour or incidence of complications.

Researchers who have focused upon the level of pain and anxiety experienced by a woman in labour have produced mixed results. Davenport-Slack and Boylan (1974) found that women who attended antenatal education sessions showed less 'body tension' and Bergstrom-Walen (1963) found the blood pressure of 'trained women' to

be more stable in labour. Similarly, Lawrence (1985) found patients who attended antenatal physiotherapy classes showed consistently less reaction to pain while experiencing the same perceived level of pain as women who did not attend. Astbury (1980), however, did not find training reduced 'anxiety' in labour.

There is, however, more consistent results for the effect of antenatal education on the use of analgesia. A number of researchers, for example, Huttel, Mitchell, Fischer and Meyer (1972), Timm (1979), Bennett et al. (1985), Enkin et al. (1972) and Hetherington (1990), found that 'trained women' required less pain medication in labour. As Simkin and Enkin state, however, 'it cannot be assumed that a reduction in use of pain medication is necessarily associated with reduced pain' (1989: 325).

Some authors have argued the merit of using analgesia as an outcome measure should be questioned because the stated objective of many antenatal preparation strategies is the reduction in the perception of pain. Rather than having reduced pain levels, women may have gained enough understanding of the purpose of the pain associated with contractions, and the possible negative consequences of using analgesia for the baby, to be more able to tolerate pain. Indeed the presence of a husband or companion is another extraneous variable affecting a woman's perception and reaction to pain (Beck et al., 1980).

Research has also investigated the impact of antenatal education on maternal satisfaction with the childbirth experience. Subjective ratings indicated that prepared mothers reported more positive feelings about the childbirth experience than unprepared mothers (Doering & Entwhistle, 1975; Huttel et al., 1972; Norr, Block, & Charles, 1977; Tanzer & Block, 1976). Cronenwett (1974) surveyed 152 couples during the postpartum period and found fathers who had attended antenatal education felt more positive about their wives and their own participation in childbirth. This research however, occurred during a period when fathers were first encouraged to be an active participant in the birth with their wife rather than passive bystanders. This factor may have influenced these results. More recently, Lumley and Brown (1993) found that attendance in antenatal preparation sessions in Victoria was not associated with increased satisfaction with care or emotional well-being among women having their first baby.

Analysis of these outcome measures reveals some indication why even carefully conducted studies have shown poor results. It appears there has been an overemphasis on birth and birth outcomes as a measure of successful antenatal education. However, as the second part of this chapter shows it may be skills and organisation of programs that are deficient and thus lack impact. Perry (1992) claims expectant parents are no more likely to have successful birth outcomes than would-be athletes who attend sports seminars in their chosen field. He suggests that the underlying assumption in both situations is that 'provision of knowledge and skills training are the major factors to influence behaviour changes that will in turn affect psychological and physiological outcomes' (Perry, 1992: 15). He also states 'this stance would erroneously minimise the influence of other key variables which include genetic factors, values, beliefs, access to resources and availability of support services' (1992: 15). The translation of coping strategies from antenatal training into practice in labour cannot be assumed (Spiby, Henderson, Slade, Escott, & Fraser, 1999). Labour management and birth outcomes can indeed be influenced or controlled by the caregiver or the institution (Shearer, 1990, 1993).

Enkin (1990) argues that women attend antenatal education for reasons other than learning how to have a shorter labour and avoid medical interventions. They wish to become informed, obtain advice, have their questions answered, reduce anxiety and meet other expectant parents (M. Enkin, 1990). Redman, Oak, Booth, Jensen and Saxton (1991) found that satisfaction with antenatal education was high and that women who attended were more knowledgeable about birth and parenting. Hillier and Slade (1989) found that the knowledge and confidence levels of sixty-seven women attending either hospital or community based antenatal education increased significantly over the period of the sessions. Confidence in coping with labour and caring for the newborn infant also showed significant increases following education (Hillier & Slade, 1989). Rautauva's Family Competence Study (1991), a national project conducted in Finland, concluded that women who were well informed about childbirth coped better with labour and had healthier babies than those whose knowledge was less thorough.

Research investigating the impact of antenatal education on knowledge has, however, suffered from a variety of methodological limitations (Hillier & Slade, 1989). Studies

have assessed knowledge after the birth rather than on completion of the education sessions (Nunally & Aguiar, 1974), tested knowledge at the end of the sessions with no measurement prior to commencement (Hibbard, 1979) or they have not had a control group of non-attendees (Hillier & Slade, 1989).

Until the last decade antenatal education focused on pregnancy, labour and childbirth, with very little time given to infant care and early parenting. Today it appears that the preparation for parenthood section of many programs has been strengthened and improved, research suggests that further changes are required (Barclay et al., 1997; Nichols, 1995; Schneider, 2001), with an increasing number of recommendations for improvement being made (Corwin, 1998; Owens, 1996; Tumblin, 1996).

Research suggests that antenatal education often fails to provide women with a realistic account of birth and parenting to replace the lived experience of earlier decades (M. Nolan, 1997a; Parr, 1998) and that midwives are not addressing some of the problems encountered by couples during their adjustment to their responsibilities and anxieties in the early days after the birth (Kelly, 1998). Kelly recommends 'the content of parenting education programs should include aspects of health care which not only accent physical well-being, but which include family relationships, childrearing and harmony within the home' (Kelly, 1998: 25). Gulland states that 'midwives should be teaching prospective parents about the psychological impact of having a child' (1998: 25). Nolan recommends that 'in aiming to help women acquire greater confidence and autonomy, educators need to ensure that attendees become competent in baby care skills' (1997a:1202). Kelly (1998) and Svensson (2001) caution, however, that midwives may require additional training to be able to facilitate effective parenting sessions.

Markham and Kadushin (1986) in their comparative study of 39 couples who participated in Lamaze training and 37 couples who did not, found that the Lamaze group reported similar levels of marital satisfaction, state anxiety problems before and after training, whereas the non-Lamaze couples showed a sharp decrease in martial satisfaction and an increase in anxiety and post birth problems. In addition Midmer, Wilson and Cummings (1995) and Kermeen (1995) demonstrate that postnatal anxiety and marital satisfaction can be enhanced through attendance at a special antenatal program. For example, parenting communication training in the middle trimester as

described by Midmer et al. (1995), or a birth and parenting program that incorporates training in communication, enhancement of relationships and issues of emotional style as described by Kermeen (1995).

3.4.2 Effectiveness of Antenatal Education Programs for Men

To date the majority of research on antenatal education has focused on the women, with few studies investigating the father or partner (Nichols, 1993). Greenhalgh, Slade and Spiby (2000) in their study of 78 fathers found that although fathers' attendance at antenatal sessions may have positive consequences for them and their partner, for some, attendance might be associated with less positive reports of experiencing childbirth. In addition, they found that the way in which men experience childbirth may have some influence on their subsequent emotional well-being (Greenhalgh et al., 2000). Diemer (1997) in her comparative study involving 83 couples found that relative to fathers in traditional mixed antenatal sessions, those attending father-specific discussion sessions significantly increased their use of reasoning during conflicts and their housework activity. Neither group, however, substantially increased their overall coping responses, although men in the father-focused group significantly changed their coping efforts by seeking more social support, including gathering information and emotional support from their partner's physician (Diemer, 1997).

The need to provide father-only groups or sessions is one requiring further investigation. Galloway, Svensson and Clune (1997), in their study of two hundred men who attended antenatal education at three tertiary referral hospitals in NSW, found that these men felt more confident about their role as a support person in labour, perceived themselves to be better prepared for the changes in their lifestyles after the birth and found that they had opportunities to talk about issues that were important to them. Furthermore, they felt that the antenatal education sessions were equally as much for them as for their partner and that the sessions were not a 'chore'. Sixty men who attended education at one of the hospitals were asked if they would have liked to attend 'fathers only' sessions. All sixty men responded 'no' to the question.

Conversely Schmied, Myors and Wills (2002) in their comparative study of two models of antenatal education found the women and men (n=19) who participated in a pilot program with gender specific discussion groups described the groups as beneficial.

Smith (1999) in her study of the role antenatal education plays in preparing men for their transition to fatherhood found that half of the men interviewed were interested in the idea of a men-only session. As Nina Smith states 'to fulfil their potential, antenatal education sessions need a structure and content which is responsive to the realities of the roles with which men identify, be they active or passive, as supporter and parent' (1999: 330). Smith recommended that men-only session, within an already existing course, be conducted and evaluated. Interestingly Markman and Kadushin (1986) found that changing the language and focus of traditional Lamaze 'classes' to include men, had a beneficial effect on postnatal outcomes.

The evidence available on the impact of antenatal education for men is largely descriptive in nature. The lack of high quality research on the education and support needs of fathers has resulted in a poor understanding of the objectives of education for fathers. This is mirrored in the lack of robust reliable research investigating the effectiveness of antenatal education for men. It is critical that more research be conducted with fathers in this area.

3.4.3 Mismatch in Expectations of Programs by Providers and Clients

A few studies have been undertaken to compare the interests of clients and their health care providers. For example, Freda, Anderson, Damus and Merkatz (1993) interviewed two groups of clients during their first antenatal visit and one group of health-care providers. They found that there were significant differences between the client's interests and the perceptions of their providers. A study by Levenson, Smith and Morrow (1986) which compared physician - patient views of the information required by pregnant teenagers found that there were significant differences in the topics each group considered to be important. Smedley (1999) found discrepancy between the relative importance of topics between couples attending Childbirth Education Association sessions in Sydney and those of the educators. Pinkosky (1997) found that providers underestimate their client's desire for information. From the literature it would seem that in many situations the needs and/or interests of the clients appear to have been subsumed by the health care provider's perception of their needs and interests (Maestas, 2003; Sullivan, 1993).

In addition as Nolan and Hicks state 'while teachers often fear frightening women with graphic accounts of what giving birth may involve and the difficulties of early parenting, women themselves are keen to have the full story warts and all' (M. Nolan & Hicks, 1997: 180). Indeed as McKay, Barrows and Roberts (1990) found women expressed feelings of betrayal when the sensations they experienced in second stage of labour were infinitely stronger and more urgent than they had anticipated them to be, from the information they received during antenatal education.

In order for an educational program to be effective it is vital to assess the interests of the clients. As Foley (2000) states adults want to be active participants rather than passive recipients in the educational process. This gives the client ownership and acknowledges the client's independence in decision-making thus increasing the motivation to learn. Other authors, for example, Perry (1992) and Durham (1988) support this notion by urging health educators not only to tailor the content of sessions to the needs of the consumer but that the approach to the antenatal education should be consumer driven. For positive results the educator and client must have mutual goals (Beger & Beaman, 1996). Canadian research which focussed on consumer needs found that participants had strong opinions regarding the importance of practical and transferable nature of information presented in programs (Beger & Beaman, 1996).

Studies that have investigated the interests of the clients include Maloney's (1985) study of the expectations of antenatal education. This study found a gender difference in levels of interest expressed. Fathers were more interested in factual information such as labour and child development and less interested in role definition and coping mechanisms. Mothers expressed more interest in gaining confidence and improving their ability to cope. Interest in these topics appeared to follow pregnancy, childbirth and parenting chronologically. The author recommends that antenatal educators should consider these differences in interests between women and men when designing a balanced childbirth and parenting curriculum.

A comparative study performed by Freda et al. (1993) found that the client's level of interest in topics was significantly influenced by parity not their level of education, with multiparous clients being generally less interested in many of the topics than nulliparous clients. The finding of major concern, however, was that for 25% of the topics listed

there was a significant difference between the perceptions of the health care providers and those of the clients. Overall the clients were more interested in certain topics than the health care providers perceived they would be. Freda et al. (1993) suggest that in addition to assessing the interests of the clients it is also necessary for those interested in developing effective adult educational programs to determine the care provider's perceptions of which topics interest their clients.

One of the limitations of the existing research, which has compared the interests of the health care providers and the clients, is that many have only used physicians who have a modest role, if any, in the provision of formal antenatal education. For Simkin and Enkin (1989) and Freda et al. (1993) the problem with the health professionals is that they seem to over-estimate the client's knowledge and they under-estimate the desire for information by the clients with the women failing to obtain the information they required.

Freda et al (1993) recommend that further research is required to determine the most appropriate method by which the educational input should be presented to the clients during the antenatal period. They see the whole nine months of a pregnancy as being a time of profound and unprecedented change in a woman's life. They raise the questions about when during pregnancy the 'teachable moments' so coveted by educators are likely to occur, and how can these be best utilised (Freda et al., 1993). The authors suggest it is unlikely that these moments fall within a sequence of six-eight weeks in the last trimester, which is when most of the antenatal education sessions are held.

Antenatal educators have been encouraged to address issues such as consumer access (Health Department Victoria, 1990; NSW Department of Health, 1989) and, in particular, different ways of providing education to meet the needs of women who have special needs and reduced access to education (Chadwick, 1994). There is however also a need to clearly identify what it is that those currently attending antenatal education sessions want from them (M. Nolan & Hicks, 1997).

Studies have found that the support women gain from participating in a small group, which meets regularly over a period of four to eight weeks, is one of the most valuable aspects of attending antenatal education sessions (Gould, 1986; Skevington & Wilkes,

1992). Like their Victorian great, great grandmothers, the women now attending antenatal education are isolated from the women's network of shared knowledge and experience of childbirth and parenting. They frequently do not live in the area in which they were brought up, having moved to pursue further education or career opportunities; full time work has isolated them from their neighbours with whom they do not socialise. When they begin their maternity leave late in pregnancy they find themselves without the support of mother, family and friends (M. Nolan & Hicks, 1997).

In addition any antenatal educator who does not adopt the principles of adult education, which require that adult learners be helped to identify their own learning needs and to share and extend their knowledge and experiences within a supportive group is not engaging in research-based practice (Daines, Daines, & Graham, 1993; Svensson & Handfield, 2001b).

3.5 Hospital Based Antenatal Education in New South Wales

The history and effectiveness of antenatal education have been described above. This next section describes some of the administrative and implementation issues related to antenatal education. It does this through an examination of policy, the roles, responsibilities and training provided to the primary providers and facilitators of antenatal education i.e. the program coordinators and the antenatal educators.

3.5.1 Policy

Public policy and supportive environments have been identified by the Ottawa chapter as critical elements in health promotion and public health. Furthermore, the PRECEDE-PROCEED Model recommends that the policy and administration context be assessed before any planned health promotion change in order to determine the political support and resources available for such programs. Innovative programs which have such support are more readily disseminated and taken up. This section will review recent policy changes which have occurred in Australia related to antenatal education.

The early 1990s were a pivotal time in Australia for hospital based antenatal education with the release of several state-wide ministerial reviews of maternity services (Department of Health Western Australia, 1990; Health Department Victoria, 1990;

NSW Department of Health, 1989). In New South Wales the *Final Report of the Ministerial Task Force on Obstetric Services* (NSW Department of Health, 1989) labelled antenatal education as parenting education, and described it as 'a valid, important aspect of maternity care, contributing to healthy, planned pregnancy, informed participation in decision making during childbirth and rewarding successful parenting' (NSW Department of Health, 1989: 233). The *Having a Baby in Victoria* report recommended that 'women have the right to participation in antenatal education which prepares them for childbirth and transition to parenthood' (Health Department Victoria, 1990: 60). These state-wide reviews were the first in Australia to provide recommendations for practice and define the scope of antenatal education. Indeed, in NSW many Parent Education Centres and program coordinators owe their existence to the NSW review.

The *Final Report of the Ministerial Task Force on Obstetric Services in NSW* (NSW Department of Health, 1989) recommended that 'the term Parenting Education be adopted to describe the continuum of educational phases' and defined Parenting Education as encompassing:

- 'Pre-conception - education about reproductive physiology; planned, healthy conception and pregnancy, childbirth and early parenting.
- Early pregnancy - education about the emotional and physical aspects of pregnancy, emphasising nutrition and fitness and preparation for parenting.
- Late pregnancy - education in preparation for childbirth and early parenting covering the emotional and physical aspects of late pregnancy and childbirth, and early parenting emphasising maternal health and fitness, preparation for labour and breastfeeding, physical early recovery, emotional adjustment and caring for the newborn.
- Postnatal - education covering the physical recovery of the mother and baby and social and emotional adjustments involved in becoming a parent, including development of parentcraft skills' (NSW Department of Health, 1989: 235).

The review stated that parenting education is 'the practical application of knowledge to assist individuals in making informed choices about their fertility, to achieve the best

possible outcome to pregnancy and birth, and to promote successful and rewarding parenting' (NSW Department of Health, 1989: 234).

The *Final Report of the Ministerial Task Force on Obstetric Services in NSW* identified that 'all professional contacts are an educational opportunity' and that 'antenatal clinics be used as an educational opportunity on both an individual and group programs basis' (NSW Department of Health, 1989: 235). The aims, desired outcomes, outline of content and target groups for structured programs were however similar, but broader, than those in existence at the time. No guidelines were given for on-going, less structured programs and little recognition is given to the importance of structured programs being based on any educationally sound process, theory or adult learning principles.

> 'Structured educational programs should provide strategies and educational processes suitable to meet the special needs of **some** women and families, such as those of non-English speaking background, aborigines, the geographically isolated, single mothers, teenage mothers, developmentally and physically disabled mothers and those with a history of congenital abnormalities or genetic disorders' (NSW Department of Health, 1989: 240).

This quotation is indeed the only occasion where the NSW report states that educational programs should provide strategies and educational processes suitable to meet the needs of the participants, an important principle in adult learning. The addition of '*to meet the special needs of some women and families'* reinforces the fact that minority groups have special needs, however it negates the importance of all programs being based on the needs of the learners.

Although the recommendations in the *Having a Baby in Victoria* report are similar to those presented in the NSW report, the Victorian recommendations are less institutionalised and more client centred. 'A comprehensive network of information and support should exist throughout the state, the elements of which should be made well known to childbearing women' (Health Department Victoria, 1990: 70). This change in orientation may well reflect the different membership of the committees and chairs that made up the group that led the work. There is a recognition that 'antenatal education programs be based on accepted adult learning principles with small group sizes and a

participative approach to learning' and that 'providers of antenatal education programs be encouraged to make explicit the aims and objectives of their programs and to undertake thorough monitoring and evaluation as a matter of course' (Health Department Victoria, 1990: 70). It also recommends that 'staff put in charge of antenatal education programs have sufficient experience and expertise and are given adequate time allowances to run courses appropriately' (Health Department Victoria, 1990: 70). In NSW, the appointment of Parenting Education Coordinators was determined by the size of the Area Health Service or Maternity Unit, reinforcing the institutionalisation of Parenting Education in NSW (NSW Department of Health, 1989).

As a result of these reports antenatal education changed from its narrow focus on the uterus and the teaching of specific labour strategies, to encouraging active participation in labour, birth and parenting. By the early 1990s, many educators agreed that a major part of their role was to provide clients with the information required to make informed decisions pertaining to pregnancy, birth and the early weeks with a new baby (Antenatal Educators: KGV Inservice, 1991). However, in reality it would seem that many hospital-based education programs in the early 1990s were perpetuating the 'medical model' of yesteryear. As Gilkison (1991: 419) stated 'much of the material covered in classes aims to 'prepare' women for childbirth in that particular institution'. During the classes 'admission procedures will be described, technological devices and possible interventions will be "explained", women will be told what to "expect" from various staff members, how they will feel at certain stages of labour and what will be done to help them' (Gilkison, 1991: 419). Gilkison states that 'women are encouraged to ask questions about the procedures, and offered 'choices' within certain boundaries, but to question the status quo or to challenge the system is definitely not a part of most antenatal education. Preparation for childbirth then, could be analogous with shaping a woman's behaviour to accommodate the requirements of the institution' (Gilkison, 1991: 418-419).

A decade later hospital-based educators in a many areas of Australia would challenge the comments made by researchers such as Gilkison (1991) as they encourage their clients to question many of the 'traditional practices' that occur within their institutions. Compared to their independent colleagues, however the hospital-based antenatal educators are 'walking on eggshells'. They are caught in the cross-fire between two

competing groups - the expectant parents who would like to know the information in order to be able to make informed choices, and the delivery ward staff and doctors who often regard the educators as 'granola ladies who rock the boat, cause patients to question procedures and make requests not in line with hospital procedures' (Holaday, 1992: 44). Anecdotal hospital reports from Australian antenatal educators that are shared at meetings such as the National Association of Childbirth Educators Biennial Conference (NACE conference delegates, 2001b) suggest that the situation in the public health system is changing as the medical dominance of maternal care is slowly decreasing, however in the private hospital sector the antenatal education programs still have a medical-orientation.

Another policy development which could have potential implications for antenatal and parenting education and support is the Families First policy initiative. Families First is a coordinated strategy of five Government agencies. They are NSW Health and Area Health Services, Community Services, Education and Training, Housing and Ageing, and Disability and Home Care.

Families First was introduced in New South Wales in 1998 based on international research demonstrating that the way we support families in the early years of their children's lives has a lasting influence on children's health and development, education and economic well-being. Research has shown that a support network of prevention and early intervention programs can benefit children and families in the many ways.

In NSW services provided through the Families First Initiative include:

- a universal home visiting program which, although offered to all mothers of new babies, concentrates on vulnerable and disadvantaged families;
- extra support to families with specific health and social problems;
- a coordinated network of services linking all sectors relevant to the health and wellbeing of children.

Although there has been minimal consideration given to its relevance to antenatal education to date in NSW, Families First has the potential to link to antenatal education programs providing a support network into the early weeks and months of life with a new baby.

3.5.2 Program Coordinators

By the mid-1990s midwives had become coordinators of the majority of the antenatal education programs being offered in most Australian hospitals and commonly referred to as 'Birth and Parenting' programs, (Parent Education Coordinators Network Meeting, 1996). This situation remains, with the coordination role frequently involving organising venues, programs, resources including educators and materials for distribution to participants, professional development, in addition to program bookings, program facilitation.

For many coordinators, particularly those in smaller organisations, this work is increasingly being done on a part time basis. In the last five years, the number of Parent Education coordinators in NSW who have been required to assume management or in-service roles in addition to the responsibilities as Parent Education coordinator has increased dramatically (Parent Education Coordinators Network Meeting, 2000). Because of these additional duties, coordinators 'struggle' to keep on top of day-to-day program management issues, with minimal time for quality management of programs or educators and program planning (Parent Education Coordinators Network Meeting, 2000). Antenatal education, although regarded as a valuable component of antenatal care (Health Department Victoria, 1990; NSW Department of Health, 1989), now appears to be under resourced in many hospitals in Australia (Advanced Educator Workshop, 2000).

The experience and qualifications of Antenatal/Parent Education coordinators in New South Wales are varied. Those in larger hospitals are generally more qualified with an increasing number having a postgraduate degree. Very few of these degrees are, however, in disciplines specifically related to antenatal education, or program planning such as Public Health or Adult Education. Many coordinators, therefore, continue to seek Antenatal Education training soon after appointment to their position, participating predominantly in short courses such as four day workshops conducted by private 'for profit' organisations such as CAPERS or Birth International, or in 1995/6/7 the NSW Midwives Association and in 1999/2000 the National Association of Childbirth Educators (NACE). These courses, however, are intensive with the number of participants being, on average 14-20. They do not allow extensive instruction on

curriculum design which is one area coordinators frequently describe as 'difficult' (Svensson & Handfield, 2001a). An anecdotal description of antenatal education in practice which was presented during the NACE Biennial conference in 2001 and resonated with many of the conference participants is presented below:

> 'On numerous occasions over the last 3 years we have found that an Area Health Service or Hospital has organised a short course/basic training program primarily because they were changing the structure and/or content of their program/s. In addition to this we, and other experienced educators, regularly receive emails seeking help in program development. So what is happening? The number of 'trained educators' in Australia has increased, they now have confidence – they have the skills required to change their practice, but they lack support to go that extra step – to change their program. We see it so many times in rural and metropolitan areas, fantastic work being undertaken at the grass roots level but in an area very few managers and colleagues understand. (Svensson & Handfield, 2001b: 4).

The National Association of Childbirth Educators Biennial Conferences have become important forums for educators, in particular hospital-based coordinators. They have led to the development of several important initiatives. For example, in 1991, two years after the release of the *Final Report of the Ministerial Taskforce on Obstetric Services in NSW*, conference networking and discussion on complex issues such as performance appraisal lead to the formation of the Parent Education Coordinators Network in NSW, a network that continues to meet quarterly. In 2001, a National Network of Advanced Educators/Coordinators was established to provide support and advice to less experienced educators with curriculum design and evaluation processes surfacing as significant issues. Initiatives, such as these, have provided and should continue to provide, much needed support for coordinators who frequently work in isolation. As colleagues have stated over the years, and discussion at the 2001 NACE conference confirmed, 'nobody really understands the work of coordinator, it is just so different from that of a clinical midwife' (Svensson & Handfield, 2001a).

3.5.3 Antenatal Educators

Today the educators facilitating the programs in hospitals are predominantly midwives, with physiotherapists continuing to be involved in some areas. Occasionally early childhood health nurses / maternal and child health nurses are also involved.

The educators may have observed education sessions as a part of their basic training but very few have had any specific training in group facilitation or presentation skills. In fact the majority of educators are deficient in education skills, particularly adult learning (O'Meara, 1993a). Although there are antenatal education training courses available, many are expensive and time-consuming. For example, in NSW educators can obtain a Graduate Diploma of Childbirth Education, a two-year part-time course, through Birthing International for a cost of $3375.00 or Childbirth Education Association for $4000.00. Training programs that give credit for university courses are becoming increasingly available and are a popular alternative. For example, in NSW the Graduate Certificate in Parenting Education provided by Hunter Area Health Service has credit articulation with the University of Newcastle or *Effective Antenatal Education* a short course provided by University of New England/University Partnerships.

The demand for educators is constant because turnover, in this predominantly female domain, is high. It is therefore rare for an educator to have time for training, even a four day workshop, prior to working in the area. Today the orientation program for an educator in a hospital may simply involve the educator sitting through one program presented by another educator. The program coordinator, or occasionally the maternity unit manager, provide additional practical information, such as how to access the venue out of hours and where resources are kept, but few managers discuss session plans or program design with the educator. As Bronny Handfield, a leading antenatal educator and educator trainer in Australia, captured in the title of her highly regarded book, many educators are literally *Thrown in at the Deep End* (Handfield, 1996).

In Brisbane in 2001 it was estimated that 80% of antenatal educators have not attended antenatal education or group skills training, and are predominantly midwives 'pulled from the unit to run a class' (Cornfoot, 2001). However anecdotal reports suggest this situation is improving because hospitals are beginning to recognise the need for and support training of their staff throughout Australia. Unfortunately, independent

antenatal educators, who have a childbirth or parenting education qualification, are often excluded from providing antenatal education in hospitals because many are not qualified health professionals.

In order to cope with the lack of training, many new educators frequently obtain a sense of security through using a range of teaching aids, such as videos. Not surprisingly they present the information, which they believe is required, in a didactic manner. They tend to do this because this was the style of teaching they experienced during their own formal education, and because they feel that they will not be able to 'manage' a group if they allow the group to be predominantly self-directed. In other words, the educator would be out of his or her 'comfort zone'. As O'Meara identified 'competency in antenatal education would be best demonstrated through a system of certification, but no standards of teaching and course content are defined' (O'Meara, 1993a:77).

3.5.4 Standards and Training

In 1988 the Interim Committee of the Australian Association of Childbirth Educators, now the National Association of Childbirth Educators (NACE), stated it had a clear perception of what it felt was needed in an accreditation scheme for antenatal educators in Australia.

> 'That if the role and work of a childbirth educator is to be professionalised, and she is to be regarded as a person with the same competence and ability in her field of work that other professional working with pregnant women have in their field, she needs a course of training that is professionally comparable to theirs. That means a course of training in a tertiary institution' (Interim Committee of AACE, 1988: 1).

The discussion paper on a National Accreditation Scheme for Childbirth Educators (Interim Committee of AACE, 1988), the 1995 NACE Accreditation Subcommittee Report (Robertson, 1995) and *Finding a Way Forward*: *a personal viewpoint* from Ronnie Pratt (Pratt, 1995) are significant documents in the development of standards, training and an accreditation process for antenatal educators in Australia. They stress the need for professionalisation of antenatal education. But, as Andrea Robertson wrote in a sub-committee report:

> 'underlying all this, however, is our own need to address our feelings about antenatal education, its scope and potential and to establish a sense of direction as a professional group. Very few of us work in this field in a full time capacity – most of us work part-time, with the major thrust of our work in an allied area. We need to think about our future, to establish some goals and directions for ourselves as educators and for our profession as a whole' (Robertson, 1995: 9).

The most significant and challenging issue confronting the association has been, and still is, that antenatal educators in Australia have diverse skills and experience, their work differs in nature and frequency and their professional training differs. The term 'Antenatal educator' encompasses midwives, physiotherapists and independent educators who facilitate antenatal education programs, but may also include pregnancy yoga teachers, hypnotherapists, and doulas. The uniting factor is that, as a member of the health care team, the antenatal educator is an advocate for families, supporting the family's growth and development in their transition through pregnancy to parenthood (ICEA, 1999). As the Interim Committee of AACE stated in their discussion paper in 1988 'someone has to change the face of birth in the 1980s and into the 1990s. Someone has to curtail, in some way or another, the escalating intervention rate in birth. The Interim Committee believes that antenatal educators need to play a significant role in achieving this' (1988: 3).

A decade later work continues on the accreditation process and some progress has been made. Standards of Practice for Antenatal Educators have been developed and were adopted by NACE in 1993. In 1998, an educator certification process was implemented with four membership categories being developed. Accreditation of individual educators proved difficult, thus certification was implemented. In 1999/2000 an educator-training program was piloted in the eastern states of Australia. The Further Education Committee, formally the Accreditation Sub-committee, are now developing an endorsement process for educator training programs and a NACE training curriculum. These are all significant advances for NACE and the professionalisation of antenatal education in Australia. In addition NACE membership has increased and with the development of an Internet site, networking amongst educators should become more accessible.

Importantly, at the local level, very few hospitals in Australia have a quality management process for educators, or indeed an educator support network in existence. Traditionally many coordinators have relied on client feedback provided on a program evaluation survey. This situation is, however, improving. For example, in NSW, the Parent Education Coordinators from two area health services and four from the larger hospitals, (the researcher being one) have implemented, or are in the process of implementing, a quality management process in their hospital/area health service. Each process differs in detail as the coordinators strive to determine a sustainable, effective process for their organisation. With the larger hospitals employing on average 20 educators, antenatal programs being predominantly in the evening and over seven sessions, the challenge remains to determine a 'workable' quality management process. One, or indeed several, of these models may ultimately be adopted or endorsed by NACE for use in Australian hospitals.

It is important to note that NACE membership is not an employment requirement for an educator in most Australian hospitals and dissemination of these standards may be slow because of this. NACE currently has 268 members of which approximately 50% are coordinators of antenatal education programs.

3.5.5 Practice

The literature demonstrates that many antenatal education programs have not been informed by adult learning theory. The four areas of criticism which may be identified are as follows:

- Program content is not based on the needs of program participants (Hillan, 1992; H. Lee & Shorten, 1998; McKay & Yager-Smith, 1993; M. Nolan & Hicks, 1997). This has been discussed at some length earlier in this chapter
- Content does not match objectives, if they exist (Health Department Victoria, 1990; O'Meara, 1993b).
- There is often poor consideration given to clients' existing knowledge (Freda et al., 1993; Health Department Victoria, 1990).
- Teaching styles are generally not learner-centred (M. Nolan, 1998; O'Meara, 1993a; Svensson & Handfield, 2001b).

These criticisms have been explored within a New South Wales context, with the results of three studies briefly described below. Although these studies support the criticisms described above, it is important to note that unpublished program evaluation data from proactive and innovative hospitals show there are programs which are exceptions and which have begun to address the criticisms (Galloway, Green, Svensson, Spencer, & Pontyn, 2001). Lack of time and resources are the main reasons much of this evaluative data remains unpublished.

Barclay et al. (1997) undertook a study which explored the experiences of new mothers during the early months of mothering. Nine focus groups were conducted within the Southern Sydney Area Health Service in New South Wales, with fifty-five women participating in the study. Although the focus of the study was on the early mothering period, the researchers found that the women spoke at length about their preparation for the birth and for parenthood. The women had mixed reactions to the antenatal education, with many challenging their usefulness in preparing them for the birth and for their future role. Indeed many of the women felt totally unprepared for the early mothering period. Barclay et al. (1997) concluded that the content and process of antenatal education needed significant development and that the emphasis on preparing clients for early parenting be increased. In addition, they recommended that education promote the development of a range of skills, such as decision-making, problem solving and networking.

A study which examined the profiles of attendees of antenatal education in the Illawarra area of New South Wales (H. Lee & Shorten, 1998), focused on women's motivations for attendance, expectations of antenatal education and their satisfaction with information provided. Results indicated that the majority of women who attended antenatal education were either satisfied or very satisfied that their expectations had been met in terms of the following objectives; gaining information (90.9%), reducing anxiety/increasing confidence (87.9%), having partner present and involved (87.9%) and having a positive emotional experience in childbirth (81.8%). However, 33% felt that there was 'too little' information about relaxation and breathing for labour, 48.5% noted that there was either 'too little' or 'no information' about nutrition and diet in the sessions attended and 30% thought there was either 'too little' or 'no information' on infant feeding. Lee and Shorten (1998) concluded that individual women and consumer

groups might have differing needs, so these should be taken into account if antenatal education is to meet their needs or expectations.

A study conducted by Barclay, Donovan and Genovese (1996) on men's experiences during their partner's first pregnancy found that as far as this group of men were concerned, antenatal education sessions were often 'endured' rather than enjoyed. Fifty-three men attending nine sessions participated in this study. Barclay et al. (1996) found that the men often felt alienated by the manner in which the information was presented, that the sessions did not cover their major concerns, such as their changing relationships, their own identity and how to adapt to their role as a father. They recommended that antenatal educators should totally review the content and the structure of their programs if they are to adequately prepare all their clients for pregnancy and parenthood. This recommendation was supported by Nichols (1993).

A study conducted by O'Meara (1993a) on antenatal education, supports this notion as she found that antenatal education has not kept pace with the developments in maternity care and adult education. Although O'Meara collected the data for the study from educators in the Australian Capital Territory (ACT), she incorporated information from other states which suggests that her results are applicable to many other areas. O'Meara found that there was little emphasis placed upon the basic principles of adult learning, and in particular the value of participative learning in small groups in informal settings was not recognised. Educational programs had ill-defined goals and there were frequently being offered without clearly defined objectives. Overall she found that in the ACT antenatal education programs are under-resourced and their value is not recognised by the health care administrators (O'Meara, 1993a).

It is apparent why the hospital-based antenatal education is criticised. The educators have frequently been placed in a position for which they are ill prepared and poorly supported, and the system within which they work is under resourced and has many limitations.

Whilst antenatal education has been investigated, to date the majority of the research has focused on antenatal education sessions in the third trimester of pregnancy. Although there has been an increasing recognition of pregnancy being a time for

learning (Health Department Victoria, 1990; M. Nolan, 1997a; NSW Department of Health, 1989), minimal consideration has been given to determining the learning needs of women and their partners during pregnancy and after birth. In discussing the need to extend current antenatal education programs to 'hard to reach groups' Nolan states that 'the danger in doing this is that a formula which has proved successful with a certain part of the pregnant population will be wrongly applied to a different section whose needs, according to some antenatal educators, may be quite different' (1997a: 1203). Although Nolan's principle is indeed correct, it must be questioned as to whether 'the formula' has been successful.

3.6 Service Implications

In Australia, antenatal education is offered in both hospitals and community settings in both public and private sectors during the day, evening and on weekends, although sessions are typically limited to the final weeks of pregnancy. Ministerial reviews of maternity services have confirmed that antenatal education programs are important and should be offered to all pregnant couples. Health Departments in all states allocate resources to such education programs. The precise costs of these programs are difficult to identify as they are hidden in staffing for the institution overall.

The researcher and the expert group informing this study, have attempted to calculate the costs incurred. The calculation is based on primiparous births as 50 percent of total births in NSW in 2003 and that 80 percent of primigravid women attend antenatal education (Lumley & Brown, 1993; NSW Department of Health, 1989). The sessional rate paid to antenatal educators of $42.70 per hour has then been factored into the calculation. This figure excludes any capital expenditure, recurrent maintenance, equipment or training costs. The calculation suggests that $1,713,838.00 is channelled annually into staffing in NSW alone. This sum is negligible in the scope of the total expenditure on health and health promotion given that childbirth is one largest DRG categories each year. Nevertheless it is a significant allocation of resources to programs that may not be serving their intended purpose, given that the evidence suggests that they do not appear to influence labour outcomes and that high levels of maternal distress (Lumley & Brown, 1993; M. Nolan, 1997a) and paternal distress (Barclay & Lupton, 1999) remain in the early weeks of parenthood. Current antenatal education

does not seem to be making a sufficient difference to most couples negotiating labour, birth and parenting. This research aims to examine how antenatal education can better meet the needs of mothers and fathers in the first year of pregnancy and childbirth.

3.7 Summary

There is significant policy support for antenatal education although it can be argued that in many areas antenatal education is under-resourced. It is argued that there is potential for appropriate education to have an impact on childbirth and parenting outcomes when it addresses the learning needs of parents particularly when it is used in conjunction with other supports and strategies eg high quality clinical care.

Historically, and also more recently, antenatal education has focused on the reduction of pain, and improving childbirth outcomes rather than developing life skills for parenting and family cohesion. Although there are signs of improvement in antenatal education the main criticisms are that it has not kept pace with consumer needs, has become institutionalized, does not have clear objectives, and is not based on adult learning or evidence based practice evidence based practice. Furthermore the individuals who administer the course are often unsure of their role and untrained.

Finally, research which examines the impact of antenatal education is narrow in focus and has significant limitations due to the design and methods used. The main findings of these studies suggest that antenatal education is not meeting its implied objectives. That is, education does not appear to consistently affect medical interventions, length of labour pain perceptions or birth complications. There is however some evidence that it can reduce the level of pain medications used during labour. A small number of studies also suggest that targeted education can influence marital stress and communication during the postnatal period. There is a critical necessity to conduct research on the needs of parents during the childbirth year, to develop new programs and to test those programs using robust research designs.

Chapter Four: Needs Assessment Methodology

4.1 Introduction

This chapter describes the methodology used in the needs assessment conducted in stage one of this research. Three data sources were used for the needs assessment. These were first time expectant and new parents, health professionals who cared for parents in the childbearing year and the written materials from existing antenatal education programs. To understand how parents' needs changed over the childbearing year, data was collected from parents at different stages i.e. early in pregnancy, mid pregnancy, late pregnancy and in the first two months after birth. The methods used for data collection and analysis for the three sources are described in this chapter. Chapters Five and Six present the needs assessment results.

4.2 Aim and Objectives

The aim of the needs assessment was to explore the concerns and interests of first time expectant and new parents and describe the changing nature of these concerns and interests during the childbearing year. It also aimed to ascertain learning processes that best suited parents and to plan effective antenatal education.

In order to achieve this aim it was necessary to adopt the following objectives**:**

1. Determine and use those data collection methods that would provide the depth and richness of the data required from each source.
2. Identify and recruit convenience samples of the three data sources under investigation.
3. Explore and describe the concerns and interests of expectant and new parents as perceived by themselves and health professionals, and how these change through the childbearing year.
4. Ascertain the sequence and timing of parents and health professionals assessment of parents learning needs, and determine means by which these could be met.
5. Establish priorities for the implementation of these means.

4.3 Method

4.3.1 Design

A longitudinal multiple source, multiple methods design was used for the needs assessment. The multiple sources were: first time expectant and new parents, primary care providers of these parents and antenatal education program documentation from three comparable hospitals. The multiple data collection methods used were repeated in-depth interviews, focus groups, participant observation, surveys and a review of program documentation.

4.3.2 Ethics

Ethics approval was obtained from hospital and university ethics committee prior to commencement of the study. Written consent was obtained from all participants (see Appendix Two). Audiotapes, surveys and field notes were kept in a locked cupboard with the researcher being the only person able to access the data. Participants were identified by a code allocated to them by the researcher.

4.3.3 Project Management

A working party of four experienced Parent Education Coordinators and three researchers in the field was established to inform this needs assessment. The working party assisted in the development and refinement of the aim and objectives for the needs assessment and selection of data sources and collection methods. The researcher provided monthly progress reports to the working party and face-to-face meetings were held quarterly.

4.3.4 Setting and Context

Two large, metropolitan referral hospitals in Sydney were selected for this study. The hospitals were located approximately 10 kms from the centre of Sydney. The departments, services, annual birth rate and antenatal education programs of both hospitals were similar. They were also representative of large referral hospitals in New South Wales.

Hospital A was a metropolitan teaching hospital located in the eastern suburbs of Sydney. This hospital specialised only in obstetrics and gynaecology and was a referral

hospital for NSW. The hospital had a high proportion of expectant and new parents from outside the local community because of its specialisation and the perceived quality of care at the hospital. The annual birth rate was approximately 3700 births, with 55% being to first time expectant parents.

Hospital B was a teaching hospital located in central Sydney with a similar demographic profile of expectant and new parents. The annual birth rate was 3900, with 50% of these being to first time expectant parents.

4.3.5 Data Collection Sources

Data was collected from three sources. Recruitment of samples was dependent on data collection methods detailed in the next section.

- **Source One:** English speaking first time expectant and new parents who attended Hospital A or B for the birth of their baby, (see Table 1).
- **Source Two:** Primary care providers of these expectant and new parents who will be referred to as a group called the 'experts', (see Table 3).
- **Source Three:** Program outline and session plan documents of antenatal education programs provided by three hospitals of comparable size and with services similar to Hospitals A and B.

4.4 Data Collection Source One: Expectant and New Parents

4.4.1 Repeated In-depth Interviews

Repeated in-depth interviews were conducted over a twelve month period with a small sample of expectant and new parents who attended Hospital A or B. In-depth interviews were deemed the optimal method by which the richness, depth and dynamic nature of their state of mind, interests, concerns and preferred learning processes could be obtained during the childbearing year. The author of this thesis, a competent and experienced interviewer, conducted the repeated in-depth interviews. This provided continuity of interview technique and enhanced development of rapport and trust. The interviewer aimed to delve beneath the surface of superficial responses to expose true meanings that these expectant and new parents gave to their experiences (Bowling, 1997).

Data Collection Method	Stage of Pregnancy Data Collected	Sample
Repeated In-depth Interviews	Early Weeks Middle Weeks Final Weeks Post birth	9 women & 9 men Cohort followed from early pregnancy to early weeks at home
Focus Groups	Middle Weeks Final Weeks Post Birth	15 women & 15 men 16 women & 16 men 15 women & 15 men Different samples used each period
Participant Observation	Final Weeks	50 couples
Surveys	Middle Weeks Final Weeks Post Birth	52 women & 52 men 46 women and 46 men 48 women & 48 men Different samples used each period
Total Number of Participants		**205 women & 205 men**

Table 1: Expectant and new parents data collection methods and samples

To obtain a sample as early in the childbearing year as possible, the researcher contacted General Practitioners in the local community of the hospitals and informed them of the study. In addition the community newspaper was approached as participants for previous similar research at Hospital A had been successfully recruited through this means.

The criteria for participation was first time expectant parents, fluent in English, over 18 years of age and planning to have their baby at either Hospital A or B. To maximise homogeneity of sample the women had to be between four and six weeks pregnant in October 1998. Women with partners were preferred, however single women were not excluded. A self-selected convenience sample of twelve expectant parents met the eligibility criteria. The final sample was nine parents who were able to complete all of the four interviews scheduled. The women were of similar gestational age, that is six to

seven weeks pregnant, at time of Interview One. The women were employed full time, educated and of Australian or English descent. Their ages ranged from 26 to 34 years. Their partners were male, employed, educated, with ages in the range 28 to 36 years. The demographic characteristics of these women and men are provided in Appendix Three. They were representative of the majority of women attending the hospital.

A small sample size for the repeated in-depth interviews was deemed to be sufficient because of the triangulation with focus group data from a similar sample, from the middle of pregnancy at similar time periods. Nevertheless, data saturation as described by Straus and Corbin (1998) was reached with no new issues, themes or concerns emerging after the completion of nine interviews at each time period.

The parents were interviewed together rather than separately. Previous exploratory research by this researcher had demonstrated that when male and female parents were given equal time to provide their own response they were able to identify similarities and differences between their issues, interests, concerns and needs.

Four, sequential in-depth interviews were conducted during recognised stages of the childbearing year.

- Interview One was in the early weeks of pregnancy, defined as <12 weeks.
- Interview Two was in the middle weeks, between 12 and 28 weeks.
- Interview Three was in the final weeks, defined as >28 weeks.
- Interview Four was in the early postpartum period 6 and 8 weeks after the birth.

An interview schedule of core questions was prepared for each of the four interviews. The researcher converted the issues of interest to this researcher and the working party into questions which were easy to respond to and used language that was easy to understand. Questions were arranged in a sequence, as suggested by Krueger and Casey (2000), leading from one topic to the next, with leeway to allow issues to arise out of order. Krueger calls this flexible use of questions a ‘questioning route’ (Krueger & Casey, 2000). The questioning route of each in-depth interview comprised three sections.

- Section One was designed to elicit participant's feelings and experiences at that stage of the pregnancy.
- Section Two focussed on their interests and concerns, and processes by which they were meeting them.
- Section Three explored their reactions to their pregnancy, birth and their life as a mother and father.

A pilot study of the interview schedules was conducted, interviewing women in the antenatal ward, to ensure that the questions were understandable and they elicited expression of their personal experiences. The interview schedules are provided in Appendix Four.

Each interview commenced with an opening question to facilitate the social and psychological comfort of the interviewees. For example, the researcher asked 'How busy were the roads driving here tonight?' at the beginning of Interview Two. The response to this question was not analysed. Time was allocated at the end of each interview for the women and their partners to ask questions, and the researcher to summarise the discussion. The formality of the interviews decreased as trust between researcher and expectant parents developed. This allowed the researcher to explore other relevant issues of importance.

Interviews One and Two were conducted at the hospital where the parents had planned to have their baby. Interview Three was conducted either at their hospital or the parents home. Interview Four occurred in their home. The interviews were conducted at time and place convenient to the parents. Partners were present at each interview and actively participated in each discussion. The duration and informality of the interviews increased as trust developed and the participants openly shared their experiences. Interview One was generally one hour with duration increasing to about two hours by Interview Four.

All interviews were audiotaped, with the permission of the participants. The researcher kept field notes recording non-verbal actions and reactions that occurred during each interview. Their salient expressions were 'jotted' down in these notes at the completion of the interview. The tapes of each stage of pregnancy were transcribed by the researcher prior to the next interview commencing. For example the Interview One

tapes were transcribed before Interview Two. This allowed minor modification of the interview schedule to enhance the richness and focus of data collected.

4.4.2 Focus Groups

Focus groups, both pre and post birth, were conducted to obtain data from a larger sample of expectant and new parents attending Hospital A and Hospital B. Additionally the group dynamics provided the capacity to build on experiences and ideas giving an understanding of similarities and differences between individuals in each group. Their insights, comments and questions led to a valuable overview of the interest, concerns, preferred learning processes and suggested antenatal education strategies of expectant and new parents attending Hospitals A and B.

Focus groups were conducted during recognised stages of the childbearing year.

- Focus Group One was in the middle weeks of pregnancy, approximately 24 weeks.
- Focus Group Two was in the final weeks, defined as >28 weeks.
- Focus Group Four was between seven to nine weeks after the birth.

The focus group for each stage of pregnancy was synchronised with that of the in-depth interview schedule.

A questioning route was developed for the three focus groups with the same or similar key questions to that of the in-depth interviews, see Appendix Five. A protocol outlining the format and timing of each group discussion was developed to enhance consistency within and between groups. The researcher, an experienced group facilitator, moderated the focus groups herself. Attention was paid to verbal and non-verbal actions and reactions, as well as the need to manage dominant personalities.

A total of six focus groups were conducted, three at Hospital A and three at Hospital B. No focus groups were conducted early in pregnancy as parents had not yet made contact with the hospitals and it was difficult to recruit homogenous samples of couples at this stage of pregnancy. Convenience samples of expectant and new parents were recruited for two focus groups of each of the three remaining time periods, i.e. mid pregnancy, late pregnancy and after the birth. The criteria for participation matched that of the in-depth interviews. All participating women had male partners. Sample size and recruitment methods are outlined in Table 2. The number of focus groups required was

determined by the researcher, and verified by the members of the working party. The principle underlying the decision was that sufficient information was obtained to achieve data saturation (Krueger & Casey, 2000).

The focus groups were conducted in both hospitals in meeting rooms used for antenatal education. Women and their partners actively participated in each group discussion. The groups were approximately one and a half hour duration, held in the evening, with refreshments provided. Participants completed a registration form at the beginning of the focus group. The groups were audio taped, with the permission of the participants. An independent observer was present during each group. The researcher and observer kept field notes recording non-verbal actions and reactions that occurred during each focus group. The tapes of each stage of pregnancy were transcribed, by the researcher, prior to commencement of the next focus group. The synchronisation of focus groups with in-depth interviews allowed checking of the data collected from interview participants, with that provided by focus group members.

4.4.3 Participant Observation of Antenatal Education Sessions

Participant observation of a cross section of expectant women and new parents during antenatal education sessions was also used to allow triangulation of research methods in the needs assessment. Participant observation explored the interests and concerns of expectant and new parents in the context of the current and conventional learning environment at a large metropolitan hospital in 1999. This environment was an antenatal education program attended in the final weeks of pregnancy. The researcher conducted the participant observation.

The types of behaviour and informations noted were:

- The teaching and learning style of the educators;
- The content of the antenatal education sessions;
- Activities used and the response of parents;
- The questions asked by parents;
- Topics discussed during informal sessions.

Stage of Childbearing Year	Venue	Recruitment Strategy
Middle weeks	Hospital A	Eight women were recruited from Antenatal Clinic and Birth Centre in February 1999 by the researcher. Gestational age at time of focus group ranged from 24 to 27 weeks of pregnancy.
	Hospital B	Seven women were recruited from Antenatal Clinic and Birth Centre in March 1999. Gestational age at time of focus group ranged from 22 to 28 weeks of pregnancy.
Final weeks	Hospital A	Eight women were recruited from the hospital antenatal education sessions in April 1999. Recruiting from these sessions provided a mix of women attending the Antenatal Clinic and Private Obstetricians. Gestational age ranged from 34 to 38 weeks of pregnancy.
	Hospital B	Eight women were recruited from the hospital antenatal education sessions in April 1999. Gestational age at time of the focus group ranged from 32 to 37 weeks of pregnancy.
After birth	Hospital A	Eight women with a baby approximately six weeks old in August 1999 were recruited from the community Early Childhood Health Centre.
	Hospital B	Seven women meeting the same criteria were recruited from the community Early Childhood Health Centre.

Table 2: Focus groups of expectant and new parents

The participant observations were concurrent with the final stage of pregnancy and postnatal in-depth interviews and focus groups. All antenatal education programs commencing in April 1999 were eligible for participant observation. Due to conflict of time the researcher was able to observe five of the seven programs. Ten expectant women and their partners were booked into each program. Ninety percent of the women had a male partner. Ten percent had no partner, with the majority bringing a friend or relative to each session. Each program had seven sessions, two hours long, attended in the final weeks or pregnancy. There was a group reunion that was also attended approximately eight weeks after the birth of their baby.

Field notes, in the form of a reflective journal, were maintained by the researcher. Within group and sub-group interaction was observed during each session in the program and the ten-minute coffee break. Interests and concerns of the women and their partners were identified by the comments and questions asked during large and small group discussion, and group activities in each session. Facial expressions and body language were recorded to determine apparent disparity between verbal and non-verbal communication. The facilitation style of the educator was documented as it is known to affect group interaction and expression of issues of interest to participants. For example an autocratic style of facilitation can control and impede input from group participants.

The antenatal educators also kept field notes in the form of a reflective journal for each program they facilitated. This strategy, implemented as a quality improvement strategy one year prior to this study, was familiar to the educators. They recorded common questions asked by expectant parents in the program, deviations in program content to meet the specific learning needs, description of group dynamics and interaction, and any difficult situations they encountered. At the completion of each program the researcher compared field note entries with those of the educator.

4.4.4 Expectant and New Parent Surveys

The conventional method of collecting data from expectant and new parents was a program evaluation survey distributed and completed during the final session of a birth and parenting program. Surveys are a cost and time effective method of collecting data from a large sample of program participants, however the detail and depth of the data

can be limited. Conventional program evaluation surveys provide process and impact, not outcome, evaluation data.

During the conduct of this needs assessment three surveys were distributed to convenience samples of expectant and new parents who attended the antenatal education programs at hospitals A and B. The methods of recruitment were:

- **Survey One**: Women who were in the middle weeks of pregnancy and made a booking for an antenatal education program commencing in May or June 1999 were informed of this study and more specifically about the surveys. Those who gave an informed consent were sent Survey One with their program booking confirmation letter. They were asked to post it back in the addressed envelope with their program payment within two weeks of receiving the letter. A total of 54 couples were approached. They all gave consent and 52 couples completed Survey One.

- **Survey Two**: Women and men who completed an antenatal education program in May 1999 were informed of the study. Those who gave an informed consent were given Survey Two during the final session of the program and were asked to complete it and return it to the educator at the end of the session. A total of 46 couples were approached, gave consent and completed Survey Two.

- **Survey Three**: Women who completed an antenatal education program in July 1999 were informed of the study and those who gave consent were posted Survey Three approximately six weeks after the birth of their baby. A total of 50 couples were approached, with 48 couples giving consent and completing Survey Three.

The surveys, which are presented in Appendices Six A, B and C, were administered to confirm or contest data collected in the focus groups and interviews. The questions elicited the following data:

- Why they attended the antenatal education program;
- What they hoped to gain from the program;
- What they liked most and least about the program;
- How and when they thought parenting and care of baby issues should be provided in the childbearing year;

- How easy it had been to obtain the information they wanted in pregnancy;
- How they preferred to learn information and skills.

The results of Surveys One and Two are presented in Appendix Six D.

4.5 Data Collection Source Two: Experts

Health professionals who worked in Hospitals A and B and experienced antenatal educators who were external to these hospitals were also used to inform the needs assessment to get a greater understanding about the needs of parents and possible inconsistencies between health professionals and parents in this area. Focus groups and surveys were used to collect the data. Data collection methods and samples are presented in Table 3 and detailed below. The total population refers to the total number of staff working in each of the clinical areas involved.

4.5.1 Focus Groups

A cross-section of health professionals who cared for, or had contact with, expectant and new parents attending Hospital A or B, were informed of the study through in-service education programs. They were invited to participate in one of seven expert focus groups conducted by the researcher. The focus groups were taped with their informed consent.

Homogeneity within focus groups was required to enhance group interaction and explore issues and ideas of importance within that department or service at a particular period of pregnancy and childbirth, for example antenatal, labour and postnatal. Separate focus groups were held for:

- Antenatal Educators;
- Antenatal Clinic Midwives;
- Delivery Suite Midwives
- Birth Centre Midwives;
- Postnatal Midwives;
- Child and Family Health Nurses.

Data Collection Method	Sample	Number and % of Total Population
Focus Groups	Antenatal Educators	14 (70%)
	Antenatal Clinic Midwives	6 (90%)
	Birth Centre Midwives	7 (90%)
	Delivery Suite Midwives	7 (60%)
	Postnatal Midwives	7 (60%)
	Child and Family Health Nurses	12 (80%)
Surveys	Antenatal Educators	20
Total Number of Participants		**73**

Table 3: The experts: data collection methods and samples

Focus groups had between 7–14 participants with a total of 53 midwives, nurses and educators participating. The focus groups were conducted at a time and place accessible to each group of experts and lasted for approximately 1-2 hours.

The questioning route, outlined in Appendix Seven, required the experts to identify the questions asked, and comments frequently made, by expectant and new parents. They were asked to describe apparent anxieties and concerns of the parents during the childbearing year and how they thought opportunities for learning and support could be provided during this period.

4.5.2 Survey

To broaden the expert sample a survey was designed and administered to a random selection of antenatal educators in August 1999. The survey, which is provided in Appendix Eight, asked questions similar to those used in the focus groups. For example, '*How do you think parenting and baby care issues should be provided to expectant couples during the childbearing year*?' Open-ended questions were used to encourage an expression of their own ideas.

A list of Parent Education Coordinators was obtained from the NSW Parent Educators Network and the National Association of Childbirth Educators. These coordinators had been informed of the study through in-service and meetings. A table of random numbers

was used to select a sample of twenty-five coordinators, with the sample including coordinators from New South Wales, Victoria, South Australia and Queensland. These coordinators were telephoned to confirm their availability to participate. Those who gave consent were sent a survey, with a stamped, addressed envelope for its return. Twenty educators returned completed surveys.

4.6 Data Collection Source Three: Antenatal Education Program Documentation

Bradshaw in his taxonomy of need, which was outlined in Chapter Two, lists comparative need as need derived by comparing the characteristics and resources of different areas. For example if a community with a certain set of characteristics has access to certain services and a similar community does not have access to such services, then the latter community is said to be in comparative need. In this needs assessment the comparative need was the outline and session plans of antenatal education programs from three hospitals of comparable size and with services similar to Hospitals A and B. The hospitals were selected from a list of Public Hospitals with Maternity Units which had a designated Parent Education Coordinator who agreed to participate in the study.

Each coordinator was interviewed at the time of presenting the documentation to the researcher in order that detail could be provided where it was required. The researcher developed an observation sheet, which outlined the areas to be examined for each type of program presented. The areas examined were:

- Structure of program, that is when program was conducted and its length;
- Number of participants attending the program;
- Setting where it was held;
- Stated objectives;
- Content and topic areas covered;
- Learning activities used in the program;
- Teaching resources used;
- Number of facilitators for the program;
- Training and education of facilitator.

4.7 Data Analysis

Data was categorised according to source and method used to collect it. The researcher transcribed all audiotapes verbatim. Text from transcriptions of the parents interviews and focus groups was examined for recurring themes, with significant words and phrases being highlighted. The words and phrases were then examined more closely for related patterns and the development of sub-themes. As Strauss and Corbin (1998) indicate the researcher must have an openness and flexibility to perceive patterns. These themes and sub-themes were allocated a code and combinations of codes were retrieved and cross linked. This process, called axial coding, allows the researcher to 'fracture' data and reassemble in a new way (Strauss & Corbin, 1998).

The interview data, as this was longitudinal and collected at different points in time, allowed the researcher to obtain feedback from the expectant and new parents about changing concerns and interests across the period of pregnancy and early postnatal period. This feedback enhanced the accuracy and reliability of analysis and interpretation of the data as it allowed for further exploration and clarification of the evolving categories and issues of interest raised during previous interviews.

Field notes kept by the researcher were also used to verify the themes and codes. This analysis created a picture of the experience of expectant and new parents during the four stages of the childbearing experience. An important consideration in the reporting of the data was to use the language of participants to present the findings.

The responses from open-ended questions in the surveys were independently analysed, with significant words and phrases being highlighted. The words and phrases were then examined more closely for related patterns, leading to the development of mutually exclusive categories. An independent researcher who analysed the survey data derived similar categories to the researcher. The themes were then cross checked and linked with the analysis of the participant observations and the analysis from the focus groups and interviews.

A similar process was conducted with the transcriptions of expert focus groups and surveys. Similarities and discrepancies between parents and experts were then

highlighted particularly in regard to the concerns, interests, needs and priorities of expectant and new parents during the childbearing year.

The characteristics of the program documentation received from the three hospitals, outlined in 4.6 were summarised in a table to determine their similarities and how much they differed from each other and the stated needs of the expectant and new parents.

4.8 Summary

This chapter has described the multiple source, multiple methods needs assessment undertaken in Stage One of this research. First time expectant and new parents and a variety of health professionals participated in this research. A longitudinal design allowed an examination of the changing needs and priorities of the expectant and new parents during the childbearing year. This made it different from the 'snapshot' approach of other published research. The multiple sources and multiple methods used allowed triangulation of data to occur strengthening the robustness of the analysis. The next two chapters describe the findings of this needs assessment.

Chapter Five: Needs Assessment Results from the Expectant and New Parents

5.1 Introduction

This is the first of two chapters that presents the results of the needs assessment. A greater emphasis was placed on the interpretation of the data from expectant and new parents which is presented first. Chapter Six contrasts this with a summary of the data collected from the experts and program documents.

The actual words used by participants in this needs assessment have been retained and identified using italics. This strengthened the authenticity of reporting the results and the categorising and interpretations made by the researcher. A bracket with a pseudonym name and number, or code, follows longer comments and questions that capture important views of the majority, or those that are polarised. The name identifies the women or man who asked the question or made the comment and the number is the week in pregnancy (8wks) or postnatal (9wksPn) they were at the time. This allows the reader to observe the changing needs, interests and concerns of women and men. The codes identify data collected from focus groups (FG), participant observation (PO) and survey (S). The names of participants have been changed to maintain confidentiality. In this needs assessment data was also collected from a larger sample of expectant and new parents by the use of a survey. Simple descriptive statistics have been used to present survey results.

The parents insights related to preparing for childbirth and parenting are divided into three areas. These are:

- The concerns and interests of first time expectant and new parents;
- How parents prepare for childbirth;
- Parents ideas for improving antenatal education.

5.2 Concerns and Interests of Expectant and New Parents

The concerns and interests of these expectant and new parents were divided into five interrelated conceptual areas. Their concerns were pregnancy, childbirth and new parenting which were seen as '*achievements*', they were also taking on '*risk*', and they were riding an emotional '*roller coaster*'. Their interests were a '*need to know…what is*

normal' and needing help to '*perform well*'. These conceptual areas are described in detail below and the changes which occurred over the year are also identified.

5.2.1 Pregnancy, Childbirth and New Parenting as '*Achievements*'

'*Its positive!*' '*We're going to have a baby!*' '*I can't believe it!*' '*We've succeeded!*' '*Wow, our life will never be the same!*' These words accompanied by smiles and physical closeness such as hugging, implied having a baby brought excitement and a sense of an achievement for many of these expectant parents in early pregnancy. Having a baby was portrayed as a '*significant step*' in their life as an adult. With many couples choosing to control their reproductive processes this '*step*', for some, was timed in a '*window of opportunity*' to suit their life plans with '*little margin for error*' (Diane: 7wks).

Their sense of achievement was reinforced because these women and men realised they had '*succeeded*' in one of their '*roles*' as a couple. Many described being a '*MUM and a DAD*' as a '*role*' they had to fulfil, with this notion being grounded in social and personal expectations. Lisa and Paul (8wks) described that attaining this role actually defined them as a couple. '*We are really happy. We've known each other for many years, but only married for two, and it is seems as though your role as a couple is to have a child. We've made it*'.

Social expectations and strong '*pressure*' felt from family and friends was expressed, by some, as '*suffocating*'. For example Trent (7wks) said '*finally they* (our friends) *will stop hassling us*'. For the minority who had an unplanned pregnancy, having a baby however was a '*shock*' and an achievement they wished had not happened. They required '*time to get over it* (the pregnancy)' (Sam: 8wks).

The notion that having a baby was an achievement recurred throughout the year expressed in different ways as pregnancy progressed. Metaphors were used to describe their '*journey*', with this comment from Sarah (24 wks) capturing the essence of their ideas. '*It's rather like steps up a ladder. Every week there is something to step up to as we head to our ultimate goal - our baby.*' Pregnancy was seen as a series of '*milestones*', as described by '*books and on the internet*'. Milestones they had to reach and by which their progress could be measured by themselves, family, and friends,

indeed '*lots of people*'. It appeared their '*success*' or '*failure*' to meet the milestones affected how they would be perceived as a parent.

There were four significant milestones identified by these expectant and new parents. They were '*we're having a baby*', '*reaching the 13th week*', the '*screening ultrasound*' and '*the birth was mind blowing*'. They were described as '*significant*' because '*everyone knows about them*' and '*everyone wants to know how you went*'.

Becoming pregnant was a personal milestone for the couples which was often kept secret in the early weeks because of the inherent risk at this stage and possibility of the pregnancy not succeeding. '*Reaching the 13th week*' was, therefore, described as '*a turning point in the pregnancy*' by many as these expectant parents emerged from the '*high-risk time*' and their growing uterus began to become visible. The '*unveiling*' of their pregnancy meant they were '*finally*' able to share their achievement with others. The judging of their progress in relation to milestones intensified, however, as '*everyone seemed to check* (my progress)' (Michelle: 25wks).

The '*feeling of uncertainty about our baby*', in particular with the men, was not reduced however until after the '*screening ultrasound*'. The screening ultrasound at around 18 weeks was a significant milestone for men because the pictures and the size of their partner's abdomen provided more concrete evidence of the pregnancy for them and others. It also reinforced that the baby was normal and healthy.

The birth of their baby, irrespective of the length of labour, the amount of pain experienced and whether their expectations were met, was a significant milestone and cherished by all. '*It* (the birth) *was truly AMAZING!*' (FG). '*I never thought that my waters would break and then I would have to go in 48 hours later and be induced. It was very painful. I tried the gas and vomited everywhere. It was then I decided on the epidural. But the whole lot just washed away when she was born…it was incredible*' (Annette: 8wks Pn).

Their overt expression of excitement weakened as these new parents described the early weeks at home with their baby. The health of the baby, health of the mother and the nature of partner and/or family support during the '*first few weeks at home*' were factors

that appeared to be positively correlated with their level of confidence in themselves as parents. As Mary-Anne (7wks Pn) stated '*Jim being home for four weeks was brilliant. Even though we were really tired it was great to be able to spend time getting to know Zoe. She's just amazing*'. Nevertheless the achievements and failures continued in the postnatal period but they were much more observable and more easily measured. For example as Diane (8wks Pn) said '*I really wanted to breastfeed my baby but I had problems. I was too scared to tell my friends that I had given up. You seem to be judged by what you do*'.

Concurrent with the sense of pregnancy, childbirth and new parenting being achievements, they conveyed varying levels of concern and self-confidence. The amount of experience these expectant parents had with children of family and friends appeared to influence these levels. For example Mary-Anne (25wks) had '*only been in Australia for three years…a long way from my family*' said '*I have never seen so many babies...everyone seems to go to the park and compare notes as to how they are going. It worries me*'. By comparison Bridget (23wks) who had '*lots of friends with babies*' said '*I'm not too worried about it* (labour)*, as friends have told me the more you go with the flow, the easier it'll be…should be OK*'.

A need to feel '*more in control*' appeared to be another factor that influenced their level of concern. Some women and men required '*lots of detail*' (Sue: 26wks) about their current and prospective milestones in comparison to others.

5.2.2 '*Taking on Risk*'

Both women and men perceived pregnancy, childbirth and '*becoming a MUM and a DAD*' as '*risky*'. They identified how they had '*mulled over*' their lifestyle behaviours such as their amount of exercise, food, medication, and their alcohol intake, as well as their work and home environments, a number of times '*around the time*' they became pregnant to maximise their chance of having a healthy baby.

This monitoring, both retrospective and prospective, intensified after their pregnancy was confirmed and continued through the year. For example couples who '*were caught unaware*' (Sam: 8wks) that they were pregnant when they went to at party. Sam asked whether they had caused harm to their developing foetus by, for example, drinking a

glass of wine or eating cheese. There was an ongoing need to '*check*' detail, for example the dose, time and method of administration of factors known to have an adverse affect on the growth and development of their baby, so they '*didn't get it wrong*'. Family, friends, colleagues and '*so many others*' also monitored their risk taking behaviour. Indeed their behaviour contributed to the '*good or bad parent label*' (FG) placed upon them by others.

Having a baby was '*risky*' for more reasons than those related to health. During the early weeks of pregnancy it was apparent the notion of becoming a '*mum and a dad*' was pervasive and contributed to their anxiety. As Michelle (8wks) said '*it is such a big thing*'. Many took a deep breath and said '*WOW*' as they discussed a range of psychosocial, financial and employment responsibilities and expectations associated with being a parent. Expressions such as '*we'll lose our spontaneity*', '*lose our independence*', '*our income will be much less*' and '*we'll have to be more responsible*' were expressed. The expenses associated with a family, changes in employment and the mother becoming more '*financially dependent*' were of significant concern, for women in particular at this time. As Sue (7wks) said '*it seems that by becoming a mum you lose your position and status at work. No one* (colleagues) *seems to contact new mums…I'm really scared of being alone*'.

Women and men differed in their priorities and concerns when interviewed at approximately 24 weeks of pregnancy. The women had become focussed around a concern of '*becoming a mum*', indeed there was a distinct concern about breastfeeding at this time. For example women asked '*how do you really know how much breast milk a baby gets*' (FG) and '*how can I prevent mastitis*' (FG). The men, by comparison, appeared to become '*very concerned about labour*' at this time because they realised they did not have a '*role model to follow*' (Jim: 25wks). They had not, however, shared their labour and birth concerns with family or friends because some tended to '*ridicule*' them. These men focussed on labour and birth risk prevention activities. For example '*how can you tell that the baby is OK during labour*' and '*how can we make sure our baby is not born at home*' (FG). Many of these men were unable to attend antenatal '*check ups because of work*', therefore both professional and family support was minimised for men during this time.

During the final weeks of pregnancy some discrepancy in these women's and men's concerns and needs remained. Women who participated in the participant observation expressed concern about feeling isolated in the early weeks at home with their baby. Many had been in paid employment for between ten and twelve years and they were '*somewhat fearful of becoming left by the wayside*' (Emma: PO). At this time the men continued to express concern about labour, but also of how to care for their baby and how their relationship with their partner would change after the birth. This latter concern was evident in both women and men in the postnatal period.

5.2.3 Riding an Emotional '*Roller Coaster*'

Entering a world they did not know was exciting, but was also described as '*challenging and strange*' and compared with a '*roller coaster*'. The women described their '*moodiness*', '*irritability*', '*being tired and emotional*' in the early weeks of pregnancy as uncharacteristic of their '*stable nature*'. There was concern that their '*secret*', their newly diagnosed pregnancy, would be revealed by this unusual emotional lability.

During the year the women talked about their '*highs*' and '*lows*' and described how demoralising it was to have people frequently '*excusing*' their '*vagueness*' as '*oh I forgot you are pregnant*' (FG). Many hated becoming '*public property*' which they felt pregnancy had made them become, and didn't like the lack of emotional sensitivity shown by their doctor or midwife. In addition to the effects of pregnancy hormones, it appeared that their concern about how they and others perceived these women and men as parents, and applied labels such as '*success*', *'failure*' and '*risk taker*', contributed to their roller coaster experience. Some found the whole roller coaster ride *'really, really hard*' and it appeared to shatter their '*confidence in anything*' (FG).

For men their feelings were closely tied to those of their partners. However financial responsibility and where they were living came to the fore in the early weeks of pregnancy. As Paul (8 wks) said '*we currently live in a one bedroom unit which is tiny. We'll have to find somewhere else before we have our baby, I can't imagine being a Dad in our cramped space. It's just not done.*'

The concerns of these expectant and new parents, which have been discussed above, stimulated a need to know '*what is normal*' and how to '*do our best*'. These two

conceptual areas were interrelated and there were sub-themes within both. Examples of questions asked by these women and men are provided in a table for each sub-theme in order to show the diversity of questions asked throughout the childbearing year. The discussion at the end of this section summarises the findings.

5.2.4 Needing to Know – '*What is Normal*'

The question '*what is normal*? pervaded interviews and discussions during the year. It appeared to be influenced by their vision of having a baby being an achievement and a progression through recognised milestones, which they and others monitored. For the women, more than the men, there was a constant need to '*check*' their progress, which stimulated a '*thirst*' for books and anything that provided a '*timeline of the milestones*'.

Some women revealed mistrust in their body and the pregnancy processes, which created a dependence on a '*midwife*', '*doctor*' or child and family health '*nurse*', as Annette (24wks) portrays. '*It's good that I see my midwife regularly because I can confirm that the books I'm reading and how I feel is correct.*' They not only wanted to check their current progress, but also '*what can we expect in the next few weeks?*' (FG) to be prepared for forthcoming events during the year. For example early in pregnancy some wanted to know when they would begin to feel their baby moving because it '*is a sign that our baby is OK*'.

It appeared men were less interested in measuring the physical and emotional milestones their partner experienced during the pregnancy because '*the doc* (doctor) *can do that*' (Paul: 24wks). Rather they focussed their interest on '*the growth and development of our baby*' and what to expect during labour.

After the birth the interests of both women and men centred on the growth and development of their baby. To illustrate the diversity and non-sequential nature of the milestone checking that occurred during the childbearing year, examples of specific questions asked are presented in Table 4.

Stage of Childbearing Year	Steps Checked	Examples of Actual Questions Asked
Early weeks of pregnancy	Changes to a woman's body Foetal development	'*I've heard it is good to have this morning sickness because it means my pregnancy is healthy. Is that true*?' (Sarah: 6wks) '*My breasts are really sore. I've never heard about it before. Should it happen*?' (Angela: 7wks) '*How big is our baby now*? *What does it look like*?' (Paul: 8wks)
Middle weeks of pregnancy	Breastfeeding Postnatal changes Foetal development	'*What do people mean when they say the let down reflex*?' (Sue: 26wks) '*How long does it take for your body to return to normal after the birth…for your stomach to flatten again*?' (Bridget: 23 wks) '*Now the baby is real…it was fantastic to see him on the ultrasound screen. When can a baby see and hear and smile*?'(Michael: 25wks)
Final weeks of pregnancy	Labour milestones	'*How do you know when labour begins*?' (Jim: 38wks) '*The midwife told Lisa her baby hasn't dropped yet. Should this have happened by now*?' (Paul: 37wks)
After birth	Infant development Physical changes	'*How much weight should a baby gain each week*?' (Angela: 7wks Pn) '*I'm still having some bleeding. How long does this go on for*?' (Mary-Anne: 7wks Pn) '*How do you know when you are fertile again*?'(Peter: 7wks Pn)

Table 4: '*Checking out steps*' through the childbearing year

With pregnancy, childbirth and parenting being seen as achievements which could be measured and they could succeed or fail as parents depending on their action, these parents wanted to know what parents normally do. That is the need to know '*what's normal*' also translated into '*what is normal practice*?' '*What can we do to get it right*' (FG). Normal practice in relation to who can help, that is the '*services and resources that are available for mums and dads*', and '*what do parents normally do?*'. For example '*what do others* (parents) *use? A capsule or a 0 to 5 car restraint?*' (PO).

The focus of their '*normal practice*' questions changed during the year. Table 5 provides examples of their specific questions. During the early weeks of pregnancy they asked specific questions related to '*providers of care*', '*heath insurance*' and '*tests women have*'. They were also interested in general parenting responsibilities as they '*realised we are going to be parents*' (Diane: 7wks). For example '*what roles do women and men normally assume when I* (the mother) *returns to work*?' (Sue: 7wks).

By the middle weeks of pregnancy it appeared their '*normal practice*' interest had become focussed on specific services and parenting responsibilities. Women were interested in breastfeeding and men asked questions about labour and birth. This question by Tim (26wks) was typical of men in this study. '*I have no idea of what I can do as a husband during labour. Dad was never involved so to me it's really different…what do guys normally do*?' It appeared their lack of a role model, and for many their lack of contact with a health professional who they would be '*able to trust*' in their search of what they should do stimulated their interest.

As the birth of their baby became '*imminent*' both women and men displayed an interest in the normal behaviours and practices of themselves and others '*during labour and in the first few days of our baby's life*'. Of '*particular interest after the birth*' was the role of community services, for example '*why do women go to Tresillian*' (Lisa: 8wks Pn).

5.2.5 Needing Help to '*Perform Well*'

These expectant parents knew there were a '*whole range of environmental, lifestyle, work and home factors that can affect the health and development of our baby*' because their '*family, friends, colleagues and the media frequently talk about them*'. To

Stage of Childbearing Year	Verifying Normal	Examples of Actual Questions Asked
Early weeks of pregnancy	Pregnancy tests	'*What kind of tests should you have when you see the doctor…does everyone have an amnio*?' (Sue: 7wks)
	Models of care	'*What do most people do during pregnancy – see a midwife, obstetrician, GP? We don't know who to go to*?' (Adam: 7wks)
	Paternity leave	'*How long do Dads normally take off work when their baby comes home*?' (Trent: 7ks)
Middle weeks of pregnancy	Storing breastmilk	'*I've heard breastmilk can be frozen. Is that true*?' (Annette: 24wks)
	Labour support	'*Is it a good idea to have another person with Sue in labour…her sister*?' (Tim: 26wks)
		'*Is the doctor with you throughout labour*?' (Robert: 24wks)
Final weeks of pregnancy	Baby care	'*Who will check our baby when she is born…a Paediatrician*?' (Paul: 37wks)
		'*Can you put a small baby in a sling*?' (Robert: 39wks)
	Postnatal support	'*Will a midwife help me with breastfeeding*?' (Lisa: 37wks)
After birth	Protecting baby	'*Immunisation seems to be a hot issue amongst my friends. What are the pros and cons*?' (Michelle: 8wks Pn)
		'*People talk about tummy time for baby. I thought they weren't supposed to be on their tummy.*' (Trent: 7wks Pn)
	Lifestyle	'*We'll be flying to Melbourne in a couple of weeks to see my family. Is it best to keep breastfeeding during the flight*?' (Diane: 8wks Pn)

Table 5: '*Verifying normal*' during the childbearing year

minimise the potential harm to their baby through the year they wanted specific information. For example '*what is the dose of exposure to lead that won't cause a problem? We're renovating and painting our house*', and '*when is a baby most a risk* (from alcohol)?' (Adam: 7wks) It appeared that many wanted to '*create an ideal place*' for their baby to grow because as Diane (7wks) said '*we will probably have only one or two children, so we don't want to get it* (the uterine environment) *wrong'*. Table 6 provides examples of questions these women and men asked as they monitored factors that were known to cause harm to a baby or themselves during the year.

Needing help to '*perform well*' appeared to be influenced by their belief that having a baby was a '*risk*' and that others would monitor their risk taking behaviour and apply a label such as '*good*' or '*bad*'. There was a continual '*need to know what are the best things to do*'. Their questions dovetailed those of '*what is normal practice*' changing from general parenting issues to those more specific to their role as a parent as the year progressed. Table 7 presents specific questions these women and men asked and comments made as they strove to do '*the best thing*' for their baby.

The men wanted to know '*precisely*' what they had to do to '*get it right*'. '*It*' referred to many factors known to enhance or adversely affect the growth and development of their baby. There was a sense that by sequentially monitoring the presence of, and when necessary acting upon, these factors these men were fulfilling their '*role to help*' their baby.

Of '*particular interest after the birth*' was the help and support available in the community, for example '*why do women go to Tresillian*' (Lisa: 8wks Pn). Some also reflected retrospectively on the support they were provided in hospital as it appeared that '*what happened in the hospital was not what we expected*' (Annette: 8wks Pn). Peter said '*the midwives in the postnatal ward pushed and pushed breastfeeding. You were made to feel like a criminal if you didn't*' (7wks Pn).

Stage of Childbearing Year	Risks	Examples of Actual Questions Asked
Early weeks of pregnancy	Nutrition	'*Morning sickness has been a problem…I like a baked dinner but I can't eat it. Will this hurt my baby*?' (Mary-Anne: 6wks)
	Exercise	'*Is it OK to do some swimming in these early weeks*? *I find it relaxing*'. (Sue: 7wks)
Middle weeks of pregnancy	Tests	'*I've already had two ultrasounds. Are they harmful to our baby*?' (Diane: 25wks)
	Alcohol	'*I had a glass of wine at a Christmas party the other day. Are you sure it is alright to have an occasional glass*?'(Angela: 25wks)
Final weeks of pregnancy	Premature baby	'*A friend had a prem baby last week…really prem. Boy it made me scared. How prem can a baby be*?' (Bridget: 38wks)
	Heat	'*How long can you stay in a shower during labour? Does the heat harm the baby*?' (Jim: 38wks)
	Relationships	'*How does your relationship change with your partner after the birth*?' (Peter: 38wks)
After birth	Isolation	'*The worst days are when you are home alone. I miss the routine of work. Is it OK to go out each day*?' (Lisa: 8wks Pn)
	Insect bites	'*We put some repellent on our baby's skin the other day to protect him from flies and mosquitos. Is that OK*?' (Peter: 7wks Pn)

Table 6: '*Checking risks*' during the childbearing year

Stage of Childbearing Year	Advice	Examples of Actual Questions Asked
Early weeks of pregnancy	Models of care	'*How can we get continuity of care…see the same person so we develop trust and can talk… during pregnancy*?' (Paul: 8wks)
	Discipline	'*You need to be consistent and persistent with kids. That's what friends say. We want to do our best.*' (Peter: 8wks)
Middle weeks of pregnancy	Baby care	'*Settling a baby…what is Tresillian? Friends have told me it's good to go there…to learn what is right.*'(Lisa: 24wks)
	Infant feeding	'*Can you breastfeed a baby and give it formula too*?' (Annette: 24wks)
	Equipment	'*What equipment do we need for baby*?' (Michael: 24wks)
Final weeks of pregnancy	Equipment	'*There are so many car restraints available. Which is the best*?' (Sam: 38wks)
	Products	'*Cloth and disposable nappies…what are the arguments about*?' (Adam: 37wks)
After birth	Childcare	'*What do you think about putting a baby in childcare? Is there a time to do it after*?' (Diane: 8wks Pn)
	Travel	'*We need fly to England later this year. Is there a best time to fly*?' (Sam: 8wks)

Table 7: '*Checking advice*' during the childbearing year

5.2.6 Summary

This section has described some of the concerns and interests of women and men during the childbearing year. These expectant and new parents saw childbirth and parenting as both an achievement and a risk, which often meant they were on an emotional roller coaster having to continually monitor their progress against perceptions of what was normal. Because of this they were constantly reviewing what was normal and as such were receptive to any information particularly if it was related to a specific individual concern. Whilst broad topic areas can be identified, as can be seen in the tables, individuals also had very specific concerns. The main topic areas identified were: changing women's bodies, tests and procedures, development of the foetus and newborn, safe behaviours, baby care and parenting, breastfeeding and labour, routine practice and the resources and support available, changing lifestyle and relationships. The preferred focus of these topics changed to some degree over the childbearing year.

The next section examines how parents addressed their concerns and adapted to childbirth and parenting.

5.3 How Expectant and New Parents Prepare for Childbirth and Parenthood

During the childbearing year parents prepared themselves for pregnancy, childbirth and parenting by talking to others, watching others, seeking support and through their own experience. Each of these categories are described below.

5.3.1 Talking to Others

'*Talking to others*' was identified, by these expectant and new parents, as an '*important way to address our concerns and interests*' (FG). It appeared the probability of them having '*only one or two children*' was a '*driving force*' behind their proactive, and at times reactive, '*search for answers to our many questions*'.

They had access to '*truckloads of information*' but many described it as '*overwhelming and confusing*' and it made some feel anxious. They wanted information that was '*current*', '*correct*' and '*reliable*' and provided by a '*trustworthy*' and '*approachable*' person (FG).

During the early weeks of pregnancy their self-enforced '*veil of secrecy*' (Bridget: 8wks) created a '*really anxious time*'. They were limited in who they could confide with and many, like Peter (8wks), were '*silently searching*' for a health professional that would '*go through what was happening and check all (*physical and emotional changes) *was normal*' (Peter: 8wks). For many this situation was aggravated because they did not access their General Practitioner, '*well he's always so busy*' (Michelle: 8wks), and others did not have one. Feeling tired and for some, like Lisa (8wks), '*being trapped at home with morning sickness*' contributed to their feelings of isolation.

Once, as Annette (24 wks) explained, '*the word was out that we were having a baby*' they '*got ideas from EVERYONE…even people in the street stop to tell me what to do*'. Their underlying concerns of needing to '*get it right*' and '*perform well*' created however a mistrust in '*unsolicited advice*'.

5.3.2 Watching Others

As they '*ventured into a world we don't know*' they described how their '*eyes were wide open watching others*' and '*they felt like absorbent sponges lapping it* (what their friends were doing) *all up*'.

It appeared the responsibilities associated with becoming a mum and a dad meant these expectant and new parents were reluctant to perform actions by trial and error. As Trent (7wks) said, *'in the beginning* (of pregnancy) *we kept watching how others discipline their kids. We need to tighten some of our behaviours…we need to be consistent…we can't do it* (discipline) *any old way. We need to see what others do.*'

Their use of expressions such as '*it's all so new*' and '*it will be a really different kind of work*' indicated that the skills required when having a baby had to be observed and learned. Their need to do their best and '*get it right*' directed them to learn from professionals, family and friends who they could trust would give them the information and support required.

5.3.3 Getting Support

Parents differed in the support they sought depending on their level of interest and concern and when it occurred. Some found they '*sought comfort*' from their mother

early in the pregnancy because '*at least she was a woman who understood*'. As explained (Diane: 7wks) '*it seems crazy but when I was home I had breakfast in bed with mum…we just talked and talked*'. This seeking of support appeared to create a dilemma for some, however, because the more their mothers became involved, the more likely they were to voice their expectations and ideas. '*It is great to talk to Mum, but the more I do the more she wants to push her ideas*' (Angela: 25wks).

'*Joining an ongoing group*', for example yoga or exercise classes where there was a '*professional who could answer my questions*' (Bridget: 23wks) and peers they became to trust, was identified as a '*really good way to get info and support*' (FG). As Jim said '*if she gets the answers she wants, she'll chill out we'll all feel a lot better*'.

Antenatal classes, the one type of group that all participants had experienced, were described as '*essential for women and their partners*' (FG). As Jim (38wks) said '*I don't know the doc said go to the classes so you learn what to do, but we really went to get to know others, and we are glad we did*'. '*Meeting and getting to know others on this journey*', and '*opportunity to clarify information we had read and heard with an educator*' were reasons many chose to attend (FG). Survey participants added to these reasons, when they responded to the question 'why did you choose to attend antenatal classes'. The actual words used were divided into eight categories, and participants were encouraged to provide more than one response. The responses to this question from those who completed Surveys One to Three are presented in Table 8.

Reason for Attending Antenatal Education	No. of Responses n = 146
To learn as much as I can about the birthing process and looking after the baby.	129
To meet other people in the same situation.	127
To understand what is happening so I can feel more in control.	119
To learn what the hospital has to offer for the birth and after.	105
To learn more about the baby and the early weeks at home.	103
To get my husband / partner more involved.	89
I'd like to learn about labour and the role of the support person.	75
To be fully informed by a Health Professional.	69

Table 8: Reasons women and men chose to attend antenatal education

5.3.4 Experience

Although many did not want to use trial and error because of the risks involved their personal life experiences did appear to contribute to coping and adjustment during pregnancy and after birth. Indeed couples who had minimal personal experience with pregnancy, birth and being a parent, even if they had been actively seeking answers and advice from the professionals, books, the internet and friends, said they did not realise how '*isolated and lonely*' they could feel. They may have been '*watching friends, but we had no idea what they really experienced. We thought we were prepared…but we did not realise how hard it can be if you don't have someone you can talk to*' (Peter).

Experiential learning was not a common type of learning style in the antenatal programs these expectant and new parents attended however when it was experienced it was rated as a preferred learning strategy. As David (FG) said '*the tour was good…excellent. It brought everything into perspective*'. Joanne explained that '*the tour was good because I really had an impression of this stainless steel room. I thought it was going to be a really sterile place…a theatre environment but it was really warm and cosy looking and I thought oh that's OK I can handle that*'(FG).

5.4 Parents Recommendations for Improving Antenatal Education

The words '*journey*', '*steps up the ladder*' and '*like a menu*' recurred during the childbearing year, as they prepared for their '*major life event*'. They talked of '*having our bag packed*' (FG) and '*labour being a marathon*' (PO), which created imagery that could be used by educators. They also outlined that '*one size does not fit all*' in relation to programs and groups, that they liked '*learning together*' rather than large groups or lectures and that the '*skills required by educators*' are important if programs and strategies are to be effective. Each of these categories are detailed below.

5.4.1 One Size Does Not Fit All

The undisputed feeling that these expectant and new parents had about antenatal and postnatal education was that '*one size does not fit all*', with this comment by Peter being typical of their feelings. '*The way many programs are only provided in the final weeks of pregnancy is really stupid.*' They recommended a range of '*programs*' and '*strategies*' should be offered and likened this concept to '*a menu in a café…you can choose what is best for you…what is tasty*' (FG). They provided detail on the recommended programs and strategies, which they referred to as '*dishes*'.

An important recommendation was that '*all doctors, midwives, GPs need to know about the menu and tell us*'. Several women had found it '*really hard to find out what was on*'. This comment by Anna (FG) was similar to those made by several women. '*I asked my midwife did this hospital have yoga and she said "no". So I asked her where I should go and she said, "I have no idea". Surely you guys* (midwives and obstetricians) *should get it together. The info we are given about programs seems to depend on who you see*'.

Programs, both '*structured…you know the same people coming along each week*' and '*those that you can drop into at any time*', were required. The types of programs they recommended divided into three categories with their own '*essential ingredients*'. These categories were:

- '*Learning and Discussing*'
- '*Sharing and Supporting Each Other*'
- '*Hearing and Discussing Detail*'

'*Learning and Discussing*' Programs

'*Learning and discussing*' programs were identified as those '*where an educator gives information and teaches skills which we all discuss and practise, and it* (the program) *goes over several weeks*'. This description was like that of a closed group program (Yalom, 1995) with a defined number of sessions and group members remain constant. As Emma said '*like one of those adult learning courses you can do at an evening college*'. This type of program providing '*a supportive environment where you can discuss preset topics and hot issues with an educator, who is unbiased…hopefully. Being over several weeks you have time to reflect*' (FG). They identified '*essential ingredients*' of '*learning and discussing*' programs, which were combined to form statements, and categorised into a program-planning framework and are presented in Table 9.

Program Development Terms	Characteristics identified by expectant and new parents
Structure	*Defined beginning and end* *Preset topics, but flexible in their order of presentation* *Same people attend each week*
Program length	*All programs at least two sessions to allow reflection and further discussion. Birth and parenting program to be 6-8 sessions.*
Session length Session frequency	*Length and frequency set according to number and complexity of issues to be addressed and discussed.*
Group composition	*Couples or single sex - determined by purpose of the group* *One or two educators to coordinate and facilitate the program* *Expert to present specific information if required*
Group size	*No more than 12 couples, preferably 10*
Educator	*Experienced group leader: able to communicate, be non-judgemental, up-to-date on content and topical issues, approachable and flexible* *Act as gatekeeper to prevent one person dominating*
Venue	*Hospital or out in the community*

Table 9: '*Essential ingredients*' of '*learning and discussing*' programs

They recommended '*learning and discussing*' programs should be available, either as independent programs or as a series, at the following times.

- '***Before you are pregnant****… held at the hospital to open the doors to a place many don't know*'. '*Hospitals with maternity units should provide sessions in the evening or on weekends for women and men thinking of becoming pregnant. There are so many things you have to think about and when you may have only one or two kids you want to do your best*' (FG)**.**

- '***When you are just pregnant****… like an interactive website, but much better. This is the really risky time for the development of the baby*' (FG). The program should be accessible to '*anyone…not only those planning on going to hospital. In fact it would help us make the decision of where to go*' (FG).

- **'*Around the middle weeks of pregnancy*** *when you expect more…more problems I guess*' (Lisa). '*Now we are confident our pregnancy will continue we're interested in a whole lot of practical information and tips on how to care for the baby. It would be good to talk them through with a professional*' (FG).

- '***Towards the end****…must not be birth focussed…birth is one day… being a parent is for life*'. '*It would be even better if some was before the birth and some after…say 70-30%*'. '*Straddled over the birth, we could have support when you go home*' (FG).

- **'*After the birth…****about four weeks after, then around six months when junior begins solids, then twelve months to know what to do with play and maybe more*'. *Hopefully it would prevent us falling into a black hole at not knowing what to do with our baby*' (FG).

The topics and some of the learning activities to be included in each of these programs were identified and discussed by the expectant and new parents during interview, focus group and participant observation (see Appendix Nine A). Many women and men said they were '*surprised how little parenting was in our* (antenatal education) *program*' indeed they had '*expected much, much more*'. Comments made by survey participants regarding the amount of parenting in antenatal education are outlined in Table 10.

Gender	Actual Comment Made about Parenting Component
Male	'*I have been amazed how little the emphasis on the baby has been. Well the birth is 24 hours and yet the baby seems such a tag on. I would have been happy to do a 6-week program on the baby parenting. I have always wanted to have children so I am interested in learning about children. I am not a reader - the self-discipline of enrolling in a program and you have to turn up is what I need*' (Adam).
Female	*'It seems crazy to me that you have 2 days on birth and only one on parenting' (Diane).*
Male	'*Parenting… there wasn't any. We could have done with half of the program on parenting and the baby. We repeated so much information on the birth it was crazy*' (Peter).
Female	'*There was not much on the baby….changing nappies and settling but that was all*' (Sue).
Female	'*The one thing we wish we had more of was parenting. There was nothing about coping with all the emotions of breastfeeding. They didn't teach anything about how you live with a baby…what to expect*' (Rose).

Table 10: Comments made about the amount of parenting in conventional antenatal education

'*Sharing and Supporting Each Other'* Programs

Many thought a regular, informal meeting, such as a monthly or second monthly informal coffee morning/meeting, would be '*such a good idea*'. They likened it to a '*tennis club, aerobics, aquarobics, or a book club…women sharing wisdom like they used to.*' This program had '*to be fluid, with its own momentum*' as listed in its essential ingredients presented in Table 11. This comment by Brad was similar to those of other men in this study. '*When your partner is OK, you are OK. Stress tends to transfer from one to another. I think a 2nd monthly group is more for the girls, so they can chat and work out problems*' (Brad). The men preferred to network '*amongst the guys at a BBQ*' or '*with mates at the footy*'.

Program Development Terms	Characteristics identified by expectant and new parents
Structure	*Informal with own momentum* *We* (participants) *have ownership* *Participants can attend as many and as frequently as liked*
Program length Session length Session frequency	*Ongoing* *At least ½ hr for yoga and exercise and 2 hrs for chats.* *Regularly eg weekly or monthly*
Group composition	*Determined by purpose of the group eg women, men, couples, pregnant or not* *One educator* (professional): *role determined by nature of program* *Expert to present specific information if required*
Group size	*Determined by purpose of the group. No more than 20 people recommended*
Educator	*Role determined by group i.e. leads or mingles. Experienced group leader, flexible, able to answer question.*
Guest speakers	*Expert could be included to present specific information*

Table 11: '*Essential ingredients' of 'sharing and supporting each other*' programs

The women and men recommended the following sharing and helping each other programs:

- Yoga
- Exercise
- Coffee mornings for expectant and new mothers
- A 'boys' night for expectant and new 'fathers'
- Informal question and answer sessions every week at the hospital.

The rationale for having these groups being similar to those found in recent research in by Scott et al (2001) in Melbourne. Recreating the village (Lawson & Callaghan, 1991) is one way of providing the much needed support to women during the childbearing year.

'*Hearing and Discussing Detail*' Programs

'*Hearing and Discussing Detail*' sessions were described as '*a series of lectures*' with a '*guest speaker talking about his or her speciality and answering questions*'. Table 12 presents the '*essential ingredients*' of this type of program.' *A timetable of session topics and presenters would be available and we could decide which we attended*'. Topics of interest, which are listed in Appendix Nine B, included '*immunisation*', '*first aid*', '*development of an infant*'. Attendance at '*one off sessions permits anonymity*', and '*could be of particular interest to those with a really strong dislike of groups*'.

Pregnancy Support Telephone Line

During the year the need for a 24-hour Pregnancy Support Telephone Line, which they called a 'Pregnancy Hotline', was discussed. As Paul stated '*I would have liked a professional available to answer our questions on a 24-hour basis…as a bloke I would have preferred a doctor or someone like them on the end. When your partner is looking for comfort… looking for answers to even simple questions, you need to be able to do something*' (Paul). With the internet being recognised as a '*a great place to get information*' these expectant and new parents saw '*a need for large hospitals, like this one* (Hospital A), *to have their own site*'. Their compulsion to know what was '*normal*' and how to do their '*best*', combined with their '*trust*' in health professionals, resulted in them '*searching for hospital sites and there weren't any…well at least when we looked*'.

Program Development Terms	Characteristics identified by expectant and new parents
Structure	*Preset topics presented on a rotational basis* *Mini lecture with question and answers*
Program length Session length Session frequency	*Fixed and rotational* *Length and frequency set according to number of topics* *Calender provided: Attended as series or independent sessions*
Group composition	*Couples or single gender - determined by purpose of the group* *Guest speaker to present specific information* *A coordinator of each session*
Group size	*Determined by venue eg 100 if large lecture theatre*
Presenter	*Guest speaker with presentation skills: able to communicate, be non-judgemental, on the ball, approachable and flexible*
Venue	*Hospital or out in the community*

Table 12: '*Hearing and discussing detail*' sessions

5.4.2 Learning Activities

The '*one size does not fit all*' theme also referred to how these expectant and new parents preferred to learn. The emphasis of all of the strategies identified by parents could be incorporated in one major category of '*learning together*' reinforcing their need for interaction and their proactive and reactive '*search for answers*' with others and from others. The importance of learning groups within the hospital and community were evident. '*Learning together*' was further divided into four sub-themes, 's*eeing and hearing the real experience*', '*practising*', *discovering*' and '*time to catch up and focus*'.

'*Seeing and Hearing The Real Experience*'

'*Seeing and hearing the real experience*' was described as a '*powerful way to learn*'. Women who attended a pregnancy yoga or exercise program described with enthusiasm how they felt when a '*new mum came along with her baby*'. '*It was so good to see Alex again with her bub. We had a real connection…it was unreal to think it would be me soon*' (Sue: 39wks). Those who experienced a couple coming to their antenatal class with their baby to talk about their experience described it as a '*really valuable*' learning

activity. Indeed some were shocked to hear '*that this did not happen in all classes*' (FG). As Helen said '*they talked about how it was for them …about the birth and life at home… we saw the baby move and stretch…it was unreal*' (FG). Watching a baby being bathed in the postnatal ward was also described as an '*unreal experience*' by those who had seen it in their birth and parenting program. '*I have bathed a doll and I have bathed my niece…there is a big difference. I think seeing a real baby would be much better as they move and you can see how they respond*' (Anna FG).

These expectant and new parents recognised the benefits of '*watching birth videos and others*' during and after pregnancy, however they only provided a '*glimpse of what it is really like*' (FG). Many preferred '*seeing and hearing what really happened*' because they could '*chat*', '*ask questions, bounce around ideas and see what Liz's* (yoga instructor) *response was*' (Sarah: 37wks). Through this interaction they were also able to get a '*true feeling of the time involved*', whereas the '*editing of videos prevented this*'.

The use of videos has been contentious in New South Wales for years, with Parent Education coordinators '*constantly searching for new ones*'. Participant observation and experience demonstrated that age of the video, its placement in a program and session, and how it was introduced influenced participants' reactions. '*We saw a birth video on the first night. I was looking forward to the classes but to see a video on the first night was a bit much. It just petrified me*.' (Sarah). Guidelines for the use of videos were identified by these expectant and new parents.

'Practising'

Parents concern around the baby being a '*very dependent being*' and their reluctance to '*just do it* (parenting tasks) *any old way*' created mistrust in their '*ability to perform skills*' and '*solve problems*' (FG). '*I think any birth or parenting program should have practical skills, as you want to be able to help at home. Bathing and showering baby, massage, ways to get her to sleep, playtime, burping…I'm sure there are many more to learn*' (Robert: 24wks). Practising was important because '*it seemed to stick more if we were shown how to do it* (wrap a baby) *and then we had a go*' (FG).

Practise solving real life scenarios, such as those experienced by other expectant and new parents, encouraged these women and men to '*think beyond the square*' and use their well-developed problem solving abilities. Nevertheless many of the expectant parents perceived parenthood as being a '*new job*' which '*requires much study*', rather than the reapplication and development of skills they already possess. Problem solving activities have been demonstrated as being effective in the uptake and retention of concepts (Clouse, Goodwin, Davey, & Burgoyne, 2003; Kemp, Stewart, Fung, & Orban, 2002), and when performed as a small group learning activity problem solving encourages self-directed learning, 'group exchange' and relation of theory to practice (W. M. Lee, Wong, & Mok, 2004)

'Discovering'

With their '*eyes and ears wide open*' these expectant and new parents liked to '*discover*' '*the facts*' from '*our educator…kind of a mini-lecture…not chalk and talk*'. Their vision was to have factual and topical information provided and discussed in '*the large group*', with '*small group exercises to focus on… find out what others feel about these issues*' (FG). For example, as Peter recounted, '*Liz* (the educator) *told us about contractions and the pain of labour, and then we split into two groups, girls and guys, to brainstorm what we could do to help relaxation and progress of labour. It was interesting to hear the others ideas*' (7wks Pn). They emphasised a need for an exchange of information and ideas, not '*one person taking over…pushing their own barrow*'.

During the childbearing year there was debate on the value of single gender discussion groups in antenatal programs. Many had encountered small group, single gender discussions and which they found '*interesting…to hear another slant on it* (pain in labour)' (Tim: 39wks). However not all parents were keen on single gender discussions. '*I don't think that you should have separate groups for men and women…It's important to be able to talk together. It really depends on the guys I guess and it also depends on the aim of the group*' (Greg: FG). The majority of parents recommended that feedback from any groups discussion or activity was vital because '*you were left in limbo wondering what the others thought if this did not occur*' (FG).

Some described how they '*found it so interesting to hear what others had found in shops…like Babies-R-Us*'. It appeared this information was shared informally '*during tea and coffee breaks or as we head to our cars*'. Several had been given '*homework during our classes…one week we were each given a community service to "discover"…Emma (educator) gave them to us. The next week we all shared what we had found out. It was really interesting to explore the services for us (first time parents)*' (Robert: 39wks). This '*homework opened us to a whole new world we did not know existed*' (Michelle: 8wks Pn). Take home activities were recognised as useful because it was interesting to focus on our baby and what we need to get. Home study is not a frequently used strategy in Australia but as Brookfield (1996) outlines participants in a program can gain as much, and sometimes more, from a take home activity as learning the information in a workshop.

'Time To Catch Up and Focus'

These expectant and new parents identified a need for an '*icebreaker at the beginning of a program*'. As Lyn said '*time to catch up on friends at the beginning of each session allows you to chill out of work mode…then you can concentrate*' (FG). Some said they '*hated the icebreaker where you have to introduce another person*' (FG) because, as Anna said '*I spent so much time trying to remember what I had to say about Pete, that I didn't hear what others were saying*' (FG). They preferred '*innocent ones* (icebreakers)*, like what are your hobbies or interests*' (FG).

They recommended subsequent sessions begin with '*a small group activity related to one of the topics to be discussed during the session*' (Emma: FG). Emma continued '*If we were given a task, a situation we may experience with our baby…like he won't stop crying and we have done all we can… we could put our heads together to work out what to do*'. This type of '*icebreaker*' allowing '*everyone time to check who was at the session and how big they were* (growth of baby). *When you know everyone you want to touch-based with them*' (Jill: FG). It also provided an opportunity to practise their problem solving skills. Refreshment breaks during session were recognised as important for '*making friends and knowing others who are going through this same experience* (having a baby)'.

5.4.3 The Skills Required By Educators

The participants of this needs assessment not only made recommendations about the programs and learning activities, but they provided information about the level of skill expected from educators. These expectant and new parents said an educator, (instructor or group facilitator) should have '*certain qualities*' with important characteristics described as '*competent*', '*non-judgmental*', '*up-to-date*', '*unbiased*', '*flexible*', '*confident*' and '*approachable*'. They spoke of the need for an educator to be '*experienced*', both in '*what the program is about…up-to-date on all topics and issues*' and '*how to deliver the goods*' (FG). As Paul, who was a group leader, said '*I think there's an issue when you get on to talking about learning activities in a session…in terms of the dynamics of the group. You have to look at what the groups like before you go ahead…. for example, this group is not really into games, don't bother with them*' (FG).

Diane (8wks Pn), who was also an educator, identified additional concerns.

> '*I was disappointed in the classes and the Birth Centre introduction. The basic principles of adult learning were not followed. We set an agenda but it was not followed through. If you are going to do it you need to continue. There was no evaluation sheet at the end. I have been to other education programs, such as media training, and I just think the classes were not well done. None of the videos were cued. I felt the program was childlike – we played a lot of games*'. (Diane)

During the course of the year a feeling that educators required '*more than training*' emerged. As Adam said '*It seemed to me as though the midwife had training but she had not been followed up – she did not know how to put it in place. I think you can train people to become an educator*' (Adam). *When you talk about midwives and educators I think so many assume that because they are one, they can be the other. It is not true. Just think of a doctor… he may be brilliant but has no people skills. Are they trained?*' (Sue: PO).

The '*use of games*' in programs was questioned several times, with some describing them as a '*big waste of time*'. The games these expectant and new parents referred to were predominantly the *Drug Cards*, *Is It Labour, Third Stage Game* and *Warning Bells* all of which were in *Games for Childbirth Educators* (Pratt, 1998). The activities in this

well-known book formed the basis of the Teaching Skills for Childbirth Educators a twenty hour training program offered by CAPERS between 1994 and 2000, which many of the educators at the hospitals had attended as professional development. Inappropriate application of games to clinical practice had been an issue of concern to this researcher with these parents comments reinforcing her concerns.

Questioning techniques used by some educators were also identified as problematic, as was program and session structure. Examples of the comments these expectant and new parents made about the antenatal eductors are provided in Table 13 below.

The need to be non-judgemental in their practice and for it to be evidence based were other issues discussed by these expectant and new parents. This comment by Anne summarising their feelings:

> '*A few things came up during the program, which were very directive, such as schedule feeding. I found it really hard when we were told something and then the educator could not back it up. If someone is an authority and they give information then they should be able to back it up*' (Anne:FG).

Issue	Actual Comment Made about Antenatal Educators
Use of games	'***One area*** *that was concentrated on and yet it is one area where there is plenty of information available was drugs. The educator seemed to want to talk about drugs, drugs, and drugs. She put it on the whiteboard, we played games, we spent so much time… it was a waste*' (Adam: 37wks). '***The card activities*** *were good in a way but they went on for too long. We just seemed to spend so much time on the cards and the educator would go through them and it just took ages to get the point across, whereas you could have said in a couple of minutes the point is . . .. But you've actually spent an hour to find out what it was*' (Helen: FG)
Questioning	'***One week*** *we were asked when we should ring the hospital. We gave all the answers and still we were asked, well when else? There was too much questioning. It is crazy being pushed when you have no idea.*' *(*Paul: 37wks). '***Sometimes*** *we were asked really stupid questions, such as "If you are in labour and had Pethidine, how would you feel?" What a stupid question. We had no idea. It is OK to pool resources but when the educator knew we were all first time parents why did she ask*' (Anna: FG)
Program structure	'***I have found*** *the lack of structure quite hard. We keep getting off the track and we seem to repeat a lot. The night we talked about things to buy for the baby we spent so long on individual ideas…everyone has their own opinion. We wanted to hear from the educator what we need*' (Michelle: 38wks). '***Structure - what structure?*** *I thought it (the program) was quite confusing. When I am doing something I want to know why I am there… what we are to achieve. They could have told us what each session would cover so we could miss a session if we wanted to. We went over the same ground many times*' (Robert: 8wks Pn) .

Table 13: Examples of comments made about the antenatal educators

5.5 Summary

The aim of the needs assessment was to explore the concerns and interests of first time expectant and new parents and describe the changing nature of these during the childbearing year. It also aimed to ascertain learning processes that best suited parents needs and plan effective antenatal education. This chapter provided the results from Source One, the expectant and new parents.

Four significant findings from Source One were that current antenatal education was not meeting the needs of these expectant and new parents and that this caused anxiety for many, they were able to provide detail in relation to the structure, content and process by which they recommended antenatal education be provided and they required information on baby care and parenting during pregnancy. As expected, the interviews, focus groups and participant observation provided the richest data with surveys confirming that which was found.

These parents varied in their preferred programs and learning strategies but they all emphasised one size did not fit all and that the childbearing year was a time of learning not, just the later weeks of pregnancy. This latter point being supported by research conducted by Anderson (1994). These expectant and new parents identified three types of programs which would be useful. These were: '*Learning and Discussing*', '*Sharing and Supporting Each Other*', '*Hearing and Discussing Detail*'. They identified the '*essential ingredients*' for each type of program. They also identified specific activities which could be used to facilitate learning. These were: '*seeing and hearing the real experience*', '*practising*', '*discovering*' and '*time to catch up and focus*'.

In making these recommendations these parents did not expect that a hospital would provide every program or strategy, rather there would be collaboration between hospital and community organisations with a '*menu*' including '*dishes*' from both sectors. A criticism that they had of current antenatal education was the lack of knowledge professionals had of services provided other than their own.

The language used by these expectant and new parents was that of a journey. A journey that brought much responsibility for which they had to be prepared, with some requiring more preparation than others. In their effort to be prepared they actively sought

information, help and support on parenting issues throughout the childbearing year, with many surprised by the lack of it until near the end of pregnancy. The adherence to a strict gestational timeline to information provision by professionals also amazed and frustrated the parents. Indeed anxiety and isolation appeared to be outcomes of this deficiency which had a flow on effect to their apparent confidence in being a mum and a dad.

An examination of the questions and comments made by the women and men revealed that the journey of the women differed slightly to that of the men after the early weeks of pregnancy. The majority of the women appeared to connect, and be interested in, their baby by the thirteenth week, whereas for the men there was a delay until the ultrasound at approximately the eighteenth week. Seeing the baby on the screen provided a sense of reality for the men, a phenomenon which has been noted in previous research (Draper, 2002). Men then became far more interested in the growth and development of the foetus and their infant, and physiological processes of labour, as the year progressed, whereas the women appeared keen to learn practical tips about baby care and breastfeeding. Men, like the women, appeared frustrated and anxious when their information needs were not met, which reinforced the recommendations of other recent research that men have specific needs and that they should be integrated into antenatal education (Schott, 2002; Somers-Smith, 1999) .

These expectant and new parents rarely used words such as ‘taught’ and ‘classes’ preferring to be actively involved in their learning. The activities they preferred, that is active involvement of learning through problem solving, discussion, observation, and using self-directed, practise and experiential activities, were those recommended in adult learning literature (Killen, 1998).

The criticisms these expectant and new parents had in relation to the educators could have been dealt with by a manager, or peer, observing and supporting an educator in their practice. Participant observation in this needs assessment proved to be an excellent strategy to determine the interplay between educator and the parents. Incorporation of this into practice would increase the profile of antenatal education in the health services arena.

Finally the use of program process evaluation surveys, that is a survey completed by participants during the final session of a program, as the chief method used to plan effective antenatal education in Australia must be questioned. Surveys are a time and cost effective method of collecting data, however it was predominantly through interviews, focus groups and the postnatal surveys that these parents expressed their needs and a thoughtful critique of programs emerged. Needs assessment differs from program evaluation and as such the methodologies should be different (Hawe, Degeling, & Hall, 1990).

Chapter Six: Needs Assessment Results from the Experts and Program Documentation

6.1 Introduction

This chapter presents the results from the primary care providers of the expectant and new parents who were referred to as a group called the 'experts'. They were antenatal educators, midwives and child and family health nurses (CFHN). The antenatal education program documentation collected from the Parent Education Coordinators of three hospitals of similar size and services to Hospitals A and B is also reported here.

Data was collected from the experts in this needs assessment through focus groups (FG), participant observation (PO) and surveys (S) with open-ended questions. The actual words used by participants have been retained and are identified using italics. This strengthened the authenticity of reporting the results and the categorising and interpretations made by the researcher. A bracket with a pseudonym name and code follows longer comments and questions that capture important views of the majority, or those that are polarised. The name identifies the expert who asked the question, or made the comment, and the code identifies the group from which the expert came. These codes were 'Ed' for antenatal educators, 'Mw' for midwife, 'CFHN' for child and family health nurse.

The expert insights related to preparing expectant and new parents for childbirth and parenting have been divided into two categories. These are:

- The perception the experts have of the concerns and interests expectant and new parents during the childbearing year;
- How they believe antenatal education should be provided.

6.2 Concerns and Interests of Expectant and New Parents as Perceived by the Experts

The concerns and interests of these expectant and new parents as perceived by the experts were divided into three interrelated categories. These were '*need to know…what's happening*', '*they won't listen*' and '*balanced information*'. Each of these areas are discussed below.

6.2.1 Need to Know… '*What's Happening*'

The experts agreed with the parents when they recognised that expectant and new parents were interested in knowing '*the milestones in pregnancy and after birth'* and they were '*happy to go through them with the women*'. As Jill (Mw) said '*every visit she comes along with a printout from the web and wants to check that the milestones listed are actually right*'. It appeared, however, that focussed training, specialisation and delineation of clinical practice of these experts limited their range of knowledge of parental concerns at different stages of pregnancy and subsequently their ability to discuss them. For example antenatal clinic midwives felt comfortable addressing questions about '*what's happening*' in pregnancy, delivery suite staff could easily address labour issues, postnatal midwives were able to discuss the immediate postnatal period and CFHNs were confident about topics concerning the '*mum*' and the growth and development of the baby. The majority in each group described that they felt '*uncomfortable*' when they were asked questions related to another area of expertise. It took them out of their '*comfort zone*'.

The experts perceived these expectant and new parents also had an interest in knowing '*what happens in relation to practice issues*' so they could make informed decisions. Probing revealed, however, that the '*practice issues*' information these experts believed should be provided during the childbearing year differed from those described by parents. Indeed comments, such as the following made by the experts, indicated the experts placed an emphasis on policy and procedure of the service or the institution. They need to know '*when to come to hospital*', '*what they can eat and drink in labour*', '*that they will have a catheter if they have an epidural*', '*that the midwife will not be with them throughout labour*' and '*that they should ring the hospital before they come in*'. Postnatal midwives stating '*they need to know how long they will be in hospital and about the classes held on the ward. They need to be told that they have to leave within 48 hours to be eligible for DMP* (Domiciliary Midwifery Program)'. There appeared two reasons for this '*need to know*'. One was to provide guidelines and direction to women and their partners, with a second, covert reason being to help the staff meet institutional requirements.

6.2.1 'They won't listen'

There was an overwhelming belief amongst the experts that expectant and new parents '*really need to know about how to care for their baby*' but '*they won't listen*' during pregnancy. For example '*they won't listen to anything about the baby*'(Mw FG), '*about what it's really like to be a Mum and a Dad*' (Ed FG), or '*about breastfeeding*' (CFHN FG). The reason proposed was '*they are too focused on the BIRTH*'. Some described pregnant women as '*cocooned in a bubble*' and '*they are in a world of their own*' (Mw). Within and between groups of experts there was an underlying impression that pregnant women had '*tunnel vision*' and were '*incapable of thinking beyond the birth*' (Mw FG). This was, however, challenged by the women interviewed as they felt some '*midwives and doctors*' appeared to '*separate the uterus, developing baby and the breasts from the body of an employed, confident woman who had a personal life*' and '*cared for the former, not the latter*'(Diane: 8wksPn).

Further questioning by the researcher about the notion that '*they won't listen*' revealed the argument posed by the experts lacked justification. For example the antenatal educators said they had women and men in recent programs who had asked questions about topics such as breastfeeding, settling techniques, controlled crying, and developing a routine for your baby, however they hastened to add '*well maybe they are interested but we don't have time to discuss them in detail…by the time we get through labour*' (Emma, Ed). As Judy (Ed) reinforced '*two of the seven sessions are now on life after the birth. Maybe we should do three but it would be hard to fit it all in. They need to know all of the birth stuff*'.

The '*time*' issue, as it became known, was of importance to the experts in particular the antenatal educators as they felt they weren't '*doing our job*' if they did not '*cover all of the labour and birth information*'. Similarly the antenatal clinics midwives felt they were not doing their job if they did not '*conduct a thorough physical examination*' during an antenatal visit. It appeared however that a lack of time provided another excuse for not changing their practice.

Indeed through probing it became apparent by the language and gestures used that each group of experts was in a position of authority because they knew what expectant and new parents needed from their practice, and as such it did not need to change.

Participant observation of programs during the childbearing year reinforced that there was an apparent unwillingness to change and broaden their focus of the information they currently provided.

6.2.2 '*Balanced Information*'

The rhetoric of experts portrayed a commitment to providing women and men with '*balanced information so they can make decisions*'. There was however inconsistency between this commitment and what they told women. For example when asked how they addressed infant feeding and circumcision, two topics that NSW Health had a policy on, they said they followed NSW Health policy. When challenged by the researcher that '*by doing this you are contradicting your earlier comment because policy limits the options available to these expectant and new parents, you are not giving balanced information',* their response was '*but policy is policy - after all it is best for the couple*' (Mw).

Personal bias was also evident in the practice of some of the experts. For example midwives had a tendency to say '*well we all know midwifery based care is the best. I tell women that it is better to go through the midwives clinic rather than the doctor*s' (Suzanne: Mw).

6.3 The Experts Ideas for Improving Antenatal Education

One of the most significant findings from the experts participating in this needs assessment was their constant return to current programs and structure when asked for their recommendations for providing effective antenatal education. Although they said current programs were '*most appropriate for couples*' the underlying reluctance and apprehension to change from a structure that was familiar became evident again. '*I can't think of how else to do it…the seven week program is THE best*' (Ed) '*I'm really reluctant to move from a structure I know. What we are doing is OK.*' (Ed).

Probing during the expert focus groups, participant observation and surveys ultimately revealed three themes arising from their recommendations related to improving antenatal education. These were '*maybe we could'*, '*networking is important'* and '*getting them involved*'.

6.3.1 *'Maybe we Could'*

To encourage creativity within the focus groups the experts were asked the following question by the researcher. '*If you had unlimited resources, how would you provide expectant and new parents with the information and skills they require during the childbearing year*?' Their responses, which appeared tentative because each group preceded their recommendations with a phrase such as '*well maybe we could*', are listed below. Sue's comment however, which accompanies the first recommendation, captured the essence of the changes in society and it created a ripple effect of innovative ideas from one of the educator focus groups.

- **Pregnancy, birth and beyond sessions in schools**. '*Well I think we really need to educate children because they're not exposed to pregnancy as they were years ago. They don't see their mums breastfeeding. I think we need to get in well before they become pregnant*' (Sue: Ed FG).
- **Television health updates**. '*During peak viewing times you could have a quick health update quick on pregnancy, birth, feeding or any of the related issues. It only needs a minute or two*' (Emma: Mw FG).
- **Preconception workshops**. '*We could cover many topics, such as how to maximize your chance of becoming pregnant, environmental factors, diet, tests…hmm the list goes on*' (Anne: Ed FG).
- **Basic pregnancy package to be distributed by General Practitioners**. '*Some GPs give women the NSW Health booklets, others just say "well the test is positive". It is no wonder couples head straight to the bookshop*' (Judith: Mw FG).
- **Early pregnancy programs**. '*I know we have tried them and we could not get the numbers….if only GPs told women about them. There is so much they need to know about diet, alcohol, caffeine, exercise and antenatal tests*' (Jane: Ed FG).
- **Coffee mornings for pregnant women**. '*Like a NMAA* (Nursing Mothers Association of Australia) *meeting, so women can just chat*' (Carol: Ed FG).
- **A seven week program in the third trimester of pregnancy**. '*I know it is what we already have but it seems the best*' (Kylie: Ed FG).

These experts found it very difficult to '*think outside the box*' beyond programs that were already available. This was in stark contrast to the wide variety of programs and strategies provided by the expectant and new parents. Parents were able to describe in much richer detail the characteristics of the programs they would find the most useful as presented in Chapter Five.

6.2.2 '*Networking is Important*'

The antenatal educators and CFHNs recognised that '*pregnant women, mums and dads need a support network*', but minimal consideration was given to this idea by the midwives in the antenatal clinic, delivery suite, birth centre and postnatal ward. The '*time*' issue appeared problematic again because as Sarah, a midwife in the antenatal clinic, said '*we simply do not have the time to think about anything except what is required* (physical care) *during the visit*' (Mw).

The antenatal educators said it was '*imperative that the hospital provide a six or seven week antenatal program*' so women and their partners could *'form friendships…form a network*'. There was some recognition that with many women employed and a reduction in the size of family networks, developing a support network before the birth was important for women and their partners. Liz's (Ed FG) comment typified those of the other educators. '*Couples need a 6 or 7 week program like we have…they need the support*'.

6.3.2 *'Getting Them Involved'*

There was a commitment amongst the educators interviewed to have both women and men '*involved in their learning*'. Their view of having them involved was to have an '*agenda setting exercise at the beginning of each program*', '*have frequent small group discussions in the program*' and '*use the games we have learned in workshops*'.

The learning activities the experts believed expectant and new parents preferred were predominantly those they themselves had learned from childbirth education books or training. Card activities, frequently called games, and videos were their favoured strategies. The explanations they provided were card activities '*involve the* group' and '*encourage decision-making by couples*' (Margaret: Ed FG). Videos '*show the couples what can happen*' and '*they give a sense of reality*'. As far as birth videos were

concerned '*they need to be seen so they understand what may happen…then they can discuss what they would do*' (Anne: Ed).

When questioned further on these opinions, two important issues arose. Firstly it appeared that the educators incorrectly believed card games, which required the women and men to sort cards into correct sequence, were problem solving activities. The educators' response to this point when it was highlighted by the researcher was '*well the group may not know the answer so we should give them some prompts*'. Secondly, in relation to the videos it seemed that they all thought couples should see the videos, although there was an acceptance of the researcher's comment that some groups and '*participants may think otherwise*.' Once again it appeared that the educators believed they knew what the expectant parents needed in their program and being in a position of power they were reluctant to change their practice.

In relation to baby care and parenting activities only one of the educators participating in this needs assessment had incorporated any innovative strategies, such as those recommended by expectant and new parents, into her practice. Indeed the inclusion of a postnatal couple in a class, one of the strategies recommended, had been and remained contentious. These comments made by Judy, Annette, Gail and Kim demonstrating their opposing views. '*Learning from peers is a great idea, but who would decide who should attend…maybe it should be more than one couple*' (Judy: Ed FG) '*The* (postnatal) *couple could offload all their bad experiences and feelings. It could be a nightmare*' (Annette: Ed FG) '*I'm not mad on the idea of new parents attending a class. I find it hard enough to get through the hundreds of topics we already need as it is. The idea may be a good one BUT I don't think it will achieve much in practice*' (Gail: Ed FG). '*Asking a couple with their baby to a class would be great as they* (the participants) *could learn from their experience*' (Kim: Ed FG).

'*Getting them involved*' as far as the midwives and child and family health nurses were concerned translated into '*I recommend that they all go to antenatal classes as that is where they can learn all they have to*' (Michelle: Mw FG). Although this appeared an appropriate action, with hospitals A and B only providing antenatal education programs in the final weeks of pregnancy at the time of the needs assessment, and the limited time

allocated for antenatal clinic consultations, it meant that there was a significant gap in the antenatal education accessible to women and men during the childbearing year.

6.4 Source Three: Program Documentation

The third source of data collected for this needs assessment was program outline and session plan documents provided by the Parent Education Coordinators of three comparable hospitals. A comparison of the attributes of the three hospitals programs demonstrated that the standard antenatal education program was a seven-session program held at the hospital, with each session being two hours in length. The programs were attended by women and their partners during the final weeks of pregnancy, and at two of the hospitals the group had an informal reunion approximately six weeks after the last baby in the group was born. A maximum of ten couples attended each program.

The program documentation from each hospital included an outline of the program, the stated aim of the program and session plans. In addition two of the hospitals provided the objectives for each session of the program. The text of each document was similar to each other and also to that of Hospitals A and B where this needs assessment was being conducted. This similarity occurred because in the early 1990's when the NSW Parent Education Coordinators network was established one of the first projects of the network was to prepare generic program outlines and session plans, which were then adapted to the local needs of each hospital. It appeared from this review that the aims and objectives essentially remained unchanged from that developed by the network, with the topic areas only changing slightly. Table 14 presents the topics by order of which they were presented. There was segregation of topics in each program with five sessions covering labour and birth, and two on postnatal issues and baby care.

The main difference between the programs was the learning activities included in each one. Each program began with an agenda setting activity in order to identify the need of each group and as such tailor the program to satisfy their needs. It appeared, however, from discussion with the Parent Education Coordinators that although the educators used this activity only a small percent changed the content and presentation of their programs accordingly.

Mini lecture, large and small group discussions, demonstrations and videos were the learning activities used in each program. The amount of time allocated to each varied as did the style of presentation within each category. A notable feature was that each of the activities were teacher-centred, not learner centred as recommended by the expectant and new parents.

The Parent Education Coordinators at the three hospitals had attended the CAPERS Teaching Skills training program for antenatal educators, which was discussed in Chapter Three. As a result they had incorporated many of the games provided in the book 'Games for Childbirth Education' (Pratt, 1998) into their programs. Although this training program included the principles of adult learning and program design, it appeared that educators often included games in their programs simply to provide variety of presentation. Their use was not grounded in adult learning theory, a point which was highlighted by the expectant and new parents in this needs assessment. Table 15 provides a list of the learning activities included in each program. From this table it is noted that only Hospital C included problem solving activities in their program. Problem solving activities were recommended by expectant and new parents and they have also been shown to substantially increase retention of information and skills when compared to other learning activities.

When this program documentation was compared to that of Hospitals A and B the content and learning activities were very similar, as they were to other programs in other public hospitals in Australia (NACE conference delegates, 2001a). The majority had been designed by health professionals with minor changes being made in response to program process evaluation data. Indeed with the increasing occurrence of under-resourcing occurring in public and private hospitals, an issue that was discussed in Chapter Three, the amount of evidence-based change was decreasing.

Topics	Hosp C	Hosp D	Hosp E
Physical & emotional changes in late pregnancy	√	√	√
Pelvic floor exercises	√	√	√
Back care	√	-	-
Normal labour and childbirth	√	√	√
Pain in labour – physiology and coping strategies	√	√	√
Drugs – side effects and uses	√	√	√
Role of support person	√	√	√
Decision making in labour	√	√	√
Intervention in labour	√	√	√
Expectations & fears of labour	√	-	-
Unexpected outcomes	-	-	√
Hospital services & policies	√	√	√
Relaxation techniques	-	√	-
Breastfeeding	√	√	√
Caring for baby i.e. nappies, clothing, equipment	√	√	√
Sleeping patterns and settling a baby	√	√	√
Newborn behaviour	√	-	-
Postnatal depression	√	√	√
Roles and responsibilities of new parents	√	√	√
Community resources for new parents	√	√	√

Table 14: Topics by order of presentation and hospital

Learning Activity	Hosp C	Hosp D	Hosp E
Agenda setting exercise	√	√	√
Mini lecture	√	√	√
Large group discussion	√	√	√
Small group discussion	√	√	√
Problem solving activities	√	-	-
Demonstration of positions for labour	√	√	√
Is it labour? activity	√	-	√
Labour videos	√	√	√
Labour line activity	-	-	√
Labour role play	-	√	-
Labour goody bag	√	-	-
Practice folding nappies	-	√	-
Crying baby tape	√	-	√
Warning Bells activity	√	√	√
Demonstration bathing a doll	-	√	-
Characteristics of the newborn video	√	√	√
Hush-a-Bye video	√	√	√
Baby of Mine video	√	√	√

Table 15: Learning activities included in each program

6.5 Summary

The aim of this chapter was to present and analyse the results of the needs assessment of experts and documentation, and in so doing compare these results to those of the expectant and new parents in Chapter Five. In doing this there have been several significant findings which require further exploration. These are the reluctance by the experts to change their practice, the apparent power these experts had over the expectant and new parents under their care, and the lack of coordination between services.

Although a lack of time was proposed as the main reason these experts were reluctant to change their practice, it appeared that their training, specialisation and delineation of clinical practice were the more significant reasons for this problem. Each group of experts had their distinct '*comfort zone*' which for the midwives and child and family health nurses corresponded to a gestational stage of the childbearing year. Indeed only the antenatal educators practice bridged gestational stages, and even then their preferred focus was on pregnancy and only the first couple of weeks after the birth. This delineation was counter to that required by the expectant and new parents of this needs assessment. It meant that if antenatal education was to be effective during the childbearing year experts may require further training.

Underlying all of the data provided by the experts and the program documentation was a sense of power over the expectant and new parents under their care. The experts did not agree with this notion when it was presented, however their language and gestures confirmed its presence. As Svensson rather controversially stated during a presentation at the National Association of Childbirth Educators in 2002 (Svensson & Handfield, 2001b) antenatal educators and midwives are the '*need to know*' brigade. Expectant couples '*need to know how to breathe*', '*they need to know the side effects of pethidine to discourage them from having it*', '*they need to know the benefits of active labour, to reduce their chance of having an assisted birth*' and '*they need to know about epidurals*', '*episiotomies*' *and* '*every benefit of breastfeeding to prevent them doing anything else*'. As Svensson continued:

> 'you may think I am being cynical, but these remarks are genuine. They are from educators here in Australia and I could give many more examples. Educators, midwives and child and family health nurses out of an anxiety to help prospective

parents, seem to have fallen into the trap of making everything too scientific, too professional and that THEY, the parents, need an expert to give them the answers' (Svensson & Handfield, 2001b).

Although there is some rationale for this belief, the way that the information is preached to the parents hinders its translation into practice. When this was highlighted to the experts their limited comfort zones became apparent again. It, therefore, appears that their training, specialisation and delineation of practice are significant issues in the plight to provide effective antenatal education. The experts, in reality, use their educational resources and activities in an instrumental fashion, rather than as tools for learning and enlightenment.

Another significant finding in this needs assessment was that there was a lack of communication between each group of experts with a resultant lack of coordination in care provided. The educators interviewed appeared to be the only group of experts who bridged speciality boundaries, however, in their practice there was an over-emphasis on pregnancy, labour and birth and an under-emphasis on parenting.

Chapter Seven: Design and Evaluation of New Strategies

7.1 Introduction

The needs assessment demonstrated that to prepare expectant and new parents more effectively for their childbearing year a wider variety of programs and strategies, with increased parenting content and improved adult learning activities, were required. To enable such programs to be implemented antenatal educators required skill development in group facilitation and resources which could assist them to quickly and easily modify sessions to suit the needs of the group.

This chapter examines four initiatives that were developed from the results of the needs assessment. These initiatives were a *Having a Baby* program which was an antenatal education program attended '*towards the end of pregnancy*', Becoming a Parent: A Handbook for Antenatal Educators, a Basic Group Skills Training Program for Antenatal Educators and Breastfeeding and You: A Handbook for Antenatal Educators. An evaluation of three of these initiatives was undertaken and the results are presented either in this chapter or on the accompanying Compact Disc. The chapter concludes with an outline of a menu approach to antenatal education which evolved concurrently with the development of the *Having a Baby* program at Hospital A, but was not implemented until after the randomised control trial of the Having a Baby program.

7.2 Having a Baby Program

7.2.1 Design of The Program

Expectant and new parents identified a '*learning and discussing*' program '*towards the end*' of pregnancy as a priority strategy by which antenatal education could be improved. The '*essential ingredients*', defined in Chapter Five, provided the structure from which the program was designed. The structure, as presented in Table 16, was:

Program length	Eight sessions. Seven attended in the final weeks of pregnancy and a reunion after birth
Session length	Two hours
Session frequency	Weekly
Group size	10 women and their partners
Educator	One
Venue	Hospital

Table 16: '*Essential ingredients*' of the *Having a Baby* program

The session content and learning activities were allocated within this program structure using a colour-coded card process, similar to that used by Svensson and Pratt (1995) in Teaching Skills workshops, and described by Priest and Schott (1993). In the design of this program the colours identified the categories of learning activities, rather than topics as in previous use. This change was because the principal objective of this program was on the learning outcomes for participants, rather than topics that would be covered in the program.

The design process involved the following steps:

- Each topic which was identified by the expectant and new parents as being of interest during the final weeks of pregnancy was written on a white card. The topics are listed in Appendix Nine A.
- All the learning activities recommended by the expectant and new parents for use during a '*learning and discussing*' program '*towards the end of pregnancy*', which are listed in Appendix Nine A, were written on a series of yellow, green, pink and mauve coloured cards. Each of these colours identified the category of learning activity to which the card belonged. The names of the four categories, which were discussed in Chapter Five, and their colours are presented in Figure 2.

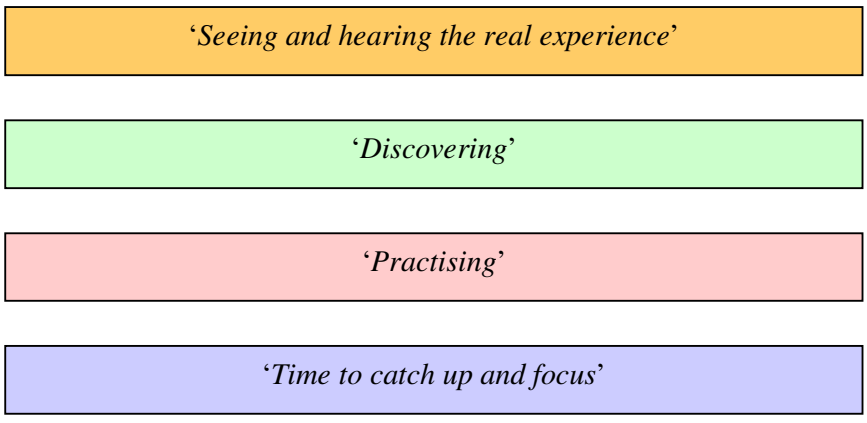


Figure 2: Learning activities by colour

- Each of the learning activity cards were placed on a table and white topic cards assigned to each activity. For example bathing a baby in the postnatal ward, which was categorised as a '*seeing and hearing the real experience*' activity, was written on a yellow card and allocated several topics as shown in Figure 3. When more than

one activity was able to cover a topic, the topic was written on several cards, the result being a selection of methods by which the topic could be covered in the program.

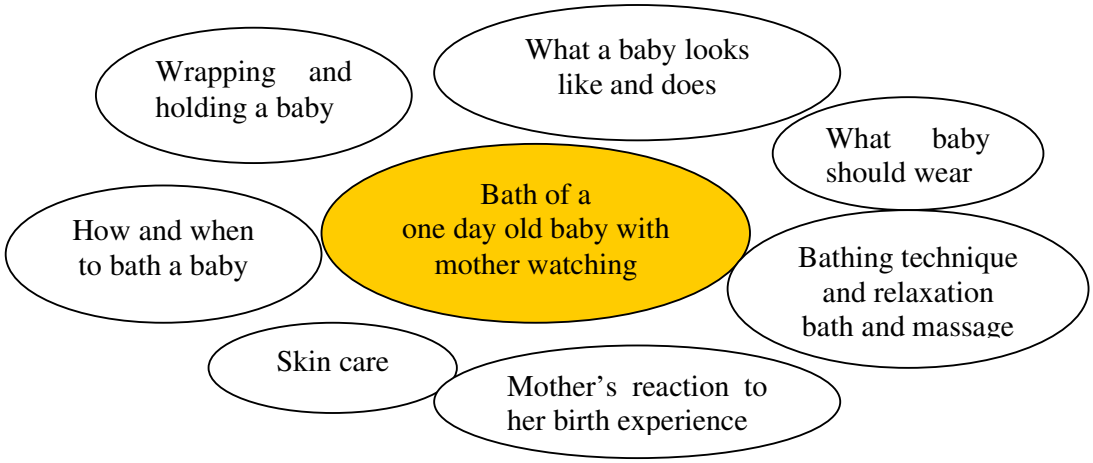


Figure 3: '*Seeing and hearing the real experience*' learning activity surrounded by topic cards

- Seven white cards were numbered and placed beside each other on the table. These represented the seven sessions in the program.
- The learning activity cards and their attached topic cards were then allocated sessions, and finally they were placed in order of presentation in a session.
- Each session was then checked for variety of learning activities and integration of topics. Appendix Ten illustrates the learning activities and topics to be covered in session one of the *Having a Baby* program. Figure 4 outlines the learning activities for sessions one to three. These figures illustrate a patchwork effect in the sessions and, as such, a blend of learning approaches. This is the desired outcome because it represents variety within a session which should stimulate the minds of the adult learners participating. The detailed session plans of the *Having a Baby* program are provided in Appendix Eleven.

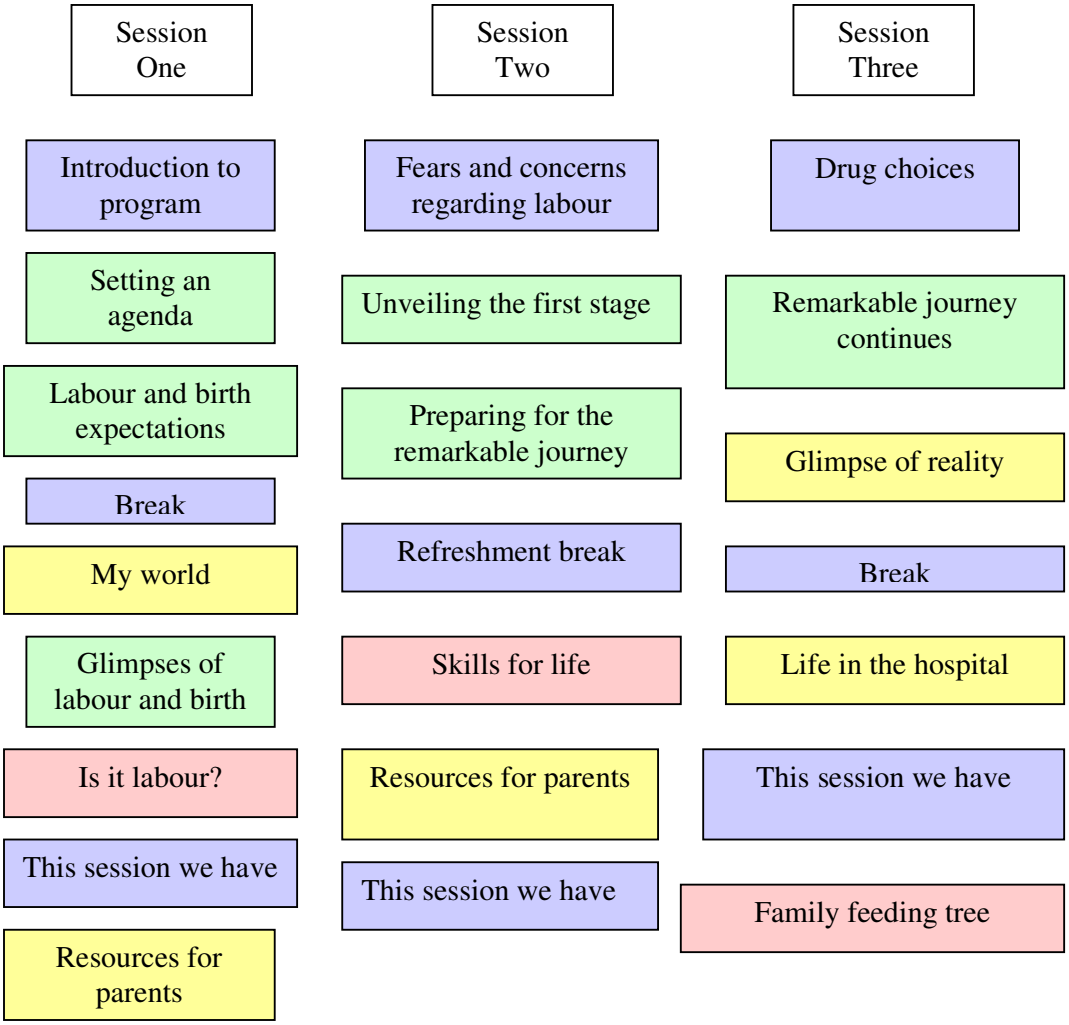


Figure 4: Learning activities for sessions one, two and three of the Having a Baby program

7.2.2 Features of the New *Having a Baby* Program

There were many features unique to the new *Having a Baby* program. They are listed below and are summarised in Table 17.

- Labour, birth and the early days and weeks with a new baby were regarded as a microcosm of the childbearing experience and not identified or taught as separate topics. For example the first hour of a baby's life outside the uterus was discussed alongside the birth of the placenta and the other processes that occur in the third

and fourth stages of labour. This integrated approach aimed to unify the childbearing experience and promote having a baby as a life transition.

- Relaxation and distraction strategies such as massage, positioning and breathing techniques, traditionally taught as skills for labour, were presented as life skills which individuals may have some experience of and could be used to reduce stress and anxiety unrelated to childbirth in the future. This point was supported by Schott in the second edition of 'Leading Antenatal Classes' (Priest & Schott, 1993).
- Men were treated as an integral part of the childbearing experience recognising that they also have interests, concerns and needs. Stress and anxiety, accompanied by the demands of a newborn, the fatigue that accompanies frequent feeding and disrupted intimacy appear to account for some of the impact on men's psychological health and as such they were discussed.
- Each session commenced with a '*time to catch up and focus*' activity. The inclusion of these activities was a recognition that the forming stage of group formation occurs at the commencement of each session, not just the beginning of a program (Western Sydney Area Health Promotion Centre, 1988). During this stage participant anxiety levels are high with retention of information low. The activities, however, were relevant and added to the totality of the learning experience.
- Problem-solving activities, categorised as '*practising*', replaced the majority of the games used in conventional programs. The use of these activities enhanced the innate problem-solving skills of these women and men.
- Many small and large group discussions focussed on psychosocial and emotional issues. For example, '*What, for you, is the worst thing that could happen during labour?*', '*As a labouring woman I would like…*', '*As a partner in labour I can give…*' and '*How do you feel about becoming a mother/father*?' The needs assessment and anecdotal evidence demonstrated that childbearing women and their partners valued an expression and discussion on issues of concern. Conventional antenatal education did not allow this expression because it predominantly used decision making activities rather than focussed discussions.
- Take home activities were included to promote on-going discussion and '*discovery*' on several issues. For example, participants were given '*Resources in your community for parents'* and '*Family Feeding Tree*' sheets to complete and discuss. Take home activities were not typically used in conventional programs.

- '*Seeing and hearing the real experience*' activities were interactive because they involved discussion with new parents and a new mother with her baby. Conventional programs used film or manikin models to simulate the real experience.

7.2.3 Features of the Conventional Antenatal Education Program

Stage Three of this research was a randomised control trial to test the effectiveness of the new *Having a Baby* program compared to conventional antenatal education. The features of the conventional program, which was used as the control, are listed below and are summarised in Table 17. The conventional program was similar to that provided in many hospitals in Australia.

- Structure of conventional program was the same as the new program, that is seven two-hour sessions facilitated by one antenatal educator, which women and their partners attended in the final weeks of pregnancy.
- Labour, birth and the early days and weeks with a new baby were identified and taught as separate topics.
- Labour and relaxation strategies, such as massage, positioning and breathing techniques, were taught as skills for labour.
- Card games, such as '*the Drugs*', '*Is it labour*' and '*Warning Bells'*, were used to introduce or reinforce topics rather than problem solving activities.
- '*Seeing and hearing the real experience*' activities, for example, life with a new baby and newborn characteristics, were covered through the inclusion of videos such as '*Baby of Mine*' and '*Characteristics of a Newborn*'.
- There was minimal time spent in the conventional program on problem solving or experiential activities.
- There was less time spent on parenting issues.
- The conventional program was mainly facilitator-centred, whereas the new program was learner-centred.

With both programs, the first session commenced with an agenda setting activity which permitted an expression of specific learning needs by group participants. The list of needs was maintained during the program with the facilitator modifying the sequence of learning activities within the program to meet the needs of the group. Each session concluded with a summary of the session and an overview of the following sessions. This summary and overview allowed the program to be flexible and yet provided a structure for participants.

Feature	New	Conventional
Labour, birth and early weeks with a baby	Integrated approach unifying the childbearing processes and this life transition	Segregation of topics
Relaxation strategies	Presented as life skills	Taught as labour skills
Time to catch up and focus activity	Each session commenced with a time to focus activity. They added to totality of the program	Sessions one and three commenced with an icebreaker unrelated to session content
Problem solving activities	Self-directed Birth and parenting scenarios	Facilitator directed Games with answers provided
Mini lecture by facilitator	20% of program	30% of program
Large group learning	50% of program Discussions Experiential Reality based Participative	40% of program Discussions Demonstrations Videos
Small group learning	30% of program Discussions Problem solving	30% of program Discussions Decision making
Small and large group discussions	40% of group discussions focussed on psychosocial and emotional issues	20% of group discussions focussed on psychosocial and emotional issues
Take home activities	Each session	Nil

Table 17: Comparison of the new and conventional programs

7.2.4 Management of the New Program

The working party which was established to oversee and guide the conduct of the needs assessment, (page 61), also oversaw the development of the new program. On completion of the design of the new program a pilot study was conducted to tease out problems in its facilitation. A randomised trial to test the effectiveness of this new program compared with that of the conventional antenatal education program at Hospital A was then conducted and is described in Chapter Eight. The specific training process of the educators facilitating the new program is also detailed in Chapter Eight. In summary the training was four hours in length and the educators were instructed to include all learning activities outlined in the new *Having a Baby* program session plans which are presented in Appendix Eleven. They could, however, change the order of the activities within the program. Flexibility and in particular, providing information when it is requested or required facilitates adult learning (Brookfield, 1996; Knowles, 1968).

7.2.5 *Having a Baby* Program Process Evaluation and Results

During the conduct of the randomised control trial to test the effectiveness of the experimental program in comparison to the conventional program, process evaluation data from the program was collected from both female and male participants in both experimental and control groups, through the use of a survey. The 11-item *Having a Baby* program process evaluation survey, which is provided in Appendix Twelve, was the second of three surveys used in the randomised control trial. The survey asked participants to:

- Rate their perceived knowledge on eleven topics included in the program;
- Rate the usefulness of the learning activities included in the program;
- State what they liked most about the program;
- State what they liked least about the program;
- Identify how the program could be improved;
- State if they would have liked information earlier in the program;
- Rate the program length and group size;
- Make any final comments.

The survey was completed at the end of the final session of both new and conventional programs. The survey was completed by 91 women and 88 men attending the new *Having a Baby* program, and 79 women and men attending the conventional program.

The results provided in this chapter are from Survey Two completed as one component of the randomised control trial. The questions were predominantly open-ended and content analysis was conducted on the response. Data was coded and respondents were able to provide more than one response to these questions. Simple descriptive statistics, frequencies and χ^2 were used to measure nominal and ordinal data and differences between group means. A summary of the women's and men's responses to the open-ended questions is presented below. The rating of their perceived knowledge at the end of the program is provided in Chapters Eight and Nine.

The responses to the open-ended questions, '*What did you like most about the program*?' and 'W*hat did you like least about the program*?' were categorised according to key words used by participants. Participants provided more than one response to the open-ended questions. Frequencies and proportions are presented in Table 18 by group and gender. To determine their feeling about the length of the program participants were asked to rate whether it was '*too short*', '*just right*' or '*too long*'. Their responses are also provided in Table 18 .

	New Having a Baby Program		Conventional Program	
	Women n =91 number (%)	Men n = 88 number (%)	Women = 79 number (%)	Men n =79 number (%)
Liked most about program*				
• Meeting others	21 (23)	16 (18)	20 (25)	14 (18)
• Hospital tour	4 (4)	10 (11)	12 (27)	18 (22)
• Baby bath / newborn	26 (29)	18 (21)	17 (13)	14 (18)
• New parents	23 (25)	18 (21)	N/A	N/A
• Informal approach	10 (11)	11 (12)	16 (19)	12 (15)
• Information gained	7 (8)	15 (17)	14 (18)	21 (27)
Liked least about program*				
• Program time	4 (4)	12 (14)	5 (6)	10 (13)
• Facilitator rambled	9 (10)	8 (9)	9 (12)	7 (9)
• Birth videos	5 (6)	2 (2)	5 (6)	5 (6)
• Too birth focussed	11 (12)	6 (7)	17 (22)	12 (15)
• Nothing disliked	62 (68)	60 (68)	43 (54)	45 (57)
Program length#				
• Too short	9 (10)	7 (8)	4 (5)	4 (5)
• Just right	82 (90)	78 (89)	67 (85)	61 (77)
• Too long	0 (0)	3 (3)	8 (10)	14 (18)

* Content analysis conducted on open-ended questions. # Chi-square was used to test for difference between groups.

Table 18: Likes and dislikes about the *Having a Baby* program by allocated group

Due to the use of different learning activities in new and conventional programs, it was difficult to make between group comparisons for '*what they liked most about the program*'. Nevertheless the two activities most liked by women in the conventional program in order of frequency were the hospital tour and meeting with others. For men in the conventional program it was the information gained and the hospital tour which they liked the most. Whereas, in the new program, both men and women preferred the session on the baby bath and what it is like to be a new parent the most. That is, new program participants preferred sessions which focussed on parenting issues and those which used more experiential processes.

It is interesting to note that 19% of women in the conventional group compared to 11% in the new program reported the informal approach of the presenter as the component they liked most about the program. Also men and women in the conventional program compared to the new program more frequently reported that the information gained from the program was the element they most liked (conventional program men 27% vs. new program men 17%; conventional program women 18% vs. new program women 8%). This may reflect the difference in the learning processes used with the educators in the conventional programs being more directive and using more mini lectures than the new program. The new program uses participatory learning and problem solving rather than teaching information and the educator takes less of a central role in 'providing information'. It may be that individuals in the new program felt they learned less because of the self directed learning activities used in the new program. The level of knowledge obtained by participants from the two programs is examined in the next chapter which compares the relative effectiveness of the programs.

In both programs, men were more likely than women to report most liking the information received during the program. These differences may be due to gender preferences and the different goals for men and women for attending childbirth and parenting education. Between 23-25% of women and 18 % of men in both programs most liked meeting other parents during the programs. This response is congruent with that of previous published and unpublished research reinforcing that women and men attended childbirth classes for reasons other than gaining information from an educator.

In relation to '*what they liked least about the program'*, a greater proportion of women and men attending the new program compared to the conventional program stated there was '*nothing*' they disliked about the program (new program women 68% vs. conventional program women 54%, new program men 68% vs. conventional program men 57%). The program being too birth focused was most frequently identified by all women as the most disliked element. However 22% of women in the conventional group said they disliked the birth focus compared to 12% of women in the new program. Men in the conventional group also reported the programs were too birth focused. However, men in the new program reported that the time of the program was what they liked least.

The majority of participants in both programs reported the duration of the programs was just right. But a larger proportion of both men and women in the conventional compared to the new program reported that the program was too long. The difference was statistically significant for women (χ^2 = 10.6 p =0.005) and men (χ^2 = 9.6 p =0.008).

In addition to the above, participants were asked to make recommendations as to how the programs could be improved. A summary is presented in Table 19. More than half the men and women in both programs reported that more time was required in the programs. Women in both groups were more likely to report wanting more time than men (women 65-70% vs. men 51-53%). The majority stated that more time should be spent on a number of topics, with '*caring for baby'* being the topic with the highest frequency in all groups (25- 33%). Breastfeeding was also consistently identified as requiring more time (10-17%). Only a small proportion of participants felt less time should be spent on topics (6-13%), with '*labour'* and '*pain relief strategies'* being the two topics most frequently mentioned by these individuals.

More than half the women and men in the new program felt the program was '*fine as it is*', whereas only 32% percent of the women and 26% or men in the conventional program reported the program was fine as it was. This difference was statistically significant for women (χ^2 = 8.22 p =0.003) and men (χ^2 = 12.29 p <0.001). One learning activity that participants in the conventional program recommended was the inclusion of some '*time with new parents*'.

The need to continue the program over the postnatal period was identified by 25-34% of individuals in both programs. However the participants of the conventional program were more likely than the new program to want at least half the program during the postnatal period (20% conventional vs. 11% new).

	Experimental		Control	
	Women n =91 number (%)	Men n = 88 number (%)	Women = 79 number (%)	Men n =79 number (%)
More time in program	59 (65)	45 (51)	56 (70)	42 (53)
More time on:				
• Labour	3/59 (5)	4/45 (9)	3/56 (5)	1/42 (2)
• Caesarean section	2/59 (3)	4/45 (9)	3/56 (5)	3/42 (8)
• Changes after birth	13/59 (22)	3/45 (7)	7/56 (13)	6/42 (14)
• Postnatal depression	4/59 (7)	3/45 (7)	5/56 (10)	1/42 (2)
• Caring for baby	17/59 (29)	13/45 (29)	14/56 (25)	14/42 (33)
• Breastfeeding	9/59 (15)	8/45 (17)	8/56 (14)	4/42 (10)
• General parenting issues	6/59 (10)	7/45 (15)	8/56 (14	3/42 (7)
• Life as mother / father	5/59 (9)	3/45 (7)	8/56 (14)	10/42 (24)
Less time in program	12 (13)	6 (7)	11 (14)	5 (6)
Less time on:				
• Labour	6/12 (50)	3/6 (50)	6/11 (54)	5/5 (100)
• Pain relief strategies	6/12 (50)	3/6 (50)	5/11 (46)	
Program improved by:				
• More practical activities	10 (11)	11 (13)	7 (9)	12 (15)
• Summary end of session	5 (6)	4 (5)	6 (8)	6 (8)
• More interaction	3 (3)	3 (3)	6 (8)	6 (8)
• Course outline	1 (1)	4 (4)	8 (10)	7 (9)
• Longer program	7 (8)	8 (9)	7 (9)	6 (8)
• More after birth	14 (15)	10 (11)	19 (24)	21 (26)
• Fine as is	51 (56)	48 (55)	26 (32)	21 (26)
Type of program				
• As current	39 (43)	41 (47)	35 (44)	42 (54)
• Prenatal, some postnatal	31 (34)	30 (34)	22 (28)	20 (25)
• Two programs prenatal	10 (11)	7 (8)	6 (8)	4 (5)
• Half and half	11 (12)	10 (11)	16 (20)	13 (16)

Table 19: Suggested improvements by allocated group and gender

7.2.6 Feedback from Educators Facilitating the New Having a Baby Program

During the conduct of the randomised control trial the researcher reviewed the learning journals kept by the educators facilitating the *Having a Baby* programs. In addition to the normal detail, educators facilitating the new *Having a Baby* program were asked to

record the delivery of the activities unique to this program. The themes apparent in their learning journals were that it was '*very difficult to condense the labour component*' of the program and that it was '*hard to organise parents returning to the group*'.

Further questioning of these educators during a meeting held during the conduct of the trial revealed they had underlying concerns related to including new parents in an antenatal program. They wondered '*how to contain the new parents*' so they did not '*take over*' or '*scare the group with their horror stories*' and '*how to use their experience as a learning strategy…there is so much information we have to cover…they* (new parents) *may give the group the wrong information, so we would have to correct all of that as well*' (Nicole: Ed). This comment made by Sally also being of importance:

> '*I feel confident talking about the early postnatal days in my program but when it comes to weeks after the baby I just don't feel that confident. I've only got my own experience to rely upon – not formal training.*'

It appeared from their journals and comments that the educators facilitating the new program felt anxious, and to a certain extent unskilled, in providing the increased parenting component of the new *Having a Baby*' program. Fortunately face-to-face dialogue during meetings and individually early in the conduct of the randomised control trial provided the support the educators required to be able to implement the new activities.

7.2.7 Summary

The process evaluation found significant differences in the content and methods used between the two programs, these differences were in the expected direction. Couples in the new program emphasised parenting whereas participants in the conventional program emphasised the information received. Although couples in both programs wanted more parenting and less labour content, a greater proportion of participants in the conventional programs wanted these improvements.

Parents in the new program more frequently reported they liked the program as it was. This difference did not appear to be due to the style of the educators, as educators appeared to be similarly liked by participants of both programs and indeed more highly

liked by women in the conventional program. Participants in both programs identified they would like at least part of the program to be provided in the postnatal period.

Whilst there are some similarities between males and females in their responses there are also gender differences regardless of the type of program offered suggesting that the elements that males and females value in the programs differed.

7.3 Becoming a Parent: Activities for Antenatal Educators

The needs assessment revealed that to enable programs to be implemented antenatal educators required skills and resources which could assist them to quickly and easily modify sessions to suit the needs of each group. 'Becoming a Parent: Activities for Antenatal Educators' (Svensson, 2000a) was a handbook written by the author of this thesis at the completion of the RCT to detail the learning activities unique to the new *Having a Baby* program. It was written as a complement to the program session plans mainly as a self-study training manual for eductors and coordinators of antenatal education programs in Australia. A copy of the manual is provided on the Compact Disc attached to this thesis.

7.4 Basic Group Skills Training Program for Educators

In 1997 an evaluation of the antenatal and postnatal education programs provided by the South Eastern Sydney Area Health Service was conducted. The results of the evaluation, similar to the needs assessment results presented in Chapter Five and Six, indicated inconsistency amongst programs offered and more importantly that many educators required group skills training. The evaluation recommended educators, in addition to training in the structure of sessions and program content, be provided with training in the principles of adult learning, group process and dynamics.

A working party was established to implement the evaluation recommendations in 1998. The members of this working party were the Area Parenting Education Coordinator, a Social Worker employed at a community health service and the author of this thesis who was employed as Health Education Coordinator at Hospital A. The latter two had extensive group skills training experience. This working party developed the

Basic Group Skills Training Program for antenatal educators employed by South Eastern Sydney Area Health Service (SESAHS).

The aim of this training program was to provide antenatal educators with the information and skills necessary to facilitate evidence-based antenatal education programs for expectant and new parents. The program was twelve hours face-to-face training presented as 4 x 3 hour sessions or 2 x 6 hour sessions, with an additional fourteen hours of training occurring in the workplace. A maximum of twelve educators participated in each program with each training program being facilitated by two members of the working party who were trained in group leadership skills.

The topics included in the Basic Group Skills Training Program for SESAHS are listed in Table 20. The learning processes used during the training were consistent with those recommended for effective adult learning (Killen, 1998). They were direct instruction, co-operative learning, problem solving, discussion and self-directed learning. The session plans for face-to-face component of the Basic Group Skills Training Program are provided in Appendix Thirteen.

Topic	Specific Aspects
Adult learning	Principles of adult learning Characteristics of adult learners Strategies to enhance and retain learning
Group dynamics	Factors affecting group interaction Stages of group formation Interesting and challenging personalities Styles of group facilitation
Unexpected outcomes	Unexpected situations with personalties in the group Unexpected situations with resources Difficult topics and how to cover them
Session and program design	Balancing learning activities in session
Program evaluation	Types of evaluation Reason to evaluate sessions and programs

Table 20: Topics included in the Basic Group Skills Training Program

To change inappropriate employment processes, identified in the needs assessment and other chapters, and thus provide more support in the workplace, the Basic Group Skills Training program developed for this research included a mentoring component of at least fourteen hours. The role of the mentor was to observe one full program facilitated

by an educator and provide feedback through the program and at the end. The author of this thesis, who was the Health Education Coordinator at Hospital A, was the mentor for the educators at Hospital A. An outline of the orientation, training and mentoring process in which all of the educators at Hospital A participated prior to the randomised control trial, is provided in Appendix Fourteen.

7.4.1 Impact Evaluation of Basic Group Skills Training and Mentoring

At the end of 1999, this researcher undertook an impact evaluation of the Basic Group Skills Training and Mentoring Program at Hospital A. Twelve of a total of fifteen educators agreed to participate in the study. A description of the evaluation survey used and the results of the evaluation are presented below. The actual words used by the educators have been retained.

The 8-item Training and Mentoring Survey was designed by the author of this thesis. Each question was open-ended to elicit feedback from the educators on the various aspects of the training and mentoring process. The survey followed the sequence of the actual process, that is it began with questions related to the Basic Group Skills training and concluded with those about mentoring. The survey was mailed to the twelve educators who agreed to participate and they were asked to return it within two weeks of it being received.

The survey elicited response on the following:
What was their overall impression of the Basic Group Skills Training program;
What did they like most about the training;
What they liked least about the training;
How they found being mentored;
What they liked most about being mentored;
What they liked least about being mentored;
How their practice had changed since being trained and mentored;
If their practice had changed, why it had done so.

The educators described the Basic Group Skills Training Program in the following ways. It was '*enjoyable, although I would have liked to learn more on course content*', '*really interesting to hear what other educators are doing*', and '*fun and a challenge in*

thinking about other topics'. When asked what they liked most about the training the responses included '*group interaction and mixing with others*', '*great ideas for group work*', '*reinforced that what I am doing is OK*' and '*it was great to be able to spend time thinking about what I do. I hardly have time to do that*'.

When asked what they did not like about the training, ten educators responded '*nothing really*' and one responded '*mixing experience of eductors…juniors and more experienced together. I don't think it worked*' and one other wrote '*being asked to role-play…I hate it*'.

The educators described the mentoring process in a variety of ways with these comments being typical of their feelings. Mentoring was '*useful…by giving comments the supervisor was able to give constructive criticism and suggest ideas she'd observed in other classes*'. '*I found it scary at first, but then I relaxed. It was good for me to reflect on my own practice*'. '*It was great. It meant I thought more thoroughly about the classes I was facilitating*'. '*A great help. It was great having someone else there for support.*'

When asked what they liked most about the mentoring process, the responses provided in Table 21 represent the view of the sample.

Actual words used by participants
'***A great opportunity for debriefing***. *It helped with awkward group members and tricky questions*'.
'***Encouraged me to re-think*** *my group coordination in terms of variety of activities, currency of knowledge and reassurance that I was doing OK*'.
'*I really felt the* ***mentor was a mentor*** *- a friend not foe. I learnt a lot from the feedback because before I had never had such a lot of input from someone*'.
'*It put* ***pressure on me to get organized*** *and try the hardest to give the group as much as I was able, according to what I perceived were their needs. I also relished the opportunity to demonstrate my ability to cope with a variety of personalities, tricky situations, be unbiased and fair in information provision.*'

Table 21: What they liked most about being mentored.

When asked what they did not like about the mentoring process the majority (n=10) responded that '*there was nothing I disliked*'. One educator said she disliked mentoring because '*I was being judged. I felt as though I was not at my best during the course as I was nervous and this affected my abilities. I was frustrated with myself, as I knew I could do it better.*' Another wrote '*the ambiguous role of the mentor, possibly because the mentor joined in. I would prefer next time that the group know that the mentoring is going on as it created confusion. I think they thought we were co-facilitating*'.

7.4.2 Summary

The needs assessment conducted as part of this research and the 1997 antenatal and postnatal education evaluation in SESAHS highlighted the requirement for a training program to develop more effective antenatal educators. The Basic Skills Training Program for Antenatal Educators, and the associated mentoring process, were designed to satisfy this requirement. The impact of the training program and mentoring process was evaluated by means of a survey and the results presented.

The establishment of a formal employment process provided the opportunity to develop a skilled workforce, as well as providing new educators support in their roles through mentoring and a structure to follow. The process is competency based, where the

educators need to be competent in reaching the standards for facilitating groups, by the end of the process. As seen in the guidelines for employment provided in Appendix Fourteen, each educator at Hospital A now undergoes a certification process within six months of employment as an educator and then again every three years.

7.5 Breastfeeding Resource for Antenatal Educators

The Australian Commonwealth Government identified breastfeeding as an important public health issue. Recent statistics indicate that although a high percentage of women commence breastfeeding, there is a rapid decline in the numbers breastfeeding by the time the infant is six weeks of age (NSW Centre for Public Health Nutrition, 2004). In an attempt to increase the rates for the year 2000 and beyond, the Commonwealth Government set a number of goals and targets and State Governments were also active in the promotion and support of breastfeeding. The Commonwealth Government funded the development of a resource package for antenatal educators to facilitate their teaching and management of breastfeeding education.

During this doctoral study, educators identified the need to have flexible teaching and learning resources available for use during antenatal education. One of the topic areas specified as essential by both educators and parents was breastfeeding. Because of this, and the serendipitous availability of funding from the government for such a resource, the author of this thesis was one member of a consortium with the Centre for Family Health and Midwifery (University of Technology Sydney) who applied for and were awarded a commission to develop, and distribute an Antenatal Breastfeeding Education Resource Package to 2000 Obstetricians and 3000 antenatal educators in Australia. The package included *Breastfeeding and You: a Handbook for Antenatal Educators*, *Breastfeeding and You: Preparing the Way* video, multicultural material and a poster. The author of this thesis was the principal author and coordinator of the handbook (Svensson, 2000b). A copy of the handbook is provided on the Compact Disc enclosed with this thesis. The aims, development and design of the handbook are detailed below.

7.5.1 Aims of the Breastfeeding and You Handbook for Antenatal Educators

The approach of this handbook was to combine the strengths of the biological model of breastfeeding, already familiar to health workers, with the knowledge gained from recent social sciences research. The aims of the handbook were to:

- provide information and resources to antenatal educators and health professionals who inform and support women and men during the childbirth period;
- promote the use of antenatal education resources that are based on recent biological and social research in breastfeeding and adult learning theory.

7.5.2 Development of the Handbook

A working party of researchers and clinicians was established to oversee the development of both the handbook and the video. The working party attended regular meetings, and a focus group of experienced clinicians contributed to the data required to determine the content and design of both resources. Concurrent with the development of the handbook this researcher was also facilitating Teaching Skills workshops for antenatal educators regularly in three states of Australia. This contact with a broad range of educators allowed the collection of additional data relating to the needs of educators. Due to the fact that the majority of educators facilitate a small number of programs per annum it was important to determine how the handbook would best suit their needs. The uptake of other published resources by educators demonstrated that the handbook should not only contain activities for use during programs, but also modules on group facilitation, program development and evaluation and breastfeeding updates. The needs assessment of expectant and new parents described in this thesis contributed to the development and design of the handbook.

7.5.3 Handbook Design

Data collected from consultations both for this project and the needs assessment revealed that the life transition of women and men in the childbearing year was analogous to a journey. This journey analogy was also relevant for antenatal educators in their practice and as such it was used to structure the handbook. With antenatal educators the journey begins with sourcing and reading reference material, this is followed by selecting learning activities and preparing session plans, and then facilitating the session or program. Occasionally educators have to work on the run and sometimes there was a need for an '*urgent call to home*' as some of the educators referred to the need to quickly source more information along the route. The '*final call*', as the educators described it, was evaluation of the session and/or program. The journey taken by educators was subsequently mapped, with the journey beginning in the

bottom left corner of Figure 5. This map was used to sequence the topics in the handbook. These topics and their allocated modules are listed in Table 22.

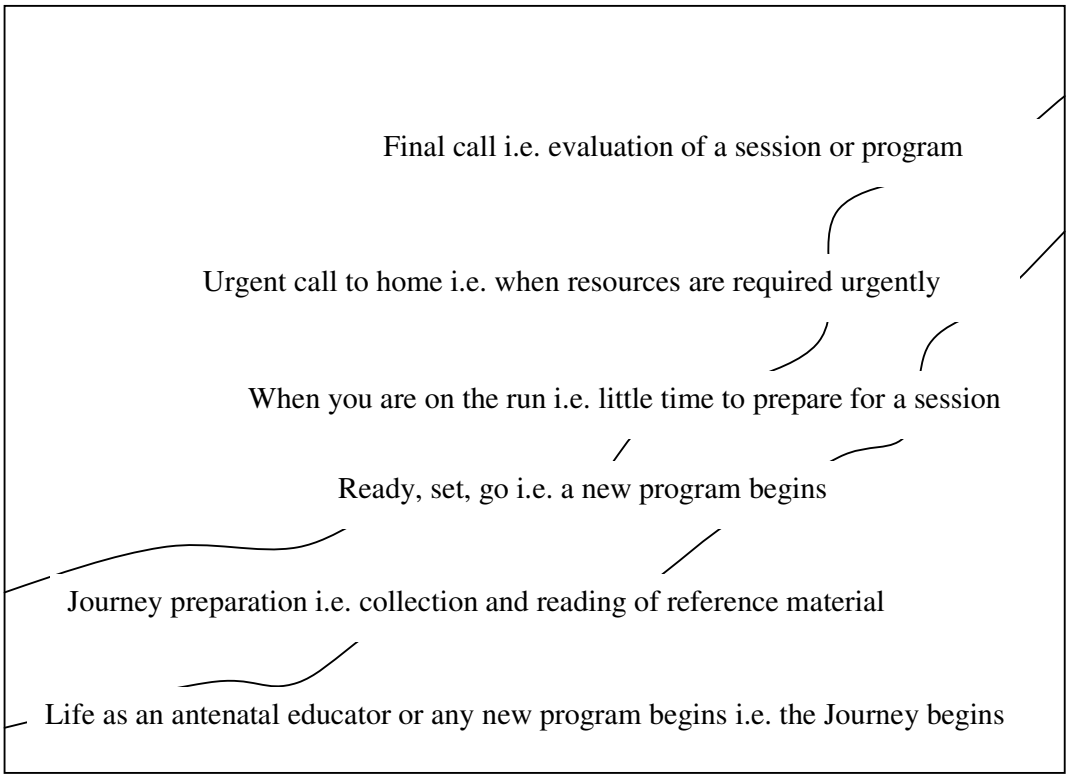


Figure 5: The professional journey of an antenatal educator

In order that the content of the handbook be relevant to educators in their local community, five icons, and accompanying instructions, were included along side the text. Readers were asked to stop at each icon and follow the path of the instruction. Although their progress was delayed through making these 'pit stops', as with any journey they embarked on, the more preparation and experience gained, the more effective the experience would be (Svensson, 2000b).

The content of Modules Two, Three, Four and Five was primarily professional development providing information on breastfeeding, adult learning, group facilitation and program planning. Each one of these modules concluded with a section entitled 'your role as an educator' to further make the handbook relevant to the educator in his/her local area. It was also suggested that readers keep a learning journal relating to their clinical practice to enhance their growth as an educator. Modules Six, Seven, Eight

and Nine provided resources for educators to use in their practice. Module Ten covered evaluation.

The language used in the handbook was the language used by the antenatal educators on the working party. It was a language that recognised that the majority of women and men who attend antenatal education are adults who want to be actively involved in their learning. For this reason the following were used:

- 'sessions' instead of 'classes';
- 'participants' instead of 'clients'
- 'parents' instead of 'couples'
- 'educator' rather than 'teacher'.

7.5.4 Evaluation of the Handbook and Video

In 2001 the Centre for Family Health and Midwifery was contracted by the Department of Health and Aged Care to evaluate the resource. The evaluation was conducted in three phases. The first phase was a written evaluation. The second phase was a telephone survey and the third phase involved a number of qualitative approaches including a focus group and feedback from seminars, conferences, workshops and email. The author of this thesis also coordinated this evaluative research. The evaluation report, which is provided on the Compact Disc attached to this thesis, is for the reader's information rather than being submitted as a part of this thesis.

Section of journey	Module of Handbook	Topics in modules
Journey begins	Module One Introduction to the Handbook	Aim of the handbook Background information How to use the handbook
Journey preparation	Module Two Preparing to Breastfeed	The realisation of pregnancy The decision to breastfeed The breasts in pregnancy Your role as an educator
	Module Three The Breastfeeding Experience	The breastfeeding experience How breastfeeding works Factors that influence breastfeeding The benefits of breastfeeding Your role as an educator
	Module Four Facilitating Antenatal Groups	Antenatal group participants Understanding antenatal groups Factors that influence group functioning Gaining confidence Your role as an educator
	Module Five Planning antenatal strategies	Assessing the participants needs Preparing session plans Learning strategies Obtaining feedback Program/session evaluation
Ready, set, go	Module Six Resources for educators and participants	Breastfeeding, antenatal education and health education resources for educators Breastfeeding resources for participants
	Module Seven Breastfeeding and You: Preparing the Way	How to use the video Facilitating a group discussion
	Module Eight Breastfeeding-related learning strategies	How to use the activities Preparing to breastfeed Learning to breastfeed The reality of breastfeeding Becoming a Parent
	Module Nine Handouts for participants	How to use reference material The handouts for participants
When you are on the run	Module Five	When you are in a hurry
Urgent call home	Modules Seven Eight and Nine	
Final call	Module Ten	Program evaluation and strategies Self-evaluation Peer review Handbook and video evaluation

Table 22: Topics in Breastfeeding and You: Handbook for Antenatal Educators

7.6 Menu Approach to Antenatal Education

The expectant and new parents who participated in the needs assessment recommended that hospitals have a variety of programs and strategies available which they wanted presented to them like '*dishes on a menu at a restaurant or café*'. In 2001, which was following the development, implementation and evaluation of the *Having a Baby* program and the development and distribution of the Breastfeeding Resource, this researcher designed a menu of programs for Hospital A. illustrates the antenatal education programs offered at the hospital in 1998. presents the menu available in 2004 and the ideal menu for 2005. The dotted line surrounding the program names in the diagrams indicates an open group, with the solid line being a closed group. All '*dishes*' adhered to the '*essential ingredients*' for each program type. An outline of each program is provided below.

7.6.1 Items on the Menu at Hospital A in 2005

The following items are on the menu at Hospital A in January 2005.

- **Just Pregnant, Now Looking** is a program designed to meet the needs of the '*silent searchers*', that is the women and men in early pregnancy who were searching for the answers to their many questions. It is two two-hour sessions covering topics that women and men identified as being important to them when they were *just pregnant*. The topics, listed in Appendix Eight A, include antenatal care, tests in early pregnancy, factors that enhance infant development, a tour of the hospital and life with a baby.

- **Having a Baby** program is the comprehensive birth and parenting program described at the beginning of this chapter. This program is now offered as two hour sessions over seven weeks, three hour sessions over five weeks, and as seven hour sessions over two weeks.

- **Having a Baby: Active** is a comprehensive birth and parenting program which has a natural birth focus and is designed for women booked into the Birth Centre.

- **Having a Baby: More Than One** is a birth and parenting program designed for women having twins or triplets.

RHW Menu in 1998

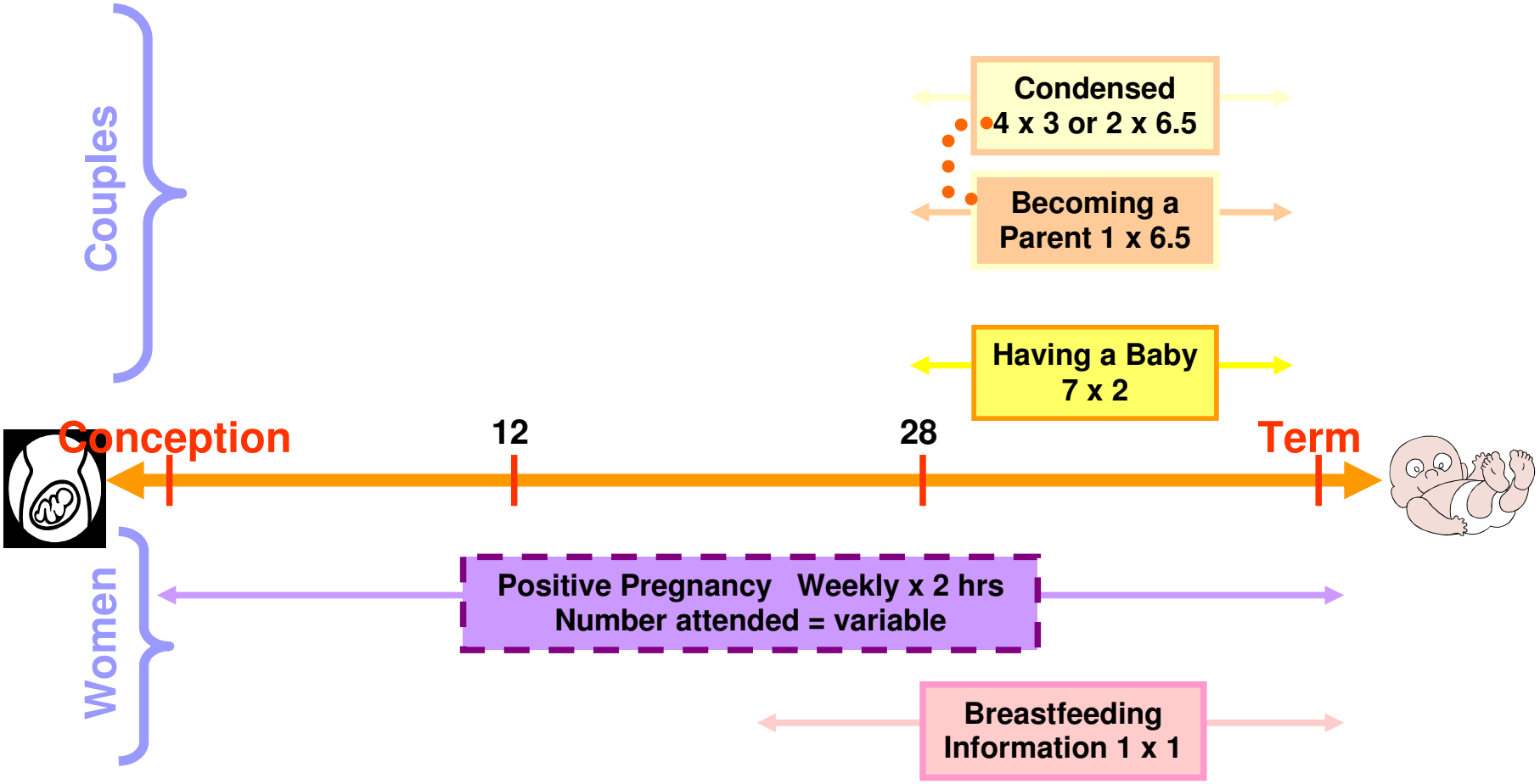


Figure 6: The menu available to expectant and new parents in 1998

RHW Menu in 2004

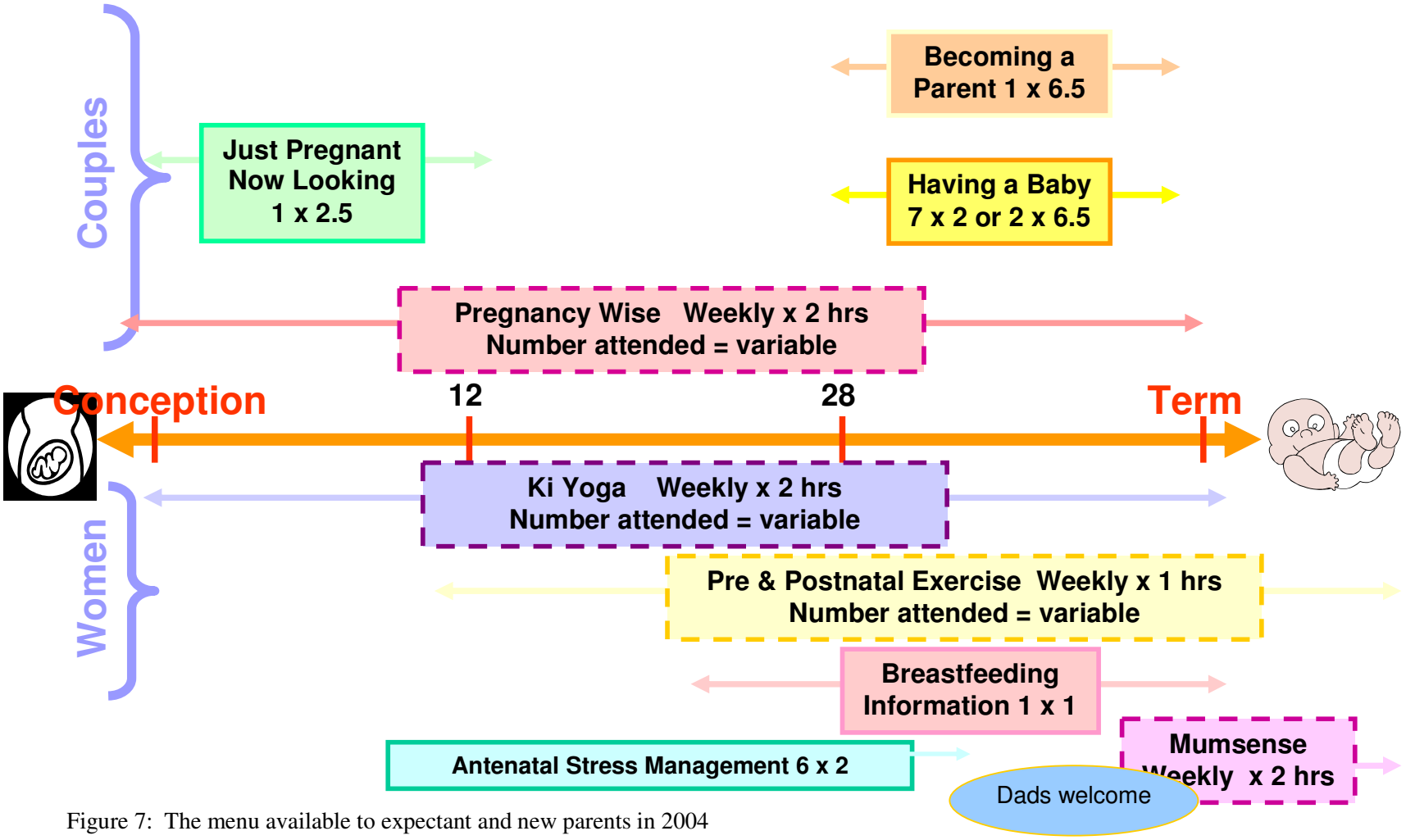


Figure 7: The menu available to expectant and new parents in 2004

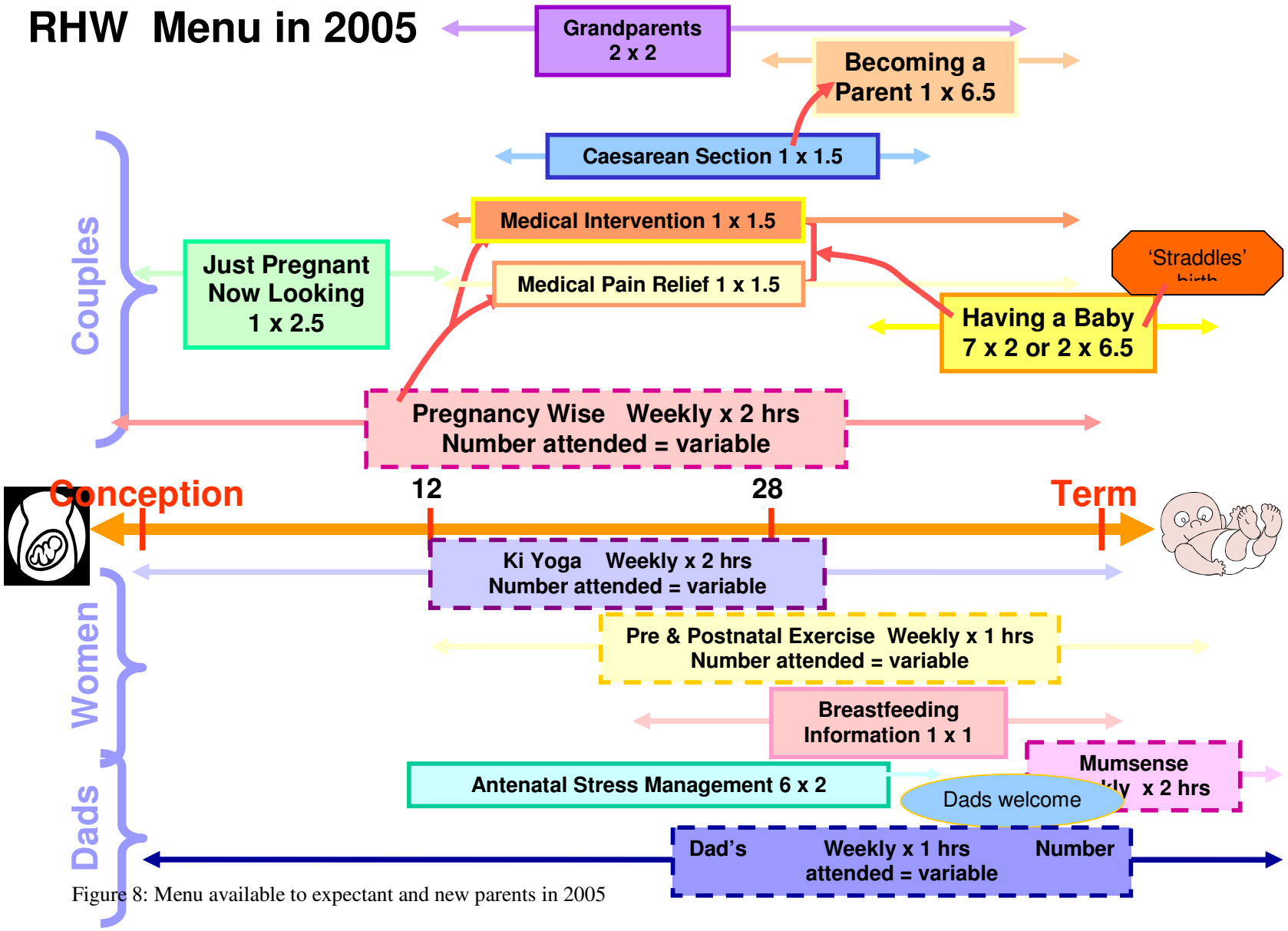


Figure 8: Menu available to expectant and new parents in 2005

- **Pregnancy Wise** fulfils the essential criteria for a '*sharing and supporting each other*' program which were listed in Chapter Five. It is a weekly informal discussion group which women and partners can attend at any stage of pregnancy, as frequently as they want and for as long required. Each week a topical issue is selected by the group for discussion and is related to pregnancy, labour, birth, baby care or life as a mother and a dad. Pregnancy Wise can be attended instead of a more structured program, such as *Having a Baby,* or it could be attended as a complement. The need for such a group was highlighted through 2003 when a core group of eight women and their partners joined Pregnancy Wise when they were approximately twelve weeks pregnant and attended weekly until their babies were born.

- **Medical Intervention** that may be necessary in labour and **Drug Choices** were two '*hearing and discussing detail*' programs that commenced in 2004 following consumer request. They are both one x 90 minute sessions facilitated by an Obstetrician and the latter an Anaesthetist. They can be attended at any stage of pregnancy and are a complement to the *Having a Baby* program at the hospital.

- **Breastfeeding Information Session** is a 90 minute '*hearing and discussing detail*' session designed for women who want additional information on breastfeeding.

- **Becoming a Parent** is a one-day workshop designed for couples who were having an elective caesarean section and therefore will not experience labour. Topics include infant growth and development, sleeping patterns of a baby, settling techniques, care of a baby, community services for parents, and the roles and responsibilities of a parent. Breastfeeding is covered in a separate session.

- **Ki Yoga** and **Pregnancy and Postnatal Exercise** sessions are provided in both hospital and community settings. The pregnancy sessions can be attended after twelve weeks, with the postnatal sessions six weeks after the birth. Both are designed for women, however the need for men-only or combined sessions is being negotiated at the time of writing this thesis.

- **Antenatal Stress Management** program is a task-orientated program designed for women who are at risk of postnatal depression. In 2001 women antenatal screening of women for postnatal depression commenced at Hospital A and those found to be of high risk are offered this program. Topics included anxiety and stress management, prioritising tasks and cognitive behaviour therapy.

- **Mumsense**, like Pregnancy Wise, fulfils the criteria for a '*sharing and supporting each other group*' which can be attended anytime after the baby is born up until four months. Each week a topical issue is discussed and women share their interests, concerns and needs. Originally the upper age limit was six months but this had to be decreased to four months because of the large size of the group. The women themselves then decided to form their own group in the community for the Mumsense graduates. They also formed coffee, tennis and cinema groups.

- **Birth Dot Com** is, as the name suggests, an antenatal education program offered over the Internet. Founded and managed by an independent childbirth educator and an independent midwife, www.birth.com is an excellent Australian resource to include on the menu.

As 2005 progresses it is hoped to add several new dishes to the menu. These include:

- a caesarean section information evening;
- grandparent's sessions;
- pregnancy for the older woman information evening;
- new dads group;
- a *Having a Baby* program that straddles the birth experience;

In the future it is hoped that a *Having a Baby* program that straddles the birth experience be introduced in a community centre rather than a hospital. Through the 1990s women themselves appear to be turning to the hospital for antenatal education services, which could lead to their 're-institutionalisation' if care is not taken to prevent it.

7.7 Summary

This chapter has described the four initiatives that were developed as a result of the needs assessment. These initiatives were:

- *Having a Baby* program;
- 'Becoming a Parent' a handbook for educators;
- Basic Group Skills Training Program for Antenatal Educators;
- 'Breastfeeding and You: A Handbook for Antenatal Educators'.

The chapter concluded with a description of a menu approach to antenatal education which evolved concurrently with the development of the *Having a Baby* program at Hospital A, and demonstrates an evolving and responsive approach to the variability of the needs of clients.

The four educational initiatives outlined in this chapter illustrate the power and significance of a needs assessment. The identification of the antenatal educational needs of future parents is the first step in their empowerment toward achieving the objectives in health promotion. Evaluation data not all reported here have shown a positive reaction to the initiatives and demonstrates the appropriateness of these programs. The development of a menu approach is intended to provide for the ultimate satisfaction of the expressed needs of the mature future parents who have had a variety of life experiences.

Chapter Eight: Randomised Control Trial and Results from Participating Women.

8.1 Introduction

This chapter describes the randomised control trial conducted to test the effectiveness of the new *Having a Baby* program, designed from the needs assessment, compared to conventional antenatal education

As discussed in Chapter Two research investigating antenatal education has traditionally focussed on labour and childbirth outcomes and/or patterns of attendance. The research suggests that programs rarely have an impact on pain relief or childbirth outcomes (Beck et al., 1980; Bennett et al., 1985) and that women attend programs for reasons in addition to gaining information (H. Lee & Shorten, 1999; Lumley & Brown, 1993). The impact of baby care and parenting information being provided during the antenatal period on knowledge, confidence, worry or ability to parent has infrequently been examined, indeed an appropriate adjustment to parenthood measure has long been sought by researchers and clinicians. Corwin, (1999) in her evaluation of an antenatal education program which had parenting integrated through the program, designed and used a Prenatal Parenting Scale pre and post intervention. This scale, similar to one used by Rolls and Cutts (2001) tested knowledge pre and post intervention in experimental and control groups. Neither measured postnatal outcomes.

Information in pregnancy can be gained from numerous sources, but what is learned and retained as knowledge and skills is affected by many factors, including the method by which the learning occurs. An important feature of the new Having a Baby program tested in this randomised control trial was the inclusion of problem-solving activities related to labour, birth, baby care and parenting aimed at increasing participant's confidence in their innate problem solving skills and enhancing their own self-confidence. Self-efficacy, according to social learning theory, is a measure of the confidence an individual has in their ability to meet the demands and responsibilities of a task (Bandura, 1977). Perceived self-efficacy can have important influences on behaviour such as influencing activity choices of individuals, and the perseverance and coping behaviours once the activity is undertaken (Reece, 1992). Parenting self-efficacy was therefore selected as a useful measure of adjustment to parenthood to be used in

this research. The Parent Expectations Survey (Reece, 1992), was selected as a tool to measure parenting self efficacy because it is a scale with demonstrated reliability and validity (Reece & Harkless, 1998) and it has been used for samples of men and women.

Research demonstrates stress is inversely related to self-efficacy (Reece & Harkless, 1998). Women who are perceived by health professionals as having a 'normal' pregnancy exhibit 'worry' (Homer, Farrell, Davis, & Brown, 2002), so there was a need to measure worry as an outcome in this study. General anxiety measures such as the State Trait anxiety scale were not appropriate because this research specifically wanted to examine worry about parenting and labour. The Cambridge Worry Scale (CWS) (H Stratham, Green, & Snowdon, 1992) was therefore selected as the tool to measure concerns and fears related to pregnancy, labour, caring for a baby, relationships and socio-economic issues. It had been used in a large study of pregnant women (Ohman, Grunewald, & Waldenstrom, 2003; H. Stratham, Green, & Kafetsios, 1997) and had face validity for men. The Cambridge Worry Scale also has demonstrated validity and reliability (J. Green, Kafetsios, Statham, & Snowdon, 2003).

More detail about the design, methods, and analysis used in the randomised controlled trial are presented in this chapter. The results for women who participated in this trial are also presented in this chapter. Chapter Nine presents the results obtained for men in the trial.

8.2 Aim of the Randomised Control Trial

The aim of this randomised control trial was to test whether the new *Having a Baby* program designed from the needs assessment data, and conducted within current resources, improved perceived parenting self efficacy and knowledge, and decreased worry about the baby eight weeks after birth. The new *Having a Baby,* which was described in detail in Chapter Seven, was the experimental program, with the conventional antenatal education program acting as the control.

Hypotheses

Participants who attended the experimental new *Having a Baby* program compared to those who attended the conventional program would have;

- Higher perceived parenting self-efficacy and knowledge scores, and lower 'baby worry', scores eight weeks after the birth.

Labour and birth outcomes were also compared.

8.3 Method

8.3.1 Design

A randomised control trial of two antenatal education programs for first time parents was conducted. Self-report surveys were used to collect data on commencement of the program, on completion of the program and 8 weeks after the program. Repeated measures analysis of variance was used to examine differences between the groups on perceived parenting self efficacy, perceived parenting knowledge, and worry about the baby.

8.3.2 Ethics

Ethics approval was obtained from hospital and university ethics committee prior to commencement of the study. Written consent was obtained from all participants, (see Appendix Fifteen), with confidentiality being protected through the allocation of a code to each participant. The perinatal death register was consulted prior to the sending a postnatal survey to ensure that participants who had a stillbirth or neonatal death were not sent the survey and further distressed.

8.3.3 Setting and Context

Hospital A, one of the two hospitals used in the needs assessment undertaken in 1998/99, was selected for this randomised control trial. It is a large metropolitan teaching hospital located in the eastern suburbs of Sydney. Hospital A specialises only in obstetrics and gynaecology and is a referral hospital for NSW. There are approximately 3700 births at the hospital per annum, with 55% of these being to primiparous women. The hospital has a high proportion of clients from outside the local community because of its specialisation and the perceived quality of care at the hospital.

The majority (75%) of primiparous women and their partners who are clients of the hospital attend an antenatal education program in the third trimester of pregnancy. In the year prior to the study 60% of primiparous women attended the conventional program consisting of seven two-hour sessions and 40% attended a program consisting of two seven-hour days. To reduce the chance of program length having an affect on the results of this trial, only participants attending a seven session program were involved.

Hospital A was selected for this randomised control trial because it had two physically separate venues within the hospital in which the antenatal education programs were conducted, thereby minimising the probability of interaction between experimental and control groups during their programs.

The hospital has a Health Education Centre which provides a wide range of education programs and strategies for women and their families of all ages. The centre is managed by a coordinator whose responsibilities include conducting needs assessments, design and implementation of programs, and management of resources and staff at the Centre. The author of this thesis had been the coordinator of the centre for three years when this research was undertaken.

8.3.4 Project Management

The researcher formed a working party to provide guidance and support for the trial. Members of the working party included the Health Area Parenting Coordinator and Nursing Unit Managers of the following departments: Early Childhood Health Centre Northern South East Health, Antenatal Clinic, Birth Centre, Delivery Suite and Postnatal Ward at Hospital A. During the conduct of the RCT, the working party met quarterly and were sent bi-monthly progress reports. In addition the researcher had at least monthly meetings with her supervisor at the university where she was enrolled.

8.3.5 Intervention

The experimental *Having a Baby* program, which was described in detail in Chapter Seven, was the same length as the control program. That is seven sessions before the birth and a reunion approximately six weeks after birth. The maximum number of couples enrolled in both the experimental and control programs were eleven with the majority (80%) enrolling 10 couples. This was the accepted maximum number of

couples attending programs in Australia and was based on figures from state-wide reviews of maternity services (Health Department Victoria, 1990; NSW Department of Health, 1989) and adult learning literature (Foley, 2000; Yalom, 1995). One experimental and one control program was provided each week night.

The broad topic areas covered in experimental and control programs were similar, but they differed in their order and method of presentation. The experimental *Having a Baby* program differed from the control program in the following ways. It:

- emphasised pregnancy, labour and the early parenting experience as a microcosm of the childbearing experience, rather than isolated events;
- had parenting activities integrated throughout the program;
- had new parents providing an overview of their early parenting experience;
- included a bath of a one day old baby in order that participants observe behaviour of a newborn;
- had a problem solving, proactive approach to learning and an emphasis on experiential learning. The experiential and mastery nature of these strategies aimed to increase the confidence and competence of women and their partners in the early weeks with a new baby, and therefore enhance parenting self-efficacy (Bandura, 1977).

8.3.6 The Educators

Both the experimental and control programs were facilitated by educators who were contracted by the hospital to conduct antenatal education. They had a variety of professional backgrounds, six were midwives, three were independent educators and one was a physiotherapist. Called 'Health Educators' they were employed on a contract basis at Hospital A and paid a NSW Health In-service Educator's award. Half the educators were employed either full or part time at Hospital A as midwives, and half were either self-employed as an independent educator or employed by a non-Health organisation. The majority (80%) had facilitated antenatal education programs for at least eight years.

Prior to the trial commencing all of the educators had attended the Basic Group Skills training program, which was described in Chapter Seven. They also had completed the Area certification process at the time of this research.

8.3.7 Random Allocation of Educators to Programs

To control for the effect of the facilitation style of the educator confounding the results, the educators were randomly allocated to experimental and control programs. All educators were informed of the trial to test the effectiveness of the experimental *Having a Baby* program. The instruments for data collection were explained and a broad overview of the experimental program was provided. Specific details regarding the process and structure of the experimental program were only revealed to the educators who would facilitate the program after randomisation. The educators were told that a pilot study would commence in late February. All educators facilitating antenatal education programs in the evening (n=10) agreed to participate in the study, understanding that 50% would be randomly assigned to the experimental program and 50% to the control program.

Allocation of educators to experimental and control groups was carried out by the researcher using a table of random numbers in late January 2000. The results of the randomisation are presented Figure 6. The five educators facilitating the experimental program participated in a four hour training workshop facilitated by the researcher. During this training each educator was given a manual containing the outline and session plans of the program which they read through and practised. An emphasis was placed on the adult learning strategies specific to the experimental program. The educators facilitating the control program were not given additional training because the control program was the program they already facilitated.

All of the educators were asked to keep a reflective journal for each program they facilitated. In the journal they recorded the amount of active participation and type of interaction that occurred within each program, the sequence of topics and activities and when there was a significant deviation/s in the delivery of program and why it occurred. The experimental *Having a Baby* program educators were also asked to include feedback on the structure and activities unique to this program.

When training was completed the experimental program and the data collection measures were piloted. The data collected during the pilot study was not included in the final study and analysis.

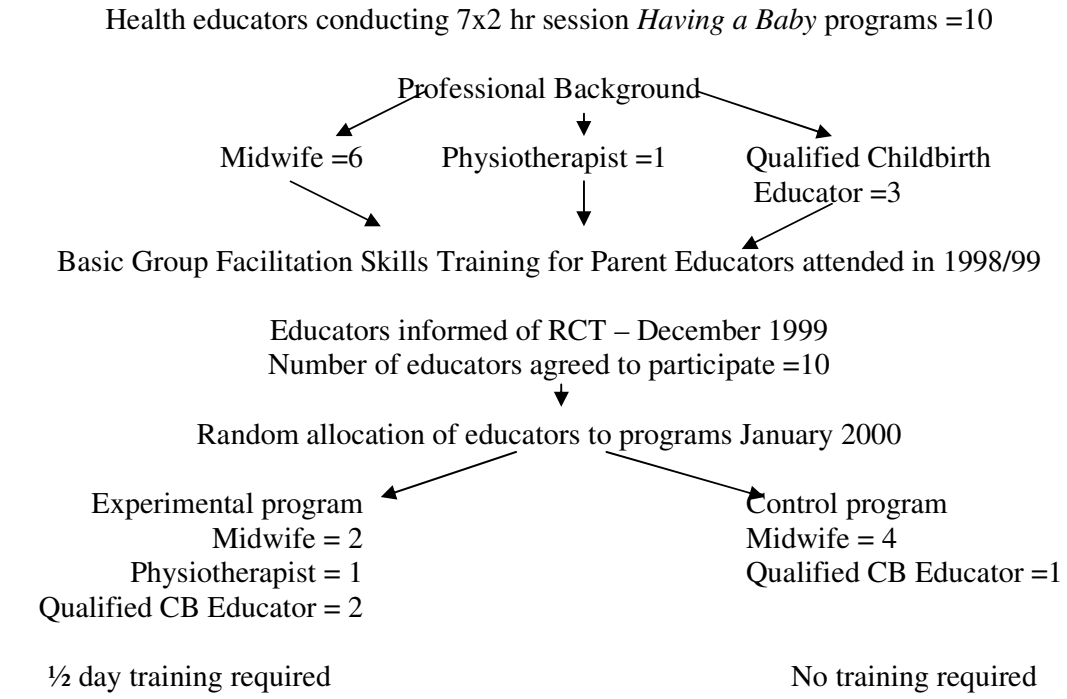


Figure 6: Allocation of educators to programs

8.3.8 Power and Sample Size Projection

This study sought to test whether the experimental *Having a Baby* program made adjustment to parenthood easier. The primary and most important variable of interest was the parenting self-efficacy score obtained from the Parent Expectations Survey, a measure which has been demonstrated to be reliable and valid measure of adjustment to parenthood (Reece, 1992; Reece & Harkless, 1998).

No published studies had used the Parent Expectations Survey (Reece, 1992) to measure outcomes from an antenatal education program. The measure had however been used in previous research to determine differences between females and males in their perceived self-efficacy as a parent (Reece & Harkless, 1998). Therefore the effect size for differences between male and female was used as an estimate of an effect size of practical significance. This calculation indicated that a total sample size of 90 was required to detect significant effects in perceived parenting self-efficacy scores. To obtain this sample size, 160 women had to be recruited. This estimate was based on previous evaluative research conducted at Hospital A which found that 95% of women who agree to participate in evaluative research commence the *Having a Baby* program,

90% complete the final session survey and 80% complete the 6-8 week postnatal survey.

8.3.9 Sample Recruitment and Randomisation

All primiparous, English-speaking clients who booked at Hospital A for an evening antenatal eduction program (commencing between May and November 2000) were informed of the study. The department secretary told them that the Health Education Centre was offering two antenatal education programs. The programs covered similar topics and the duration of the programs was the same. Clients were informed the major difference was in the order the information was provided and activities used to provide information during each session. The clients who were willing to participate in the research, and gave an informed consent, were randomly allocated to an experimental or control group on their preferred night of attendance. Clients who did not give consent were allocated to the program of their choice.

At the beginning of recruitment the secretary was given a small locked box, which contained 400 squares of paper. Two hundred squares identified the experimental programs, with 200 identifying the control program. The secretary blindly withdrew, and subsequently discarded, one square from the box each time a woman agreed to participate in the research. The researcher and educators had no responsibility for randomly allocating women to experimental or control groups. If there were no remaining spaces in the allocated group for the night requested, the participants were offered an alternative night for the allocated group, or were recorded as not participating in the research because they were unable to attend the night offered.

8.3.10 Data Collection Instruments

Participants were asked to complete three self-report surveys. Survey One, which is provided in Appendix Sixteen A, was mailed to participants with their program booking confirmation letter. Survey Two, (Appendix Sixteen B), was distributed and completed during the final session of the Having a Baby program. Survey Three, (Appendix Sixteen C), was posted to participants approximately six weeks after birth. Participants who had not returned Survey Three within four weeks were given a follow-up telephone call and sent a copy of Survey Three if required. The majority of women completed

Survey Three eight–ten weeks after the birth, with the mean age of the baby being 9.69 weeks.

To reduce the chance of incorrect survey distribution, for example experimental surveys being given to control group participants, all surveys were colour coded according to group and gender of participant. The researcher coordinated distribution and collection of surveys with assistance from the educators facilitating the programs. Each survey was tested by forty participants who gave consent during a pilot study of programs commencing in February and March 2000. No modification of surveys was required.

8.3.11 Variables

Perceived Maternal Parenting Self-Efficacy

Adjustment to parenthood in this study was measured by maternal and paternal perceived parenting self-efficacy pre-program and postnatal. The 25-item Pre and Postnatal Parent Expectations Survey (PES) (Reece, 1992) is a self-report survey, which examines perceived parenting self-efficacy in relation to tasks they will perform in caring for their baby, their role as a parent and their relationship with their partner. Participants are asked to rate the confidence they have on a scale of 0 (cannot do) to 10 (certain can do) in their ability as a parent on twenty-five affirmative statements. '*I will be able to manage the feeding of my baby'* and *'I will be able to tell when my baby is sick'* are examples of statements to be rated by the parent. In the prenatal scale each statement has the prefix '*I will*', with the postnatal scale being *'I can'*. The total score is calculated by summing the rating on each statement. The Parent Expectation Scale has demonstrated reliability and validity (Reece, 1992) and has been used to measure perceived parenting self-efficacy with women and men (Reece & Harkless, 1998). The internal consistency of the Reece Scale was evaluated and the Cronbach's alpha was .936.

Maternal Worry

The Cambridge Worry Scale (CWS) (H. Stratham et al., 1997; H Stratham et al., 1992) was selected for several reasons. These were it measures concerns and fears related to pregnancy, labour, caring for a baby, relationships and socio-economic issues. This 10-item scale, which has demonstrated reliability and validity (Ohman et al., 2003; H. Stratham et al., 1997), can be modified to more accurately measure worry in a specific

population, can be administered pre and postnatal, and can be used by women and men. Participants rate 10 items on a 5-point likert scale from 0 (not a worry) to 5 (a major worry), with 'your baby's health at the moment' being one example of 'baby worry'. The rating they give to each item is summed to give the total score. In this trial Cambridge Worry Scale was divided into three subsets which were worry about baby, life and self. The internal consistency of the Cambridge Worry Scale was evaluated and the Cronbach's alpha was found to be .808.

Assessment of Perceived Knowledge

An Assessment of Perceived Knowledge Scale designed and used for quality assurance purposes in Hospital A, and subsequently by colleagues across NSW, was used to measure knowledge related to labour, infant care and the role of a parent. Participants are asked to rate their perceived knowledge on 11 topics covered in a program on a 5-point likert scale from 1 (very poor) to 5 (very good). In this study four topics related to labour and birth, one to hospital services, one to rights and responsibilities, and five to postnatal issues. The postnatal topics, of particular interest in this study, were 'your feelings after baby is born', 'caring for your baby', and 'feeding your baby' and 'life as a mother' in the women's survey. The rating given to each item was summed to give the total score.

8.3.12 Demographic, Pregnancy, Labour, Birth and Postnatal Details

In addition to the above measures demographic data was collected in Survey One and pregnancy, labour, birth and postnatal outcomes were collected in Survey Three. The outcomes measured included:

- Date of birth of their baby.
- How many weeks pregnant when their baby was born
- Pregnancy related health problems;
- How labour started i.e. spontaneous or induction;
- Use of nitrous oxide, pethidine and epidural in labour;
- Type of birth i.e. natural or assisted;
- Length of labour in hours;
- Length of postnatal hospitalisation in days;
- Method of infant feeding;

- Problems with health of baby.

8.4 Data Analysis

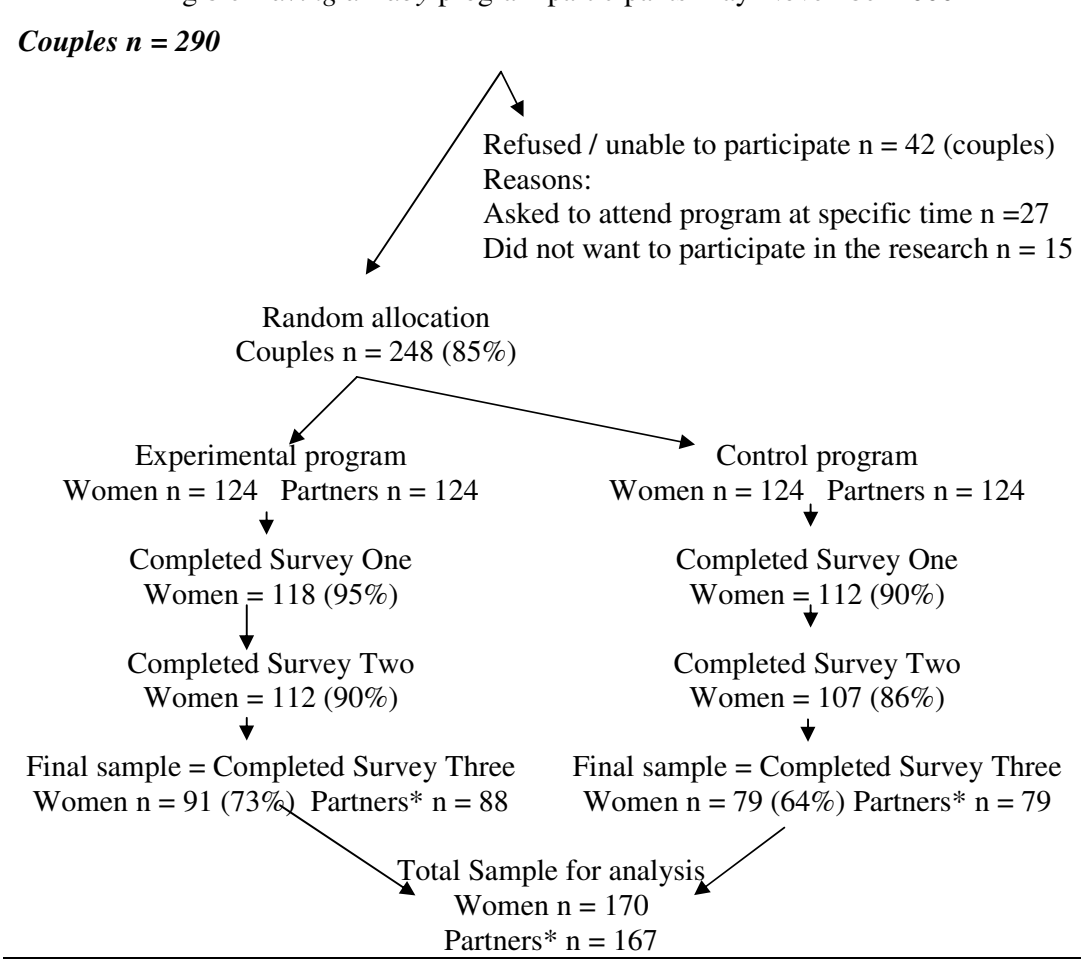
The statistical software package SPSS (Version 11) was used for data analysis. Only data from participants who had completed every question in the three surveys was analysed. An independent researcher checked 10% of the SPSS data entry for accuracy. Data analysis commenced during data collection but was not reported to the educators or the working party to decrease the chance of the results influencing the facilitation style of each educator.

Simple descriptive statistics, frequencies, means, χ^2 and independent sample t-test, were used to measure nominal and ordinal data and differences between group means, for example, demographic details, labour, birth and postnatal outcomes. Fishers exact, rather than χ^2 was used for cells that had a count less than five, and Yates continuity correction was used for 2x2 tables. Statistical significance set at $\alpha = 0.05$.

The responses to every item on the three primary outcome measures, perceived parenting self-efficacy, worry and assessment of perceived knowledge were totalled. Repeated measures analysis of variance was performed to determine whether PES, Worry and Assessment of Perceived Knowledge scores varied with group. The assumptions were tested and not violated. The researcher collected and analysed the educator's reflective journals and used content analysis to extract the main themes.

8.4.1 Results

Two hundred and ninety women and their partners, referred to as 'couples', were approached to participate in the research see Figure 7. Forty-two refused or were unable to participate. The reasons for non-participation were 'did not want to participate' (15) and twenty-seven there were no vacancies in programs on their preferred night, which meant they had to attend the alternate program. Clients who did not consent to the study were allocated to the program of their choice on their preferred night of attendance.



- Data collected from partners was analyzed separately

Figure 7: Flow chart identifying sample size from eligibility to final sample

Ultimately 248 couples were recruited to the study as shown in Figure 7. Ninety-five percent (n=118) of the experimental group and 90% of the control group completed Survey One. Ninety percent (n = 112) of the experimental group and 86% of the control group completed Survey Two. Seventy-three percent (n = 91) of the experimental and 64% of control group completed Survey Three. The response rate for partners is provided in detail in Chapter Nine. Women and men in the final sample of both groups were included irrespective of whether they received the entire program. The response rates for the groups were tested and found not to be significant.

There were no observable differences in age, parity, or education between women participating in this RCT and the program attendees who did not agree to participate in the research.

8.4.2 Maternal Demographic Details and Pregnancy Characteristics

There was no significance difference in age, country of birth, level of education, family income or pregnancy complications between women in experimental and control groups. Frequencies, proportions, means, and test of significance are presented in Table 23. The age range of the women in the study was 19 to 41 years, (mean 30.26 years, SD 4.26), with all women expecting their first baby. Ninety-eight percent of participants (166/170) spoke English at home, with the country of birth of women in the study being representative of the women who gave birth at Hospital A. Sixty-six percent of participants (112/170) were born in Australia, 15% (25/170) were born in the United Kingdom and 9% (15/170) born in Asia. The majority of women were educated with 84% (142/170) having a tertiary level of education, and 73% (123/170) had a family income greater than $60,000 per annum. Education level and family income data collected from antenatal program participants in 2000 who did not participate in this study demonstrated similar results. Two women in this study had a multiple pregnancy and 29% of the women (49/170) had a pregnancy complication/s, for example high blood pressure, bleeding in pregnancy, severe morning sickness or diabetes. The majority of women went into labour at term, with a mean gestation of 40 weeks and range of 35–42 weeks.

8.4.3 Labour and Birth Outcomes

There was no significance difference in pregnancy, labour and birth outcomes of women in experimental and control groups. Frequencies, proportions, means, and test of significance are presented in Table 24. Thirty three percent of the total sample (56/170) had an induction of labour. There was no difference in birth outcome between groups with 54% (91/170) of women in the experimental group having a spontaneous vaginal birth, and 53% in the control group. Seven percent (12/170) of the total sample had an elective caesarean section.

	Total Sample n = 170	Experimental n = 91 number (%)	Control n = 79 number (%)	Statistic / Sig
Mean age in years (SD) Range in years	30.26 (4.26) 19 - 41	30.08 (4.33) 21 - 41	30.47 (4.19) 19 - 39	t = -.596 p = 0.55
Nulliparous	170 (100)	91 (100)	79 (100)	
English spoken at home	166 (97.6)	87 (95.6)	79 (100)	Fishers exact =3.09 p = 0.25
Country of birth • Australia and NZ • United Kingdom • Asia • Other	112 (65.9) 25 (14.7) 15 (8.8) 18 (10.6)	59 (64.8) 13 (14.3) 11 (12.1) 8 (8.8)	53 (67.1) 12 (15.2) 4 (5.1) 10 (12.7)	χ^2 = 3.02 p = 0.39
Highest level of education • Degree • Diploma • Apprentice • Secondary	80 (47.1) 62 (36.5) 15 (8.8) 13 (7.6)	43 (47.3) 34 (37.4) 7 (7.7) 7 (7.7)	37 (46.8) 28 (35.4) 8 (10.1) 6 (7.6)	χ^2 = 0.33 p = 0.95
Family Income • <40,000 • 40,001-60,000 • >60,000	13 (7.6) 34 (20) 123 (72.4)	7 (7.7) 19 (20.9) 65 (71.4)	6 (7.6) 15 (19) 58 (73.4)	χ^2 = 0.099 p= 0.95
Major stress in last 12 months	59 (34.7)	31 (34.1)	28 (35.4)	χ^2 = .001 p = 0.98
Pregnancy Characteristics				
Multiple pregnancy	2 (1.2)	2 (2.2)	0 (0)	
Pregnancy complication	49 (28.8)	27 (29.7)	22 (27.8)	χ^2 = .008 p = 0.93
Mean gestation labour-weeks Range (SD)	39.7 35-42 (1.37)	39.82 37–42 (1.3)	39.56 35-42 (1.43)	t = 1.27 p = 0.21

Independent sample t-test was used to test difference between groups for interval data. Chi-square and Fishers exact were used to test difference between groups on nominal variables. Yates continuity correction was used for 2x2 tables. Statistical significance set at $\alpha = 0.05$.

Table 23: Maternal demographic details and pregnancy characteristics by allocated group

	Total Sample n = 170	Experimental n = 91 number (%)	Control n = 79 number (%)	Statistic / Sig
Induction of labour	56 (32.9)	27 (29.7)	29 (36.7)	χ^2 =0.657 p = 0.42
Birth outcome				
• Spontaneous vaginal	91 (53.5)	49 (53.8)	42 (53.2)	
• Assisted vaginal	36 (21.2)	18 (19.8)	18 (22.8)	χ^2 =0.317
• Emergency C/S	31 (18.2)	17 (18.7)	14 (17.7)	p = 0.96
• Elective C/S	12 (7.1)	7 (7.7)	5 (6.3)	
Drugs used in labour *				
• Nitrous Oxide	87/158 (55.1)	46/84 (54.8)	41/74 (55.4)	χ^2 = 0.000 p = 1.00
• Pethidine	61/158 (38.6)	29/84 (34.5)	32/74 (43.2)	χ^2 =0.921 p = 0.34
• Epidural	66/158 (41.8)	34/84 (40.5)	32/74 (43.2)	χ^2 =0.036 p = 0.85
No drugs in labour *	21/158 (13.3)	9/84 (10.7)	12/74 (16.2)	χ^2 =0.61 p=0.43
Caesarean section				
• Epidural	41/43 (95.3)	24/24 (100)	17/19 (89.5)	χ^2 = 0.81 p =0.37
Perineal trauma #				
• Episiotomy	36/127 (28.3)	18/67 (26.9)	18/60 (30)	χ^2 =0.038 p= 0.85
Mean length of labour (SD) #	10.43 (5.27)	10.13 (5.08)	10.77 (5.51)	t = -0.673
Range in hours	2 - 27	2 - 22	3 -27	p=0.502
Mean satisfaction childbirth (SD)	6.54 (2.40)	6.60 (2.34)	6.47 (2.47)	z = -0.085 p=0.932
Control in labour				
• Most of the time	126 (74.1)	67 (73.6)	59 (74.7)	χ^2 =0.000
• Hardly at all	44 (25.9)	24 (26.4)	20 (25.3)	p = 1.00

Sample excluded women who had an elective caesarean section. Women were asked to identify all drugs used. # Sample excluded women who had a caesarean section. Independent sample t-test, Chi-square and Mann-Whitney U were used to test difference between groups on the variables. Fisher's exact was used when expected count <5. Yates Continuity Correction for 2x2 tables. Statistical significance set at α = 0.05.

Table 24: Maternal labour and birth outcomes by allocated group

Chi-square test of independence were used to determine the relationship between experimental and control groups for each method of pain relief used in labour. Eleven percent of women in the experimental group (9/84) did not use pharmacological pain relief in labour, compared to sixteen precent (12/74) in the control group. Nitrous oxide, pethidine and epidural anaesthetic were the pharmacological pain relief used by women in this study, with the majority using a combination of nitrous oxide and epidural. Nitrous oxide was used by fifty-five percent of women in both the experimental group (46/84) and control group (41/74). Thirty-four percent (29/84) of women in the experimental group had a pethidine injection compared to 43% (32/74) in the control group. Forty percent (34/84) of women in the experimental group had epidural analgesia, compared to 43% (32/74) in the control group. These differences were not statistically significant.

The mean length of labour for women in the experimental group who had a vaginal birth (67/91) was 10.13 hours (SD = 5.08) with a range of 2-22 hours. The mean length for women in the control group (60/79) being 10.77 hours (SD = 5.51) with the range 3-27 hours. These differences were not statistically significant. The mean satisfaction with the childbirth experience, measured on a scale 0 (totally unsatisfactory) to 10 (absolutely wonderful) was 6.54 (SD 2.40). Mann-Whitney U test demonstrated there was no significant difference between the satisfaction of women in experimental and control groups ($z = -0.085$ $p=0.932$). Ninety-three percent (85/91) of women in the experimental group and 86% (68/79) in the control group felt they were given a say in making decision in labour 'most of the time'.

8.4.4 Postnatal Outcomes

There was no significance difference in the length of postnatal hospital stay, method of infant feeding, health problems of mother or baby, or paid work hours of women in experimental and control groups (Table 25). In summary, 80 percent (137/170) of women in this trial stayed in hospital for > 48 hours, . Ninety-one percent of women (155/170) breastfed their baby in hospital, with seventy-five percent of women (128/170) still breastfeeding at of time of completion of survey three. Sixteen percent of women (27/170) reported their baby had a health problem since birth, with reflux (4/23) being the most common health problem reported. Twelve percent of women (20/170) stated their health had not returned to normal since the birth. Twelve percent of women

(21/170) had returned to paid employment with 2% (4/170) working > 20 hours per week.

	Total Sample n=170 number (%)	Experimental n = 91 number (%)	Control n = 79 number (%)	Statistic / Sig
Length of hospital stay				
• < 48 hours	33 (19.4)	17 (18.7)	16 (20.3)	$\chi^2 = 0.004$
• > 48 hours	137 (80.6)	74 (81.3)	63 (79.7)	p = .95
Infant feeding in hospital				
• Breastfeeding/partial BF	155 (91.2)	84 (92.3)	71 (89.9)	$\chi^2 = 0.082$
• Infant formula	15 (8.8)	7 (7.7)	8 (10.1)	p =0.77
Health problem with baby	27 (15.9)	13 (14.3)	14 (17.7)	$\chi^2 = 0.16$ p =0.69
Mother health not returned	20 (11.8)	12 (13.2)	8 (10.1)	$\chi^2 = 0.144$ p=0.71
Returned to paid work	21 (12.4)	11 (12.1)	10 (12.7)	$\chi^2 = 0.000$ p=1.00
Work hours >20 / week	4 (2.4)	4 (4.4)	0 (0)	$\chi^2 = 1.90$ p=0.168

Independent sample t-test was used to test difference between groups for interval data. Chi-square and Fishers exact were used to test difference between groups on other variables. Yates continuity correction was used for 2x2 tables. Statistical significance set at $\alpha = 0.05$.

Table 25: Postnatal outcomes by allocated group

8.4.5 Maternal Perceived Parenting Self-efficacy

The 25 item Prenatal Parent Expectations Scale asks participants to rate how they feel about their ability to perform 25 skills relating to baby care, interaction with baby and life as a mother on a scale 0 (cannot do) to 10 (certain can do) This scale was administered pre-program (Survey One) and postnatal (Survey Three). The pre-program mean score by group was 172 (SD 32.46) for the experimental group and 174 (SD 29.13) for the control group (see Table 26). T-test for independent means was used to measure the difference between experimental and control group means. There was no statistically significant difference between the pre-program parenting self-efficacy mean scores for women in experimental and control groups (t = -0.527, p=0.596).

The 25-item Postnatal Parent Expectations Scale measures the same skills as the prenatal scale, prefacing each skill with 'I am' rather than 'I will'. Distributed to study participants by mail approximately six weeks after the birth of their baby, the majority were returned by 9 weeks, with a range of 5 to 12 weeks. The mean postnatal perceived parenting self-efficacy score for the experimental group was 206 (SD 21.02) and 190 (SD 22.28) for the control group. There was a statistically significant difference, measured by t-test for independent group means, between the postnatal mean scores of women in experimental and control groups ($t = 4.84$, $p<.001$).

To determine the effect of group and time on perceived maternal parenting self-efficacy, a repeated measures ANOVA was performed. Perceived parenting self-efficacy increased over time (df 1,168, $F = 98.914$, $p<.001$), as shown in Figure 8, with the difference in perceived parenting self-efficacy scores between the antenatal and postnatal period being greater for women in the experimental group than the control group (df 1,168, $F = 13.35$, $p<.001$). That is the new *Having a baby* program had an increased beneficial effect on maternal perceived parenting self-efficacy .

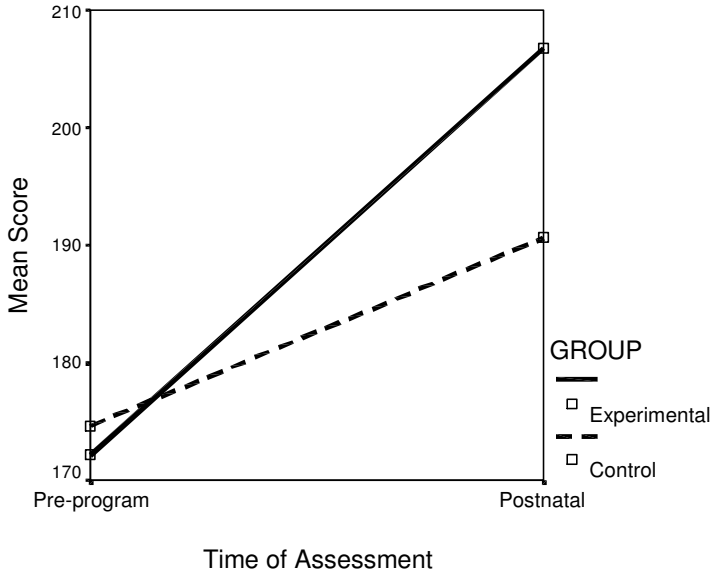


Figure 8: Maternal perceived parenting self-efficacy by group and time of assessment

8.4.6 Maternal Worry about the Baby

The outcome of interest in this trial from the Cambridge Worry Scale (H Stratham et al., 1992) was worry pertaining to the baby. The mean scores prenatal for this subsection of the scale were 5.66 (SD 3.2) for the experimental group and 5.99 (SD 3.23) for the control group. Mean postnatal scores, as presented in Table 26, were 2.04 (2.49) experimental and 2.14 (SD 2.51) for control group.

A repeated measure ANOVA demonstrated worry about the baby scores in both groups decreased over time, see Figure 9, with the difference between Survey One and Survey Two being significant (df 1,168, F = 177.804, p<.001). The difference between groups was not statistically significant (df 1,168, F = .173, p = .678). That is the experimental and control programs did not differ in their effect on worry about the baby.

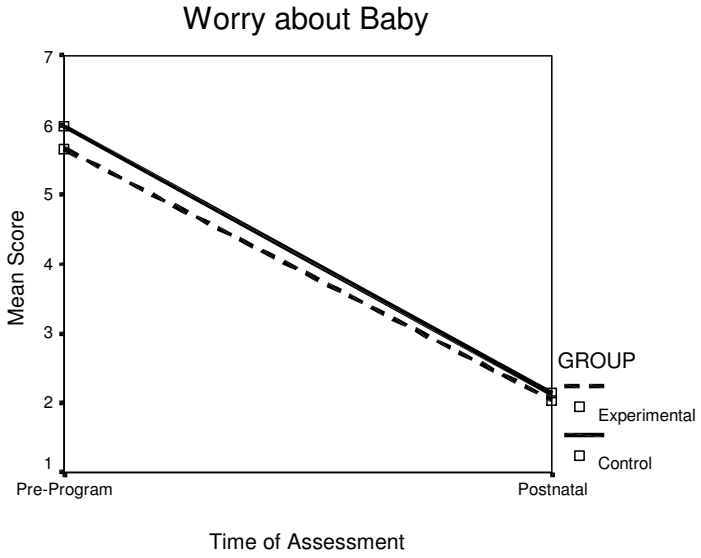


Figure 9: Maternal worry about baby by group and time of assessment

8.4.7 Maternal Assessment of Perceived Knowledge

An assessment of perceived knowledge, relating to issues covered in the Having a Baby program, was performed pre-program, post-program and postnatal. Mean scores demonstrated an increase in assessment of perceived knowledge scores between pre and post-program for women in both programs, with a decrease in perceived knowledge occurring after the birth of the baby.

To determine the effect of group on perceived knowledge of childbirth and parenting two knowledge subscales were examined. Subscale One related to aspects of parenting knowledge and Subscale Two related to labour and birth. A repeated measures ANOVA was performed on the both of the sub-scales.

Assessment of Parenting Knowledge

A significant difference in the implementation of the experimental and control programs was the integration of parenting topics and skills throughout Having a Baby with labour and birth being presented as a life transition. Less direct lectures and more self directed activities were used in the new program. The impact evaluation also suggested that information received during antenatal education was particularly relevant to the control group. Therefore, assessment of group differences of perceived parenting knowledge was of particular interest. The pre-program mean scores by group were 12.407 (SD 2.78) for the experimental group and 13.215 (SD 2.95) for the control group. T-test for independent means was used to measure the difference between experimental and control group means. There was no statistically significant difference between the pre-program mean scores for women in the experimental and control groups ($t=-1.84$ $p=0.068$).

Perceived parenting knowledge scores for both groups increased post-program as shown in Figure 10. The means scores measured by Survey Two were 16.79 (SD 2.06) for the experimental group and 16.07 (SD 2.31) for the control group. To determine the effect of group on parenting knowledge scores a repeated measures ANOVA was performed on pre-program (Survey One) and post-program scores (Survey Two). Perceived parenting knowledge for both groups increased over the time between Survey One and Survey Two (df 1,168, $F=219.511$, $p<.001$) with the increase for women in the experimental group being greater than those in the control group (df 1,168, $F=9.710$, $p=.002$).

Perceived parenting knowledge scores for both groups decreased after the birth. Mean scores measured by Survey Three were 13.20 (SD=3.60) for the experimental group and 12.38 (SD=3.90) for the control group. The mean postnatal score for each group demonstrated that perceived knowledge for women in the experimental group remained

above the pre-program score (Survey One), whereas for the women in the control group it decreased.

A repeated measures ANOVA conducted on the pre-program (Survey One) and postnatal scores (Survey Three) demonstrated a significant interaction between group and time. That is, women in the experimental group increased their level of perceived parenting knowledge 8 weeks after the birth of the baby compared to pre program levels, whereas women in the control group decreased their perceived parenting knowledge during this period.

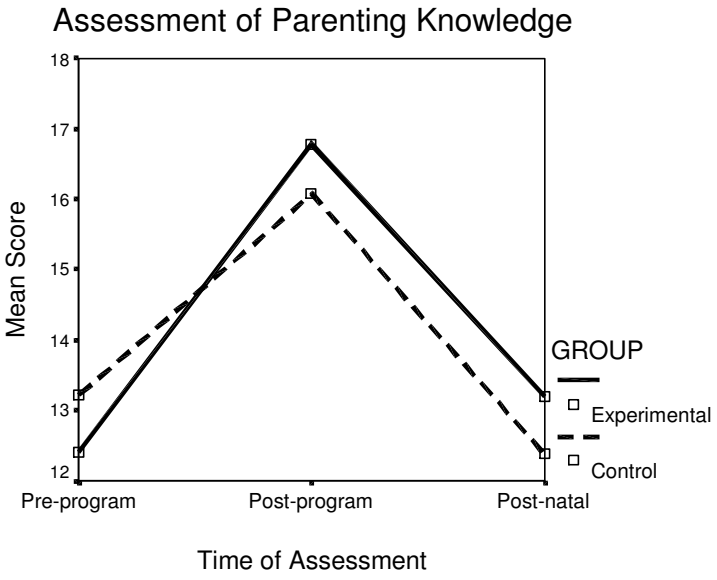


Figure 10: Maternal assessment of perceived parenting knowledge by group and time

The amount of time spent on labour in the experimental program was less than that in the control program and its method of presentation was different. It was therefore important to analyse the perceived labour knowledge for both groups. The pre-program mean scores by group were 11.67 (SD 3.47) for the experimental group and 12.39 (SD 3.01) for the control group. T-test for independent means was used to measure the difference between experimental and control group means. There was no statistically significant difference between the pre-program mean scores for women in the experimental and control groups (t=-1.44 p=0.152).

To determine the effect of group on labour knowledge scores a repeated measures ANOVA was performed on pre-program (Survey One) and post-program scores (Survey Two). Perceived labour knowledge for both groups increased over the time between Survey One and Survey Two (df 1,168, F=417.857, p<.001). There was no significant difference between the experimental group and control group scores for perceived knowledge about labour (df 1,168, F=2.875, p=.092).

Perceived labour knowledge scores decreased after the birth as shown in Figure 11. A repeated measures ANOVA conducted on the pre-program (Survey One) and postnatal scores (Survey Three) demonstrated a significant increase over time (df 1,168, F=117.213 p<.001). There was no interaction between time and group (df 1,168, F=2.627, p=.107). The mean postnatal score for each group, (see Table 26), demonstrated that perceived labour knowledge for women decreased slightly after the birth of their baby but in both groups it remained above the pre-program score.

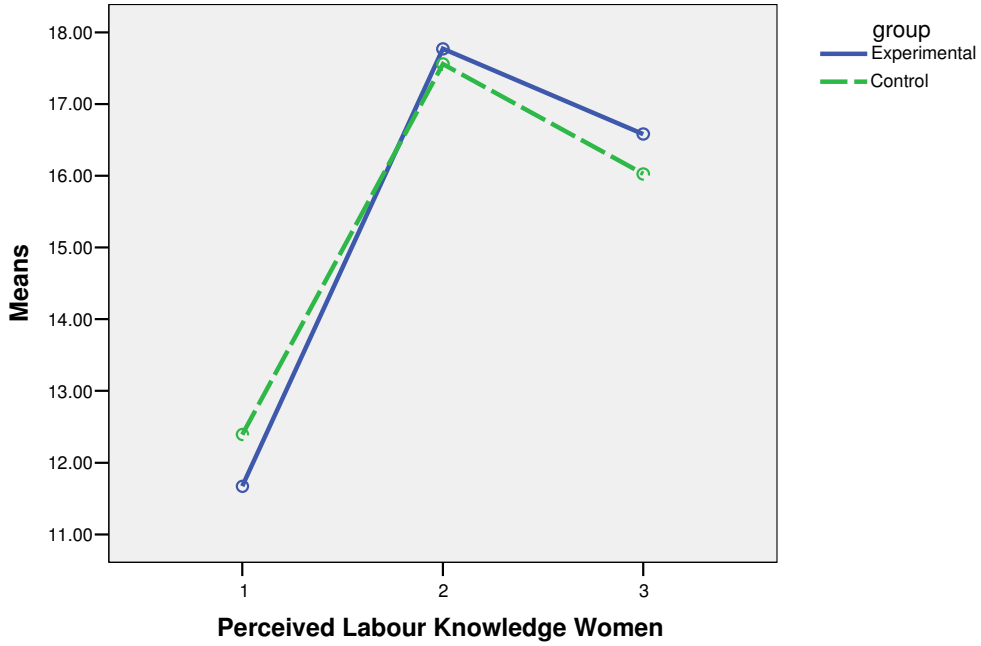


Figure 11: Maternal assessment of perceived labour knowledge by group and time

Variable	Time	Group	Mean	Std. Error	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Self – Efficacy	Pre-program	Exp	172.009	3.246	165.691	178.506
		Control	174.608	3.483	167.731	181.485
	Postnatal	Exp	206.736	2.266	202.263	211.210
		Control	190.633	2.432	185.831	195.434
Baby Worry	Pre-program	Exp	5.659	0.340	4.988	6.330
		Control	5.987	0.365	5.267	6.707
	Postnatal	Exp	2.044	0.263	1.525	2.563
		Control	2.139	0.282	1.583	2.696
Knowledge Parent	Pre-program	Exp	12.407	0.300	11.815	12.998
		Control	13.215	0.322	12.580	13.850
	Post-program	Exp	16.791	0.229	16.339	17.243
		Control	16.076	0.246	15.591	16.561
	Postnatal	Exp	13.198	0.392	12.423	13.973
		Control	12.380	0.421	11.548	13.211
Knowledge Labour	Pre-program	Exp	11.670	.342	10.994	12.346
		Control	12.392	.368	11.667	13.118
	Post-program	Exp	17.769	.190	17.394	18.145
		Control	17.557	.240	17.154	17.960
	Postnatal	Exp	16.582	.368	11.667	13.118
		Control	16.025	.386	15.262	16.788

Table 26: Mean and standard error by group for primary outcome measures

8.5 Discussion

The aim of this randomised control trial was to test whether women and men who attended the *Having a Baby* would have higher perceived parenting self-efficacy scores eight weeks after the birth, and lower baby worry scores compared with the women and men attending a conventional antenatal education program used as the control. The new Having a Baby program, explained in detail in Chapter Six, was designed from the needs assessment data primarily obtained from expectant and new parents. The program was the same length as the conventional program but the structure and process were significantly different.

The results indicate that the women who attended the new *Having a Baby* program compared to those attending the conventional program had improved perceived parenting self-efficacy and parenting knowledge approximately eight weeks after the birth of their first baby. Both the *Having a Baby* program and the conventional program had similar decreased levels of worry about their baby after birth. The reduction in the

worry scores of the women in the control group was, however, not sufficient to boost their parenting self-efficacy.

Knowledge, skills and experience are related to confidence, which in turn is related to self-efficacy. A strong sense of self-efficacy is necessary for a sense of personal well-being and for persisting in efforts towards success. Persons with greater self-perceptions of efficacy are able to channel their attention and resources to mastering the situation at hand (Reece & Harkless, 1998). The results from this evaluative research indicate that the *Having a Baby* program, with innovative learning activities such as problem solving and experiential activities, had a beneficial affect on maternal parenting self-efficacy. The considerable distress currently being experienced by new mothers may have been reduced for these women by providing them with the problem solving skills to adapt and adjust to their new life situations. Further research is however required to determine whether improving parenting self efficacy through childbirth and parenting education can have an effect on family distress and associated health and social outcomes.

It is interesting to note that although the control group believed that the information provided by the conventional program was one of the elements most liked about the program, the control group had lower perceived knowledge scores at least in the area of parenting. Although there was no difference in the two groups in their knowledge about labour, the control group spent more time on labour issues during the program and more frequently recommended that less time should be spent on labour issues when evaluating the program.

As discussed in Chapter Seven the structure and learning activities specific to the Having a Baby program were well accepted by the women. Indeed many thought that the parenting component could be increased further. This research has demonstrated that new parents are interested in baby care and parenting issues during pregnancy. The results of this study also indicate that refocusing of labour and birth content in the program does not have a detrimental effect. The labour and birth outcomes such as length of labour, use of pain medication and type of delivery for both groups were similar.

The women in this study were predominantly middle class, English-speaking, educated women with a male partner. Although they were the majority population attending Hospital A for the birth of their first baby, the generalisability of these results is limited. There are many groups within our multicultural society which may have special needs which have not been identified in this research e.g. adolescents, single women, and women from minority cultures. The teaching and learning methods and topics covered in the program may or may not be suitable for such groups and it is recommended that the needs of significant minority groups be examined and the program modified accordingly to encourage these women both to attend and benefit from education or health promotion programs. Further research is required to determine if the program is appropriate and effective for such groups.

The process evaluation described in the previous chapter indicated that a majority of program participants in the both the new and conventional programs would like some component of the program to be offered during the postnatal period. The dip in parenting self efficacy scores from post program levels to after the birth of the baby suggests that providing parenting learning support in the first two months after birth may be beneficial and should be examined

This chapter has described the results of a randomised controlled trial of two antenatal programs for women. Chapter Nine provides the comparable results from the male participants in the study.

Chapter Nine: Randomised Control Trial and Men's Results

9.1 Introduction

Research measuring the outcomes of antenatal and postnatal education have focussed on women (Buist, Morse, & Durkin, 2003; McVeigh, Baafi, & Williamson, 2002), with few exceptions. Barclay et al (Barclay et al., 1996) in a study on men's experiences found men 'endured' rather than 'enjoyed' antenatal classes. Diemer (1997) found that men who attended a father focussed discussions in perinatal classes showed significantly greater improvement in spousal relations than those in traditional classes. Schmied et al (Schmied et al., 2002) found men liked having a single gender component in antenatal education. Galloway et al (Galloway et al., 1997) found, however, that only sixteen percent of the men they questioned wanted a father's only session.

In this research men were included and an important component of all data collection. They expressed their interests, concerns, needs and priorities throughout the needs assessment, and they recommended programs and strategies for more effective antenatal education. This chapter presents the men's results to the randomised control trial to test the effectiveness of the new *Having a Baby* program compared to conventional antenatal education.

9.1.1 Hypothesis

Men who attended the experimental Having a Baby program compared to those who attended the conventional program would have higher perceived parenting self-efficacy and knowledge scores, and lower 'baby worry' scores eight weeks after the birth.

9.2 Method

9.2.1 Design

A randomised control trial was used to test the effectiveness of the new *Having a Baby* program compared to the conventional program. Self-report surveys were used to collect data on commencement of the program, on completion of the program and 8 weeks after the program. Repeated measures analysis of variance was used to examine differences between the groups on perceived parenting self efficacy, perceived parenting knowledge, and worry about the baby.

9.2.2 Sample recruitment and randomisation

Primiparous, English speaking clients who booked a Having a Baby program at Hospital A which commenced between May – November 2000 were invited to participate, and those who gave an informed consent were randomly allocated to an experimental or control group on their preferred night of attendance. Experimental and control programs were offered each night of the week. Clients who did not consent to the study were allocated to the program of their choice on their preferred night of attendance.

9.2.3 Data Collection Instruments

Women and men participating in the study were asked to complete three surveys. The men's surveys were posted or distributed at the same time as the surveys completed by the women. Survey One was completed and returned with program payment, Survey Two was completed during the final session of the program and Survey Three was posted to participants six weeks after the birth of their baby. Written consent was obtained from women and men, with confidentiality being protected through the allocation of a code to each participant. Participants who had not returned Survey Three within four weeks were given a follow-up telephone call and sent a copy of Survey Three if required. The majority of men completed Survey Three 8-10 weeks after the birth, with the mean age of the baby being 9.69 weeks and the range 5-16 weeks.

To reduce the chance of incorrect survey distribution all surveys were colour coded according to group and gender of participant. The surveys were tested by forty participants who gave consent during a pilot study of programs commencing in February and March 2000. No modification of surveys was required.

9.2.4 Variables

Perceived Paternal Parenting self-efficacy

Adjustment to parenthood in this study was measured by maternal and paternal perceived parenting self-efficacy pre-program and postnatal. The 25-item Parent Expectations Survey (PES) (Reece, 1992), described in detail in Chapter Eight, is a self-report survey which examines perceived parenting self-efficacy in relation to tasks they will perform in caring for their baby, their role as a parent and their relationship with their partner. Participants are asked to rate the confidence they have on a scale of 0

(cannot do) to 10 (certain can do) in their ability as a parent on twenty-five affirmative statements.

The fact that the scale had been used for men in previous research studies was one of the reasons it was used as a measure in this trial. The wording of all items in the PES, except item 14, were suitable for men. The wording of statement 14 in both pre and postnatal surveys was changed for the men's survey. '*I will easily be able to get the baby and myself out for a visit to the Early Childhood Health Centre*' was changed to '*I will be able to get the baby and myself out for a visit to friends.*' This change was made because the majority of men attending antenatal education programs were not primary carer of the baby and/or unable to visit the Early Childhood Health Centre during hours of operation.

Paternal Worry

Research demonstrates stress is inversely related to self-efficacy (Bandura, 1977). The Cambridge Worry Scale (CWS) (H Stratham et al., 1992), a 10-item scale measures concerns and fears related to pregnancy, labour, caring for a baby, relationships and socio-economic issues. Participants rate each on a 5-point likert scale from 0 (not a worry) to 5 (a major worry). This scale, which has demonstrated reliability and validity (H. Stratham et al., 1997), can be administered to men with minor modification. Item 5 was changed from '*Your own heath during pregnancy'* in the women's survey to *'your partner's health in pregnancy'* in the men's survey.

Assessment of Perceived Knowledge

An Assessment of Perceived Knowledge Scale (APKS) related to labour, infant care and the role of parent knowledge, used by the researcher in previous unpublished evaluative research, was administered pre-program and post program and postnatal. The men were asked to rate their perceived knowledge on 11 topics covered in a program on a 5-point likert scale from 1 (very poor) to 5 (very good). In this study, four topics related to labour and birth, one to hospital services, one to rights and responsibilities, and five to postnatal issues. The postnatal topics, of particular interest in this study, were 'your feelings after baby is born', 'caring for your baby', and 'feeding your baby' and 'life as a father' in the men's survey.

Additional Data

Age, country of birth, languages spoken at home, level of education, family income and major lifestyle changes in the previous twelve months was the socio-demographic data collected from male participants in Survey One. Labour, birth and postnatal outcomes were collected in Survey Three. The outcomes included:

- Age of their baby;
- Their parity by asking the question *is this your first baby*?
- Their ability to make decisions during labour and birth;
- Sense of control during labour and birth.

9.2.5 Data Analysis

The statistical software package SPSS was used for data analysis. Only data from participants who had completed every question in the three surveys was analysed. An independent researcher checked 10% of the SPSS data entry for accuracy. Data analysis commenced during data collection but was not reported to the educators or the working party to decrease the chance of the results influencing the facilitation style of each educator. The men's data was analysed separately from data collected from the women.

Simple descriptive statistics, frequencies, means, χ^2 and independent sample t-test, were used to measure nominal and ordinal data and differences between group means. For example, Fishers exact, rather than χ^2 was used for cells that had a count less than five, and Yates continuity correction was used for 2x2 tables. Statistical significance set at $\alpha = 0.05$.

The responses to items for the three primary outcome measures, perceived parenting self-efficacy , worry and assessment of perceived knowledge were each totalled. T-tests were performed to determine whether PES, Worry and Assessment of Perceived Knowledge scores initially varied with group. Then repeated measure ANOVAs were used to determine the effect of group over time. The assumptions of homogeneity of variance were measured and not violated.

9.3 Results

Two hundred and ninety primiparous, English speaking women and their partners, referred to as 'couples', were approached to participate in the research. Forty-two refused or were unable to participate. The reasons for non-participation were 'did not want to participate' (15) and twenty-seven there were no vacancies in programs on their preferred night, which meant they had to attend the alternate program.

Ultimately 248 couples were recruited to the study. Ninety-five percent (n=118) of men in the experimental group completed Survey One compared to 90% (n=112) in the control group. Ninety precent in the experimental group and 86% in the control group completed Survey Two. Seventy-one percent in the experimental group and 64% in the control group completed Survey Three as is shown in Figure 12. All participating partners were men. There were no differences in the socio-demographic characteristics between participants and non-participants in this study. All male partners of women who completed the three surveys in the control group also completed the three surveys. Three male partners of women who completed surveys in the new program did not complete the survey three. The final total sample size for men in both groups was 167 and for women the total sample was 170.

9.3.1 Paternal Demographic Details

There was no significance difference in age, country of birth, level of education or family income between men in experimental and control groups. Frequencies, proportions, means, and test of significance are presented in Table 27. The age range of the men in the study was 19 to 45 years, (mean 31.31 years, SD 4.41), with all men expecting their first baby. Ninety-seven percent of men (162/167) spoke English at home, with the country of birth of men in the study being similar in this characteristic to the women who birth at hospital A. Sixty-seven percent of participants (112/167) were born in Australia, 17% (29/167) were born in the United Kingdom and 6% (10/167) born in Asia. The majority of the men were educated with 75% (126/167) having a tertiary level of education, and 73% (122/167) had a family income greater than $60,000 per annum. Twenty-five percent of men (442/167) had a major stress in the twelve moths prior to the study. Employment status data was collected after the birth in Survey Three. Ninety-two percent (153/167) were employed in paid work, with 85% (142/167) working > 20 hours per week.

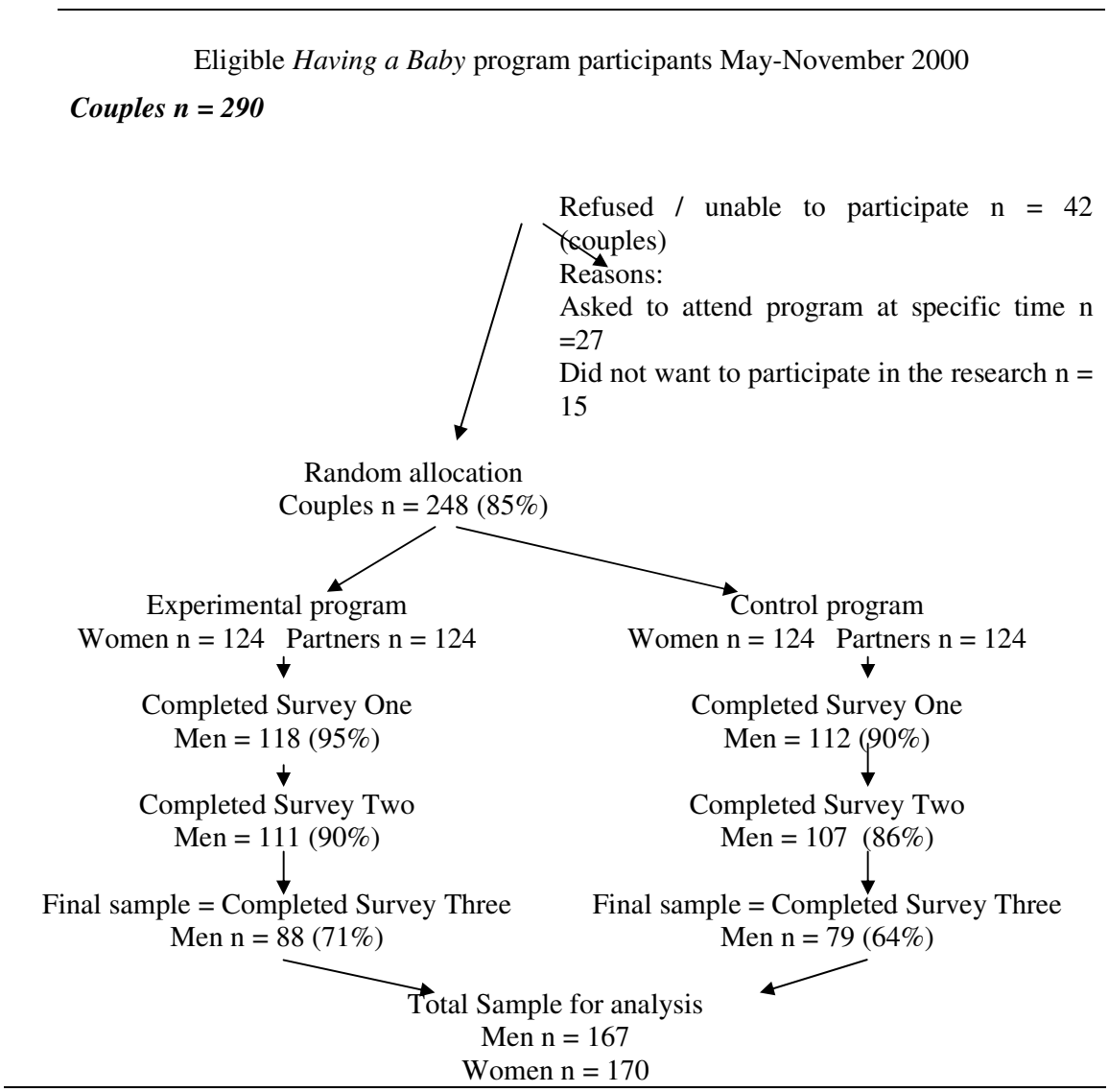


Figure 12: Flow chart identifying sample size

	Total Sample n = 167 number (%)	Experimental n = 88 number (%)	Control n = 79 number (%)	Statistic / Sig
Mean age in years (SD) Range in years	31.31 (4.41) 19 - 45	30.69 (4.28) 20 - 42	32 (4.46) 19 - 45	t = -1.93 p = 0.06
English spoken at home	162 (97)	83 (94.3)	79 (100)	Fishers exact = 4.10 p = 0.25
Country of birth				
• Australia and NZ	112 (67.1)	55 (62.5)	57 (72.2)	Fishers exact = .115 p = 1.00
• United Kingdom	29 (17.4)	17 (19.3)	12 (15.2)	
• Asia	10 (6)	8 (9.1)	2 (2.5)	
• Other	16 (9.6)	8 (9.1)	8 (10.1)	
Highest level of education				
• Degree	82 (49.1)	43 (48.9)	39 (49.4)	Fishers exact = .115 p = 1.00
• Diploma	44 (26.3)	23 (26.1)	21 (26.6)	
• Apprentice	32 (19.2)	17 (19.3)	15 (19)	
• Secondary	9 (5.4)	5 (5.7)	4 (5.1)	
Family Income				
• <40,000	8 (4.8)	4 (4.5)	4 (5.1)	Fishers exact = .130 p= 1.00
• 40,001-60,000	37 (22.2)	20 (22.7)	17 (21.5)	
• >60,000	122 (73.1)	64 (72.7)	58 (73.4)	
Major stress in last 12 months	42 (25.1)	21 (23.9)	21 (26.6)	χ^2 = 0.05 p =0.82
Father in paid work	153 (91.6)	79 (89.8)	74 (93.7)	χ^2 = .394 p = 0.53
Work hours >20 / week	142 (85.0)	75 (85.2)	67 (84.8)	χ^2 = 000 p =1.00

Independent sample t-test was used to test difference in age between groups. Chi-square and Fishers exact were used to test difference between groups on other variables. Yates Continuity Correction was used for 2x2 tables. Statistical significance set at $\alpha = 0.05$.

Table 27: Paternal characteristics by allocated group

9.3.2 Labour and Birth Outcomes

The mean satisfaction with the childbirth experience, measured on a scale 0 (totally unsatisfactory) to 10 (absolutely wonderful), was 7.94 (SD 1.93). Mann-Whitney U test demonstrated no significant difference between the satisfaction of men in experimental and control groups z = -1.814 p=0.07. It is noted however that there is a stronger trend

towards greater satisfaction in childbirth than that of the women (men p=0.07 and women p=0.923). From this result it appears that the intervention made a difference in childbirth satisfaction for both women and men. Reducing some of the distress surrounding parenting may have made them more satisfied with their experience. The fact that the trend was weaker for women is probably due to the fact that they experienced the labour pain and at approximately eight weeks postnatal it was still prominent for them. Eighty-five percent (75/88) of men in the experimental group and 80% (63/79) in the control group felt they were given a say in making decision in labour 'most of the time'. Ninety-four percent (158/167) of men felt in control during their wife's labour, as presented in Table 28.

	Total Sample n = 167 number (%)	Experimental n = 88 number (%)	Control n = 79 number (%)	Statistic / Sig
Mean satisfaction childbirth (SD)	7.94 (1.93)	8.11 (2)	7.75 (1.85)	z = -1.814 p=0.07
Control in labour				
• Most of the time	158 (94.6)	83 (94.3)	75 (94.9)	χ^2 =0.00
• Hardly at all	9 (5.4)	5 (5.7)	4 (5.1)	p =1.00

Chi-square and Mann-Whitney U were used to test difference between groups on the variables. Statistical significance set at $\alpha = 0.05$.

Table 28: Paternal labour outcomes by allocated group

9.3.3 Paternal Perceived Parenting self-efficacy

The Parent Expectations Scale (Reece, 1992), measuring prenatal and postnatal paternal perceived parenting self-efficacy was the instrument used to examine adjustment to parenthood in this trial. The 25 item Prenatal Scale asks participants to rate how they feel about their ability to perform 25 skills relating baby care, interaction with baby and life as a father on a scale 0 (cannot do) to 10 (certain can do) This scale was administered pre-program (Survey One) and postnatal (Survey Three).

The pre-program mean score by group was 171 (SD 29.95) for the experimental group and 168 (SD 30.27) for the control group, see Table 29. T-test for independent means was used to measure the difference between experimental and control group means. There was no statistically significant difference between the pre-program parenting self-efficacy mean scores for men in experimental and control groups (t = 0.63, p=0.527).

The 25-item Postnatal Parent Expectations Scale measures the same skills as the prenatal scale, prefacing each skill with 'I am' rather than 'I will'. The mean postnatal perceived parenting self-efficacy score for the experimental group was 199 (SD 23.11) and 179 (SD 23.76) for the control group. There was a statistically significant difference, measured by t-test for independent group means, between the postnatal mean scores of men in experimental and control groups ($t = 5.32$, $p < 0.001$).

To determine the effect of group and time on perceived paternal parenting self-efficacy , a repeated measures ANOVA was performed. Perceived parenting self-efficacy increased over time (df 1,165, $F = 60.36$, $p<0.001$), with the difference in perceived parenting self-efficacy scores between the antenatal and postnatal period greater for men in the experimental group than the control (df 1,165, $F = 10.63$, $p<.001$).

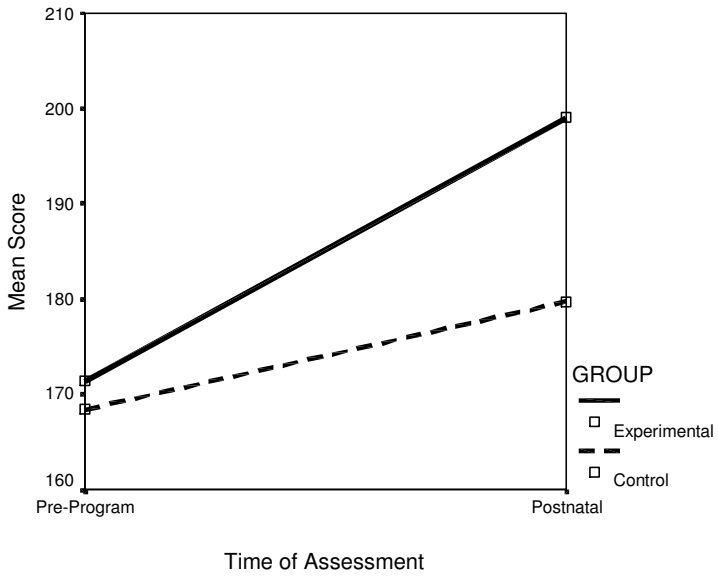


Figure 13: Paternal perceived parenting self-efficacy by group and time of assessment

9.3.4 Paternal Worry

Paternal worry has been shown to be inversely related to self-efficacy. The 10 item Cambridge Worry Scale (H Stratham et al., 1992) was divided into subsections allowing measurement of the effect the independent variable had on specific types of worry. In this study three subsections were analysed, (self, life and baby), with the scale being administrated pre-program and postnatal.

Worry about the Baby

The outcome of interest in this study was worry pertaining to the baby. The mean scores prenatal were 5.30 (SD 3.14) for the experimental group and 4.92 (SD 3.75) for the control group, (see Table 29). Mean postnatal scores were 2.46 (SD 3.09) experimental and 2.68 (SD 2.55) for control group.

A repeated measure ANOVA demonstrated worry about the baby scores decreased over time, the difference being significant (df 1,165, F = 67.585, p<0.001). There was no statistically significant difference between the groups over time (df 1,165, F = .944, p = .333) as shown in Figure 14.

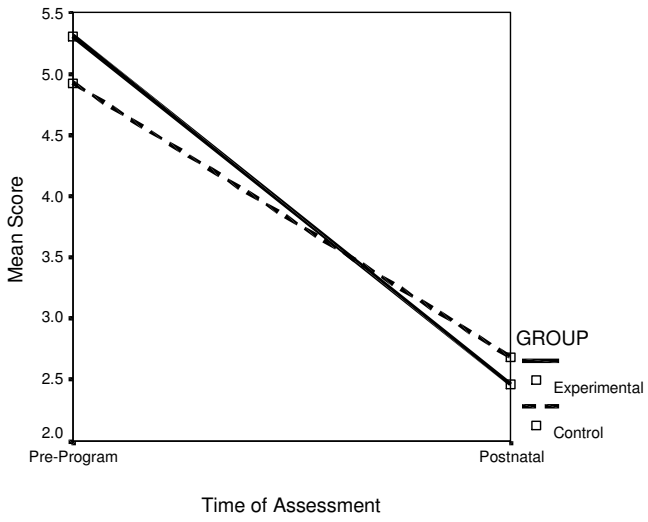


Figure 14: Paternal worry about baby by group and time of assessment

9.3.5 Paternal Assessment of Perceived Knowledge

An assessment of perceived knowledge related to issues covered in both experimental and control programs, was performed pre-program, post-program and postnatal. Mean scores demonstrated an increase in assessment of perceived knowledge scores between pre and post-program surveys for men in both programs, with a decrease occurring postpartum.

To determine the effect of group on two aspects of knowledge gained during the antenatal education program the scale was sub-divided. Subscale One related to aspects

of parenting knowledge and Subscale Two examined knowledge relating to labour and birth.

Assessment of Parenting Knowledge

Assessment of perceived parenting knowledge was of particular interest because of the differences between experimental and control programs in the amount of time spent on parenting and the different methods used to facilitate learning in this area,. The pre-program mean scores for perceived parenting knowledge by group were 12.43 (SD 3.53) for the experimental group and 12.29 (SD 3.29) for the control group. T-test for independent means was used to measure the difference between experimental and control group means. There was no statistically significant difference between the pre-program mean scores for men in the experimental and control groups (t=.266 P=.791).

Perceived parenting knowledge scores increased post-program as shown in Figure 15. The means scores measured by Survey Two were 16.64 (SD 2.02) for the experimental group and 15.63 (SD 2.29) for the control group. To determine the effect of group on parenting knowledge scores a repeated measures ANOVA was performed on pre-program (Survey One) and post-program scores (Survey Two). Perceived parenting knowledge for both groups increased over the time between Survey One and Survey Two (df 1,165, F=172.156, p,<001). There was no significant difference between groups over time (df 1,165, F=2.250, p=.135).

Perceived parenting knowledge scores decreased after the birth as shown in Figure 15. Means scores measured by Survey Three were 13.64 (SD 4.44) for the experimental group and 12.82 (SD 3.90) for the control group. A repeated measures ANOVA conducted on the pre-program (Survey One) and postnatal scores (Survey Three) demonstrated that there was no significant increase over time (df 1,165, F=4.509 p=.035) and no difference between time and group (df 1,165, F=0.691, p=.407).

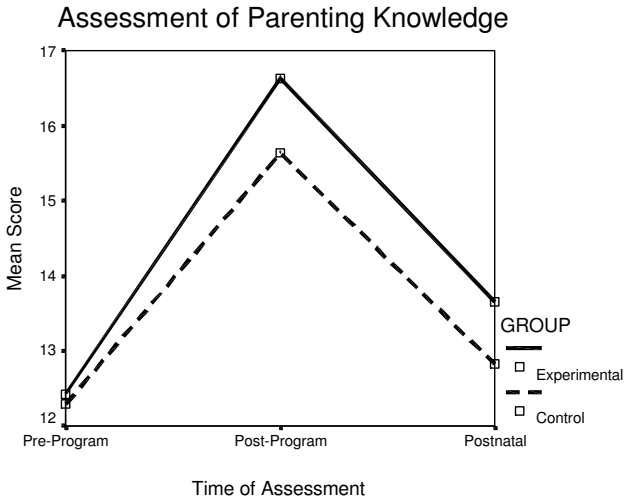


Figure 15: Paternal assessment of perceived parenting knowledge by group and time

The amount of time spent on labour in the experimental program was less than that in the control program and its method of presentation was different. It was therefore important to analyse the perceived labour knowledge for both groups. The pre-program mean scores by group were 9.76 (SD 3.47) for the experimental group and 10.19 (SD 3.13) for the control group. T-test for independent means was used to measure the difference between experimental and control group means. There was no statistically significant difference between the pre-program mean scores for women in the experimental and control groups (t=-.834, p= .406).

To determine the effect of group on labour knowledge scores a repeated measures ANOVA was performed on pre-program (Survey One) and post-program scores (Survey Two). Perceived labour knowledge for both groups increased over the time between Survey One and Survey Two (df 1,165, F=607.489, p<.001) with the difference in experimental group and control group scores not being statistically significant (df 1,165, F=3.596, p=.060), (see Figure 16). Group did not have an effect on perceived labour knowledge scores.

Perceived labour knowledge scores decreased after the birth as shown in Figure 16. A repeated measures ANOVA conducted on the pre-program (Survey One) and postnatal scores (Survey Three) demonstrated that there was an increase in scores over time (df 1,165, F=333.799 p<0.001). There was no difference between groups over time (df

1,165, F=2.544, p=.113). The mean postnatal score for each group, (see Table 29), demonstrated that perceived labour knowledge for men decreased slightly after the birth of their baby but in both groups it remained above the pre-program score (Survey One).

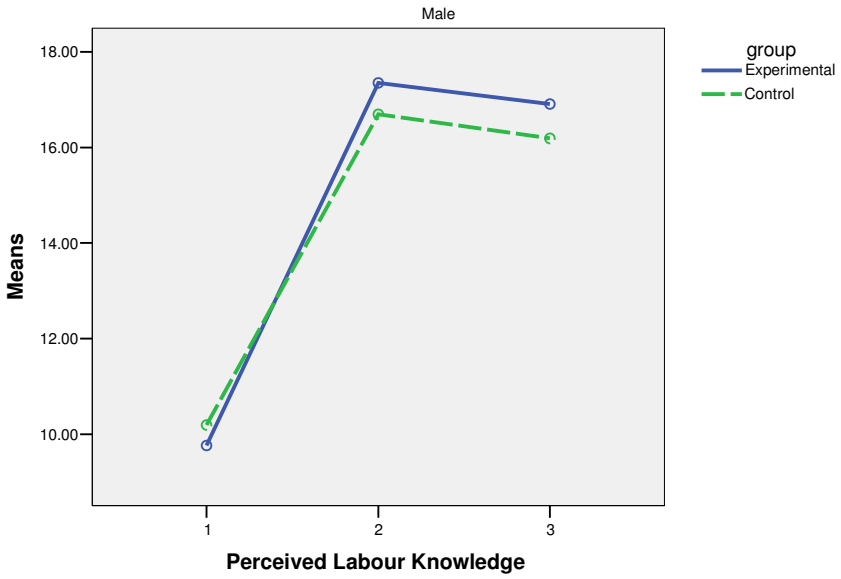


Figure 16: Paternal assessment of perceived labour knowledge by group and time

Variable	Time	Group	Mean	Std. Error	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Self – Efficacy	Pre-program	Exp	171.364	3.209	165.027	177.700
		Control	168.405	3.387	161.717	175.093
	Postnatal	Exp	199.023	2.497	194.092	203.953
		Control	179.709	2.636	174.505	184.913
Baby Worry	Pre-program	Exp	5.307	0.368	4.581	6.033
		Control	4.924	0.388	4.158	5.690
	Postnatal	Exp	2.466	0.304	1.865	3.067
		Control	2.684	0.321	2.049	3.318
Knowledge Parent	Pre-program	Exp	12.432	0.364	11.712	13.151
		Control	12.291	0.385	11.532	13.050
	Post-program	Exp	16.636	0.229	16.183	17.089
		Control	15.633	0.242	15.155	16.111
	Postnatal	Exp	13.648	0.447	12.765	14.530
		Control	12.823	0.472	11.891	13.754
Knowledge Labour	Pre-program	Exp	9.761	.353	9.063	10.459
		Control	10.190	.373	9.453	10.926
	Post-program	Exp	17.352	.209	16.939	17.765
		Control	16.696	.221	16.260	17.132
	Postnatal	Exp	16.909	.328	16.261	17.557
		Control	16.190	.347	15.506	16.874

Table 29: Mean and standard error by group for primary outcome measures

9.4 Discussion

The aim of this randomised control trial was to test whether women and men who attended the *Having a Baby* would have improved postnatal outcomes to those who attended the conventional program. The *Having a Baby* program, explained in detail in Chapter Seven, was designed from the needs assessment data primarily obtained from expectant and new parents. The program was the same length as the conventional program but the structure and process were significantly different. Gender specific activities were integrated through the program and gender inclusive language was used throughout.

The results indicate that the men who attended the new *Having a Baby* program had superior postnatal outcomes to those attending the conventional program. In particular they had significantly improved perceived parenting self-efficacy. Men in both the new program and the conventional program had lower baby worry scores at approximately eight weeks after the birth of their first baby. As previous research has demonstrated

that worry is inversely related to self-efficacy, these results indicate that both the *Having a Baby* program and the conventional program were beneficial. The reduction in the worry scores for the men in the conventional program group was, however, not sufficient to boost their parenting self-efficacy . Similar to the results for the women, perceived parenting knowledge scores increased after the education program but decreased for men in both groups after the birth when the reality of parenting was experienced. Unlike the women, men in both groups felt they knew more about parenting labour and birth eight weeks after birth than they did before they attended the education program.

As discussed in Chapter Three the amount of published antenatal education research which has investigated men is minimal and there is no consensus as to the most effective method by which men can learn (Galloway et al., 1997; Schmied et al., 2002). This study, combined with the needs assessment, indicates that men, like the women, are able to identify their interests, concerns and needs are during the childbearing year and that when given an opportunity to gain the information and skills they want, in a way that makes sense to them, it can have a beneficial effect.

Although the data from women and men was analysed separately it is interesting to make some comparison. The results of the three primary outcome measures for the men appear to be similar to those obtained from the women, except for perceived parenting self-efficacy and knowledge. Further analysis of these differences will be conducted in the near future. Women were the predominant carers of babies as the majority of men worked more than 20 hours after the birth. In this situation it is hypothesised that the experience and ongoing learning by the women may increase their knowledge confidence and parenting self-efficacy compared to men.

Process evaluation described in Chapter Seven indicated that the knowledge gained from the education programs was more important to men than women. Further research is needed to determine the content and activities preferred by men. Other strategies such as the use of a male facilitator in gender-specific discussions also needs further examination. There are no male antenatal educators at Hospital A and rather than potentially confounding the results of this trial through employing and incorporating

male facilitators in the program it was deemed more important to develop and test the *Having a Baby* program within the current resources.

Chapter Ten: Discussion and Implications for Practice

10.1 Introduction

The purpose of this research was to improve confidence and decrease the level of distress experienced in the early postnatal period by improving antenatal education and support. With increasing rates of intervention (Roberts et al., 2000), depression (O'Hara & Swain, 1996), and decreasing self-efficacy and breastfeeding rates (NSW Centre for Public Health Nutrition, 2004) conventional antenatal education, primarily in the third trimester of pregnancy, and based on psycho-physical theory of childbirth pain, (Dick-Read, 1933; Lamaze, 1956), was deemed ineffective.

In this thesis, antenatal education was located in a health promotion framework. The PRECEDE-PROCEED model was used to plan and evaluate programs and resources to more effectively prepare women and their partners through the childbearing year. The first stage of the research involved an assessment of the critical elements for planing and implementing a health promotion program as defined by the PRECEDE-PROCEED model. That is sociocultural, epidemiological, behavioural and environmental, educational and political (policy and administration). This assessment was carried out using a review of the literature and a multiple source, multiple methods needs assessment which was described in Chapters Three, Four, Five and Six.

The second stage of the research described how the results of the needs assessment were translated into practice in one hospital. This was presented in Chapter Seven. The chapter described the structure, content and processes used in the development of an antenatal education program and provided the results of a process evaluation. The chapter also described two resources developed for Australian antenatal educators and a Basic Group Skills Training program for educators as a result of this work. The third and final stage of the research consisted of randomised controlled trial of an antenatal education program, based on the needs assessment, compared to the conventional program which is provided by many hospitals in NSW and Australia.

The learning and knowledge produced from this research are outlined below. The relevance of the findings to health promotion as defined by the Ottawa Charter and the implications for practice are then discussed, as are the limitations of this research. This

chapter concludes with recommendations for service improvement and further research and development.

10.2 Overview of the Research Questions

Five research questions were listed in Chapter One and examined in this thesis. They are each summarised below.

10.2.1 What were the interests, concerns and priorities of first time expectant and new parents during the childbearing year?

Contrary to the longstanding belief held by health professionals these women and men were interested in life as a parent and baby care issues during pregnancy (Svensson, 2001). Indeed this research suggests that expectant women and their partners believe they have the baby in pregnancy. They have, or experience, foetal movements, they see the baby on ultrasound, they watch the baby and uterus grow, and when asked to draw or describe the baby during antenatal education programs they can portray a visual image.

An increasing amount of research recommends that the parenting component of antenatal education be increased (Nichols, 1995; M. Nolan, 1997b; Schneider, 2001) with several providing strategies by which this can be achieved. For example Corwin (1998) recommends paralleling the stages of parenting with the stages of labour in an integrated birth and parenting program, enhancing the parent's awareness of the infant's developmental needs. Westmoreland and Zwelling (2000) providing a family centred education program with a series of eight courses beginning pre-conception and continuing after the birth. In this program, newborn care is divided into two courses, with parental adjustment being provided in another course.

This research adds to previous research and not only identifies specific strategies proven to be effective during the childbearing year, (Chapters Eight and Nine), but argues the need to refocus conventional antenatal education, in particular the labour and birth component. Pregnancy, labour, birth and the early weeks with a baby can and should be regarded as a life transition or life journey. Labour skills can, and should, be presented as life skills. Antenatal education, both with conventional structure and new strategies,

needs to assume a parenting focus and there must be a commitment made to make sessions and topics relevant to the participants for whom they are intended. For example, with these expectant and new parents their parenting focus changed from long term childcare issues in early pregnancy, to breastfeeding and infant development during the middle weeks of pregnancy and then more specific baby care issues in the final weeks of pregnancy. Subsequent, and more recent, program observation by this researcher has demonstrated that this change of interest focus was not unique to the population investigated in this research.

An important finding of the needs assessment undertaken and reported here was that parents were able to clearly articulate their concerns, interests and priorities during the childbearing year and strategies by which they could be met. They also identified how their interests and concerns changed in focus during the year and they did not follow a 'gestational' or physical sequence. Both women and men were constantly searching for answers to their very specific questions. They described how they were frequently let down by clinical staff especially during antenatal visits and that they were frustrated by conventional antenatal education being so limited. The fact that the majority of these expectant and new parents were only planning to have one or two children meant that they wanted to do their best and '*get it right*'.

The population who accessed antenatal education at Hospitals A and B were predominately English speaking, middle class, educated and employed, in their late twenties to mid thirties. They came from nuclear families and therefore had minimal personal experience in pregnancy, labour and life with a new-born. They did not have the family networks of previous generations and they lacked role models. Although care must be taken when generalising these results to other populations, it is important to note that these demographic characteristics were similar to that of the majority of women and men who access antenatal education in Australia (NACE Conference Delegates, 2001).

10.2.2 What were the interests, concerns and priorities of first time expectant and new parents during the childbearing year as perceived by health professionals?

The needs assessment demonstrated a significant mismatch between the interests, concerns and priorities of expectant and new parents and those perceived by health

professionals. For example some health professionals believed that parents needed information about parenthood and baby care but they were all adamant that parents would '*not listen*'. The antenatal educators incorrectly thought that parents would learn effectively from using games and questioning techniques in their programs, when the parents found both of these strategies tedious.

The focussed training of the experts and their specialisation and delineation of practice meant their ability to provide information and answer questions was limited to their 'knowledge comfort zones', and even within these they tended to follow a chronological and gestational order. For example at the twenty-four week antenatal check, midwives provided developmental and institutional information relevant to that stage to women but did not address breastfeeding. This research shows that some of the women wanted and needed this information. As far as the parents were concerned it appeared that the experts had control over the provision of information. Parents felt it was not easy to get answers to their questions leading to a sense of powerlessness and anxiety which contributed to their roller-coaster emotional experience during pregnancy and after birth. It could be argued that in part this anxiety was self-inflicted because amongst these expectant and new parents there was an over-reliance on expert advice, as opposed to peer advice and knowledge.

Another important finding was that the clinical experts, with the exception of the antenatal educators, were unable themselves to spontaneously make recommendations to improve antenatal education. It appeared that the experts wanted parents to attend conventional antenatal classes to learn about institutional requirements and policies (Barclay et al., 1989; Gilkison, 1991) and whilst this information was also of interest to parents, it was not the primary focus of their learning during the childbearing year.

10.2.3 Could the adjustment to parenthood be made easier for first time expectant and new parents at two large metropolitan hospitals in Sydney through antenatal education?

There were numerous processes which parents identified could improve their learning experience during childbearing year. Firstly they recommended a range of programs and different types of groups. The key processes described were: '*learning and discussing*' programs where individuals could discuss preset topics and hot topics within a

supportive structured environment with an unbiased and experienced educator; '*sharing and supporting each other*' through informal and regular meetings or coffee mornings led by participants; '*hearing and discussing detail*' sessions which provided a more didactic presentation of information from an expert health professional with time for questions.

Secondly parents recommended learning activities which would not only enhance their learning but also help them gather the support they required. For example they recommended meeting new parents and discussing the early weeks at home with their baby, and observing newborn behaviour through watching a baby being bathed should be incorporated into a '*towards the end*' of pregnancy program. Contrary to a longstanding belief expressed by health professionals these expectant and new parents were able to identify the learning processes they wanted and were grateful when opportunities to express them were provided.

Thirdly parents believed that other expectant parents would prefer to be offered a '*menu*' of antenatal education from which they could select options that would meet their learning and support requirements during the childbearing year. They recommended the menu should consist of a combination of hospital-based and community-based programs and strategies, all of which should adhere to the '*essential ingredients*' these expectant and new parents identified. These '*ingredients*' included structure of program, session length and frequency, group size and composition and style of facilitator.

Another important confirmation of this study was that men differed slightly in their learning needs and recommended strategies during the year as suggested by Barclay (1996), McElligott (2001) and Robertson (1999). They believed their role in pregnancy was to check, with a health professional, '*what was normal*' and '*what was risky*' because they wanted to maximise the chance of having a healthy baby. They then monitored the growth and development of the foetus in order that they identify any adverse situation before harm occurred. The men preferred to learn from '*hearing and discussing detail*' sessions and also '*learning and discussing*' programs. The need for men-only sessions or groups during the year was not a priority of the men who

participated in this research, however it is one area that requires further investigation as recommended by recent research by Schmied (2002) and Symon (2003).

10.2.4 What role did health professionals play in this process?

This research demonstrated that health professionals now play a significant role in antenatal education because of changes in technology and societal structure. Policy (Health Department Victoria, 1990; NSW Department of Health, 1989) identifies that antenatal education is an important component of antenatal care. The parents themselves recognise health professionals as authority figures who they believe should be able to satisfy their thirst for information and support. However when professional help was not available they are disheartened, isolated and very frustrated. Specialisation and delineation of clinical practice in maternity care were major contributors to these problems.

This research identified several problems intrinsic to those who coordinate and facilitate antenatal education. Reports advocating a greater emphasis be placed on antenatal education gained significance in the early 1990s (Health Department Victoria, 1990; NSW Department of Health, 1989) and were indeed the catalyst for the development of many Parent Education Coordinator positions in New South Wales (Rogers, 1991). Many who filled these positions were, however, midwifery educators who had minimal training in health promotion or adult learning theory, and many worked in the position in a part-time capacity (P. Green, 1996). Lack of knowledge and training contributed to them not having a clear understanding of their role. Furthermore the educators employed to facilitate the programs predominantly didactically taught the topics that they believed were important rather than facilitating learning which met the needs of parents (O'Meara, 1993a). Similar to the coordinators the educators were inadequately trained in the principles of adult learning and group facilitation. Through the 1990's the National Association of Childbirth Educators and the NSW Parent Education Coordinators Network have attempted to address these problems, however progress has been slow.

10.2.5 What affects did implementation of evidence-based, educational strategies and a needs assessment based program design have on adjustment to parenthood?

Chapters Eight and Nine presented the results of the randomised control trial to test the effectiveness of the new *Having a Baby* program compared with the conventional antenatal education. In particular, it tested whether perceived parenting self-efficacy was higher and worry about the baby lower at approximately six weeks after the birth compared to those who attended the conventional program. It also examined whether labour and birth outcomes and perceived knowledge about parenting and labour and birth differed as a result of education.

Labour and birth outcomes between groups were similar. Knowledge of both groups initially increased as a result of the program but after the birth of the baby it decreased. However in general participants in the new program had a greater increase in knowledge about parenting and less reduction in knowledge than parents in the conventional program. Most importantly the results revealed a statistically significant difference in perceived parenting efficacy for both women and men who attended the new program.

The decrease in perceived knowledge after the birth of the baby for both groups suggests that ongoing support for parenting is required in the early postnatal period. There is potential for antenatal programs to be extended into the postnatal period, as recommended by these expectant and new parents to provide ongoing learning support and early intervention during this critical period. The impact of the new program for men was less than for women. More work is required in this area to determine specific content and processes of interest to men as recommended by Galloway (1997) and Schmied (2002).

These findings were of importance because there is minimal recent empirical research relating to the effectiveness antenatal education per se, and that which has investigated the role and impact on men is even more limited (Nichols, 1993; M. Nolan, 1999). In addition the process evaluation of the new program found that, while it was very well received by those who participated in it, they recommended that the amount of time spent on parenting could be increased even further. Also the innovative learning activities that were recommended by the expectant and new parents in the needs

assessment appeared to enhance the uptake and retention of information. A move to participant designed learning activities is one which is unfamiliar in antenatal education in Australia. This research demonstrates it that is a worthwhile exercise. It also suggests that there is potential for antenatal education to have an important positive impact on parent's experience of early parenting.

The fact that the new *Having a Baby* program was the same structure as conventional antenatal education, and that it was conducted within the same resources, suggests that it may be applicable to hospitals with similar demographic profiles. However it should be noted that the training of educators who facilitate programs was an important component of both the new and conventional programs, and this would have to be considered in future cost analysis.

10.3 Ottawa Charter Action Areas and Implications for Practice

This research situated antenatal education within a health promotion framework, with the Ottawa Charter and its five action areas being of relevance throughout. This research will now be discussed under each of the five action areas. Implications for practice and future development of antenatal education will be outlined.

10.3.1 Healthy Public Policy

Healthy public policy is a key element in health promotion because encompassed in the notion of health being a state of optimal physical, mental and social wellbeing is the recognition that health is affected by many factors including education, financial status and environment. Health should be valued by and a concern of policy makers in all sectors and at all levels (World Health Organisation, 1986).

As discussed in Chapter Three antenatal education policy gained significance in the NSW in 1989 with the publication of the NSW Review of Obstetric Services (NSW Department of Health, 1989). This review provided guidelines for practice, including topics to be covered, throughout the childbearing year and also employment criteria for program coordinators. This research has confirmed however that the translation of programs into practice has been limited. Midwives and other health professionals have not embraced the childbearing year and onwards as part of the learning experience.

Programs continue to be provided in the final weeks of pregnancy and although many coordinators state that their programs aim to prepare couples for birth and early parenting, the traditional labour and birth orientation of programs has been maintained. Specialised training, delineation of practice and under-resourcing appear to be factors contributing to this continuation of traditional practice. The results of the randomised control trial have demonstrated however that the continuation of this practice must be challenged. Antenatal education grounded in adult learning and health promotion theory can make a difference to parenting self-efficacy in the early postnatal period. Greater emphasis must be placed on long-term outcomes, and educators must be trained and mentored to be able to facilitate programs.

This, and other recent research (Homer et al., 2002), has also demonstrated that normal pregnant women have worries and that these should be addressed and support is needed throughout the childbearing year. Models of antenatal care are beginning to change with the introduction of team midwifery and case-load midwifery care, however as was found in this research there continues to be a relegation of duty with women continuing to be told by midwives and obstetricians to book into antenatal classes because '*that is where I'll learn what to do in labour and with the baby*' (Sue FG). Programs towards the end of pregnancy are important, however as these expectant and new parents described they are one component of the learning they require.

Accessibility of minority groups to the specialised antenatal education they require has been, and continues to be, a problem (Senate Community Affairs References Committee, 1999). However accessibility of antenatal education for <u>all</u> expectant parents is now even limited with many programs in NSW operating on a cost recovery basis. Members of the NSW Parent Education Coordinators Network have attempted to make inroads through state government and local area health service policy however to date this has been limited in its success.

Coordinators have also attempted to have a voice at policy level and in the design and implementation of the Families First Initiative in NSW, an intersectorial government, early intervention policy program for families. Currently there is no link between care in the antenatal period and the commencement of the universal home visiting in the

early postnatal period. Clearly this could be considered as a lost opportunity and should be rectified.

During the conduct of this research it has become apparent that under-resourcing also had an impact on roles and responsibilities of many program coordinators. Many have assumed responsibilities in midwifery education and as such less time is spent on antenatal education duties. Research and program development are suffering and many are looking to this research for their program development guidelines. However the need for programs to be developed for the needs of each local community is being neglected.

Finally whilst implementation of policy has been problematic the changes that have occurred in antenatal education have been advanced through the policy process and may not have occurred unless maternity care and parenting had been on the policy agenda.

10.3.2 Create Supportive Environment

The Ottawa charter also suggests that a supportive environment is another key element in health promotion in that through creating a supportive environment individuals can change practice. These expectant and new parents recognised that changing patterns of life, work and leisure have a significant effect on health and that in pregnancy the health of the couple is not only at risk, but also the health of future generations. This research used antenatal education to provide a supportive environment for parents to learn about parenting and childbirth.

The menu approach to antenatal education and the redesigned *Having a Baby* program proved to be significant answers to the current gaps in service that became evident in this research. Elements and content identified as important to parents, such as networking, meeting other new parents, talking with parents and watching newborn behaviour, which were incorporated into the *Having a Baby* program were highly rated by parents participating in the program and appeared to enhance the uptake and retention of information. Further work is currently in progress to develop the other items on the menu in the hospital and area health service in which the researcher is employed. One of the most important features of the menu is the blend of hospital based and community based programs all of which adhere to the essential processes that were

specified by these expectant and new parents. This work, however, is isolated and not led or accepted by leaders of health services.

Creating a supportive environment for the educators was also deemed important. The Basic Groups Skills training program, and in particular its mentoring component, were major advances in providing support for the antenatal educators at hospital A. The program has now been in operation for four years and it has become recognised as being the best in the New South Wales (Members of NSW Parent Education Coordinators Network, 2004). Indeed the turnover of predominantly female staff at Hospital A was and is minimal with many citing the work conditions as being their reason for continuing their practice at the hospital.

Creating this supportive environment for the educators was however challenging for the author of this thesis. Many of the educators employed to facilitate programs had done so for six to eight years, and they therefore regarded themselves as experienced. The majority did not have formal group skills training, rather they had attended the occasional teaching skills workshops where games for use in programs were demonstrated, and which they believed provided them with adequate skills for their role. As this needs assessment demonstrated, however, they had integrated games into their practice with minimal consideration given to their aim and outcomes.

As a result of their years of experience many of the educators described feeling threatened when they were informed of the Basic Group Skills training they were required to undertake, and even more so regarding the mentoring that followed. Many said they didn't want '*the boss*' to watch what they were doing. In-services, team building lunches and a monthly newsletter were all used to allay their fears and apprehensions. Four years later the eductors at Hospital A have embraced their employment guidelines, presented in Appendix Fourteen, and they are asking to be mentored.

10.3.3 Strengthen Community Action

The Ottawa Charter however suggests that a supportive environment by itself is not sufficient to implement and maintain health promotion activities. Strengthening and facilitating community action is important because it empowers individuals and

communities by acknowledging and promoting the use of the knowledge, experience and skills available in the community.

Historically, it could be argued, that the power of women's voice and the development of community based education was stronger in Australia in the 1960s. Four decades later however antenatal education is predominantly the domain of the health care arena and with its top down program planning it could be argued that antenatal education has become institutionalised. The challenge is to avoid compromising its quality as a result and prevent it becoming, as Barclay et al (1989) warned twenty years ago, further institutionalised.

The Commonwealth Government recognised antenatal education as an important vehicle for the transmission of breastfeeding information to increase the initiation and maintenance of breastfeeding in Australia. In 2000 it commissioned the Centre of Family Health and Midwifery at UTS to develop a resource for antenatal educators and a video for Obstetricians. Breastfeeding and You: A Handbook for Antenatal Educators (Svensson, 2000b) was designed by this researcher as a result of the needs assessment. The work emphasised the socio-cultural aspects of breastfeeding and as such encouraged the enhancement of breastfeeding community action.

Importantly and somewhat predictably, however, the evaluation of the handbook demonstrated that although it had been received by approximately 3000 educators in Australia many of the activities were not effectively used until they had been demonstrated at in-service, workshops or conferences. The antenatal education practice of the majority of educators in Australia is secondary to other work as a health professional, the result being that their program preparatory time is limited. Thus any promotional campaigns aimed at increasing community action and involving educators, and it could be argued midwives and other health professionals, need to involve the clinicians if they are to be successfully implemented.

The new programs which have been developed and incorporated on the menu at Hospital A have attempted to provide parents with a voice and some control over their current situation. 'Mumsense', the weekly coffee morning for mothers with a baby 0 to 4 months, is an ideal example of a hospital based program that has strengthened

community action. It was one of the first items placed on the menu in 2001 and it now has approximately 25 women meeting weekly. It has all of the essential ingredients of a '*sharing and supporting each other*' programs with women attending for as many weeks as they desire. Over time participants of the program have further organised themselves into special interest sub-groups centred around their life interests. For example film, tennis and swimming groups. Such groups provide both a supportive environment and an opportunity for women to have power over their learning. The fact that 'Mumsense' is located in the hospital has, however, been questioned on several occasions, with an arguments being that the group itself could become institutionalised. However Hospital A's geographical catchment covers many suburbs in Sydney makes the hospital a central location for all involved. This situation may change in the future when programs, such as the Having a Baby program straddling the birth experience and with a greater postnatal component are implemented.

Strengthening community action amongst antenatal education coordinators was enhanced in 1992 with the development of the NSW Parent Education Coordinators Network, which was described in Chapter Three and above in this chapter. This combined with NACE, which is a national association, are aiming to make their voice heard both in their local community and also in the political arena.

10.3.4 Develop Personal Skills

Health promotion supports personal and social development through providing information and enhancing life skills. By doing so it increases the options available to people to exercise more control over their health and their environments and their decisions relating to health.

A significant finding of this research was that these expectant and new parents were able to articulate strategies by which they preferred to learn. The randomised control trial and other unpublished research conducted at Hospital A demonstrated that, when the learner designed activities were integrated into a birth and parenting program, they enhanced the uptake and retention of information. Indeed the activities in Just Pregnant, Now Looking, which is a program designed to meet the needs of the silent searcher in early pregnancy, have allowed women and men to determine their destiny in antenatal

care. It has provided them with power and capacity to manage this themselves in ways they need.

The new programs, resources and the Basic Group Skills Training program were informed by adult learning principles. Adult learning theory advocates the use of active learning strategies with the educator facilitating learning rather teaching that which he/she believes should be taught (Brookfield, 1996). The principles listed for each type of antenatal education program these expectant and new parents recommended proved critical in the development of the new programs.

One of the limitations of the new *Having a Baby* program was that it did not provide sufficient learning support during the postnatal period. The randomised controlled trial demonstrated a decrease in the perceived parenting knowledge of the women and men after the birth of their baby. There appears to be a need to design a birth and parenting program straddling the birth experience so that parents can build on their knowledge and practice their parenting skills in a supportive environment, when the learning curve is steepest and problem based learning can be usefully employed.

This research recommends that all antenatal educators not only require training in pregnancy, breastfeeding, baby care and postnatal issues, but also in group facilitation, program design and evaluation, and adult learning. It is difficult for part time staff to achieve this without the resources and support of the area health service to provide and encourage such training. It is also recommended that training has a mentoring component in order that educators receive ongoing support to reflect and improve their practice. Indeed the randomised control trial revealed that even experienced, creative educators find change difficult and as such they require support.

This research demonstrated that currently health professionals at both hospitals have power over the learning of expectant and new parents. It did however also reveal that coordinators themselves have power over the practice and the skills of their educators. This researcher's experience training educators in Australia has revealed frustration amongst the educators themselves because many have not been included in the design and implementation of the programs they facilitate.

The educators need support to develop their skills in group facilitation and adult learning. Problem based learning, peer evaluation, reflection and feedback are useful processes to encourage the development of the personal and professional skills required in workplace. The majority of educators work in the evening and on weekends and therefore they frequently work in isolation. Providing one-to-one support in the workplace where theory could be turned into practice, although initially considered as threatening, was gradually perceived as very beneficial. Indeed over the conduct of this research being at the hospital in the evenings and on weekends has brought together a committed team of educators who are proud to acknowledge that they work at Hospital A. Initially the team building process began with the distribution of a monthly newsletter and then progressed to networking lunches and regular meetings. All of these strategies have brought together a fragmented team into a cohesive and supportive whole that encourages growth and initiative in staff.

Although some of the educators described the mentoring process as anxiety provoking, overall they found it enabled them to share information, obtain constructive feedback and it encouraged reflection. Many realised they put extra effort into their sessions whilst being mentored. Whether they were able to maintain this effort was difficult to ascertain, however a process of ongoing peer support was designed and implemented in an attempt to address this issues.

10.3.5 Reorient Health Services

The Ottawa charter also recommends health services be reoriented to enable them to promote health. The large pressures on health care services from new technologies and changing epidemiological profiles are important reasons why health services must change their focus from medical domination and illness focus to that of health promotion. There must be stronger attention paid to health research and professional education and training conducive to changes in the organisation of health services so they refocus on the need of the individual as a whole person.

The new *Having a Baby* program described in this research is by no means the only model for a '*toward the end of pregnancy*' program. It is one that worked in the context of hospital A. The structure, content and process may have to be altered to suit other local communities. For example the program could be rearranged to address parenting

issues in the beginning and labour and birth towards the end. Indeed further expansion of the program may include 'straddling' the birth experience as proposed by the women and men in this research study. The cost and impact on clinicians would need to be considered in the development of any new '*towards the end of pregnancy*' program as it would for the development of any new programs.

In a health system that is under-resourced, the notion of change can seem daunting. At Hospital A there was a tolerance of current practice unless it appeared detrimental to the health and wellbeing of the mother/baby unit. As stated in Chapter Six the experts had a very constrained view of what antenatal education could do and although some were critical of current practice they could not think of better improvements.

Leadership is an important component of any organisational change. It involves having a vision of the outcome and the stages of the change process, an ability to stand up and be assertive, as well as having a tolerance to the opinions of other points of view and the capacity to negotiate, persuade and debate as necessary. The change process requires creativity and imagination and a strong sense of how the vision may be translated into practice. There must also be a capacity to muster support and develop trust and for change to be effective it needs to be slow and must involve key stakeholders in the process.

Leadership and vision used in this study came from this researcher's commitment to antenatal education, its importance, and to evidence-based practice, but it was fuelled by the energy received from the other members of each of the working parties formed. That is the working party for the needs assessment, the working party for the randomised control trial, the one for the group skills training program and the one for the Breastfeeding resource. Keeping staff informed via meetings, in-service, newsletters, and communication books were also methods used in this research

Inter-disciplinary collaboration was a crucial factor in the development of a menu approach to antenatal education at hospital A, because the facilitators came from a range of disciplines and some programs on the menu were based in the hospital whereas others were in the community. Being a clinician committed to providing expectant and new parents power and support of their learning was the driving force

behind the redesign of antenatal education achieved by the author of this thesis. The driving force would not have been sustained, however, without the support from the working party established to oversee its implementation, and a knowledge of the prevailing conditions at Hospital A.

Professional territorial boundaries and disputes had the potential to impede the model of collaborative practice being implemented, to the detriment of women who want and need groups from more than one professional group. For example 'Mumsense' an informal coffee morning for new mothers implemented at the hospital in 2000 could have created rifts between midwives facilitating it and those in the community because traditionally all postnatal groups were facilitated by child and family health nurses. Early in its inception, however it became evident that Mumsense was another avenue for women to gain support and that these women were attending groups with the child and family health nurses as well as Mumsense. The assumption by some of the experts that women only needed one type of postnatal group was deemed incorrect.

For the menu approach to be effective it not only required collaboration between and within services and departments, but also the woman and her partner must be central to the practice of care providers, rather than being an afterthought. Having an empowered consumer on a working party, may also assist with the development and implementation of programs and ensure that the programs do not become institutionalised in focus rather than focussing on the client.

To keep pace with socio-cultural expectations and life experiences of parents the scope of programs developed over time will need to be reviewed regularly, as will the language used within the programs. This researcher continues to promote a change in terminology from 'childbirth classes', to antenatal education strategies, programs and sessions. 'Classes' perpetuate the didactic, medical approach of yesteryear; 'strategies', 'programs' and 'sessions' led by a facilitator or educator recognise the change to adult learning principles. Also 'childbirth' suggest the focus of programs should only be on labour and birth where as clearly parents want information on optimising pregnancy, parenting and infant feeding. Furthermore women, their partners and their families seek more than information provided by professionals, they also seek friendship, networking,

support, and companionship in a contemporary society that often lacks cohesion in local communities.

Whilst consideration has been given, and should be in each local area, to involving postnatal specialists, for example Early Childhood Health Nurses in an antenatal education program, there are a number of inherent problems. Firstly, the benefits of having a primary educator, in particular the rapport established, would be interrupted. Secondly styles of group facilitation could potentially be quite different between facilitators, which may have a negative impact on group interaction. Finally it could lead to the de-skilling of current childbirth educators. Despite these challenges it is not impossible to conceive of integrated programs which crossover birth. This will most likely be achieved through discussion and planning with key professional stakeholders and most importantly the parents.

10.4 Limitations

This research was undertaken to examine the needs of expectant and new parents attending antenatal education at two hospitals in the area health service in which the coordinator worked. The innovations described in health services delivery, as distinct from program design, occurred only in Hospital A. As reported in the thesis the attendees at these programs were educated, mature age groups having English as their principle language. Other groups in other health areas may not be classified in this manner and the outcome presented here may not be applicable to them. Nevertheless the methodology of the needs assessment stage is, in my opinion, an essential prerequisite for the development of an effective antenatal education program. Consequently, any application of the principles of this thesis to other groups should follow the methodology adopted here but with variations that enable the needs of the group to be correctly identified.

Chapter Seven deals with the development of the *Having a Baby* program from the needs which had been identified in stage one. The content and strategies of this program are, no doubt, one of several possibilities which would also be effective. But, as with any change, the researcher had to work within the constraints of the environment and resources available. The realisation that the significance of these constraints cannot be

over-emphasised and highlights the importance of understanding the environmental and resource issues in any other program planning activity.

The researcher was intimately involved with antenatal and postnatal education and therefore her interpretations of the data may have been influenced by this. The researcher attempted to minimise this effect by triangulating the analysis through the use of multiple methods and multiple sources and various management committees were used to guide the implementation and evaluation of the programs.

Finally men were an integral part of this research and strategies and processes by which they learn were identified. The joint interviews and focus groups, that is men and women together, may have limited the ability to understand the specific needs of men. They may have focused on and given preference to the needs of their wife/partner and the experiences she was having. Future research should perhaps have single gender interviews and focus groups.

10.5 Further Research and Development

10.5.1 Antenatal Education for Men

This research adds to the small amount of research that has investigated men's experience with antenatal education. Data collected from both the needs assessment and the randomised control trial demonstrated that men have a wide variety of interests, concerns and needs during the childbearing year and that they value opportunities to articulate them. The need for men only sessions in structured programs and men only groups, such as informal drinks at a hotel (SMH 2004), require further investigation.

10.5.2 Promotion and Trialling of Programs that Bridge the Birth Experience

The childbearing year lays the foundations for the health and wellbeing of future generations and therefore there needs to be liaison between and integration of services available to expectant and new parents. The territorial boundaries, in particular those between hospital based services and those in the community, need to be destroyed to provide the support and services many parents are searching for. As stated in Chapter Three, Families First with its universal home visiting to new mothers is beginning to fill a gap in current practice however to date there has been minimal interaction with

professionals in the antenatal period. Whilst such a service provides important professional support, such initiatives may do not empower parents and build ongoing community support such is available from developing strong peer networks Fragmentation of services needs to be investigated and reduced where possible through mapping and integration of services. A *Having a Baby* program that bridges the birth experience may provide the ongoing support that is required.

10.5.3 Advocacy and Proactive Seeking of Funding by Coordinators

Antenatal education in New South Wales is under-resourced and indeed the situation has worsened during the conduct of this research. Many hospital-based coordinators have had their antenatal education role reduced and as a result minimal evaluative research or program development is now in progress. Accessibility of programs has been reduced due to many programs now operating on a cost-recovery basis, and there are large discrepancies in the fees paid to educators. The NSW Parent Education Coordinators Network and the National Association of Childbirth Educators are striving to change these situations however progress has been slow. This research advocates these changes must occur.

10.5.4 Employment Context of Antenatal Educators

An important issue raised during the conduct of this research was the employment context of antenatal educators. Turnover in this female dominated profession is high and, as outlined in Chapter Three, educators rarely have time for effective training. In addition many assume their role in a part-time capacity, and few have input in the design and development of programs they facilitate. Indeed in many areas in Australia it appears that educators continue to teach programs rather than facilitate the learning of participants. For change to occur in antenatal education practice the employment context of educators must be explored. Professional boundaries, vested interests, and employment capacity are all issues that must be considered.

10.6 Summary

This research demonstrated that the information needs and priorities of expectant and new parents are wide ranging and that current programs at two large hospitals in Sydney are not meeting their identified needs. Additionally the study demonstrated that it was

possible to develop a high quality antenatal education program within current budget allocation, taught by trained facilitators, to produce superior outcomes that were tied to program objectives. The reworked focus on parenting adjustment appears to be able to ameliorate the considerable distress currently being experienced by new parents. It has provided evidence-based practice to antenatal educators.

To implement and maintain change in health promotion programs such as antenatal education it is important to consider the critical elements of health promotion as identified by the Ottawa charter. These are healthy public policy, supportive environments, community action, personal skills and reorient health services. The PRECEDE-PROCEED framework proved a practical and useful tool to ensure that these critical elements were taken into account in the planning, implementation and evaluation of the program.

The main recommendations from this study are:

- A simplified needs assessment, using a health promotion framework such as the PRECEDE–PROCEED model should be used inform all antenatal education programs;
- Parenting should be included in antenatal programs;
- A range of programs adhering to the adult learning principles should be offered to expectant and new parents;
- Resources should be available for ongoing training and education of educators and coordinators;
- Research on education programs which specifically support fathers must be conducted;
- Research on education programs which bridge the birth and provide ongoing support in the early postnatal period is a priority.

SOUTH EASTERN SYDNEY
AREA HEALTH SERVICE

RESEARCH ETHICS COMMITTEE - Eastern Section

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Appendix One: Ethics Approval Letters

11 July, 1997

Ms J. Svensson (for Professor Barclay)
Parent Education Centre, Level 5
King George V Memorial Hospital
Missenden Road
CAMPERDOWN NSW 2050

Dear Ms Svensson

Re: **Antenatal education: the development and evaluation of an improved parenting education program. Ref: 97/067.**

The Research Ethics Committee is in receipt of your letter dated 2 July, 1997

Following consideration Executive Approval has been given on 10 July, 1997 for:

* **Clarification of the Committee's queries and**
* **Modifications to the Consent Form as requested.**

This executive decision will be placed before the Research Ethics Committee for Ratification at its next meeting on 26 August, 1997.

In accordance with the National Health and Medical Research Council Guidelines the Committee requires you to furnish it with a progress report every 12 months and on completion of the study.

You may commence your study and the Committee wish you well.

Yours sincerely

Production Note:
Signature removed prior to publication.

Kim Breheny
Research Ethics Co-ordinator

Area Office: Primrose House 190 Russell Ave Dolls Points NSW 2219 PO Box 430 Kogarah NSW 2217 Tel: 61 2 9382 9666 Fax: 61 2 9382 9891
Incorporating: Prince Henry • Prince of Wales • Sydney Children's • Royal South Sydney • Royal Hospital for Women • St George • Sutherland • Sydney and Sydney Eye Hospitals • Community Health Services • Garrawarra Centre for Aged Care • The Langton Centre, Associated Calvary • St Vincent's • War Memorial (Waverley) Hospitals • Sacred Heart Hospice • Scarba Family Centre. Administrative Responsibility: The Gower Wilson Memorial Hospital.

SOUTH EASTERN SYDNEY
AREA HEALTH SERVICE

RESEARCH ETHICS COMMITTEE - Eastern Section

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27 August, 1997

Ms J. Svensson (for Professor Barclay)
Parent Education Centre, Level 5
King George V Memorial Hospital
Missenden Road
CAMPERDOWN NSW 2050

Dear Ms Svensson

Re: Antenatal education: the development and evaluation of an improved parenting education program. Ref: 97/067.

The Research Ethics Committee at its meeting of 26 August, 1997 considered the Executive Approval given on 10 July, 1997 for the following changes for the above study, and this decision was ratified.

* **Clarification of the Committee's queries and**
* **Modifications to the Consent Form as requested.**

In accordance with National Health and Medical Research Council Guidelines, the Committee requires you to furnish it with a progress report each twelve months and on completion of the study.

The Committee wish you well with the continuation of your study.

Yours sincerely

Production Note:
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Kim Breheny
Research Ethics Co-ordinator

Appendix One: Ethics Approval Letters

Telephone: (02) 9515 6766
Facsimile: (02) 9515 7176

Reference: X97-0066

CSAHS
CENTRAL SYDNEY AREA HEALTH SERVICE

5 May 1997

Professor L Barclay
James Laws House
St George Hospital
Belgrave Street
KOGARAH NSW 2217

Dear Professor Barclay,

Re: Protocol No X97-0066 - "Antenatal education: the development and evaluation of an improved parenting education program"

The Executive of the Ethics Review Committee, at its meeting of 1 May 1997, considered Ms J Svensson's correspondence of 24 April 1997 concerning the above protocol, and it was noted with thanks. The Executive sought the following:

1. Amendments to the Information for Participants of Part One:
   - Paragraph 2, line 1: "..., you will be asked to participate ..."
   - Paragraph 2, line 4: "... They will be led by an experienced ..."
2. Amendments to the Information for Key Informants:
   - Paragraph 2, line 1: ".... you will be asked to participate ..."
   - Paragraph 5, line 3: "... will not affect your relationship with other antenatal educators."
3. Amendments to the Information for Participants of Part Two:
   - Correction of the title to Information for Participants of Part Three, in accordance with the protocol.
   - Inclusion of information on what antenatal education will be available to women who decline to participate in the study, eg "If you decide not to participate in the study, you will be able to join one of the standard antenatal education classes."

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Incorporating
- Royal Prince Alfred Hospital
- Concord Hospital/Concord General Hospital
- Canterbury Hospital
- United Dental Hospital
- Balmain Hospital
- Division of Population Health
- Rozelle Hospital
- Division of General Practice

As stated in the Committee's correspondence of 11 April 1997, approval of Parts Two and Three will be given upon receipt of details of the outcome of the previous part of the protocol.

In order for your response to be presented at the next Ethics Review Committee meeting, this information should be forwarded to the Research Development Office by Wednesday, 28 May 1997.

Yours sincerely,

Production Note:
Signature removed prior to publication.

Lesley Townsend
Secretary
Ethics Review Committee

cc: Ms J Svensson
Parent Educator
King George V Hospital

HERE\EXCOR97-05 (948)

Jne
Svenston

Telephone: (02) 9515 6766
Facsimile: (02) 9515 7176

Reference: X97-0066

CENTRAL SYDNEY
AREA HEALTH SERVICE

3 June 1997

Professor L Barclay
James Laws House
St George Hospital
Belgrave Street
KOGARAH NSW 2217

Dear Professor Barclay,

Re: Protocol No X97-0066 - "Antenatal education: the development and evaluation of an improved parenting education program"

The Executive of the Ethics Review Committee, at its meeting of 3 June 1997, considered Ms J Svenson's correspondence of 19 May 1997 concerning the above protocol, and recommended approval to proceed.

The Committee looks forward to receiving information on the outcome of Parts One and Two, so that the subsequent parts can be considered and approved.

Yours sincerely,

Production Note:
Signature removed prior to publication.

Lesley Townsend
Secretary
Ethics Review Committee

HEAC\CORR97-86 (p24)

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Funded by the NSW Department of Health

Appendix Two: Information Sheets and Consent Forms for Needs Assessment Participants

ANTENATAL EDUCATION PROJECT (STAGE ONE)
Information Sheet For In-depth Interview Participants

You are invited to take part in Stage One of a research study into Antenatal Education. The objective is to develop educational programs and strategies which will meet the needs of expectant and new parents and make their adjustment to parenthood easier. The study is being conducted by Jane Svensson, Antenatal Educator and Research Officer, Professor Lesley Barclay, Professor of Family Health and Midwifery, University of Technology, and Ms Margaret Cooke, Senior Research Officer.

If you agree to participate in this study, you and your partner will be asked to participate in four in-depth interviews, which will explore your interests, concerns and needs through pregnancy, and the early weeks at home with your baby. The interviews will be held in the Health Education Centre at the Royal Hospital for Women in Randwick or King George V Memorial Hospital in Camperdown, and they will be conducted antenatally at approximately 8 weeks, 24 weeks, 34 weeks and at 6 weeks postnatal. An experienced midwife who is an antenatal educator will lead each interview. Examples of questions you will be asked are: What is most important to you now in your pregnancy? What do you feel good about? Is there anything that worries you at this stage of your pregnancy? At the end of each interview any questions you may have will be answered.

All aspects of the study, including results, will be strictly confidential and only the investigators involved in the study will have access to information on participants. The information generated during the discussions will be used to develop new antenatal education programs and strategies. Individual participants will not be identifiable in any documentation produced from these interviews.

While we intend that this research study will further our knowledge and may improve the standard of antenatal education programs in the future, it may not be of direct benefit to you. Participation in this study is entirely voluntary: you are in no way obliged to participate and if you do participate you can withdraw at any time. Whatever your decision, please be assured that it will not affect your relationship with staff.

When you have read this information sheet, Jane Svensson will discuss it with you further and answer any questions you may have. Please contact her on 9382 6700. If you would like to know more at any stage, please feel free to contact Jane. This information sheet is for you to keep.

The Ethics Review Committee of the University of Technology, Central Sydney and South Eastern Sydney Area Health Services have approved this study. Any person with concerns or complaints about the conduct of a research study can contact the Secretary of the Ethics Review Committee (RPAH Zone) on 02 9515 6766 or 02 9382 3583 for RHW zone.

ANTENATAL EDUCATION PROJECT (STAGE ONE)

IN-DEPTH INTERVIEW PARTICIPANT CONSENT FORM

I, ... *[name]* of

..... *[address]* have read

and understood the Information Sheet for In-depth Interview Participants on the above named research study and have discussed the study with Ms Jane Svensson.

I am aware of the procedures involved in the study, including any inconvenience, risk and implications.

I freely choose to participate in this study and understand that I can withdraw at any time.

I also understand that the research study is strictly confidential.

I hereby agree to participate in this research study.

NAME: .....

SIGNATURE: .....

DATE: .....

NAME OF WITNESS: .....

SIGNATURE OF WITNESS: .....

ANTENATAL EDUCATION PROJECT (STAGE ONE)

Information Sheet for Focus Group Participants (Middle Weeks)

You are invited to take part in Stage One of a research study into Antenatal Education. The objective is to develop educational programs and strategies which will meet the needs of expectant and new parents and make their adjustment to parenthood easier. The study is being conducted by Jane Svensson, Antenatal Educator and Research Officer, Professor Lesley Barclay, Professor of Family Health and Midwifery, University of Technology, and Ms Margaret Cooke, Senior Research Officer.

If you agree to participate in this study, you and your partner will be asked to participate in one discussion group which will explore your interests, concerns and information needs during and after pregnancy. You will also be asked questions about the antenatal classes you will or have attended. All participants will contribute to an open forum at the end of the session where any questions you may have will be answered.

The discussion group will be held at the Hospital you are attending, i.e. either at the Royal Hospital for Women in Randwick or King George V Memorial Hospital in Camperdown. You will be asked to attend the group during the middle weeks of your pregnancy. Seven or eight couples will participate and an experienced antenatal educator will lead the group.

All aspects of the study, including results, will be strictly confidential and only the investigators involved in the study will have access to information on participants. The information generated during the discussions will be used to develop new antenatal education strategies and these will be assembled into a document for use in the next stage of this study. Individual participants will not be identifiable in any documentation produced from the focus group.

While we intend that this research study will further our knowledge and may improve the standard of antenatal education programs in the future, it may not be of direct benefit to you.

Participation in this study is entirely voluntary: you are in no way obliged to participate and if you do participate you can withdraw at any time. Whatever your decision, please be assured that it will not affect your relationship with staff.

When you have read this information sheet, Jane Svensson will discuss it with you further and answer any questions you may have. Please contact her on 9382 6700. This information sheet is for you to keep.

The Ethics Review Committee of the University of Technology, Central Sydney and South Eastern Sydney Area Health Services have approved this study. Any person with concerns or complaints about the conduct of a research study can contact the Secretary of the Ethics Review Committee (RPAH Zone) on 02 9515 6766 or 02 9382 3583 for RHW zone.

ANTENATAL EDUCATION PROJECT (STAGE ONE)

FOCUS GROUP PARTICIPANT CONSENT FORM

I, ... *[name]* of

..... *[address]* have read

and understood the Information Sheet for Focus Group Participants (Middle Weeks) on the above named research study and have discussed the study with Ms Jane Svensson.

I am aware of the procedures involved in the study, including any inconvenience, risk and implications.

I freely choose to participate in this study and understand that I can withdraw at any time.

I also understand that the research study is strictly confidential.

I hereby agree to participate in this research study.

NAME: .....

SIGNATURE: .....

DATE: .....

NAME OF WITNESS: .....

SIGNATURE OF WITNESS: .....

ANTENATAL EDUCATION PROJECT (STAGE ONE)

Information Sheet for Focus Group Participants (Final Weeks of Pregnancy)

You are invited to take part in Stage One of a research study into Antenatal Education. The objective is to develop educational programs and strategies which will meet the needs of expectant and new parents and make their adjustment to parenthood easier. The study is being conducted by Jane Svensson, Antenatal Educator and Research Officer, Professor Lesley Barclay, Professor of Family Health and Midwifery, University of Technology, and Ms Margaret Cooke, Senior Research Officer.

If you agree to participate in this study, you and your partner will be asked to participate in one discussion group which will explore your interests, concerns and information needs during and after pregnancy. You will also be asked questions about the antenatal classes you will or have attended. All participants will contribute to an open forum at the end of the session where any questions you may have will be answered.

The discussion group will be held at the Hospital you are attending, i.e. either at the Royal Hospital for Women in Randwick or King George V Memorial Hospital in Camperdown. You will be asked to attend the group during the final weeks of your pregnancy. Seven or eight couples will participate and an experienced antenatal educator will lead the group.

All aspects of the study, including results, will be strictly confidential and only the investigators involved in the study will have access to information on participants. The information generated during the discussions will be used to develop new antenatal education strategies and these will be assembled into a document for use in the next stage of this study. Individual participants will not be identifiable in any documentation produced from the focus group.

While we intend that this research study will further our knowledge and may improve the standard of antenatal education programs in the future, it may not be of direct benefit to you.

Participation in this study is entirely voluntary: you are in no way obliged to participate and if you do participate you can withdraw at any time. Whatever your decision, please be assured that it will not affect your relationship with staff.

When you have read this information sheet, Jane Svensson will discuss it with you further and answer any questions you may have. Please contact her on 9382 6700. If you would like to know more at any stage, please feel free to contact Jane. This information sheet is for you to keep.

The Ethics Review Committee of the University of Technology, Central Sydney and South Eastern Sydney Area Health Services have approved this study. Any person with concerns or complaints about the conduct of a research study can contact the Secretary of the Ethics Review Committee (RPAH Zone) on 02 9515 6766 or 02 9382 3583 for RHW zone.

ANTENATAL EDUCATION PROJECT (STAGE ONE)

FOCUS GROUP PARTICIPANT CONSENT FORM

I, ... *[name]* of

..... *[address]* have read

and understood the Information Sheet for Focus Group Participants (Final Weeks of Pregnancy) on the above named research study and have discussed the study with Ms Jane Svensson.

I am aware of the procedures involved in the study, including any inconvenience, risk and implications.

I freely choose to participate in this study and understand that I can withdraw at any time.

I also understand that the research study is strictly confidential.

I hereby agree to participate in this research study.

NAME: .....

SIGNATURE: .....

DATE: .....

NAME OF WITNESS: .....

SIGNATURE OF WITNESS: .....

ANTENATAL EDUCATION PROJECT (STAGE ONE)

Information Sheet for Focus Group Participants (Postnatal)

You are invited to take part in Stage One of a research study into Antenatal Education. The objective is to develop educational programs and strategies which will meet the needs of expectant and new parents and make their adjustment to parenthood easier. The study is being conducted by Jane Svensson, Antenatal Educator and Research Officer, Professor Lesley Barclay, Professor of Family Health and Midwifery, University of Technology, and Ms Margaret Cooke, Senior Research Officer.

If you agree to participate in this study, you and your partner will be asked to participate in one discussion group which will explore your interests, concerns and information needs during and after pregnancy. You will also be asked questions about the antenatal classes you attended. All participants will contribute to an open forum at the end of the session where any questions you may have will be answered.

The discussion group will be held at the Hospital you are attending, i.e. either at the Royal Hospital for Women in Randwick or King George V Memorial Hospital in Camperdown. You will be asked to attend the group approximately six weeks after your baby was born. Seven or eight couples will participate and an experienced antenatal educator will lead the group.

All aspects of the study, including results, will be strictly confidential and only the investigators involved in the study will have access to information on participants. The information generated during the discussions will be used to develop new antenatal education strategies and these will be assembled into a document for use in the next stage of this study. Individual participants will not be identifiable in any documentation produced from the focus group.

While we intend that this research study will further our knowledge and may improve the standard of antenatal education programs in the future, it may not be of direct benefit to you.

Participation in this study is entirely voluntary: you are in no way obliged to participate and if you do participate you can withdraw at any time. Whatever your decision, please be assured that it will not affect your relationship with staff.

When you have read this information sheet, Jane Svensson will discuss it with you further and answer any questions you may have. Please contact her on 9382 6700. If you would like to know more at any stage, please feel free to contact Jane. This information sheet is for you to keep.

The Ethics Review Committee of the University of Technology, Central Sydney and South Eastern Sydney Area Health Services have approved this study. Any person with concerns or complaints about the conduct of a research study can contact the Secretary of the Ethics Review Committee (RPAH Zone) on 02 9515 6766 or 02 93823583 for RHW zone.

ANTENATAL EDUCATION PROJECT (STAGE ONE)

FOCUS GROUP PARTICIPANT CONSENT FORM

I, ... *[name]* of

..... *[address]* have read

and understood the Information Sheet for Focus Group Participants (Postnatal) on the above named research study and have discussed the study with Ms Jane Svensson.

I am aware of the procedures involved in the study, including any inconvenience, risk and implications.

I freely choose to participate in this study and understand that I can withdraw at any time.

I also understand that the research study is strictly confidential.

I hereby agree to participate in this research study.

NAME: .....

SIGNATURE: .....

DATE: .....

NAME OF WITNESS: .....

SIGNATURE OF WITNESS: .....

ANTENATAL EDUCATION PROJECT (STAGE ONE)

Information Sheets for Experts

You are invited to take part in Stage One of a research study into Antenatal Education. The objective is to develop educational programs and strategies which will meet the needs of expectant and new parents and make their adjustment to parenthood easier. The study is being conducted by Jane Svensson, Antenatal Educator and Research Officer, Professor Lesley Barclay, Professor of Family Health and Midwifery, University of Technology, and Ms Margaret Cooke, Senior Research Officer.

If you agree to participate in this study, you will be asked to participate in a focus group which will explore the interests, concerns and needs of expectant and new parents and how their needs can be met during the childbearing year. The group will be held in the Health Education Centre at your affiliated hospital and it will be facilitated by an experienced antenatal educator. Eight other members of your team will participate in the focus group.

All aspects of the study, including results, will be strictly confidential and only the investigators involved in the study will have access to information on participants. The information generated during the discussions will be used to develop new antenatal education programs and strategies. Individual participants will not be identifiable in any documentation produced from the focus group.

While we intend that this research study will further our knowledge and may improve the standard of antenatal education program in the future, it may not be of direct benefit to you.

Participation in this study is entirely voluntary: you are in no way obliged to participate and if you do participate you can withdraw at any time. Whatever your decision, please be assured that it will not affect your relationship with staff.

When you have read this information sheet, Jane Svensson will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Jane Svensson, Antenatal Educator on 9382 6700. This information sheet is for you to keep.

The Ethics Review Committee of the University of Technology, Central Sydney and South Eastern Sydney Area Health Services have approved this study. Any person with concerns or complaints about the conduct of a research study can contact the Secretary of the Ethics Review Committee (RPAH Zone) on 02 9515 6766 or 02 9382 3583 for RHW zone.

ANTENATAL EDUCATION PROJECT (STAGE ONE)

EXPERT CONSENT FORM

I, ... *[name]* of

..... *[address]* have read

and understood the Information Sheet for Experts on the above named research study

and have discussed the study with Ms Jane Svensson.

I am aware of the procedures involved in the study, including any inconvenience, risk and implications.

I freely choose to participate in this study and understand that I can withdraw at any time.

I also understand that the research study is strictly confidential.

I hereby agree to participate in this research study.

NAME: .....

SIGNATURE: .....

DATE: .....

NAME OF WITNESS: .....

SIGNATURE OF WITNESS: .....

Appendix Three: Biographies of Couples who Participated in the In-depth Interviews

Bridget 28, and Peter 30 were married and had been together for five years before Bridget became pregnant for the first time. At the time of the first interview Bridget was eight weeks pregnant and they were living in a two bedroom unit they were renting with another couple in Newtown. Peter was in his 4th and final year at Moore Theological College and Bridget was undertaking a two year course at the same college. Peter had been a high school teacher prior to studying theology and Bridget an administrative assistant at Sydney University. Their daughter, Rebekkah, was the first grandchild for their parents, with Bridget's parents living in Sydney and Peter's living separately in Canberra and Brisbane.

Michelle and Chris were married and had recently returned from an overseas trip when Michelle discovered she was pregnant. They had been together for three years and although they wanted a family they had intended to buy and renovate a house before they 'settled down'. Michelle, 26 was a research officer at the University of NSW and Chris, 28 an accountant in the city. Chris was Australian born, of Chinese parents, who lived in Tamworth. Michelle's parents lived in Sydney. Their daughter, Verity, was born in January 1999.

Sarah, 29 and Michael, 31 were married and had been in their relationship for four years prior to Sarah becoming pregnant. They described themselves as being 'experienced with babies' because Sarah had worked at a Child Care Centre for eight years and Michael had 'numerous' nephews and nieces. They lived in a small unit near the beach at Coogee, which suited their current lifestyle, but they intended to move soon after the birth of their son, Timothy. Sarah's parents lived in the Hunter Valley and Michael's in Penrith.

Lisa, 35 and Paul, 34 had been married for five years when Lisa 'finally' became pregnant after two years of 'thinking about it'. Paul was from a large family and always wanted children, but Lisa described herself as being career-orientated and valued her position as a project officer at the Cancer Council. Paul was an Electrician and they lived in a two bedroom unit in Coogee. Lisa's parents lived in Wagga, Paul's in Bathurst with Sara being the first grandchild for both families.

Diane, 29 was married to Adam, a 34-year-old scriptwriter. They had been in their relationship for four years and wanted 3-4 children, but were uncertain whether this would be possible because Diane had a miscarriage one year before she became pregnant with Patrick. Diane, a Health Educator, described herself as being 'very protective' during the pregnancy because the thought of needing IVF in the future if she lost a second pregnancy was more than she could 'tolerate'. They lived in a two-bedroom terrace house in Erskinville and travelled regularly to Canberra to visit their families.

Annette, a 29-year-old English teacher was married to Robert, a 31-year-old engineer with Concord council. They had been living together for many years and had travelled extensively when they decided to marry and settle in Sydney. Annette became pregnant soon after and for the first 9 weeks she was housebound with severe morning sickness and exhaustion. Annette was vegetarian and described herself as a 'true earth mother'

when she decided to leave work three months before Liam was born. Her parents were separated with Annette only seeing her mother occasionally. Robert's parents lived in Melbourne.

Angela, a 31-year-old hairdresser and Trent, a 29-year-old mechanic, were married and had been in their relationship for two years before the birth of their son Luke. Angela was born in England but had migrated to Australia with her parents when she was young. Trent was Australian and they lived in a two-bedroom house in Concord. Their parents and siblings lived nearby and they described themselves as coming from close-knit families.

Mary-Anne, 28 and Jim, 30 were married and had lived together in a unit in Bondi for three years. Mary-Anne was an accounts clerk in the city and Jim a plumber. They both enjoyed swimming and walking and hoped to buy a larger unit before the birth of their daughter Zoë. Mary-Anne's parents lived in England, Jim's in New Zealand but they both had siblings living in Sydney.

Sue, a 31 year old accountant and Tim, a 32 year old builder had known each other for six years and had been married for two years. They were the first of their close circle of friends to become pregnant, which was the reason Sue said she asked so many questions. Their parents lived 'out of town' which they described as 'lucky because they won't interfere' but also 'hard because they wouldn't have any hands-on help'.

Appendix Four: Interview Schedules for In-depth Interviews with Expectant and New Parents

Interview One: Early Weeks of Pregnancy

- Introduction – e.g. name and how many weeks pregnant.
- How do you feel about your/your partner's pregnancy?
- Has it changed your lifestyle? How? Why?
- Have you changed as a person? How? Why?
- Has your relationship with your partner changed? How? Why?
- What is most important to you now in your pregnancy?
- What do you feel good about?
- Is there anything that worries you?
- How do you feel about becoming a father/mother?
- Have you thought how you were parented?
- What if any information would you like now? Have you found this information is available to you? Where was it available?
- Are there any questions you would like to ask me?

Interview Two: Middle Weeks of Pregnancy

- General introduction – names etc.
- What has been happening since we last met?
- How do you feel about your pregnancy now?
- What changes have you noticed in yourself since our last meeting?
- What issues concern you now?
- What interests you?
- Have you received any information about your pregnancy or parenthood since we last met?
- What areas did it cover? From where did you receive it?
- Has your relationship with your partner changed? How? Why?
- How do you feel about becoming a mother/father?

Interview Three: Final Weeks of Pregnancy

- What has been happening since we last met?
- How are you feeling?
- How do you feel about your pregnancy? About labour? About becoming a parent?
- What interests you at the moment?
- What do you feel good about?
- What concerns you now?
- How has your lifestyle changed?
- Have you attended any antenatal classes? How many sessions did you attend? How long were the sessions? What was covered?
- How would you describe the style they were presented?
- What did they do well?
- Did they meet your needs?
- What do you think could have been improved?

Interview Four: Post-Birth

- How are you? How have you been since we last met?
- How have you found the last six weeks? Has it been anything like you expected? Has it been easier or harder?
- How would you describe your birth experience?
- How involved were you in any decisions that were made? Was this level of involvement appropriate?
- Do you think your antenatal classes prepared you for the birth experience?
- How could they have been improved?
- Do you think your antenatal classes prepared you the demands of a new baby?
- Do you think they prepared you for the changes in your relationship?
- Could you have been more prepared? If so, how?
- Reflecting back upon your experience, what information do you think should be given to expectant couples? By whom should it be given, when, where, how often, and why?

Appendix Five: Questioning Routes for Focus Groups with Expectant and New Parents

Focus Group One: Middle Weeks of Pregnancy

- General introduction – names etc.
- How do you feel about your pregnancy now?
- What changes have you noticed in yourself during your pregnancy?
- Has your relationship with your partner changed? How? Why?
- What issues concern you now?
- What interests you?
- How have you found trying to get information about your pregnancy and being a mother and a father?
- What areas did it cover? From where did you receive it?
- How do you feel about becoming a mother/father?

Focus Group Two: Final Weeks of Pregnancy

- General introduction – names etc.
- How do you feel about your pregnancy? About labour? About becoming a parent?
- What interests you at the moment?
- What do you feel good about?
- What concerns you now?
- How has your lifestyle changed?
- Have you attended any antenatal classes? How many sessions did you attend? How long were the sessions? What was covered?
- How would you describe the style they were presented?
- What did they do well?
- Did they meet your needs?
- What do you think could have been improved?

Focus Group Three: Post-Birth

- General introduction – names etc
- How have you found the last six weeks? Has it been anything like you expected? Has it been easier or harder?
- How would you describe your birth experience?
- How involved were you in any decisions that were made? Was this level of involvement appropriate?
- Do you think your antenatal classes prepared you for the birth experience? Explain response
- How could they have been improved?
- Do you think your antenatal classes prepared you the demands of a new baby? Explain response
- Do you think they prepared you for the changes in your relationship?
- Could you have been more prepared? If so, how?
- Reflecting back upon your experience, what information do you think should be given to expectant couples? By whom should it be given, when, where, how often, and why?

Appendix Six A: Survey for Expectant Parents

Antenatal Education Pre-Program Survey

In order to assist in the development of new programs, I would appreciate your response to the following survey. The majority of items on this survey are statements which you are to complete. Please provide detail to help in the development of future programs.

Having a Baby Program

1. I am attending the "Having a Baby" program because: (Please list your reasons)

   ……

   ……

2. I hope the following topics/skills will be included in the program:……

   ……

   ……

Information in Pregnancy

3. During the pregnancy it has been easy/difficult to gain the information I want/need.

   Please comment:…….…….

4. The most useful sources of information have been:
   Please number the sources in order of usefulness. 1 = least useful 8 = most useful.

Books	Magazines	Friends	Brochures
The midwife	The doctor	The Chemist	Videos

   Others:……..……

5. I think information should also be provided by: (Please complete e.g. via an antenatal program early in the pregnancy, via the Internet).

   ……..……

Now to the content of new programs

6. I think programs during pregnancy **should include** the following topics/skills:

   ……

   ……

   ……

7. I think the following topics/skills should **not** be included in programs during pregnancy:

   ……

   ……

8. If **parenting issues** are to be covered during pregnancy, should they be:

   a) incorporated into a combined birth – parenting program;

   b) presented in a special parenting program;

   c) other option……..…….

9. When do you think parenting information should be provided? How early or late in the pregnancy? Please comment.

   ……

   ……

10. Do you think couples with young babies should attend a program in pregnancy so you gain first hand knowledge of how to care for a newborn? Yes/No

Now to the structure of new programs

11. I learn more effectively if information is given to me by the following strategies: (Please circle the strategies.)

Lectures	Demonstrations	Group discussions
Role-plays	Practical activities	Videos
Handouts	Posters	Scenario cards

Others……

12. How do you think programs during pregnancy should be offered: (Please circle your preferred option)

a) as a 6 – 7 week program in the evening;

b) as a 6 – 7 week program during the day;

c) as a 2 day workshop on a weekend;

d) as a 2 day workshop during the week;

e) as a package with 2 or 3 components e.g. 2 weeks early in the pregnancy and 5 weeks towards the end;

f) another option, such as……..…

Final thoughts

13. I believe the woman's role in an antenatal program is……..……....

……

14. I believe the partner's role in an antenatal program is…..…..…….

15. The educator's role in an antenatal program is to……..…….

……

16. Are there any other comments you would like make? ……..…

……

Thank you for your assistance

Health Education Centre

Dear

Over the last few months I have been interviewing couples in order to gain their ideas on how to design new antenatal education programs. I would appreciate your assistance in this matter and am enclosing a survey for you to complete.

At the Royal we are striving to develop programs which will prepare expectant couples not only for the birth experience, but also for the early days of parenthood. I am, therefore, interested in hearing what you believe should be included in our programs and how the information should be given.

The information you provide in this survey will be treated confidentially. The number on the top right hand corner will not identify you in any way, it is only a code so I know the response rate.

If you have any questions regarding the survey or you would like to discuss new programs at greater length, please contact me on 9382 6700.

A stamped self-addressed envelope has been provided for the return of the survey.

Yours truly,

Jane Svensson
Health Education Coordinator.

Appendix Six B: Survey for Expectant Parents

Antenatal Education Post-Program Survey

In order to assist in the development of new programs, I would appreciate your response to the following survey. The majority of items on this survey are statements which you are to complete. Please provide detail to help in the development of future programs.

Having a Baby Program

1. I attended the "Having a Baby" program because: (Please list your reasons)

   ……

   ……

2. I hoped the following topics/skills would be included in the program:…….

   ……

Information in Pregnancy

3. During the pregnancy it has been easy/difficult to gain the information I want/need.

   Please comment:…….

   ……

4. The most useful sources of information have been:
   Please number the sources in order of usefulness. 1 = least useful 8 = most useful.

Books	Magazines	Friends	Brochures
The midwife	The doctor	The Chemist	Videos

   Others:……..…….

5. I think information should also be provided by: (Please complete e.g. via an antenatal program early in the pregnancy, via the Internet).

   ……

   Now to the content of new programs

6. I think programs during pregnancy **should include** the following topics/skills:

   ……

   ……

   ……

7. I think the following topics/skills should **not** be included in programs during pregnancy:

   ……

   ……

8. If **parenting issues** are to be covered during pregnancy should they be:

   d) incorporated into a combined birth–parenting program;

   e) presented in a special parenting program;

   f) other option?…….

9. When do you think parenting information should be provided? How early or late in the pregnancy? Please comment.

   ……

   ……

10. Do you think couples with young babies should attend a program during pregnancy so you gain first hand knowledge of how to care for a newborn? Yes/No

Now to the structure of new programs

11. I learn more effectively if information is given to me by the following strategies: (Please circle the strategies.)

Lectures	Demonstrations	Group discussions
Role-plays	Practical activities	Videos
Handouts	Posters	Scenario cards

Others……

12. How do you think programs should be offered during pregnancy: (Please circle your preferred option)

g) as a 6 – 7 week program in the evening;

h) as a 6 – 7 week program during the day;

i) as a 2 day workshop on a weekend;

j) as a 2 day workshop during the week;

k) as a package with 2 or 3 components e.g. 2 weeks early in the pregnancy and 5 weeks towards the end;

l) another option, such as……

Final thoughts

13. I believe the woman's role in an antenatal program is……..……

……

14. I believe the partner's role in an antenatal program is……..…….

15. The educator's role in an antenatal program is to……..…….

…….……

16. Are there any other comments you would like make? …….……..…

……..……

Thank you for your assistance.

Health Education Centre

Dear participant,

Over the last few months I have been interviewing couples in order to gain their ideas on how to design new antenatal education programs. I would appreciate your assistance in this matter and am enclosing a survey for you to complete.

This survey is **not an evaluation** of the program you are attending. It has been designed to give me an understanding of what expectant couples want from antenatal education programs. At the Royal we are striving to develop programs which will prepare expectant couples not only for the birth experience, but also for the early days of parenthood. I am, therefore, interested in hearing what you believe should be included in our programs and how the information should be provided.

The information you provide in this survey will be treated confidentially. The number on the top right hand corner will not identify you in any way, it is only a code so I know the response rate.

If you have any questions regarding the survey or you would like to discuss new programs at greater length, please contact me on 9382 6700.

Please return the survey to your educator during the final session of your 'Having a Baby' program.

Yours truly,

Jane Svensson
Health Education Coordinator.

Appendix Six C: Survey for New Parents

Antenatal Education Postnatal Survey

In order to assist in the development of new programs, I would appreciate your response to the following survey. The majority of items on this survey are statements which you are to complete. Please provide detail to help in the development of future programs.

Having a Baby Program

1. Did the "Having a Baby" program prepare you for your birth experience? Yes / No

   a) If yes, how did it prepare you?

   ……

   b) If no, then why do you feel that way?

   ……

2. Did the "Having a Baby" program prepare you for the early weeks at home? Yes / No

   Please comment:……..…….…….

3. Did you attend all of the program? Yes / No

   a) If no, how many sessions did you miss?……..

Becoming a Parent Workshop

4. Did you attend the "Becoming a Parent" workshop? Yes / No

5. Did the workshop prepare you for life with a newborn? Yes / No

   a) If yes, how did it prepare you?

   ……

   b) If no, then why do you feel that way?

   ……

Now to the content of new programs

6. I think programs during pregnancy **should include** the following topics/skills:

   ……

   ……

7. I think the following topics/skills should **not** be included in programs during pregnancy:

   ……

   ……

8. If **parenting issues** are to be covered during pregnancy, should they be:

   g) incorporated into a combined birth – parenting program;

   h) presented in a special parenting program;

   i) other option……..…….

9. When do you think parenting information should be provided? How early or late in the pregnancy. Please comment.

   ……

10. Do you think couples with young babies should attend an antenatal program so you gain first hand knowledge of how to care for a newborn? Yes / No

Now to the structure of new programs

11. I learn more effectively if information is given to me by the following strategies: (Please circle the strategies.)

Lectures	Demonstrations	Group discussions
Role plays	Practical activities	Videos
Handouts	Posters	Scenario cards

Others……

12. How do you think programs during pregnancy should be offered: (Please circle your preferred option)

    m) as a 6 – 7 week program in the evening;
    n) as a 6 – 7 week program during the day;
    o) as a 2 day workshop on a weekend;
    p) as a 2 day workshop during the week;
    q) as a package with 2 or 3 components e.g. 2 weeks early in the pregnancy and 5 Weeks towards the end;
    r) Another option, such as……..……..…

Final thoughts

13. I believe the woman's role in an antenatal program is……..……

    ……

14. I believe the partner's role in an antenatal program is……..……..

    ……

15. The educator's role in an antenatal program is to…….…….

16. Are there any other comments you would like make? ……..….

    …….……

    ……..

Health Education Centre

Dear

Over the last few months I have been interviewing couples in order to gain their ideas on how to design new antenatal education programs. I would appreciate your assistance in this matter and am enclosing a survey for you to complete.

At the Royal we are striving to develop programs which will prepare expectant couples not only for the birth experience, but also for the early days of parenthood. I am, therefore, interested in hearing what you believe should be included in our programs and how the information should be given.

The information you provide in this survey will be treated confidentially. The number on the top right hand corner will not identify you in any way, it is only a code so I know the response rate.

If you have any questions regarding the survey or you would like to discuss new programs at greater length, please contact me on 9382 6700.

A stamped self-addressed envelope has been provided for the return of this survey.

Yours truly,

Jane Svensson
Health Education Coordinator.

Appendix Six D
Antenatal Education Survey Report

Data collected from 98 couples who attended an antenatal education program at Hospital A or B. The survey was distributed with the program booking confirmation letter or during the first session of a program. Separate cohorts were sampled.

1. Reasons for attending the antenatal classes (participants could provide more than one reason):

Reasons for attendance	n = 98
Learn information	39
Meet others in same situation	34
Gain confidence	29
Learn skills for birth	23
Learn skills required by a parent	35

2. Topics they thought would be covered in the classes (participants could list more than one topic):

Topics to be covered	n = 98
All topics advertised in the brochure	56
Labour, birth & pain relief options	44
Skills for care of a newborn	51
Afterbirth care	35
Hospital procedures & facilities	28
Breathing & labour skills	18
Feeding a baby	47
Inductions	13
Caesarean sections	28
Difficult birth experiences	26

3. When asked whether it had been easy or difficult to gain the information during the pregnancy, the following response was given. Easy to obtain = 81 Difficult = 17

4. Useful sources of information were (participants could list more than one source):

Sources of information	n = 98
Books	83
Friends	45
Midwife	36
Magazines	12
Videos	6
Doctor	27
Internet	81

5. Participants felt that information should also be provided by the following strategies during pregnancy:

Strategies	n = 42
Antenatal class early in pregnancy	26
Counselling service / midwife accessible 24 hrs	10
Pregnancy help-line	16

6. When asked as to the topics they thought should be included in an antenatal program the following responses were given:

Topics to be included	n= 98
Labour process & how to cope	87
Hospital services & policies	42
Pain relief options	81
Parenting	47
Complications in labour	75
Feeding a baby	89
Caring for a newborn	74
PND	26
Common discomforts in pregnancy	17

7. When asked as to the topics they thought should not be included in an antenatal program, the only comment was that there should be a greater emphasis on parenting issues.

8. If parenting issues are to be covered during the antenatal period, participants felt they should be:

Strategy	n=98
Incorporated in a birth – parenting program	79
Offered as a special program	19

9. When asked when they thought parenting information should be provided, the following response was given:

Stage in pregnancy	n = 98
End	79
Middle	15
Early	3
After birth	1

10. When asked whether they thought couples with young babies should attend an antenatal program so they gain first hand knowledge of how to care for a newborn, the following response was given: Yes = 83 No = 15

11. Participants stated that they learn more effectively from the following strategies (participants could identify more than one strategy):

Strategies	n = 98
Videos	23
Demonstration	76
Mini Lecture	42
Group discussion	37
Practical activities	65
Handouts	22
Role-play	9
All the strategies listed	11

12. Participants thought an antenatal program should be offered as a:

Strategy	n =98
6 – 7 week program	82
As a package with 2 or 3 components	11
2 day workshop	5

13. Participants thought the woman's role in an antenatal program was:

Woman's Role	n= 89
Understand birth process & pain relief options	35
Become informed, relaxed and confident	38
Learn skills for caring for baby	27
Learn about choices	31
Participate in discussions	29
Understand body changes	10

14. Participants thought the partner's role in an antenatal program was:

Partner's Role	n= 82
Support and understand the partner	28
Learn about birth process	34
Gain confidence	29
Learn skills to care for newborn	27

15. Participants thought the educator's role in an antenatal program was

Educator's Role	n=84
Provide current information	69
Provide guidance & answer questions	35
Dispel myths	15

Appendix Seven: Questioning Routes for Expert Focus Groups

- General introduction – names etc.
- What interests expectant or new parents under your care?
- What concerns expectant or new parents under your care?
- How do you know what they are interested in and concerned about?
- What questions are you frequently asked?
- Do you think it is hard for expectant and new parents to get the information they want during the childbearing year?
- What sources of information do they use?
- How do you think expectant and new parents prefer to learn?
- How do you think birth and parenting information should be presented to expectant parents?
- Final comments.

Appendix Eight: Experts Survey

Experts survey

In order to assist in the design of the new antenatal education programs I would appreciate your response to the following survey. The majority of items on this survey are statements which you are to complete. Please provide detail to help in the development of future programs.

The content of new programs

1. I believe antenatal education program **should include** the following topics/skills:

   ……..……

   ……..……

2. I think the following topics/skills should **not** be included in antenatal programs:

   ……

   ……

3. **How** do you think parenting and postnatal information should be provided to expectant couples? Please list specific strategies.

   ……

   ……

4. When do you think **parenting information** should be presented to expectant couples? How early or late in the pregnancy. Please comment.

   ……

Now to the structure of new programs

5. I believe participants learn more effectively if information is given to them by the following methods. Please number the methods according to their effectiveness.
   1 = least effective 9 = most effective

Lectures	Demonstrations	Group discussions
Role-plays	Practical activities	Videos
Handouts	Posters	Scenario cards

6. How do you think the information required by expectant couples should be offered? (For example an incorporated birth and parenting 6 –7 week program). If you think a range of options should be available please list them .

   ……

   ……

Final thoughts

7. I believe the woman's role in an antenatal program is……..……..…

   ……

   ……

8. I believe the partner's role in an antenatal program is……..……..……

   ……

   ……

   ……

9. The educator's role in an antenatal program is to……..

   ……

   ……

   …….

10. Final comments I would like to make are: ……..…….

……

……

……

Thank you for your assistance.

Health Education Centre

Dear

Over the last few months I have been interviewing couples and health professionals in order to gain their ideas on how to design new antenatal education programs. I would appreciate your assistance in this matter and am enclosing a survey for you to complete.

At the Royal we are striving to develop programs which will prepare expectant couples not only for the birth experience, but also for the early days of parenthood. I am, therefore, interested in hearing what you believe should be included in these programs and how the information should be given.

The information you provide in this survey will be treated confidentially. The number on the top right hand corner will not identify you in any way, it is only a code so I know the response rate.

If you have any questions regarding the survey or you would like to discuss new programs at greater length, please contact me on 9382 6700.

A stamped self-addressed envelope has been provided for the return of this survey.

Yours truly,

Jane Svensson
Health Education Coordinator.

Appendix Nine A: Topics these Expectant and New Parents Recommended for Learning and Discussing Programs

The expectant and new parents who participated in the needs assessment identified topics that should be included in '*learning and discussing*' programs to be held during the childbearing year. The following tables present the topics and the specific aspects that they believed should be covered at the various stages during the year.

These expectant and new parents also made some recommendations as to how information should be provided. For example in the '*towards the end of pregnancy*' program they recommended that a newborn baby should be bathed in order that they learned about newborn behaviour. This Appendix includes tables which list learning activities they recommended. It is to be noted that they only made recommendations for some of the topics. Also several of the learning activities, such as a hospital tour, are recommended more than once. If all of these programs were implemented, and if a cohort were to attend them, then consideration would have to be given as to whether activities such as the tour would be repeated.

Topics	Specific aspects of the topics
Maximising fertility	Things to do to increase chance of becoming pregnant Contraception – when to stop taking the pill Folic acid and other supplements Food and alcohol Tests to be done What happens when you are over 35 years old How to prevent miscarriage
Care in pregnancy	Options for care during and after pregnancy Health insurance Costs associated with having a baby Maternity leave
Lifestyle	Appropriate exercise routines Activities that could harm a baby Traveling when you are trying to become pregnant Hazards when renovating a house

Topics to be included in a '*before you are pregnant*' program

Topic area	Learning activities they recommended
Maximising fertility	Mini-lecture and discussion
Care in pregnancy	Tour of the hospital
	Mini-lecture and discussion
Lifestyle	Demonstration and discussion

Learning activities for inclusion in a '*before you are pregnant*' program

Topics	Specific aspects of topics
Care in pregnancy	How to get the best care when you are pregnant Difference between Birth Centre and Delivery Suite Things to avoid when you are pregnant Tests you need and when you have them Supplements to take Health insurance and costs in pregnancy Who you can contact when you are worried about something Costs associated with having a baby
Foetal development	Growth and development of the baby
Lifestyle changes	Smoking and alcohol intake in pregnancy Foods that are best to eat Foods to avoid Sex during pregnancy Air travel in pregnancy How long is maternity leave When should women go back to work Renovating a house--- things to avoid

Topics to be included in a '*when you are just pregnant*' program

Topic area	Learning activities they recommended
Care in pregnancy	Tour of the hospital
	Mini-lecture and discussion
Foetal development	Video and discussion
Lifestyle changes	Mini-lecture and discussion

Learning activities for inclusion in a '*when you are just pregnant*' program

Topics	Specific aspects of topics
Care in pregnancy	How do you know if all is OK Difference between Birth Centre and Delivery Suite Things to avoid at this stage of pregnancy Tests you need and when you have them
Growth and development of baby	How big the baby is and what it looks like What the baby does
Lifestyle changes	Foods to avoid Sex during pregnancy Exercise in pregnancy
Labour and birth	What is labour really like What does the partner do in labour Problems that can occur in labour
Breastfeeding	How does breastfeeding work How often a baby feeds Problems that can occur
Equipment for baby	What you need to buy for a baby Where you can get it from

Topics to be included in a program '*around the middle weeks of pregnancy*' program

Topic area	Learning activities they recommended
Labour and birth	Mini-lecture Group discussion
Breastfeeding	Video and discussion
Care in pregnancy	Hospital tour Mini-lecture and discussion

Learning activities for inclusion in a '*around the middle weeks of pregnancy*' program

Topics	Specific aspects of topics
Labour and Birth	How and when labour starts How to work out when you are in labour When to go to hospital Who looks after you in hospital How to manage labour pain Why are some women in labour for 4 hours and others 36 hrs How to help labour along Decision making in labour Problems that can occur Intervention – why and what happens Caesarean section Relaxation techniques Delivery suite tour Hospital facilities How to prevent a tear and an episiotomy How to care for stitches How many people will be in the room during the birth
Breastfeeding	Breastfeeding – how it works How to work out how much milk the baby is getting Problems that can occur Frequency of feeding When to start solids Mixing formula feeding and breastfeeding Going back to work
Basic care of baby	How to cope with a baby Sleeping positions and patterns Bathing and changing a baby Crying and settling Myths explained What babies can do Basic parenting skills
Life with a baby	How to maintain our relationship When you can have sex again Support networks and community resources Recuperation after the birth Early days at home Postnatal depression Parenting issues Networking with others

Topics to be included in a '*towards the end of pregnancy*' program.

Topic area	Learning activities they recommended
Labour and birth	Tour of the hospital Birth video/s Problem solving activities e.g. situations they may encounter Mini lectures for labour stages and processes, intervention and drugs Meeting a couple/s who had a baby Is it labour activity
Breastfeeding	Breastfeeding video Mini lecture including problems that can occur Sucking the orange activity
Basic care of baby	Watching a newborn baby being bathed and meeting the parents Tired signs video Mini lecture on immunization and what babies can do
Life as a mum and a dad	Meet and talk to one or two couples who have had a baby recently

Learning activities recommended for a '*towards the end of pregnancy*' program

These expectant and new parents also made recommendations regarding activities they did not want included in a '*towards the end of pregnancy*' program.

Topic area	Learning activities they did not want included
Icebreaker	Introduce the person beside you
Labour and birth	Pain relief game Old birth videos Laborious questioning about labour
Icebreaker	Introduce other couple

Learning activities they did not want included in a '*towards the end of pregnancy*' program

.

Topics	Specific Aspects
Breastfeeding	How do you know if your baby is getting enough Problems that can occur Preventing mastitis Feeding in public
Infant growth and development	Weight gain expected in the early weeks How much sleep a baby needs What a baby can do
Parenting issues	How to get things done during the day Preventing feeling isolated Dealing with family What to do when things go wrong

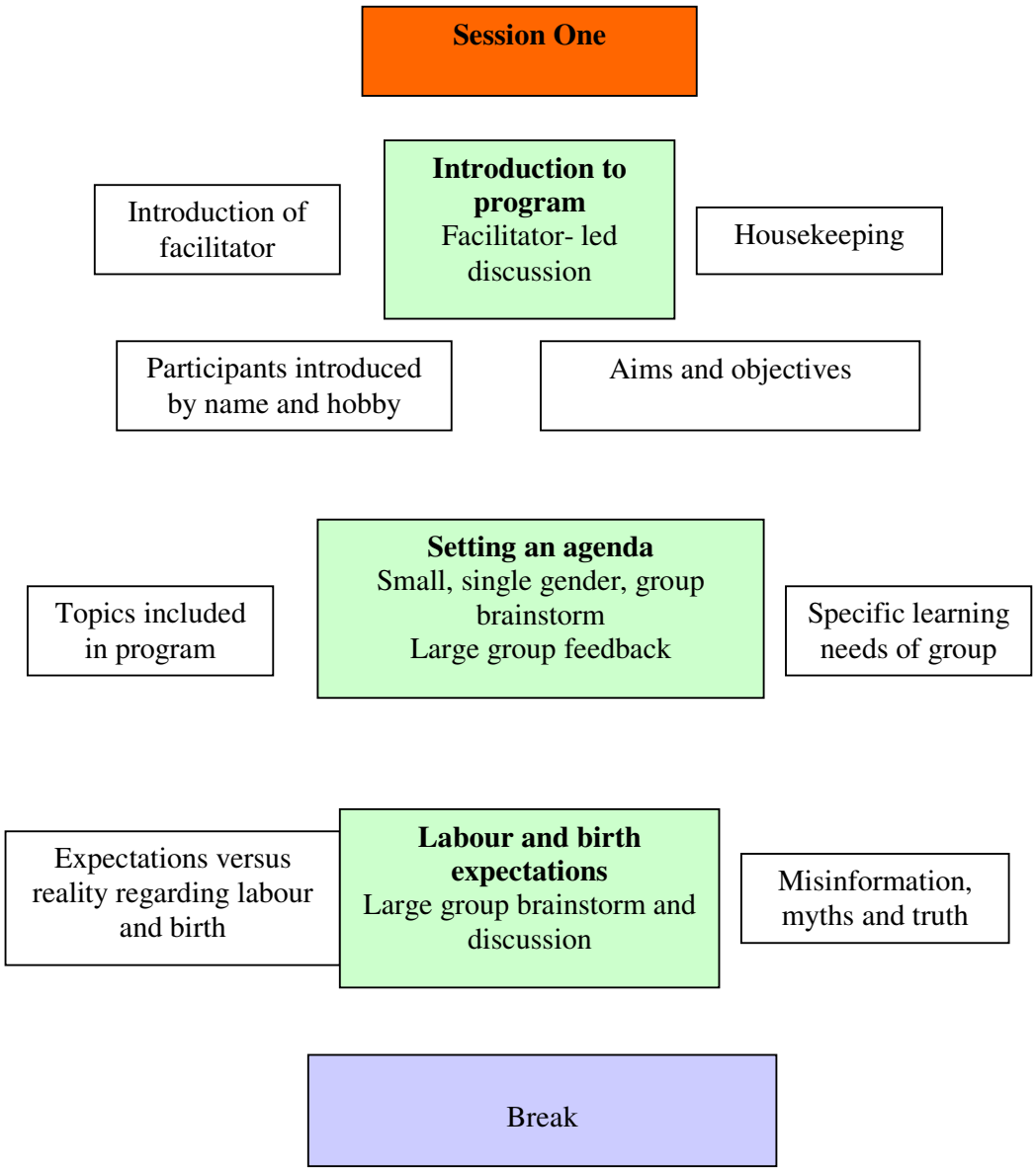
Topics to be included in a program '*after the birth*'

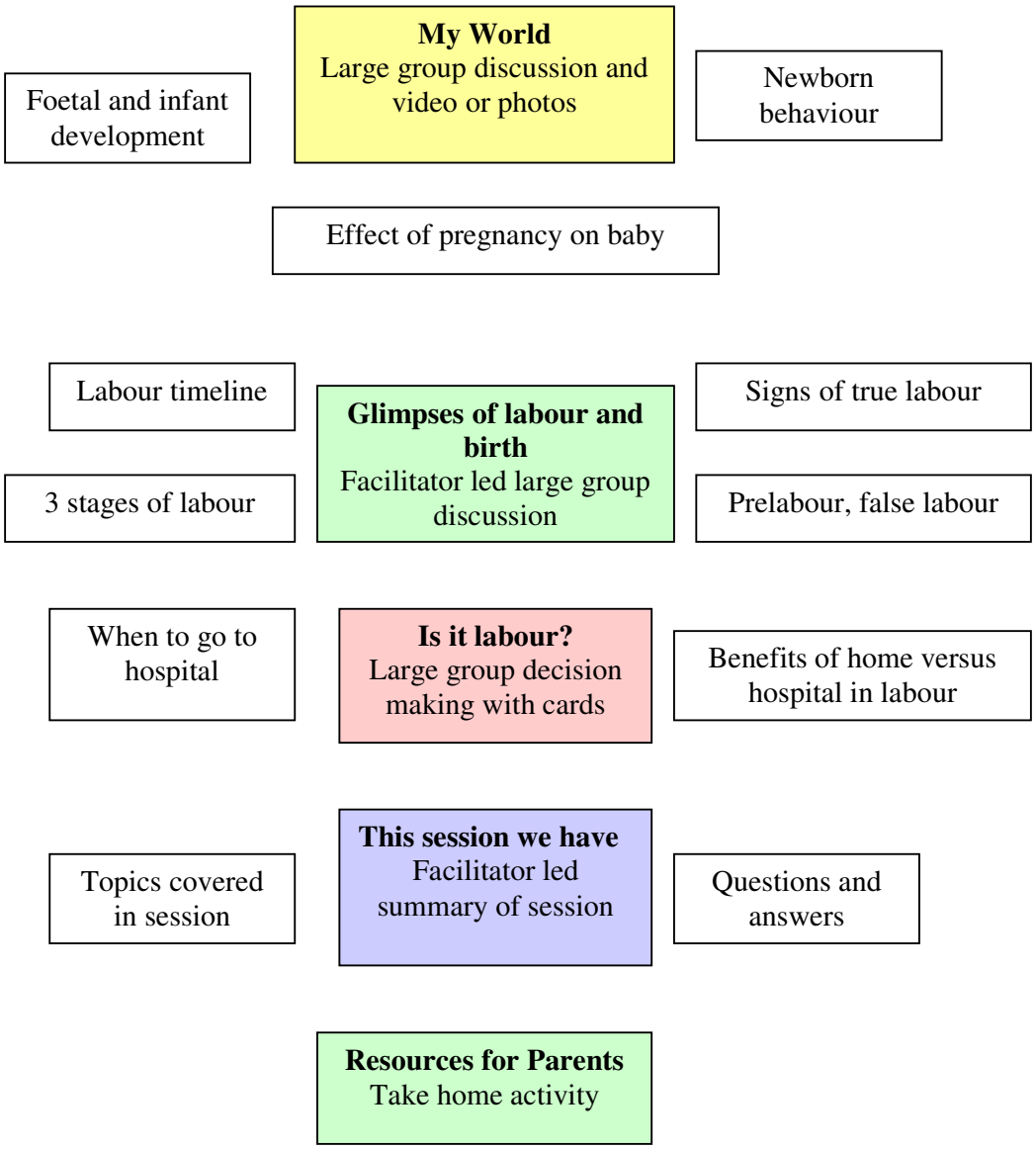
Appendix Nine B: Topics these Expectant and New Parents Recommended for '*Hearing and Discussing Detail*' Programs

These expectant and new parents recommended several topics that they believed should be covered in '*hearing and discussing detail*' programs during the childbearing year. The actual words used by these expectant and new parents have been retained.

Topics	Specific aspects of topics
Growth and development of an infant	What babies can do, see and hear Reflexes How much sleep they need Sleep cycles When babies crawl and walk Baby checks – who does them Keeping baby healthy Traveling with a baby
Development of a baby	Size of baby at various stages of pregnancy Adverse events in pregnancy What happens to a baby in labour
Breastfeeding	How breastfeeding works How much milk does a baby need Problems that can arise How to establish a routine Meaning of rooming in
Intervention in labour	Anesthetic for a caesarean section When, why, and how intervention is used in labour Foetal monitoring Tears and episiotomies Problems that can occur
Drug Choices in Labour	Drugs that can be used Side effects of each drug Their effect on the baby

Appendix Ten: Learning Activities in Session One of the Having a Baby Program Error!




My World
Large group discussion and video or photos
Foetal and infant development
Newborn behaviour
Effect of pregnancy on baby
Glimpses of labour and birth
Facilitator led large group discussion
Labour timeline
Signs of true labour
3 stages of labour
Prelabour, false labour
Is it labour?
Large group decision making with cards
When to go to hospital
Benefits of home versus hospital in labour
This session we have
Facilitator led summary of session
Topics covered in session
Questions and answers
Resources for Parents
Take home activity

Appendix Eleven

Having a Baby Program
Session Plans

Developed as Part of Doctoral Research

Antenatal Education: Meeting the Needs of Consumers
A Study in Health Services Development

Jane Svensson
Revised November 2004

This program has been designed to meet the needs of the women having their baby at the Royal Hospital for Women and their partners. The words 'partner' and 'dad' have been used throughout this document in place of husband or father, but please replace these terms with those that suit each group.

The activities in this program:

- **should be of interest to male and female participants**. Men may not spontaneously ask as many questions as women in the antenatal period, but this is no indication of their level of interest or their knowledge base. To foster peer support and sharing of ideas, concerns and interests I have suggested single gender, small groups for several of the activities. The composition of the small groups can, however, be changed when needed.
- **can be used at any stage of the pregnancy**. Monitor the needs of your group and integrate the activities as appropriate.
- may be **appropriate or they can be adapted for special needs groups**. The language used in the activities should allow them to be used in age or culture-specific groups.
- have been **designed for a group of 20 people** as this is the average size of antenatal education groups in Australia.
- Are **colour coded according to the type of activity they are**. The four categories, and colours they have been allocated, come from my doctoral research. *Time to catch up and focus* occur at the beginning and end of session which coincide with the forming and adjourning stages of group development when anxiety levels are higher. *Practising* relates to practising skills and situations they may encounter. *Discovering* relates to discovering new information and skills as well as the ideas of other in the group. *Seeing and hearing the real experience* relates to learning from peers which is one of the preferred learning styles of adults.

	Time to catch up and focus
	Practising
	Discovering
	Seeing and hearing the real experience

Session One

By the end of session one participants should be able to:

- Recall the names of the others in the group;
- Recognise the need for open communication and active participation during the program;
- Identify topics that will be covered during the program;
- State their labour and birth expectations;
- Describe the characterises of their growing baby at various stages of pregnancy;
- Provide an overview of labour & pre-labour.

Resources	Handouts
CD player and CDs	What to Bring to Hospital
Whiteboard and markers	Community Contact Numbers
Butchers paper and pens	Suggested Reading List
Birth atlas	What Baby May Want
Doll, pelvis, placenta, uterus	
Is it Labour cards	
Resource questions	

Providing a Warm, Supportive Learning Environment

Venue to be prepared by:

- Arranging chairs in a semi-circle
- Placing books & handouts on a table and birth atlas on the floor
- Placing name tags and pens on a table
- Tea, coffee, water and mugs in the kitchen

On whiteboard write program dates and topics to be covered in first session.

Welcome and Introduction to the Program

Facilitator to:

- Introduce self and welcome participants to the program
- State aims of the program and acknowledge that participants may have specific needs
- Address housekeeping issues i.e. refreshment break, toilets, receipts, name badges, car park letter, health fund letter, handouts, beanbags and chairs
- State program content disclaimer

In round robin, each participant to state their name, how many weeks pregnant they are and their hobbies or interests.

Note: If a participant states their occupation, facilitator to remind them they are to state their hobbies and interests, not their occupation. Hobbies and interests aid group networking and inclusion of partners – occupations can create division or competition.

Identifying Group Needs – Setting an Agenda

Facilitator to provide overview of each session in program, but emphasise that content and sequence will be adapted to meet group needs. Hence need for group to identify their learning needs → agenda set.

Divide participants into 2 single gender groups. If group is large divide them into 4 groups, 2 of each gender. Each group to appoint a scribe.

Each participant to complete the following sentence:

- From this program I want to gain / learn ……..

Scribe to record topics on butcher's paper.

Large group → feedback from each group & discussion as to how their learning needs will be integrated into the program. State that in this program labour and birth are seen as a microcosm of the childbearing experience and as such there will be minimal demarcation between topics. There will be a postnatal reunion.

Note: Sheets of butcher's paper are to be kept by facilitator through the program and to review them, with the group, at least once (session four) during the program. Tell participants they can add new 'topics' during the program.

Labour and Birth Expectations

Facilitator to lead large group brainstorming activity.
Participants asked to complete the following statements about labour and birth:

- I expect childbirth will be…
- Friends and family have told me childbirth is…
- I have heard or read that…

Large group discussion on unique nature of labour - reality versus expectations.
Provide examples of birth stories and an outline of hospital birth statistics, i.e. % who will have a vaginal birth, % who will have an assisted vaginal birth and % who will have a caesarean section

Percentage of women who give birth on their due date = approx 5 %. Approx 70% are overdue and 25% before the due date.

Break

My World

Facilitator to show in-utero photographs to the large group so participants can see the developing baby and its characteristics at different weeks of pregnancy. The 'Human Body' video, or similar fetal development video, can be used in addition to or instead of the photographs. Facilitator and participants to discuss:

- Size of the baby
- Development of organs, body systems and senses in pregnancy.
- Growth in the final weeks of pregnancy, hiccups, sleeping patterns, movements.

Close the discussion by asking each participant the following question. 'Think of one word to describe baby's world – what is the word?'

A Glimpse of Labour and Birth

Facilitator to draw labour timeline on the whiteboard.

Pre-labour | First stage = 12 – 14 hours | Second stage | Third stage

Identify the 3 stages of labour – include length and signs of each.

Use birth atlas to outline the anatomy and physiology of the uterus, vagina, cervix, perineum, amniotic sac, placenta, umbilical cord, baby, pelvis and the physiology of childbirth.

List the three signs of labour – show, ruptured membranes and contractions – when, why and how they occur.

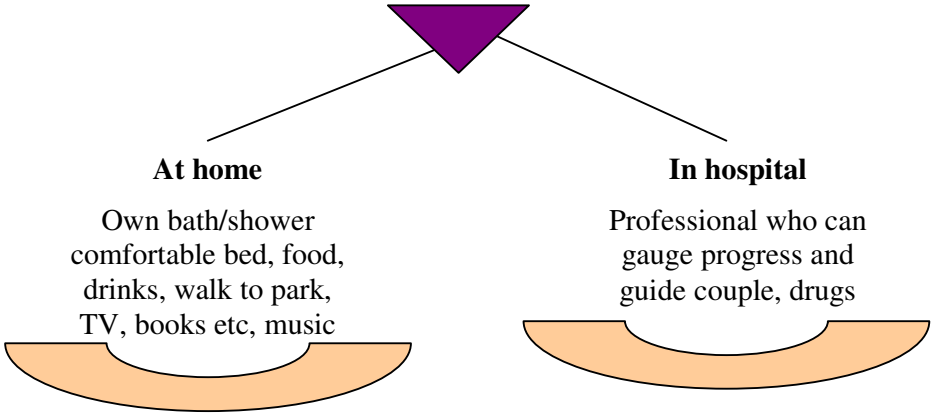
- Show can happen up to 3 weeks before labour.
- Ruptured membranes may be a gush or a trickle. Clear or meconium.
- Contractions are different from Braxton Hicks contractions - like a wave – they have peaks and troughs. Irregular to begin and short. Real contractions keep coming when at rest.

Define pre-labour, false labour and true labour.

- Pre-labour signs and processes e.g. backache, nesting, engagement, movements, diarrhoea, cervix ripening
- False labour – pattern and timing of contractions
- True labour – nature of contractions include timing, strength and frequency.

Is It Labour?

Use 'Is it labour' cards (Pratt, 1998) to demonstrate that the signs of labour can vary in their sequence and presentation. Knowing these signs allows women to stay at home longer. Describe the decision as to when they will go to hospital as like a set of scales --at home on one side and hospital on the other. Think what they would value at home and then what they would go to the hospital for.



This Session We Have

Summary of topics covered in the session and questions answered:
Overview of program and agenda setting;
Labour and birth expectations and the world of the baby;
Glimpse of labour and birth and when to go to hospital.

Resources for Parents

Divide participants into 2 groups.

- Group 1: Visit a baby shop & note equipment available & cost of same. Bring list of prices to session two.
- Group 2: Distribute the 'Community Contact' list and allocate one of the named resources to each pair in the group. They are to investigate the resource and answer the questions listed.

Resource Questions

Where in your local area is the resource located?
What services does the resource provide?
How do you access it?
Do you have to pay for the service?

Session Two

By the end of session two participants should be able to:

- Outline fears and concerns these women and men have regarding childbirth;
- Describe methods by which labour can be induced and why it may be required;
- Provide an overview of the first stage of labour;
- Present an overview of pain in labour and strategies which promote relaxation and the release of endorphins;
- List the equipment required for a baby and resources for parents.

Resources	Handouts
CD player and CDs	Massage and Touch Relaxation
Whiteboard and markers	Positions for Labour
Butchers paper and pens	Labour Fact Sheets
Birth atlas	
Doll, pelvis, placenta, uterus	

Introducing Session Two

Ask each person to state in 1 or 2 words what becoming a mum and a dad means to them.

Outline topics to be covered in the session.

Fear and Concerns Regarding Labour

Divide the large group into 2 single gender groups. Ask each group to brainstorm what they fear the most about childbirth. Ask the groups to discuss their responses and list the main fears on a sheet of paper and reasons for the fears. Allow 10 minutes for discussion.

Close the discussions with a spokesperson from each group presenting their responses to the large group. Follow the presentations with a general discussion about fears and concerns which expectant parents may have and the reasons for them. Encourage an expression of fears and concerns and remind them of the community resources available to parents. Remind participants of the Medical Intervention and Drug Choices information evenings.

Predicted Outcome: The number of fears will depend on the group. Women are often concerned about how they will cope with the pain, who will be at the birth, how they will know when labour has commenced, will they need an episiotomy. Concerns frequently expressed by men are how they will feel in labour, how they will know what to do, how they will respond to their partner's pain, how the health of the baby will be monitored.

Unveiling The First Stage of Labour

Remind participants of how labour begins. Refer to Labour Fact Sheets. Include:

- Anatomical and physiological processes of first stage.
- Description of contractions, pre labour, early labour, active labour and transition.
- Cervical effacement and dilation esp. that contractions have to last 60 secs before cervix begins to dilate --- therefore plenty of time to get to hospital.
- Membranes rupture.
- When to go to hospital.
- What to do during first stage.

Discuss induction of labour, medical and natural – reasons and methods:

- Good weekend
- Hot curry
- Nipple stimulation
- Long walk
- Prostin E2 is a vaginal gel paced high around the cervix, used to ripen the cervix.
- Foleys catheter.
- Artificial rupture of the membranes.
- Intravenous drip with Syntocinon.

Describe foetal presentation, descent, how position changes with descent and strategies that aid these processes. Relate to maternal position. Outline foetal monitoring.

Break

Preparing For This Remarkable Journey

Compare labour to an overseas journey – the more prepared you are the smoother the journey will be. Is this true? No – unexpected situations can arise at any time in labour, just as they can with a well-planned journey. Many compare labour to a marathon, as it is physically and emotionally tiring.
Divide large group into 4 single gender groups. Each group has a set of questions.

Group One = Women
What would you do if you were preparing for a marathon?
How does your body react when you are in the marathon?

Group Two = Men
Think of a time when you have had pain, e.g. headache, migraine, shoulder pain, backache.
What have you done when you have been in pain?

Group Three = Women
What might make you feel safe, comfortable and relaxed in labour?

Group Four = Men
What might make your partner feel safe, comfortable and relaxed in labour?

Large group discussion on the unique nature of labour pain and their responses to the questions.

Pain is more than a physical experience – it is also a psycho-emotional experience. Fear, anxiety, stress, fatigue, tension and ignorance can increase the perception of the pain. Personality, social and cultural factors can impact on the way we perceive and react to pain. Some cultures expect you to be stoic, while others encourage full expression.

Describe body's natural pain relief mechanisms i.e. gate control theory and endorphins. In labour you can reduce the pain messages by creating harmless stimulation to compete at the dorsal horn level of the spine. For example you can use touch, massage, hugging, sacral pressure, heat, cold, running water. Movement, such as rocking, rolling hips, walking and frequent position changes can also help in labour. Dim lights, music, aromatherapy can help women relax in labour.

Skills For Life

Give participants the 'Massage and Touch Relaxation' and 'Positions in Labour' handouts and demonstrate a range of these techniques. Emphasise that they can be used at any time, as they are life skills not labour skills. Relaxation itself can be very helpful after the birth. Show sections of the 'Positioning for Birth' video if time permits.

Resources for New Parents

Ask for feedback from the week one take home activity. Discuss the marketing of resources and equipment and the essential items required. Outline community resources.

This session we have

Summary of topics covered in the session and questions answered.
Fears and concerns regarding labour;
First stage of labour – how labour begins;
Preparing for the remarkable journey;
Relaxation skills for life;
Resources and equipment for parents.

Session Three

By the end of session three participants should be able to:

- Outline the effects and side effects of the drugs that can be used in labour;
- Recall the basic processes which occur during the first stage of labour;
- Describe transition stage of labour and second, third and fourth stages;
- Discuss the care they would prefer in each of these stages;
- Recall the hospital admission procedure and the facilities available at the hospital.

Resources	Handouts
Whiteboard and markers Butchers paper and pens Birth atlas Doll, pelvis, placenta, uterus Drug Trigger Cards	Labour Fact Sheets Drugs Fact Sheets

Drug Choices in Labour

Prepare the room by placing chairs and/or beanbags in three circles with one 'Drug' trigger card, some paper and a pen on one chair in each group. Ask each group to brainstorm their responses to the trigger questions.

Group One

What is Nitrous Oxide?
When, why and how is it used in labour?
What would you like to know about it?

Group Two

What is Pethidine?
When, why and how is it used in labour?
What would you like to know about it?

Group Three

What is an Epidural?
When, why and how is it used in labour?
What would you like to know about it?

Allow 10 minutes for discussion, with participants who arrive late being asked to join one of the groups. Close the discussion with a spokesperson from each group presenting their drug to the large group. As each drug is presented address the 'what would you like to know about it' and correct any misinformation. Remind group of Drug Choices information evening.

Our Remarkable Journey Continues

Provide summary of pre-labour and first stage, and then proceed to description of second, third and fourth stages of labour. Include:

- Anatomical and physiological processes of these 3 stages;
- Breathing techniques and panting;
- Processes baby undergoes in second and third stages;
- Foetal monitoring;
- Assisted birth - forceps, ventouse, caesarean section – briefly as detail will be in next session;
- Episiotomy;
- Baby's first hour of extra-uterine life.

Break

A Glimpse of Reality

In large group show Birthing My Way video, or another birth video. Introduce the video by identifying the key points of each birth. Large group discussion following the video.

Life in the Hospital

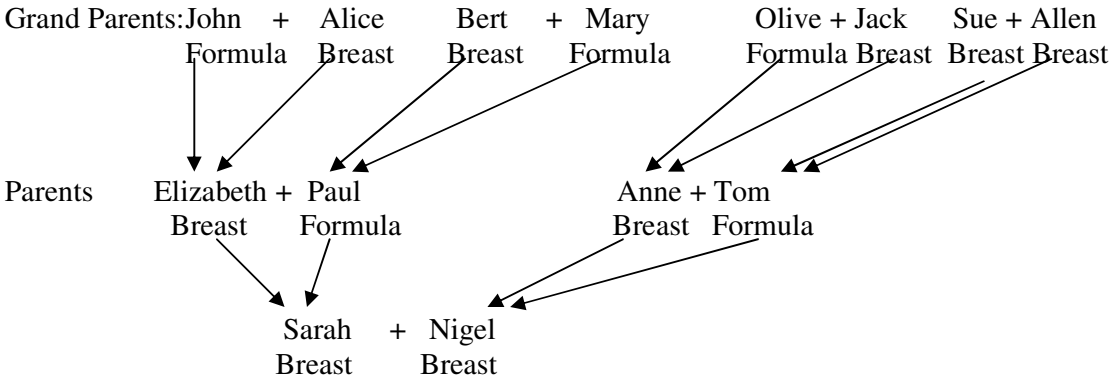
Large group tour of the front entrance and admissions desk, Delivery Suite, Birth Centre, Newborn Care, Postnatal Wards, Breastfeeding Support Unit and Home Midwifery Service. Demonstrate how the birthing room can have subdued lighting, the bed can be made into a chair and the use of beanbags and mats. Show Nitrous oxide, delivery set and resuscitaire. Explain length of time in birthing room and length of hospital stay.

This Session We Have…….

Summary of the session and give each couple their take home activity.
Drugs that can be used in labour;
Second, third and fourth stages of labour;
Glimpse of reality;
Life in the hospital.

Family Feeding Tree – Take Home Activity

The infant feeding experience of family members can have a significant, yet seldom recognised, influence on the experience of new parents. For this reason it is useful for women and men to explore their family 'feeding' tree. Each participant is to draw their family tree on a piece of paper during the week and under the names on the tree they write how the person was fed as a baby. For example:



Ask participants to commence the tree with their grandparents if they know how they were fed as a baby, but if they don't they can begin with their parents.

Complete the introduction with a comment about how family members can influence breastfeeding. Encourage further exploration/discussion of this issue before they have their baby, as it can help them identify the family members who will provide support in the early postnatal weeks.

Session Four

By the end of session four participants should be able to:

- Outline situations they may encounter in labour and describe action that could be taken;
- Discuss the use of intervention in labour and the effects of each;
- Identify the reasons a caesarean section may be recommended and describe the procedure;
- Outline the needs of a mother, father and baby in the early weeks at home.

Resources	Handouts
Whiteboard and markers Butchers paper and pens Birth atlas Doll, pelvis, placenta, uterus What If Cards All I Need Is….. cards	Intervention Fact Sheets Caring for the Perineum

What If?

Prepare the room by placing chairs and/or beanbags in four circles with one 'What If' trigger card, some paper and a pen on one chair in each group. Ask each group to discuss their scenario and summarise their answers to the problem on the paper. Allow 15 minutes for the discussion. Latecomers are asked to join a group.

Close the discussions with a spokesperson from each group presenting the answers to the large group. Follow each presentation with a discussion about the key issues in the scenario. Emphasise the importance of clarifying incomplete or inconsistent information/advice they receive.

Medical Intervention that May Be Needed in Labour

Draw labour timeline and mark on it the medical intervention that may be necessary in labour.

Induction
Augmentation
Foetal monitoring
Caesarean section
Ventous forceps
Episiotomy

Remind participants about Induction of labour and foetal monitoring which were covered in earlier sessions. Discuss each type of assisted birth – their use and reason for them being used. Provide percentages of women who have had these forms of intervention at the hospital.

Break

Birth by Caesarean Section

Show the group a caesarean section under G.A. and one with an epidural on the 'Another Special Delivery' video. Discuss reasons for the caesarean and also describe the procedure and the anesthetic. Include immediate post-operative care of mother and baby.

All I Need Is…

Divide the large group into three groups – group one is the mother, group two is the father and group three is the baby. Give each group some paper and a pen. Ask them to discuss the following trigger statement according to the group they are in and write their responses on the paper. That is, the mothers look at the needs of the mothers, fathers at the needs of the fathers and babies at the needs of the baby. Allow 10 minutes for the discussion.

As a new mother I will need… I have these needs because…… To meet these needs I….

As a new father I will need… I have these needs because…… To meet these needs I….

As a new baby I will need… I have these needs because…… To meet these needs I….

Close the discussions with a spokesperson from each group presenting the responses to the large group. Follow the presentations with a general discussion about the changes and needs of the mother, father and the baby in the early postnatal weeks. Emphasise the importance of support in the postnatal period and, to complete the activity, remind participants about the community resources that were discussed in week two.

This Session We Have

Provide a summary of the session and ask for feedback from the Family Feeding Tree (session three) take home activity.

Topics covered:
Situations that may occur during labour;
Intervention that may be necessary;
Caesarean section;
Needs of mother, father and baby;
Family feeding tree.

Session Five

By the end of session five participants should be able to:

- Describe how breastfeeding begins and is maintained;
- Outline the principle of breastfeeding supply and demand;
- Discuss the 24hours of life with a baby in the early weeks at home and how it differs from during pregnancy;
- Recall strategies for settling a baby.

Resources	Handouts
Whiteboard and markers Butchers paper and pens Doll, breast model Breastfeeding and You manual Dolls and baby wraps Hush-a-Bye video 24 hour baby transparencies	Breastfeeding Tips Breastfeeding Support Unit Sleeping Patterns of a Baby Postnatal Care Options

Advice We Have Received

Each participant to state the best advice they have been given about being a new mother/ father.

How Breastfeeding Begins

Large group mini lecture.

Briefly describe, using visual aids, the following:

- The breast – its role and function as the birth approaches;
- The hormonal changes that occur once baby is born and placental separation has occurred;
- The natural instincts of the baby;
- How the mother feels immediately after the birth;
- The benefits of early initiation of breastfeeding;
- Why initiation may be delayed, the effect this has on breastfeeding outcome and how this situation can be managed;
- The differences between colostrum, transition milk and mature milk – their amounts, their colour, etc.
- The breast changes in the early postnatal days.

You may like to use the information and the flow chart in Module 3 of the 'Breastfeeding and You' Handbook to enhance your description. In addition the final scene of the 'Breastfeeding and You: Preparing the Way' video can be used to supplement your input.

Complete the activity with a discussion of the role of the mother, the baby, the staff and partner in breastfeeding. Emphasise the importance of physical and emotional support in the postnatal period and give participants a list of resources they may like to access.

Breasts, Nipples and Sucking

To compare the difference in breastfeeding when a baby is attached to the nipple versus the breast, this simple exercise can be demonstrated. The baby needs to have a wide-open mouth to get as much breast tissue into its mouth as possible.

Ask participants to suck on the end of one of their fingers, as if they were sucking just on a nipple. Whilst they are sucking ask them to think about the shape of their mouth, their cheeks and the jaw and how they feel.

Now get them to open their mouth wide and suck on their arm. Once again they are to notice the shape of their mouth, their cheeks and the jaw.

At the end of the exercise, ask participants:

- to describe the difference between the two types of sucking;
- what they think would happen when a baby is nipple sucking, as opposed to breast sucking?
- what would happen to the nipple?
- would the baby get much milk through nipple sucking?

Breastfeeding According to Need

Briefly explain:

- the feeding patterns of a newborn baby compared with those of a baby at one week and how the pattern changes as the baby grows;
- the meaning of 'rooming in' and the benefits of feeding according to need;
- the breast changes in the early postnatal weeks. For example on day 3 they are full and by week 3 they are settling and softer.

Complete the activity with a discussion of the role of the mother, the baby, the partner and the postnatal support services in the early postnatal period. Emphasise the importance of physical and emotional support in the postnatal period and give participants a list of resources they may like to access.

Break

Sleeping and settling

In large group show the Hush a Bye video. This video helps expectant and new parents to recognise a baby's tired signs and what to do when they occur. Discuss sleep cycles and normal newborn behaviour.

My World, My Day

Give each participant a sheet of paper with two circles drawn on it – each circle represents a 24-hour clock.

Ask them to allocate portions of the first 'clock' to the activities that occupy their typical 24-hour weekday as it is at present. Ask them to categorise the activities e.g. paid work, sleep, domestic chores, leisure time activities etc.

When they have completed the first clock, ask them to divide the second 'clock' into how they believe their time will be allocated when they have their baby at home.

Complete the activity with participants comparing their clocks and also those of real babies which you have collected and put on overhead transparencies. Discuss how and why the 'clocks' are different and identify any major differences between those of the women and those of the men. Give an example of a clock you have prepared yourself and emphasise the unique nature of every parenting experience. Reinforce the need for support in the postnatal period and give participants a list of resources they may like to access.

This Session We Have

Topics covered in this session are:
Breastfeeding;
Sleeping and settling;
24 hours now and with baby.

Session Six

By the end of session six participants should be able to:

- Discuss the reality versus expectations of life as a mum and a dad;
- Identify reasons for feeling tired, isolated and anything but sexy what can be done to reduce the feeling.
- Outline reasons a baby can be hard to settle and what can be done to relieve the situation.

Resources	Handouts
Whiteboard and markers Butchers paper and pens Feelings cards	Postnatal Contraception Sex after birth

Expectations and Reality of Motherhood and Fatherhood

Invite one or two sets of new parents to the antenatal session to discuss their postnatal experience. The simplest way to acquire the parents is to recruit them from a previous antenatal program and confirm their availability and interest through a telephone call ~24 hours prior to the session.

Your role as facilitator will vary depending upon the spontaneity of the participants. You may need to guide the discussion through the use of questions that trigger responses, such as those below, or you may need to refocus an active discussion to keep it relevant. As one of your aims is to give participants an understanding of the reality of parenting, make sure that most of the time is spent discussing their experience. Complete the activity with a summary of the issues discussed.

Trigger Questions:

- How would you describe the first six weeks as a mother/father?
- What did you enjoy?
- What have you found hard?
- Has the experience been anything like you expected?
- How would you describe your breastfeeding experience at the beginning? How would you describe it now?
- What has helped you with breastfeeding? What have you found hard?
- What handouts, books, person/people or resources, if any, have you found particularly helpful?

Break

Feeling……

Divide the large group into four groups. Give each group a 'Feeling....' trigger card [Svensson, 2000 #382:14], some paper and a pen. Ask each group to discuss the comment on their card, answer the questions and summarise their answers on the paper. Allow 10 minutes for discussion.

Close the discussions with a spokesperson from each group presenting the list to the large group. Follow each presentation with a large group discussion about the comment, emphasise the reason/s for the comment and add any strategies not listed by the group.

As a new parent you will feel constantly tired.

List possible reasons for feeling this way.
What may help decrease this feeling?

As a new parent you may feel isolated.

List possible reasons for feeling this way.
What may help decrease this feeling?

As a new parent you will feel anything but sexy.

List possible reasons for feeling this way.
What may help decrease this feeling?

As a new parent you may find that there are times when your baby won't settle or sleep.

List possible reasons for this happening.
What could you do to settle your baby?

Predicted Outcome:
Participants may not have thought about the reasons for these comments before, but when asked they should be able to list a number of reasons and what they can do about the situation.

During This Session We Have
Provide summary of topics covered in this session, in particular the ones that arose from the discussion with the new parents.

Session Seven

By the end of session seven participants should be able to:

- Outline the characteristics and behaiour of an infant;
- Express concerns they have about becoming a mum and a dad.

Resources	Handouts
Baby, clothes and bathing equipment Butchers paper and pens	Vitamin K Immunisation Circumcision Nursery Furniture

A New Life

Go to the postnatal ward before the session begins, asking for a mother who would be happy to have her baby bathed with a large group observation. Speak to the mother and explain the activity.

Take the group to the postnatal ward where the bath is to be demonstrated and ask them to wait until you get the baby. Prepare all the equipment and then demonstrate the undressing, bathing, massage and dressing of the baby. This process should take at least 20 minutes, as the aim is to show the group the physical and behavioural characteristics of the newborn. Have the water hot enough and deep enough for the baby to be placed on its stomach as occurs in a relaxation bath technique. Allow the group to discuss the birth with the mother.

Predicted Outcome:
The couples should be fascinated to see the baby in the relaxation bath.

Fear and Concerns Regarding Becoming a Mum and a Dad

Divide the large group into 2 or 4 (depending on size) single gender groups. Ask each group to brainstorm what they fear the most about becoming a mother and a father. Ask the groups to discuss their responses and list the main fears on a sheet of paper and reasons for the fears. Tell the group to go for their break when they have finished their brainstorming

Break

Fear and Concerns Regarding Becoming a Mum and a Dad

Resume this discussion with a spokesperson from each group presenting their responses to the large group. Follow the presentations with a general discussion about fears and concerns which expectant parents may have and the reasons for them. Encourage an expression of fears and concerns and remind them of the community resources available to parents.

Predicted Outcome: This activity is a good activity for the final session as it may stimulate concerns related to labour and birth which have to be addressed, as well as post-birth issues. With the final session coinciding with the adjourning stage of group development it is common for some participants to feel sad and concerned as they approach what some call 'their graduation'. The next step is the 'test'.

This program we have…

Summarise all of the topics covered in the program and organise the reunion for the group.

Appendix Twelve
"Having a Baby"
Program Evaluation – Women

Study Number: ☐☐☐☐ Date: ☐☐ ☐☐ ☐☐☐☐

To assist in the development of future programs, we would appreciate your feedback.

1. Overall, did the program meet your needs? ☐ Yes ☐ No

2. How would you describe your understanding/knowledge of the following issues **now you have completed our Having a Baby program**?

	Very poor	Poor	Fair	Good	Very good
a. Your labour and birth	1	2	3	4	5
b. Pain relief strategies for labour	1	2	3	4	5
c. Role of the support person in labour	1	2	3	4	5
d. Medical intervention in labour	1	2	3	4	5
e. Hospital services & facilities	1	2	3	4	5
f. Your rights & responsibilities	1	2	3	4	5
g. Your physical changes after the birth	1	2	3	4	5
h. Your feelings after baby is born	1	2	3	4	5
i. Caring for your baby	1	2	3	4	5
j. Feeding your baby	1	2	3	4	5
k. Your life as a mother	1	2	3	4	5

Comments……..

3. How much did the strategies listed below help your understanding of the information provided?

	Not at all	A little	Somewhat	A fair bit	A lot
a. Lecturing	1	2	3	4	5
b. Large group discussion	1	2	3	4	5
c. Small group discussion	1	2	3	4	5
d. Birth videos	1	2	3	4	5
e. Practical sessions	1	2	3	4	5

Comments……..……..

Now for your personal comments

4. What I liked most about the program was:……..…..……..……..……

……...

……

5. What I liked least was:……..…..……

……...

……

6. I believe the program could be improved by: ……..……

……...

……

……...

7. I would have liked the following information covered earlier in pregnancy:……..……..

……...

7. I thought the program length was: ☐ too short ☐ just right ☐ too long

8. I thought the group size was: ☐ too small ☐ just right ☐ too large

9. When I made my booking I was given the program time that suited my needs. ☐ Yes ☐ No

Comments:……..……..…

10. I attended all of the sessions in the program.
☐ Yes
☐ No, I missed 1
☐ No, I missed 2 or more

11. Final comments I would like to make:

……...

……

……...

Thank you for your assistance.

Appendix Thirteen: Basic Group Skills Training Program
Session One

Learning Outcomes:
By the end of the session participants will be able to:

- identify the steps involved in the certification process
- describe the characteristics of adult learners
- recognise the styles of group leadership
- recognise the impact of the above on their practice
- describe the uses of icebreakers, group agreements and energisers

TOPIC	STRATEGY	TIME IN MINS	FACILITATOR/ RESOURCES
Setting the scene	Name labels, refreshments, background music, chairs arranged in small groups.	Prior to session	Labels, tapes, tape recorder
Welcome & introduction to facilitators	Principal facilitators introduce themselves. Housekeeping (include group agreement- if educators unclear)	5	Principal facilitators
Icebreaker	Each person to state their name, where they work and what their hobbies and interests are.	15	
Expectations and aims of training	Climbing the steps Write in order of preference, with the first preference being on the top step, the 5 things they would like most like covered in the workshop	10	Steps handout

Area Accreditation Program outline of training program learning journal next phase➔ mentoring etc	Principal facilitator: • explain the participant's role in the training program and how feedback will be given; • explain the use of a reflective journal. • explain the importance of reflective practice	10	Handout: How to keep your journal Competencies for educators
Adult learners Characteristics Implications for practice	Individual activity: Participants to answer to following question: • Do you learn differently now from when you were a child? • If yes, what are the differences? Characteristics of adult learners – brainstorm on board & Discussion Small group activity: Participants to complete Characteristics of adult learners worksheets. Large group: Feedback from worksheets and implications for practice to be listed on butcher's paper. Handout to be explained and distributed.	20 20	Whiteboard Children vs Adult RAMP2FAME Handouts: Adult Learners worksheet

Adult learners (cont.) Learning Styles	Group activity: Participants to complete Learning Styles questionnaire. Feedback to large group. Large group activities: Paper tearing Implications for practice – based on Giving information without lecturing handout.	20 10	Learning Styles questionnaire Giving information without lecturing
AFTERNOON TEA	Review Resources	20	Paper and Pens
Styles of leadership Characteristics	Divide into 3 small groups, each with a facilitator who assumes a particular style of leadership: autocrat, democrat and laissez faire. Role-play an activity for 5 mins. Group members then move on to the next facilitator for a role-play of the same activity for 5 mins and then to the next facilitator for the final role-play of the activity. Each group to experience the three styles of leadership. NB Participants to concentrate on how each leader facilitates, how they feel with each style of leadership, and the impact on the group as a whole – including verbal/non-verbal messages. Large group: Feedback • How did participants feel about their particular leadership style? • What was the impact on the group as a whole – including verbal/non-verbal messages?	30	Participant Activity

Styles of leadership (cont) Implications for practice	Large group: • Is it appropriate to maintain one style of leadership? • When is it appropriate to use each style? • How does this fit in with other group leader roles		
	Participants to complete Leadership style questionnaire. Feedback to large group. Discuss the difference between task and maintenance of the group and how this fits with leadership style. Important points to be covered: definition, characteristics, advantages and disadvantages of each style of leadership: autocratic, democratic, laissez faire, task and maintenance	10 20	Leadership style questionnaire Roles of Group Leader
Icebreakers, group agreements and energisers	Participants to explore use of ices breakers, group agreements and energisers. Examples of Icebreakers- eg take a stand, zoo activity, age and rope activity.	20	Participant activity
Summary and closure		10	

Session Two

Learning Outcomes
By the end of the session participants will be able to:

- describe the stages of group development
- identify strategies to develop trust and confidence in groups
- describe the impact of anxiety on groups
- identify strategies to manage anxiety in groups
- identify techniques and processes for effective facilitation of learning activities
- describe the characteristics of a session plan

Topic	Strategy	Time	Resources/ Facilitator
Set up room	Ask participants to add to the list type of learner they are i.e. Visual, auditory or kinaesthetic		List of learning outcomes Topics on board
Welcome & recap	State the topics covered last week, outline this weeks content	5	
	Ice breaker • Using your play dough model a shape that reflects how you feel this afternoon. • Give examples how you can adapt the question to be able to use this activity in your current group.	10	Play dough

Stages of group development	Small group activity: Participants to reflect on the last group they ran or were a participant in. ***NB Focus on level of interaction / participation*** Answer these questions on butchers paper: • How would you describe the group at the beginning? • How would you describe the group at the end? • Have all your groups gone through the same process? If not, what reasons could have contributed to the differences? Feedback to large group and summarise the stages of group development and the implications for practice. That is forming storming, norming performing & mourning.	25	Participant activity Butchers paper Pens
Building trust and confidence in groups.	Large group discussion: • How do we develop trust and confidence in a group? Small groups: Identify specific strategies.	20	Participant activity
Energiser	Clap & walk	10	

Group discussion skills	Brainstorm: Think of a time when you were involved in a really satisfying discussion. • Identify characteristics of a good group discussion. (write up on board) Important points: Use of silence, thoughtful use of open and closed questions, when to let the group flow and when to redirect the group.	10 15	Participant activity **Handout:** Guiding a group discussion & Getting and keeping Attention
Afternoon Tea	Review resources	20	
Learning activities	Small groups activity: divide into small groups and answer the following questions. • Why do learning activities? • When do we attempt a learning activity/when are they inappropriate? • What is the purpose of the activity – what do we hope our clients learn? • Whose learning experience is it? • How do we set up the learning experience? Facilitator to summarise learning activities "Big 5" (link to type of learners in group)	20 10	White Board

Activities	Birthday line up/islands Breast Feeding Activity Scenarios	15	
Session plans	Short presentation on whiteboard The use of session plans, advantages and disadvantages, characteristics of a useful session plan to the practitioner In 3 groups of develop session plan for teaching 3 simple activities ▪ Changing a tyre ▪ Sewing on a button ▪ Making a cake Review each as a large group	10 20	Butcher's paper
Summary and closure	Reflect on the session and summarise main points Homework: Each individual to develop a plan for one session they conduct, & bring to share on the 26th May.	10+	

Session Three

Learning Outcomes:
By the end of the session participants will be able to:

- identify key elements of program planning
- recognise the legal responsibilities of a group facilitator
- describe the characteristics of challenging group members
- identify strategies to manage challenging group members

Topic	Strategy	Time	Resources/ Facilitator
Set up room	Books, resources learning outcomes Tea, coffee etc		List of learning outcomes Topics on board
Welcome & recap	State the topics covered last session and outline this weeks content	5	
	Ice breaker Turn to the person next to you & tell them • Something you have achieved this week. • Something that made them feel happy to be alive	10	
Present session plans	Present and discuss session plan they have prepared in small groups	35	

Topic	Strategy	Time	Resources/ Facilitator
Designing & Revising programs	Large group: • How have you been involved in designing/revising the program you facilitate? • Whose role is it and why? • What are the benefits/problems of being involved? • How can you become involved? • Use and types of evaluation. Important points to be covered: Principals of program design & needs assessment, ongoing professional development. Illustrate use of colour system to look at balance of program Split back into groups to look at one session plan	45	Participant activity Coloured paper Session plan Blutak
Relaxation Break Visualisation	Discussion first around creating the mood for relaxation and use of music	15	Starlight book
	Afternoon Tea	20	

Legal responsibilities and evidence-based practice	Introduction: Use common situation that illustrates the fine line between recommendation/advice and information giving, eg Which brand of washing machine to buy? Then as small groups answer the following questions: • When is it our responsibility to give recommendation/advice or information and when is it the responsibility of the adult learner? • What is evidence-based practice? • What are the legal implications if we do not follow evidence- based practice? • What are the legal implications if we do not follow Area protocols/policies? • How do we keep up to date with Area protocols/policies? Feedback & briefly cover legal Implications- record keeping	20	
Challenging group members Characteristics Reasons for behaviour Implications for practice	**Large group brainstorm:** Identify the types of roles individuals take in a group. Dissect client types to determine why they behave as they do carousel Develop possible strategies to deal with these clients. Feedback and discussion. Important point – contribution of anxiety.	30	Participant activity **Handout:** Common challenging behaviours
Summary	**Next week:** Bring your favourite activity to share		

Session Four

Learning Outcomes:
By the end of the session participants will be able to:

- identify when feedback is required from the group
- describe strategies for attaining constructive feedback
- identify evaluation strategies
- adapt learning activities to suit their client group

Topic	Strategy	Time	Resources/ Facilitator
Set up room			List of learning outcomes Topics on board
Welcome & recap	State the topics covered last week, outline this weeks content	5	
	Ice breaker – Write down your first pets name and street name where you grew up. This is your 'porn star' name. (Other ice breakers that may not work- Age line up, Islands)	15 mins	

Feedback from activities	Large group: questions: • What is feedback? • When is feedback required? • What ways can feedback be given? • How do we set up feedback to make it relevant? • How do we set up feedback to make it constructive? • What happens if it is delayed?	15	
Evaluation	Identify the reasons for evaluating sessions and programs List & discuss different types of evaluations and different methods	30	Participant activity Handout Program evaluation
	Afternoon Tea	20	
Sharing Activities	Group to share their favourite activity	60	
Training evaluation	Participants to complete an evaluation form.	10	Evaluation form
Closure	Discuss the importance of closure- relate to stages of group development. Methods- hedgehog curls, Spider web Photolanguage cards: Each participant to select two cards that illustrate how they felt at the beginning of the training and how they feel now. Each participant to reveal them to the large group.	20	Ball of wool Photolanguage cards

Appendix Fourteen: Employment Guidelines for Antenatal Educators at Hospital A.

Phase One: Initial Interview

Face to face interview with Health Education Coordinator to:

- determine the educator's interest in health education;
- clarify commitment required to conduct health education programs;
- provide an overview of induction and certification process;
- identify training needs and organise as required;
- organise Phase 2 of the induction program.

A Curriculum Vitae is to be sent to Health Education Coordinator, with an accompanying letter seeking employment as a Health Educator, prior to initial interview. Previous experience (if any) in adult education/group facilitation is to be outlined in CV. Job description, outlining essential and desirable criteria, and Health Education Centre philosophy, to be sent to those expressing interest.

Phase Two: Program Observation

At initial interview a decision will be made as to the type of program the educator seeks to facilitate – this will be the program observed. Educators are required to sit through one complete program conducted by a senior educator and are asked to complete the *Educator Orientation Form*.

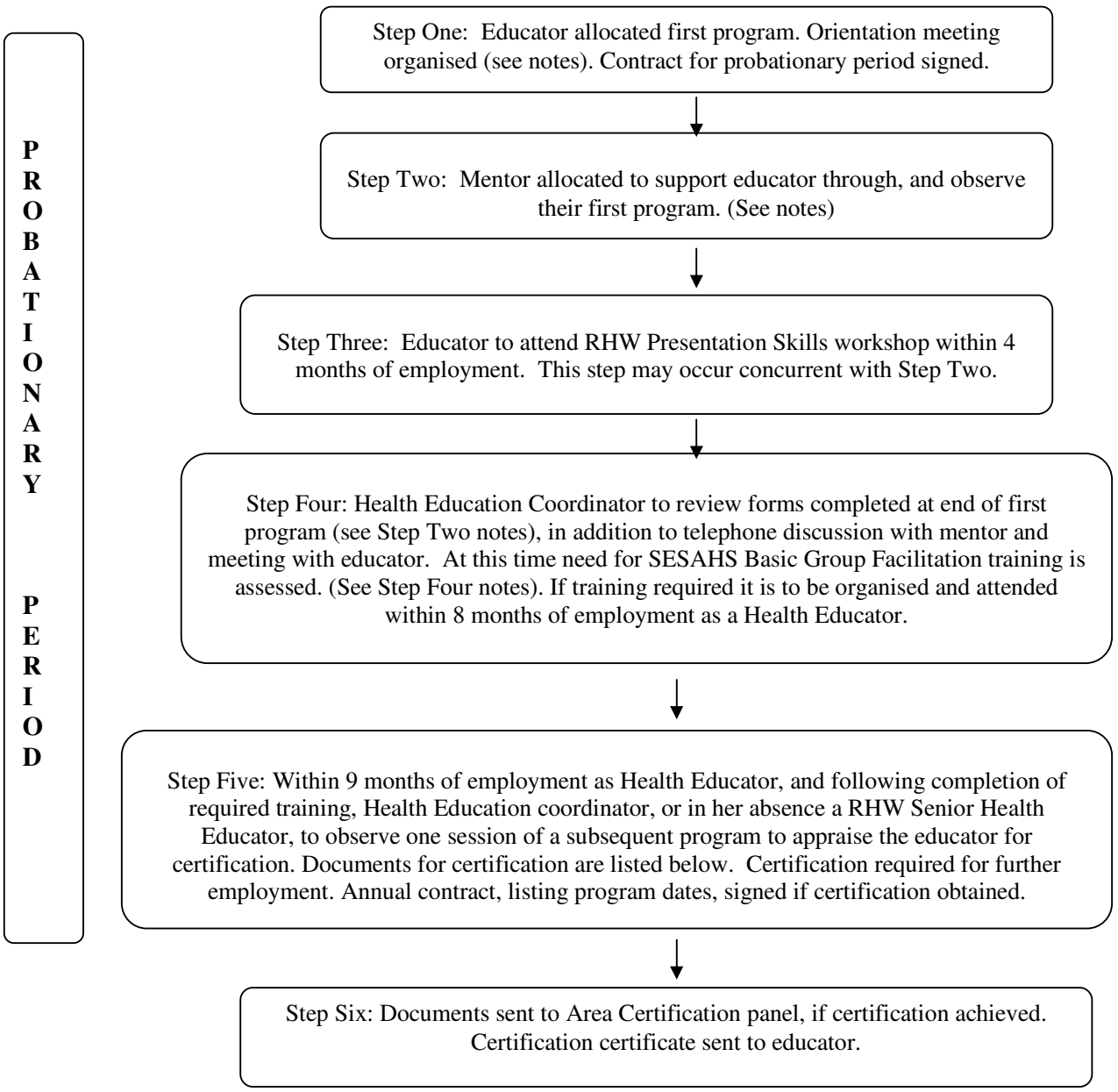
Phase Three: Interview Two and Probationary Period

A second interview with the Health Education Coordinator is to be conducted at the completion of the program observation. Employment as a Health Educator will **not be confirmed** until the end of the second interview. During this interview the following will be discussed:

- the *Educator Orientation Form*;
- the educator's thoughts on the commitment required to conduct programs. At this stage the following may occur:
    - the educator may withdraw her / his application for employment;
    - the Health Education Coordinator may not accept the educator's application.

An action plan, outlined on flowchart, will be developed once educator and coordinator have agreed to further employment, date to commence the first program will be determined and orientation meeting to Centre will be organised. All Health Educators are employed on a contract basis. The first 9 months of employment will be called the Probationary period, with a contract for these 9 months being signed by educator and Health Education Coordinator within 2 weeks of the second interview.

At the end of the probationary period, the educator's progress will be reviewed. Achievement of certification status will be required for further employment. Further employment will proceed following signing of an annual contract by educator and Health Education Coordinator.



Flow Chart Notes:

Step One:

- Prior to their first program the educator is to meet with the Health Education Coordinator to be orientated to the work environment.

Step Two:

- Educator will meet with mentor to discuss their program, including session plans. The mentor will observe the first program facilitated by the educator and support them through the program;
- On completion of first program the educator will complete the *Educator Self – Evaluation Form,* the mentor the *Observer Observation Form* and clients *Program Evaluation forms.* The educator and mentor will meet to discuss the program;
- All documents to be forwarded to Health Education Coordinator

Step Four:

- Previous group facilitation training will be assessed for Recognition of Prior Learning (RPL). If RPL criteria cannot be met, within 8 months of employment the candidate will attend Basic Group Facilitation training based on competency criteria.

Basic Group Facilitation Training and Presentation Skills Workshop

Soon after admission to the service, as listed above, the educator will attend the RHW Presentation Skills Workshop. In addition, unless determined otherwise, the educator will attend the SEH Basic Training Program for Health Educators, which is based on competency criteria. Recognition of prior learning criteria will be used to determine the need for training.

Certification Process

Within a probationary period of 9 months the educator will be required to achieve certification competencies.

The educator will:

- be appraised by the Health Education Coordinator, or in her absence a RHW Senior Health Educator, for one session of a Health Education program;
- complete the *Educator Self Evaluation Form*. The appraiser will complete the *Observer Observation Form*;
- be required to keep a journal for reflection of practise, which will be summarised for the final assessment. The learning journal will continue to be kept as a function of maintaining certification;
- complete session plans for their program and provide a copy to the appraiser;
- collect client evaluation forms from participants in their program on completion of the final session;
- meet with the appraiser on the completion of the program to discuss the program and their observation forms.

Following the completion of all of the above, a decision will be made as to the readiness of the educator to submit their documents to the Certification Panel.

If the appraiser determines that competencies have not been achieved the options are:

- the appraiser and the educator can discuss which competencies have not been achieved and arrange either a simulation or another group in order to observe the educator reattempting the competency(ies) until all have been achieved;
- change appraiser after discussion with the Area Parenting Coordinator and repeat the process;
- withdraw from the process.

The Certification Panel will include the Area parenting Co-ordinator, one certified educator and one independent member. It will meet 6 monthly to certify educators. The documents required for the Certification Panel are:

- Educator and Observer Observation Forms
- Summary of educator's reflection of practise - based on their learning journal
- Client evaluations

Maintaining Certification

Once an educator is certified there will be a 3 yearly requirement to maintain certification. A three yearly assessment will include:

- An informal interview with Health Education Coordinator
- Proof of on-going relevant professional development (15 hours/year)
- Proof of minimum number of programs facilitated (6 programs / 3 years)
- Summary of learning journal
- One mentored program including client evaluations and evidence of a learning journal of that program being kept. The mentor for this program will be a RHW Senior Health Educator who will attend at least 10 hours of the program.

Additionally, the educator will be required to maintain regular contact with the Health Education Coordinator.

Appendix Fifteen A
Antenatal Education Research Project
Information for Participants: Stage Three

You are invited to take part in the third stage of a research study into Antenatal Education. The objective of the study is to evaluate an educational program, which will meet the needs of expectant parents, and it should make their adjustment to parenthood easier. The study is being conducted by Jane Svensson, Health Education Coordinator, Royal Hospital for Women.

During the conduct of Stage Three there will be two different Having a Baby programs offered at the hospital – Having a Baby Exp and Having a Baby Control. Having a Baby Exp is a new program designed from the results of a comprehensive needs assessment. Its structure is the same as Having a Baby Control, that is seven x 2-hour sessions. The content of the programs are similar but the way they are presented differs. If you agree to participate in this study you will be randomly allocated to a program on your preferred night of attendance. You will be asked to complete a total of three surveys in this study.

Survey One will be posted to you with your program confirmation letter and you are asked to return it with your program payment. Survey Two will be distributed during the final session of your Having a Baby program. Survey Three will be posted to you with your program reunion reminder notice approximately six weeks after the birth. A stamped, addressed envelope will be included for its return. It is estimated that Survey Three will take 20-30 minutes to complete the final survey. As the final survey will be completed in your home at your convenience, names and addresses of participants are required in order to send the survey to you at the appropriate time.

All aspects of the study, including results, will be strictly confidential and only the investigator involved in the study will have access to information on participants. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report. Data will be stored on computer for seven years and will be destroyed by erasure.

While this research study will further our knowledge and may improve the standard of antenatal education programs in the future, it may not be of direct benefit to you.

Participation in this study is entirely voluntary: you are in no way obliged to participate and - if you do participate - you can withdraw at any time. Whatever your decision, please be assured that it will not affect your relationship with the Royal Hospital for Women.

If you would like to know more about the study at any stage, please feel free to contact Jane Svensson, Health Education Coordinator 9382 6700. This information sheet is for you to keep.

ANTENATAL EDUCATION RESEARCH PROJECT
PARTICIPANT OF STAGE THREE - CONSENT FORM

I, ... *[name]* of

..... *[address]*

agree to take part in this research project. I have had the project explained to me and have read and understood the Information for Participants of Stage Two, which I retain for my records.

I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports, published or otherwise, on the project or to any other party.

I also understand that my participation is voluntary, that I can choose not to participate, and that I can withdraw my participation at any stage of the project, without prejudice to my relationship to the Royal Hospital for Women.

STUDY NUMBER ☐☐☐☐ **EDC**……..……..

Name: **…….....(Please Print)**

Signature: **.....**

Date: **.....**

Name of witness: **.....(Please Print)**

Signature of witness:….....

REVOCATION OF CONSENT

I hereby wish to **WITHDRAW** my consent to participate in the research proposal described above and understand that such withdrawal **WILL NOT** jeopardise any care or my relationship with the hospital or the antenatal educators.

....
Signature Date

The section for revocation of consent should be forwarded to:
Ms Jane Svensson, Health Education Coordinator
Royal Hospital for Women, Locked Bag 2000
RANDWICK NSW 2031

Appendix Fifteen B
Antenatal Education Research Project
Information for Educators: Stage Three

You are invited to take part in Stage Three of a research study into Antenatal Education. The objective of this stage is to evaluate an educational program that should meet the needs of expectant parents and make their adjustment to parenthood easier. The study is being conducted by Jane Svensson, Health Education Coordinator, Royal Hospital for Women.

During the conduct of Stage Three there will be two different Having a Baby programs offered at the hospital – Having a Baby Exp and Having a Baby Control. Having a Baby control will be the same as the current Having a Baby program and it will not require you to attend any training. Having a Baby Exp is a new program designed from the results of a comprehensive needs assessment. Its structure is the same as the current program, that is seven x 2-hour sessions, but its content and process are different. A three-hour training session will be provided to those educators who facilitate the new program.

If you agree to participate in this study your name will be written on a piece of paper, which will be placed in a sealed box. When all names are in the box the box will be shaken and the names will be removed one by one and assigned to a program. This will ensure educators are randomly assigned to experimental and control programs. All educators will be asked to keep a learning journal for the duration of this study.

Participants who agree to participate in the study will also be randomly assigned to programs. They will also complete three surveys, one of which you will be asked to distribute. Survey One will be distributed with their program booking letter and they will be asked to mail it back with their payment. Survey Two will be distributed and completed during the final session of their program. Survey Three will be mailed approximately six weeks after the birth and will be returned in an addressed envelope. All surveys will be treated confidentially and code numbers will be used instead of names.

All aspects of the study, including results, will be strictly confidential and only the investigator involved in the study will have access to information on participants. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report. Data will be stored on computer for seven years and will be destroyed by erasure.

Participation in this study is entirely voluntary: you are in no way obliged to participate and - if you do participate - you can withdraw at any time. Whatever your decision, please be assured that it will not affect your relationship with the Royal Hospital for Women. If you would like to know more about the study at any stage, please feel free to contact Jane Svensson, Health Education Coordinator 9382 6700. This information sheet is for you to keep.

ANTENATAL EDUCATION RESEARCH PROJECT
EDUCATOR: STAGE THREE - CONSENT FORM

I, ... *[name]* of

..... *[address]*

agree to take part in this research project. I have had the project explained to me and have read and understood the Information for Educators of Stage Three, which I retain for my records.

I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports, published or otherwise, on the project or to any other party.

I also understand that my participation is voluntary, that I can choose not to participate, and that I can withdraw my participation at any stage of the project, without prejudice to my relationship to the Royal Hospital for Women.

STUDY NUMBER ☐☐☐☐ **EDC**……..……..

Name: **…….....(Please Print)**

Signature: **.....**

Date: **.....**

Name of witness: **.....(Please Print)**

Signature of witness: **….....**

REVOCATION OF CONSENT

I hereby wish to **WITHDRAW** my consent to participate in the research proposal described above and understand that such withdrawal **WILL NOT** jeopardise any care or my relationship with the hospital or the antenatal educators.

....
Signature Date

The section for revocation of consent should be forwarded to:
Ms Jane Svensson, Health Education Coordinator
Royal Hospital for Women, Locked Bag 2000
RANDWICK NSW 2031

Appendix Sixteen A

"Having a Baby" Program
Survey One – Women

Study Number: ☐☐☐☐ Date: ☐☐ ☐☐ ☐☐☐☐

The following statements describe what some parents-to-be believe about their abilities to take care of their infants. After reading each statement, **please circle the number** that you feel most closely describes **how you feel about yourself in relation to parenting**. These are statements about beliefs, so there are no right or wrong answers.

1. **I will** be able to manage the feeding of my baby.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

2. **I will** be able to manage the responsibility of my baby.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

3. **I will** always be able to tell when my baby is hungry.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

4. **I will** be able to deal effectively with the baby when he / she cries for "no reason".

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

5. **I will** be able to tell when my baby is sick.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

6. **I will** be able to tell when to add different food items to my baby's diet.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

7. **I will** be able to manage my household as well as before, while caring for the baby.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

8. When I think the baby is sick, **I will** be able to take his / her temperature accurately.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

9. **I will** be able to give my baby a bath without him / her getting cold or upset.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

10. **I will** work out my concerns about working or not working once the baby arrives.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

11. **I will** be able to keep my baby from crying.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

12. **I will** be able to maintain my relationship with my partner during this next year.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

13. **I will** be able to meet all the demands placed on me once the baby is here.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

14. **I will** easily be able to get the baby and myself out for a visit to the Early Childhood Health Centre.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

15. I have good judgment in deciding how to care for the baby.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

16. **I will** be able to make the right decisions for my baby.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

17. **I will** be able to get the baby on a good nighttime routine.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

18. **I will** be able to give the baby the attention he / she needs.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

19. **I will** be able to hire a baby sitter when I need one.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

20. **I will** be able to tell what my baby likes and dislikes

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

21. **I will** be able to sense my baby's moods.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

22. **I will** be able to show my love for my baby.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

23. **I will** be able to calm my baby when he / she is upset.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

24. **I will** be able to support my baby during stressful times.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

25. **I will** be able to stimulate my baby by playing with him / her.

Cannot do					*Moderately certain can do*					*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

26. Please look at the list below and tell us what, if any, are your worries **at the moment**. The list is not meant to give you more things to worry about!

Please circle a number for each one to show how much of a worry it is to you, from 0 if it is not a worry, to 5 if it is something which you are extremely worried about.

LINE	Not a worry	PLEASE CIRCLE ONE NUMBER ON EACH				A major worry
a. Your baby's health at the moment	0	1	2	3	4	5
b. Labour and giving birth	0	1	2	3	4	5
c. Caring for your baby	0	1	2	3	4	5
d. Feeding your baby	0	1	2	3	4	5
e. Your own health during pregnancy	0	1	2	3	4	5
f. Your sex life	0	1	2	3	4	5
g. Your relationship with your partner	0	1	2	3	4	5
h. Your housing	0	1	2	3	4	5
i. Money problems	0	1	2	3	4	5
j. Employment problems	0	1	2	3	4	5

27. How would you describe your understanding/knowledge of the following issues **before you began our Having a Baby program?**

	Very poor	Poor	Fair	Good	Very good
a. Your labour and birth	1	2	3	4	5
b. Pain relief strategies for labour	1	2	3	4	5
c. Role of the support person in labour	1	2	3	4	5
d. Medical intervention in labour	1	2	3	4	5
e. Hospital services & facilities	1	2	3	4	5
f. Your rights & responsibilities	1	2	3	4	5
g. Your physical changes after the birth	1	2	3	4	5
h. Your feelings after baby is born	1	2	3	4	5
i. Caring for your baby	1	2	3	4	5
j. Feeding your baby	1	2	3	4	5
k. Your life as a mother	1	2	3	4	5

These final questions are about yourself

28. How old are you? _____

29. What is the name of the country where you were born? _____

30. What language/s do you speak at home? _____

31. When did you leave school?

Completed secondary school to year 12	☐ 1
Attended secondary school but did not complete final year	☐ 2
Attended primary school only	☐ 3
Did not attend school	☐ 4

32. Have you completed further study since leaving school?

Yes, finished a degree	☐ 1
Yes, completed a diploma	☐ 2
Yes, completed an apprenticeship	☐ 3
No, none of these	☐ 4

33. What was the total income of your family last year before tax?

$ 20,000 or less	☐ 1
$ 20,001 - $ 30,000	☐ 2
$ 30,001 - $ 40,000	☐ 3
$ 40,001 - $ 50,000	☐ 4
$ 50,001 - $ 60,000	☐ 5
More than $60,000	☐ 6

34. Have you had any major stresses, changes or losses in the last 12 months?
E.g. Unemployment, moving house, bereavement, separation?

Yes	☐ 1
No	☐ 0

If **yes**, please specify:

Thank you very much for completing this questionnaire. We are grateful for the time and trouble you have taken.
Please return it to your educator during the next *Having a Baby* session.

Appendix Sixteen B

"Having a Baby" Program
Survey Two – Women

Study Number: ☐☐☐☐ Date: ☐☐ ☐☐ ☐☐☐☐

To assist in the development of future programs, we would appreciate your feedback.

2. Overall, did the program meet your needs? ☐ Yes ☐ No

8. How would you describe your understanding/knowledge of the following issues **now you have completed our Having a Baby program**?

	Very poor	Poor	Fair	Good	Very good
a. Your labour and birth	1	2	3	4	5
b. Pain relief strategies for labour	1	2	3	4	5
c. Role of the support person in labour	1	2	3	4	5
d. Medical intervention in labour	1	2	3	4	5
e. Hospital services & facilities	1	2	3	4	5
f. Your rights & responsibilities	1	2	3	4	5
g. Your physical changes after the birth	1	2	3	4	5
h. Your feelings after baby is born	1	2	3	4	5
i. Caring for your baby	1	2	3	4	5
j. Feeding your baby	1	2	3	4	5
k. Your life as a mother	1	2	3	4	5

Comments…….

9. How much did the strategies listed below help your understanding of the information provided?

	Not at all	A little	Somewhat	A fair bit	A lot
a. Lecturing	1	2	3	4	5
b. Large group discussion	1	2	3	4	5
c. Small group discussion	1	2	3	4	5
d. Birth videos	1	2	3	4	5
e. Practical sessions	1	2	3	4	5

Comments……..…….

Now for your personal comments

10. What I liked most about the program was:……..…..……..…….……..……

    ……...

    ……

11. What I liked least was:……..…..…..……

    ……...

    ……

12. I believe the program could be improved by: ……..……

    ……...

    ……

    ……...

13. I would have liked the following information covered earlier in pregnancy:……..……..…..

    ……...

12. I thought the program length was: ☐ too short ☐ just right ☐ too long

13. I thought the group size was: ☐ too small ☐ just right ☐ too large

14. When I made my booking I was given the program time that suited my needs. ☐ Yes ☐ No

Comments:……..……..…

15. I attended all of the sessions in the program.
    ☐ Yes
    ☐ No, I missed 1
    ☐ No, I missed 2 or more

16. Final comments I would like to make:

    ……...

    ……

    ……...

Thank you for your assistance.

Appendix Sixteen C

Study Number: ☐☐☐☐ **Date:** ☐☐ ☐☐ ☐☐☐☐

'HAVING A BABY' PROGRAM
POSTNATAL SURVEY

Thank you for continuing to be part of the Antenatal Education Project. This questionnaire will take about 20 minutes to complete. Your answers are confidential and will in no way affect any future care or services you receive.

Most of the questions are to be answered by putting a tick in the box next to the answer that best applies to you or circling a number on a line.

If you wish to write further comments, please do so on the blank page at the end of the questionnaire.

Please complete the questionnaire and return it by post, in the enclosed envelope, as soon as possible.

These questions are about your pregnancy and birth experience

1. How many weeks old is your baby today?

Please write in the number of weeks _____

2. How many weeks pregnant were you when you had your baby?

_____
Number of weeks

3. Is this your first baby?

Yes ☐ 1
No ☐ 0

4. Did you have twins or triplets?

Yes, had twins ☐ 1
Yes, had triplets ☐ 2
No, had a single baby ☐ 3

5. Which of the events listed below did you experience during pregnancy? **Please tick** all that apply.

a. Pregnancy with no problems ☐ 1
b. High blood pressure during pregnancy ☐ 1
c. Premature labour - labour began at less than 37 weeks of pregnancy ☐ 1
d. Bleeding during pregnancy ☐ 1
e. Diabetes during pregnancy ☐ 1
f. Other: _____ ☐ 1

6. Overall, what was your pregnancy like for you?

Please rate how the pregnancy was for you, by giving it a score out of ten on the line below. Zero out of ten would mean a totally unsatisfactory experience with nothing good to be said for it, ten out of ten would mean it was an absolutely wonderful experience that could not have been better.

0 1 2 3 4 5 6 7 8 9 10

Totally unsatisfactory Absolutely wonderful

7. Which of the events listed below did you experience during labour? **Please tick** all that apply.

a. Induction of labour - i.e. labour was started or assisted through the use of one of the following procedures: breaking your waters; using a vaginal pessary or gel to soften the opening of the womb; using a hormone 'drip'. ☐ 1
b. Nitrous oxide during labour ☐ 1
c. Pethidine injection during labour ☐ 1
d. Epidural anesthetic during labour ☐ 1
e. General anesthetic during or after labour ☐ 1
f. Vaginal birth with no assistance ☐ 1
g. Instrumental birth – i.e. forceps or suction used to deliver the baby ☐ 1
h. Tear which required stitches ☐ 1
i. Episiotomy ☐ 1
j. Planned (elective) cesarean delivery ☐ 1
k. Unplanned (emergency) cesarean delivery ☐ 1
l. Other: _____ ☐ 1

8. How long was your labour? Calculate the time from when contractions became strong and regular, until the baby was born. _____ hours.

9. What was the childbirth experience like for you?

Please rate how the childbirth experience, vaginal birth or caesarean section, was for you by giving it a score out of ten on the line below. Zero out of ten would mean a totally unsatisfactory experience with nothing good to be said for it, ten out of ten would mean it was an absolutely wonderful experience that could not have been better.

0 1 2 3 4 5 6 7 8 9 10

Totally unsatisfactory — Absolutely wonderful

10. Were you given a say in making decisions about what happened during your labour and the birth?

- Yes, always ☐ 1
- Yes, most of the time ☐ 2
- Only some of the time ☐ 3
- No, hardly at all ☐ 4
- I did not want to have a say ☐ 5

11. Did you feel in control of the way you managed yourself during labour and birth?

- Yes, always ☐ 1
- Yes, most of the time ☐ 2
- Only some of the time ☐ 3
- No, hardly at all ☐ 4
- I did not want to feel in control ☐ 5

These questions are about your postnatal experience

12. How long did you stay in hospital after the birth of your baby?

- Less than 24 hours ☐ 1
- Between 24 – 48 hours ☐ 2
- More than 48 hours ☐ 3

13. When you were caring for your baby in hospital, how confident did you feel?

0 1 2 3 4 5 6 7 8 9 10

Not confident — Very Confident

14. Which statement describes how you fed your baby in hospital?

- Only breastmilk ☐ 1
- Mostly breastmilk with occasional infant formula ☐ 2
- Half breastmilk and half infant formula ☐ 3
- Mostly infant formula with occasional breastmilk ☐ 4
- Infant formula only ☐ 5

15. Which statement describes how you are feeding your baby now?

Only breastmilk	☐ 1
Mostly breastmilk with occasional infant formula	☐ 2
Half breastmilk and half infant formula	☐ 3
Mostly infant formula with occasional breastmilk	☐ 4
Infant formula only	☐ 5

16. If you have changed the way you feed your baby, why did you change?

---

17. Has your baby had any health problems since birth?

Yes	☐ 1
No	☐ 0

If **yes**, what were the problem/s:

---

18. Thinking about your health since the birth of your baby, do you feel you are back to normal now?

Yes, completely	☐ 1
Yes, mostly	☐ 2
No, not yet	☐ 3

Please read the following statements and **circle the number**, which describes how **you feel** about yourself as a mother.

19. I **can** manage the feeding of my baby.

Cannot do				*Moderately certain can do*						*Certain can do*
0	1	2	3	4	5	6	7	8	9	10

20. I **can** manage the responsibility of my baby.

Cannot *do*				***Moderately certain*** *can do*						***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

21. I **can** tell when my baby is hungry.

Cannot *do*				***Moderately certain*** *can do*						***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

22. I **can** deal effectively with the baby when h / she cries for “no reason”.

Cannot *do*				***Moderately certain*** *can do*						***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

23. I **can** tell when my baby is sick.

Cannot *do*				***Moderately certain*** *can do*						***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

24. I **can** manage my household as well as before, while caring for the baby.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

25. When I think the baby is sick, I **can** take h /her temperature accurately.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

26. I **can** give my baby a bath without him / her getting cold or upset.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

27. I **can** work out my concerns about working or not working now that the baby is here.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

28. I **can** keep my baby from crying.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

29. I **can** maintain my relationship with my partner during this next year.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

30. I **can** meet all the demands placed on me now that the baby is here.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

31. I **can** easily get the baby and myself out for a visit to the Early Childhood Health Centre.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

32. I **have** good judgment in deciding how to care for the baby.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

33. I **can** make the right decisions for my baby.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

34. I **can** get the baby on a good nighttime routine.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

35. I **can** give the baby the attention h / she needs.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

36. I **can** hire a baby sitter when I need one.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

37. I **can** tell what my baby likes and dislikes.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

38. I **can** sense my baby's moods.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

39. I **can** show my love for my baby.

Cannot *do*					*Moderately certain* *can do*					*Certain* *can do*
0	1	2	3	4	5	6	7	8	9	10

40. I **can** calm my baby when he/she is upset.

Cannot *do*					Moderately certain *can do*					Certain *can do*
0	1	2	3	4	5	6	7	8	9	10

41. I **can** support my baby during stressful times.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

42. I **can** stimulate my baby by playing with him / her.

Cannot *do*					***Moderately certain*** *can do*					***Certain*** *can do*
0	1	2	3	4	5	6	7	8	9	10

43. How much has your life changed since you had the baby?

Not at all					*A fair bit*					*Very much*
0	1	2	3	4	5	6	7	8	9	10

44. How satisfying has being the mother of a new baby been for you?

Not at all				*Moderately satisfying*					*Very satisfying*	
0	1	2	3	4	5	6	7	8	9	10

45. Please look at the list below and tell us what, if any, are your worries **at the moment**. The list is not meant to give you more things to worry about!

Please circle a number for each one to show how much of a worry it is to you, from 0 if it is not a worry, to 5 if it is something which you are extremely worried about.

	PLEASE CIRCLE ONE NUMBER ON EACH LINE					
	Not a worry					Major worry
a. Your baby's health at the moment	0	1	2	3	4	5
b. Your baby's long term health	0	1	2	3	4	5
c. Caring for your baby	0	1	2	3	4	5
d. Feeding your baby	0	1	2	3	4	5
e. Your own health since the birth	0	1	2	3	4	5
f. Your sex life	0	1	2	3	4	5
g. Your relationship with your partner	0	1	2	3	4	5
h. Your housing	0	1	2	3	4	5
i. Money problems	0	1	2	3	4	5
j. Employment problems	0	1	2	3	4	5

These questions are about yourself

46. Have you had any major stresses, changes or losses in the last 6 months?
E.g. Moving house, bereavement, separation?

Yes	☐ 1
No	☐ 0

If **yes**, please specify:

---

47. Can you rely on friends or relatives to help with the baby when necessary?

Yes, always	☐ 1
Yes, most of the time	☐ 2
Only some of the time	☐ 3
No, hardly at all	☐ 4

48. Can you talk to friends or relatives about concerns / questions you have about being a mother?

Yes, always	☐ 1
Yes, most of the time	☐ 2
Only some of the time	☐ 3
No, hardly at all	☐ 4

49. Since having your baby have you gone back to work in a paid job or to study?

Yes, gone back to paid work	☐ 1
Yes, returned or taken up study	☐ 2
No, neither apply	☐ 3

If **yes**, how many hours a week does this involve you being away from your baby?

None	☐ 1
Less than 10 hours	☐ 2
Between 10 – 20 hours	☐ 3
More than 20 hours	☐ 4

50. In addition to the ***Having a Baby*** program at the hospital, did you attend any of the following during your pregnancy? Please tick all that apply.

Creative Birth for Women	☐ 1
Just Pregnant, Now Looking	☐ 1
Meditation sessions	☐ 1

51. **Looking back,** how much did the ***Having a Baby*** program increase your knowledge / understanding about the following?

	Not at all	A little	Somewhat	A fair bit	A lot
a. Your labour and birth	1	2	3	4	5
b. Pain relief strategies for labour	1	2	3	4	5
c. Role of the support person in labour	1	2	3	4	5
d. Medical intervention in labour	1	2	3	4	5
e. Hospital services & facilities	1	2	3	4	5
f. Your rights & responsibilities	1	2	3	4	5
g. Your physical changes after the birth	1	2	3	4	5
h. Your feelings after baby is born	1	2	3	4	5
i. Caring for your baby	1	2	3	4	5
j. Feeding your baby	1	2	3	4	5
k. Your life as a mother	1	2	3	4	5

52. How much did the strategies listed below help your understanding of the information provided?

	Not at all	A little	Somewhat	A fair bit	A lot
a. Lecturing	1	2	3	4	5
b. Large group discussion	1	2	3	4	5
c. Small group discussion	1	2	3	4	5
d. Birth videos	1	2	3	4	5
e. Practical sessions	1	2	3	4	5
f. Take home activities	1	2	3	4	5
g. Time with the new family	1	2	3	4	5

53. Since having your baby, which of the following have you attended? Please tick all that apply.

Mother's group at the Early Childhood Health Centre	☐ 1
Mumsense at RHW	☐ 1
Early bird program at Early Childhood Health Centre	☐ 1
Other:_____	☐ 1

Preparing for labour and motherhood

These final questions will help us plan future programs and strategies.

54. Thinking about your birth and the early weeks with your baby, do you think **more time** should be given to any of the topics listed in question 50, in our ***Having a Baby*** program?

Yes	☐ 1
No	☐ 0

If **yes**, please list the topics:

55. Thinking about your birth and the early weeks with your baby, do you think **less time** should be given to any of the topics listed in question 50, in our ***Having a Baby*** program?

Yes	☐ 1
No	☐ 0

If **yes**, please list the topics:

56. What other information and skills do you think pregnant couples need for labour, birth and the early weeks at home?

57. How should this information / skills be provided?

58. Do you think birth and parenting information should be presented to pregnant couples as:

A birth and parenting program before the birth over 7 weeks – e.g. current program	☐ 1
A birth and parenting program, with 7 weeks before birth and 2 weeks after birth	☐ 2
Split into 2 programs before the birth – i.e. labour and birth separated from parenting	☐ 3
Split into 2 programs with ½ before the birth and ½ after the birth	☐ 4
Other: _____	☐ 5

59. In question 57 we have listed ways of how to present birth and parenting information, but you may be able to think of others. Please list ways that would have been better for you.

60. Any final comments you would like to make:

Thank you very much for completing this questionnaire. We appreciate your time.

When you have finished, please return it in the stamped addressed envelope provided.

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