Psychosocial Assessment: a Critical Incident Analysis of Child and Family Health Nurses' Decision-Making in an Early Parenting Setting

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CERTIFICATE OF AUTHORSHIP

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirement 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.

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ABSTRACT

Child and family health nurses are skilled professionals, responsible for making decisions regarding care. Decision-making in nursing is a complex process involving both formal and informal thinking to gather and analyse information, evaluate significance, weigh alternative actions and to make judgements regarding care. The nurses' ability to make decisions affects access to and the outcomes of care.

Psychosocial assessment of women in the first postnatal year is critical to ensure access to care. Many women caring for their babies experience mental illness. It is essential that these women are recognised and help is offered to them to reduce the risk of mental illness onset or, when present, to provide support and treatment for mental illness. The objective of this research is to describe the clinical decision-making process of child and family health nurses when they undertake psychosocial assessment of women in the postnatal period. A description of the clinical decision-making process of nurses will provide information and education for health care professionals undertaking postnatal psychosocial assessment.

Critical Incident technique is the methodology used to explore the process of clinical decision-making. Thinking in Practice is the theoretical framework that is used to understand the clinical decision-making process. Twelve Child and Family Health nurses working in an early parenting service were interviewed in this research study. Both template and thematic analysis were used to work with the data.

This research found that decision-making in regard to postnatal psychosocial assessment is a complex process. The nurses move through relevant domains of information that are specific to each woman, most commonly information on parenting and care of the child, information from assessment tools and women determined issues or goals were considered. The nurses used a variety of thinking strategies in each information domain, most commonly searching for information, recognising pattern, drawing a conclusion and judging the value of the information.

CHAPTER ONE – POSITIONING THE STUDY

1. Introduction

This research project investigates how child and family health (CFH) nurses make clinical decisions following psychosocial assessment of women in the first postnatal year. Throughout the thesis this project will be referred to as the CFH Nurses Decision-Making Study or The Study.

The postnatal year is complex. For the woman it is a time of physical, emotional and social changes, many occurring simultaneously and often rapidly (Austin et al. 2010; Austin, Highet & Committee 2011; beyondblue: The National Depression Initiative 2008). The many and varied psychological and somatic incidents of the postpartum require personal adaptation and interpersonal reorganisation (Brockington 1996; Milgrom et al. 2011). Physical discomfort and pain, reduced rest and recreation, loss of employment and financial pressures, as well as changes in social networks may result in stressful experiences for the woman and her relationships (Brockington 1996; Cox, Holden & Henshaw 2014). The impact on women's lives is profound (Milgrom et al. 2011). The psychiatry of childbirth is more complex than any other human situation, including bereavement, battle and imprisonment (Brockington 1996).

The first year following birth presents a critical period for a woman, her baby and her family (WHO 2009). As primary caregiver, the woman is predominately responsible for the physical and emotional health of her baby. The woman is also frequently required to take on the day-to-day responsibilities maintaining their relationships, home management, care of elderly relatives and possibly paid employment. The adjustments to these changes can be difficult. As an outcome, the emotional wellbeing of the woman may be negatively impacted leading to mental illness. Yet during this period mental health is critical to optimise parenting, ensure the development of the baby and to ensure that the woman, as a new mother, is equipped to manage the physical, emotional and social changes that parenting brings (Austin, Highet & Committee 2011; Halligan et al. 2007). Whilst psychological treatments for postnatal mental illness are

effective, treatments can only be implemented once a problem has been identified. The use of a psychosocial assessment can facilitate early identification and appropriate intervention for women at risk of psychosocial difficulties (Austin, Highet & Committee 2011). This crucial assessment is only as effective as the person conducting the assessment, interpreting the assessment findings and formulating a plan (Austin, Highet & Committee 2011).

Australia has a long history of the provision of child and family health (CFH) nursing that has always had a focus on health promotion and primary prevention (Briggs 2013). In the past decades there has been a shift in focus to incorporate not only child and family physical health, but also psychosocial issues and mental health through the use of early assessment and intervention. The driving force for this assessment is to reduce the risk of the onset of mental illnesses such as anxiety and depression (Briggs 2013). A key competency of child and family health nurse practice is the integration of psychosocial assessment into the admission process (Nursing and Midwifery Office 2011a). In completing the assessment the nurse must critically think about the information they receive and formulate this information into a management or care plan in collaboration with the mother.

The aim of this study is to describe the clinical decision-making of CFH nurses, in an early parenting setting, in regard to a psychosocial assessment. This research, herein termed 'The Study', provides a descriptive study of the specific thinking strategies and the domains of information that the nurses use for psychosocial assessment of women during the first year postpartum. This chapter will provide an overview of mental health during the perinatal period (pregnancy, birth and the first postnatal year), the context of The Study, a personal perspective of the researcher, an explanation of the components of psychosocial assessment and the psychosocial assessment process within The Study setting.

1.1. Mental Illness

Mental illness may result in difficulties in activities of daily living, social demeanour or cognition as an outcome of behavioural or emotional impairment (Bynum-Grant & Travis-Dinkins 2011). A person with a mental illness may have difficulties in: providing for their own nutrition; hygiene; home maintenance; relationships; and occupation. Most importantly when the woman has responsibilities for a child these difficulties maybe exacerbated and severely impact her ability to provide care. The most common mental illnesses to affect women in the postnatal period are anxiety and depression, which affect one in every six women in the year following birth (Austin et al. 2011).

The development of postnatal mental health care spans the centuries 460 – 377 BC starting with early recognition by Hippocrates, who described puerperal illness (Cox 1986). Ancient Greeks, Romans and Arabs viewed mental derivations as a natural phenomena and provided humane care for the mentally ill with sedation, music, nutrition, activity and physical hygiene (Kalman & Waughfield 1987). From the Middle Ages (500 A.D.) signs and symptoms of mental illness in women during the perinatal period were thought to be due to witchcraft (Kalman & Waughfield 1987) and superstitious beliefs continued through the Renaissance. The first mental hospital opened in England, the Bethlehem Royal Hospital (or Bedlam as it was locally pronounced) kept patients caged or chained as late as the 17th Century (Kalman & Waughfield 1987).

In the eighteenth century Philippe Pinel and Benjamin Rush used a humanistic approach and great advances were made in diagnoses and treatment of mental illness (Kalman & Waughfield 1987). During the 19th century male scientists dominated investigations of women's mental health issues, providing an androcentric review of "the female question". Evidence was frequently lacking or altogether insufficient due in part to the fact that all researchers were male and, in part to the fact that, females were positioned as substandard to males. Often women's stories went unheard or were told from such a male dominated perspective that they held little truth (Oakley

1993). In 1858 French psychiatrist, Louis Marce wrote the first treatise entirely devoted to puerperal mental illness. He described 310 mothers who had mental illness associated with childbirth and made the first clinical observation that these women were perplexed and disoriented (Cox 1986).

The first American National Association for Mental Health was organised in 1909 by Clifford Beers. As a result of increased public awareness large state hospitals were built to care for the mentally ill (Kalman & Waughfield 1987). In the 1920s Austrian neurologist, Sigmund Freud, made a substantial contribution to our understanding of mental illness. Unfortunately, his position that women's mental ill health was 'a result of simply being female' was well accepted at the time (Kalman & Waughfield 1987). Around this time Margaret Mead's research, on women coming of age in Samoa, provided scientific basis to conclude that what is involved in being a woman varies considerably between cultures (Oakley 1993). By the 1940's Freud's disciple, Deutch, had gained favour in the industry and her manual "The psychology of women" was well accepted and widely utilized (Oakley 1993). By the 1960's maternal mental illness, specifically puerperal psychosis was recognised as a specific condition and the 1970's saw an expansion of the definition of maternal mental illness to include pregnant women. At this time John Cox's (1986) studies on postnatal depression in Uganda led to the conclusion that perinatal mental health is not a 'culture-bound' illness.

In the 1980's scientific interest in postnatal depression was elevated and UK psychiatrists, including John Cox, spent time and resources to improve outcomes for women who experience mental illness. The Edinburgh Postnatal Depression Scale (EPDS) was developed and used by British health visitors (Cox et al 1987) who have a similar role to Australian Child and Family Health nurses. Postnatal mental health has expanded to perinatal mental health care in order to include the antenatal period (Austin, 2003). The spectrum of mental health disorders has also expanded from either depression or psychosis to include; major and minor depression, psychosis, anxiety, bipolar disorder, adjustment disorders, panic disorder, obsessive compulsive disorder and agoraphobia (Austin 2003; International Marce Society 2013).

Mental illness in women is more prevalent during the perinatal period than at other time (Austin et al. 2010). This is recognised as a major public health issue in Australia (Austin, Highet & Committee 2011; Health Department NSW 2010). Postnatal mental illness results in increased rates of maternal morbidity and mortality. Depression is estimated to affect 16% and anxiety disorder is thought to affect 20.4% of women in the postnatal period (Austin, Highet & Committee 2011).

During pregnancy and the first postnatal year maternal mental illness can detrimentally impact the cognitive, emotional and behavioural development of the child (Talge, Neal & Glover 2007). Postnatal depression has been strongly linked with infant-maternal attachment disorders, mother–infant interaction deficits and long-term impairment of the mother-infant bond (McMahon et al, 2006). Infant cognitive, behavioural, psychomotor and language development are all affected when maternal depression is severe and/or chronic (Cornish, McMahon and Ungerer, 2005). The long term impact of postnatal depression can increase the risk of mental illness including depression and anxiety disorders occurring in adolescent children (Halligan et al. 2007). Moreover, the risk of developing a psychiatric disorder is four times higher among children of women who experienced postnatal depression (Cogil et al, 1986). Considering the repercussions for the woman and her baby, a greater focus on assessment of maternal mental health and early intervention during this period has been recommended (Austin, Highet & Committee 2011).

Research on perinatal psychosocial assessment has focused on information disclosure (Armstrong & Small 2010; Chew-Graham et al. 2009) and the ability of the clinician to detect depression (Jones, Creedy & Gamble 2011) leading to recommendations for further research into psychosocial risk assessment (Jones, Creedy & Gamble 2011).

1.2. Child and Family Health Nursing

In Australia, CFH nurses[1] are registered nurses with specialised qualifications and experience to: support families; enhance parenting; and monitor the health and development of children (Child and Family Health Nurses Association, 2009). Nurses provide universal primary, secondary and tertiary services based on principles defined by the CFH nursing Professional Practice Framework (2011 - 2016). CFH nursing policy is informed by social models of health and includes: the provision of antenatal parent education and support; monitoring of child health and development up to age five years; support of nutritional issues of infancy and early childhood and providing support for women, babies and families in the transition to new family roles (Child And Family Health Nurses Association NSW 2009). Health education and social support are framed within the Family Partnership Model to address issues of importance to the family and to foster confidence in parenting (Fowler et al. 2012). CFH nurses are well positioned to recognise early signs of parental and/or family stress or dysfunction and to refer to appropriate secondary-level health professional or health services (Child And Family Health Nurses Association NSW 2009) In addition, nurses provide parenting support in transition to new family roles, responsibilities and mechanisms to increase social support and develop social networking (Child and Family Health Nurses Association, 2009). Recent policy directions in Australian jurisdictions require nurses to conduct psychosocial assessment of women several times during the perinatal period, including screening for depression (Schmied et al., 2011).

1.3. Psychosocial Assessment

Postnatal psychosocial assessment includes clinical evaluation of the risk factors that may contribute to poor mental health outcomes (Austin, Highet & Committee 2011). These include a history of: mental illness; substance dependence; trauma; perceived issues in partnerships and social support; poverty; isolation; personality vulnerabilities; and recent stressful life events (International Marce Society 2013; Yelland et al. 2009). A number of psychosocial assessment tools have been developed and are available to

[1] For ease of reading the child and family health nurse will also be referred to as the nurse.

assist health professionals identify psychosocial difficulties encountered by women during the perinatal period (NSW Department of Health 2008). While the CFH Nurses Decision-Making Study focuses on the postnatal psychosocial assessment it is important to note that in NSW psychosocial assessments are performed both antenatally and postnatally. Psychosocial assessments are usually conducted by midwives during the antenatal period and CFH nurses, in the community and early parenting centres, during the postnatal period (NSW Department of Health 2009).

Ethical issues related to the use of psychosocial assessment tools include the lack of available services once vulnerabilities have been identified (Barclay & Kent 1998) and misconceptions that exist about mental illness and the stigmatisation related to mental illness that can occur from community members, health professionals and from the women themselves (Barclay & Kent 1998).

In the past a number of concerns have resulted in the use of psychosocial assessment tools being discouraged. These included poor sensitivity and specificity of the tools and the reluctance of health professionals to enquire about sensitive issues (Yelland et al. 2009). Psychosocial assessment tools have been criticised for their promotion of an over-controlling, professional-led agenda that result in women feeling disempowered and unable to disclose sensitive information (Cowley, Mitcheson & Houston 2004).

An alternative view is that the use of psychosocial assessment tools provide health professionals with an opportunity to start a conversation with women regarding potentially sensitive psychosocial vulnerabilities such as their level of social support, history of mental illness, abuse, and stressful life events (Yelland et al. 2009). Developing a relationship of trust between the woman disclosing sensitive matters and the nurse receiving the information is paramount (Kardamanidis, Kemp & Schmied 2009). Australian clinicians, researchers and Health Departments now recognise the usefulness of routine, standardised screening and psychosocial risk assessment (Austin, Highet & Committee 2011; NSW Department of Health 2008; State Government of

Victoria. 2012). The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (2011) has also advocated the importance of early identification of risk factors associated with perinatal depression and the use of tools to facilitate the identification of women at risk. In Australia, postnatal psychosocial assessment practices are varied as individual jurisdictions have historically made their own decisions on this matter (Yelland et al. 2009). For example, in 2009, only 15 of 110 maternity hospitals in Victoria and South Australia routinely used postnatal psychosocial assessment tools (Yelland et al. 2009).

In 2011, Australia's National Depression Initiative; *beyondblue*, released The National Perinatal Depression Plan (NPDP). This plan provides Australian clinicians with guidelines for assessment and management of perinatal mental illness (Yelland et al. 2009). These guidelines recommend identification of current depressive symptoms using a structured method to assess psychosocial factors, provide workforce training and supervision and develop integrated pathways to care and community awareness programs. The guidelines aim to provide a beginning process to assist health professionals with early identification and intervention for women who are at risk and require additional support, diagnosis or treatment for mental illness and other psychosocial risks (Austin, Highet & Committee 2011). In 2013, The Marce Society (International Society for Perinatal Mental Health Professionals), released a position statement on the general principles and concepts involved in psychosocial assessment in the perinatal period. The Marce Society states that:

> *...psychosocial assessment does not set out to identify women with a possible diagnosis of a particular condition at the time of assessment. Rather it gives us a multidimensional picture of the woman's psychosocial circumstances which can then be used to make decisions about best care options (International Marce Society 2013).*

To date published studies focus on the need for early identification of psychosocial risk and the importance of early intervention, but not on the nurses' experience conducting psychosocial assessments or on the thinking skills used by the nurses.

1.4. The Study Setting

Tresillian Family Care Centre (Tresillian), funded by NSW Health, is the largest provider of Child and Family Health services in Australia. Tresillian is an early parenting centre that uses a partnership approach to provide families with holistic care within a Primary Health Care framework (Tresillian 2013).

Tresillian's mission is to optimise the health and wellbeing of families with babies and young children. Women are referred to Tresillian by their General Practitioner, Early Childhood Health Centre nurse or other health professional (Tresillian 2013). These Early Parenting Centres (EPCs) offer: home visiting; day stay; residential care; perinatal mental health services; childcare; and education for parents and health professionals (Tresillian 2013). Home visiting, day stay and residential care require the nurse to complete a comprehensive admission process that includes a psychosocial assessment of the primary caregiver.

1.4.1. Tresillian Assessment Process

The comprehensive assessment process[2] of a woman and her baby commences prior to admission when the nurse begins reading the intake data or day stay notes in order to obtain background information. On arrival at Tresillian, the nurse greets the woman, her partner and their baby. The nurse then provides a personal introduction to the unit and escorts them to their room. During this time the nurse will start to assess the woman's affect, her interaction with her baby and partner as well as her ability to respond to the conversation.

Once the family have settled into their room the nurse helps the woman to prioritise the baby's needs by checking nutrition and sleep priorities. The timing of the admission process and other activities are sequenced to suit the baby's requirements. The

[2] A description of the assessment process is provided from interview data and organisational documentation.

admission process includes a physical check of the baby and completion of growth charts in the presence of the parents. A tour of the facilities is provided and includes the food room, dining room and playroom.

The nurse undertakes an interview to discuss: the woman's goals, her partner's goals and their goals for the baby; to assess their current situation; to gather information on the parent's aspiration for their baby and parenting role; what they want to gain from their Tresillian experience – the parent's expectations of both the program and of themselves. The nurse encourages the parent(s) to feel welcomed and comfortable, she[3] explains the flexibility of the program to be changed or modify as the days progress, and Tresillian expectations regarding the parent's participation. An explanation is provided about the role of the other team members including the counselling team and the paediatrician. During the interview the nurse will talk with the woman about her concerns and the reason for the baby's admission to Tresillian. These reasons may include issues related to: settling and sleep, feeding, or other behavioural or parenting concerns. During the admission process the nurse and woman will commence the development of a care plan for the baby. The nurse will encourage involvement and engagement of the woman's partner or her support person and explain that they are a vital part of implementing the care plan while the family are part of the Tresillian program and when they return home. The nurse may answer any questions that the woman or her partner might identify and discuss their concerns.

Documentation for the baby will be completed including development milestones (completed by the parents and discussed with the nurse), the baby's care plan, and an explanation to the parents of how to complete sleeping and eating charts for the baby. Documentation for the woman includes: a genogram, notes on the pregnancy, labour and birth experiences, the woman's current feelings, past history of mental illness, current medications, family history, smoking and allergies. The nurse may discuss the

[3] The nurse will be referred to as a female as all registered nurses at the time of this study were women.

parent's current situation and how it has affected them and the woman's perception of partner's support and social support. The assessment process includes a review of the Edinburgh Postnatal Depression Scale (EPDS), Postnatal Risk Questionnaire (PNRQ), Domestic Violence (DV) screening and a Substance Abuse form and residential checklist. If the partner is staying there is an extended admission process including many of the same assessments as for the woman. Many of these assessments have a significant history of use for several decades by nurses and other health professionals e.g. the EPDS (Cox & Holden 1987). The newest tool is the PNRQ developed by Austin (Christl et al. 2013).

1.5. Edinburgh Postnatal Depression Scale and Postnatal Risk Questionnaire

Psychosocial assessment measures, such as the PNRQ, used in combination with a symptom-based screening measure, such as the EPDS, provides early identification of mental health risk and morbidity in the perinatal period (Austin et al. 2011; Austin et al. 2005). The EPDS is a symptom-based screening measure that can support early identification of mental health risk and morbidity in the perinatal period (Austin et al. 2011; Austin et al. 2005). The EPDS was developed in 1983 as a tool for community workers to provide symptom-based screening for postnatal depression (Cox & Holden 1987). This 10-item self-report scale has been found to have sensitivity and specificity, as well as sensitivity to change over time. It is easily administered in five minutes and has a simple scoring method (Cox & Holden 1987).

An integral part of the Tresillian assessment process the woman (mother) completes a second psychosocial assessment tool, the PNRQ. (Refer to Appendix 1 for PNRQ). This self-report psychometric test has been developed specifically for use in the postnatal period and enables examination of the key psychosocial risk factors that may contribute to negative or compromised mental health outcomes for the woman and her baby (Christl et al. 2013). This 12-item questionnaire focuses on the woman's history of previous mental illness; sexual or emotional abuse; current level of supports;

her relationship with her mother and her partner; anxious and perfectionistic personality traits; birth and parenting experience as well as any recent stressors. The PNRQ is a combination of rating items and yes/no questions, with higher scores indicating a stronger endorsement of particular risk factors. The nurse uses the information obtained from the assessment process, including the PNRQ and EPDS, to make clinical decisions regarding the woman in her care.

1.6. Defining Clinical Decision-making

A key nursing competency is the ability to make clinical decisions (Bakalis & Watson 2005). Clinical decision-making is the process that nurses use to gather and evaluate information and to make judgements regarding patient care (Bakalis & Watson 2005). Decision-making is defined as a complex process that uses formal and informal thinking to gather and analyse information, evaluating significance and weighing alternative actions (Fonteyn 1998). The process is dynamic and allows backward/forward movement as information is added, deleted or re-evaluated or as information, interventions and alternative actions are considered or discarded at multiple points. It is affected by cognitive ability, experience, skill level and maturity (Simmons 2010). In the literature this process has been described by multiple terms including critical thinking, clinical reasoning, critical judgement and using thinking strategies (Simmons 2010). These will be further discussed later.

1.6.1. Critical Thinking

Clinical decision-making is described in the literature using the term critical thinking and defined as the use of controlled, purposeful and well-reasoned strategies to drive problem solving and decision-making (Robert & Petersen 2013). Critical thinking requires both analysis and conclusion, it is outcome focused and result oriented (Alfaro - Lefevre 1999). Critical thinking can be developed and improved as a ‘habit of mind’ to support excellence in knowledge development (Facione 1995).

1.6.2. Critical Thinking in Health Care

Critical thinking can be aligned to the scientific process and is similar to the nursing process. Critical thinking includes observation, classification of data, concluding, conducting experiments and testing hypothesis (Alfaro - Lefevre 1999). Thinking strategies are a way for nurses to apply the process of inquiry which provides a method of assessing, planning, implementing and evaluating nursing care (Alfaro - Lefevre 1999). Through the growth of nursing practice and the widening of nursing autonomy nurses are faced with more decisions than ever. Critical thinking assists nurses in the decision-making process (Rogal & Young 2008) and encourages nurses to challenge established theory and practice (Boychuk Duchscher 1999). Nurses need to know how to use resources, how to establish interpersonal relationships and how to acquire and evaluate information in order to make decisions that are in the best interest of the patient (Alfaro - Lefevre 1999).

1.6.3. Clinical Reasoning

Clinical decision-making was initially studied in medicine using the term clinical reasoning (Simmons 2010). There are a number of qualities assigned to clinical reasoning. Possible attributes include: data analysis, interpreting information, deliberation, heuristics (informal thinking), inference or speculation, reflective thinking, argument, perception, organizing data and insight (Simmons 2010).

Nurses are involved in complex situations that increase the intricacy of decisions that they have to make and the level of responsibility that they hold. Nurses are knowledge workers, not just doers. Understanding thinking strategies is key to resolving problems. Health care settings are increasingly filled with uncertainty, risk and complexity due to increasing patient acuity, multiple co-morbidities and enhanced use of technology (Fonteyn 1998), thus requiring nurses to use multiple thinking strategies in a variety of ways.

Nurses are responsible for making decisions regarding care. Nurses working in child

and family health are frequently required to work independently. The nurse needs to acquire and evaluate information, establish positive interpersonal relationships, know how to use resources including time, money, space and human resources, and they need to make the best use of thinking to achieve all of these to provide the highest level of nursing care (Alfaro - Lefevre 1999).

1.6.4. Thinking Strategies May Contribute to Education and Training

Nurses require thinking strategies in order to make clinical decisions. Cognitive flexibility enables a person to simultaneously assess cues, determine relevance, apply knowledge and experience and weigh the value of the data and possible interventions (Simmons 2010). This model of logical thinking uses hypothetico-deductive reasoning and places an emphasis on cognitive reasoning skills and the use of evidence to make treatment decisions (Simmons 2010). An understanding of clinical decision-making and the cognitive flexibility this requires, or the thinking strategies that nurses use, may enhance nursing education, improve nursing practice and offer direction for needed further research to examine the consequences of clinical reasoning in specific situations (Simmons 2010).

1.7. Personal Perspective on Psychosocial Assessment

As a newly graduated registered nurse, I spent time working in a private psychiatric hospital and developed some knowledge of mental illness during the postnatal period. This triggered an interest that has stayed with me throughout my nursing career. In 2010, I fulfilled a lifelong goal to become a midwife. I enjoyed the 12 month course and was delighted with the emphasis given to the emotional health of women. Surprisingly the focus on the mental health of the mother was only a small component of the course. I was shocked by the 2005/2006 statistics on perinatal death, where three out of the 21 maternal deaths in New South Wales were from suicide by hanging (Health Department NSW 2010). I was also alarmed at the incidence of depression and related disorders in the perinatal period and the detrimental effect this has on the baby, the family and our society. Since completing the Graduate Diploma of Midwifery I have

worked as a research assistant on a number of perinatal studies that have increased my knowledge and improved my understanding of the importance of perinatal mental health. I have identified that an increased understanding of the assessment of risk for mental illness will enable care to be implemented that will improve the outcomes of women, their babies and families.

I am providing my own story to state my personal interest in this area of midwifery and nursing practice. As a midwife I am unaware of the particular issues that CFH nurses face and I bring an open mind to this research. As an outsider to Tresillian Family Care Centres (where this research is located), I bring no known conflict of interest to this research.

1.8. Conclusion and Thesis Outline

This chapter provided a background to the CFH Nurses Clinical Decision-Making study including: an overview of postnatal mental health highlighting the importance of psychosocial assessment; a description of The Study setting and of the nurses who undertake the assessment; the assessment process in this setting; the tools utilized (EPDS and PNRQ); and a description of critical thinking concepts.

The following chapter (Chapter Two) reviews the current literature on nurse's clinical decision-making and the thinking strategies that nurses used. The search strategy that was utilized has been documented. Four studies of postnatal nurses' decision-making and ten studies of nurses' thinking strategies were examined to provide a background on current knowledge of nurses' decision-making in the post-natal period.

Chapter Three describes The Study design and the method used to address the research question as well as The Study aims. This chapter provides information about The Study setting and location, the participant recruitment process (selection process, inclusion and exclusion criteria, gaining participant consent), as well as the potential

impact on the participants and ethical issues. This chapter also explains the data collection approach using Critical Incident Technique, analysis and coding of data utilizing a template based on thinking strategies from Fonteyn's Thinking in Practice Study. The domains of information that are deduced from the nurses' recount are explained. The management and security of the data is also described in this chapter.

Chapter Four provides a description of the domains of information and the thinking strategies that two of the nurses described using for psychosocial assessment. This chapter highlights the thinking strategies that the nurses use through two case studies that place the data in context.

Chapter Five describes the most commonly used thinking strategies and the most frequently accessed domains of information from the data.

Chapter Six, the final chapter discusses The Study findings and the limitations of this study. The direction for future research in this area is highlighted.

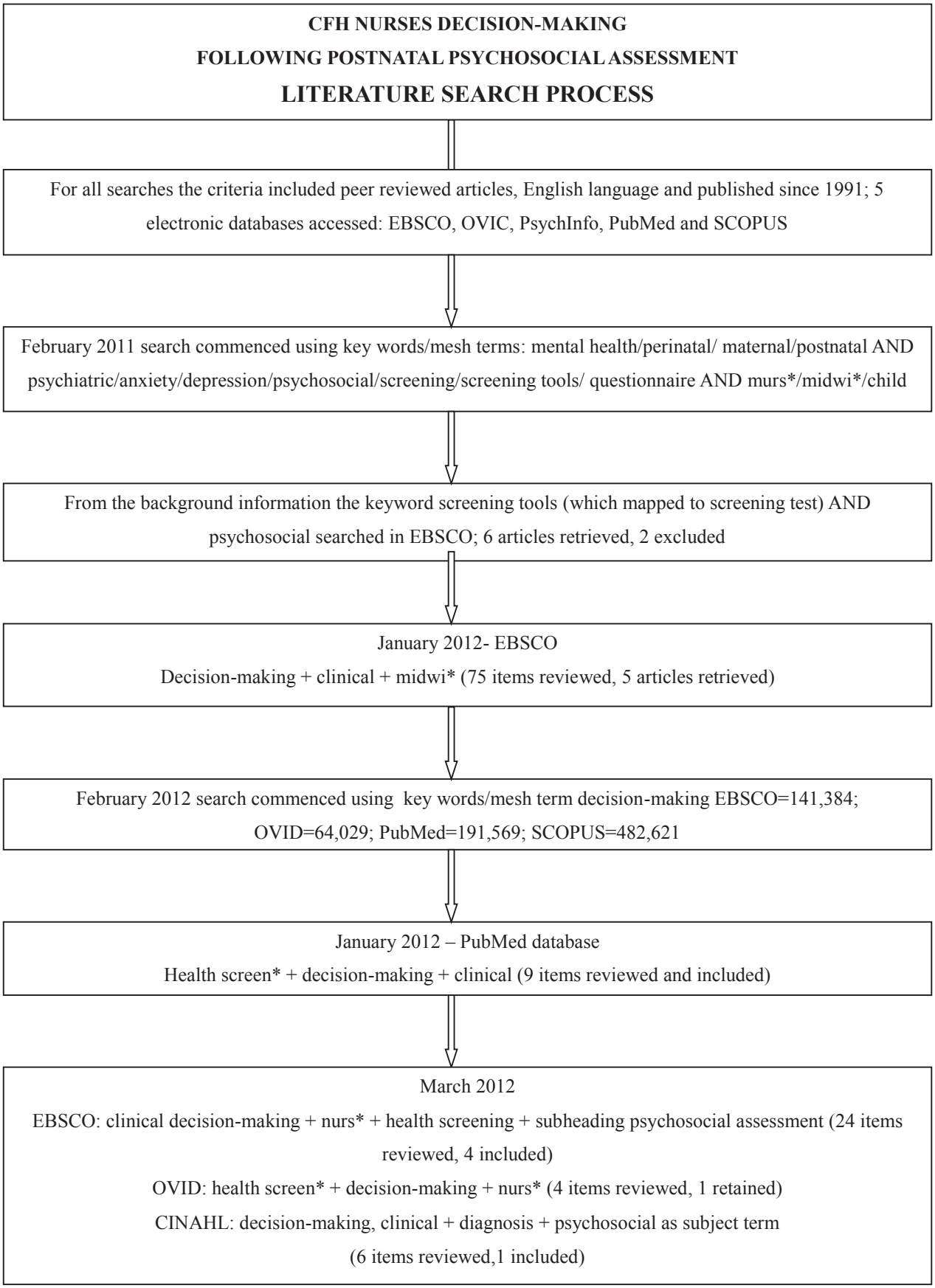
CHAPTER TWO – LITERATURE REVIEW

2. Introduction

Child and Family Health Nurses are required to gather assessment information regarding risk of mental illness and apply their nursing knowledge and experience to make clinical decisions regarding the nursing care and support that will be provided to a woman. This project is investigating how nurses make these clinical decisions following a postnatal psychosocial assessment. A seven-stage qualitative research protocol was used to guide the literature review process; focusing, documenting, reading, combining knowledge with critical thought, respecting the literature, telling a story and concluding the search (Silverman 2010).

This chapter provides a detailed review of the search process that was undertaken for this study. The search has been a continuing process that included biannual consultation with a UTS librarian to ensure that the results were both comprehensive and specific. The search yielded 15 articles about decision-making by nurses. On review, four of these studies provided background information specific to postnatal care with limited information on decision-making. No studies were found that provided information on clinical decision-making in regard to psychosocial assessment. Eleven studies provided detailed information on the specific thinking strategies that nurses utilized to make clinical decisions in a variety of clinical specialties. One of these was later discarded as this only provided information on one specific area of decision-making and not on decision-making overall.

Figure 1: Flow chart of literature review



2.1. Focusing and Documenting the Search

Searching was conducted through five comprehensive health databases EBSCO (CINAHL), Ovid (MEDLINE), PsychInfo, Scopus, and PubMed. In each instance the search parameters limited the results to items published in the English language, in peer reviewed journals and within the most recent 15 years. The initial background search focused on perinatal mental health, specifically on postnatal psychosocial assessment. Terms that targeted the search to psychosocial assessment included health screening and screening tools. Terms that targeted the search to the postnatal period included postnatal, perinatal, midwifery, child and family health, public health and heath visitor. Table 1, below, provides the terms used to search the literature for research on Postnatal Psychosocial Assessment.

Table 1: Literature Search Terms for Psychosocial Assessment

1	Psychosocial Assessment, health screen*, screen* tools
2	Postnatal (post natal), perinatal, midwif*, child and family health, public health, health visitor
3	English Language, within 15 years

The search on decision-making included the terms decision-making, critical thinking, thinking strategies and clinical reasoning. This yielded thousands of articles that included information, but were not necessarily focused, on the strategies of decision-making in health. The search was narrowed to focus on nurses' decision-making. Further refinement occurred by searching for the decision-making terms in either the title or in the abstract. Table **2**, below, outlines the terms used to search the literature for research on decision-making.

Table **3**, below, outlines the specific criteria utilized to either include or exclude the

research that was found.

Table 2: Literature Search Terms for Decision-making

1	Decision-making, critical thinking, thinking strategies or clinical reasoning
2	Nurs*

Table 3: Literature Inclusion Criteria

Inclusion criteria	Exclusion criteria
Decision making in clinical situation Publication between 1999 and "current"	Non-English language

As the search focused on nurses' decision-making in clinical situations, articles were excluded if the decisions makers were students, educators, teachers, trainers, clients or patients. The search was limited to articles available in English language and published within the last fifteen years. All duplicate articles were excluded. Reference lists were also searched to ensure that all seminal papers had been included. In addition, a number of CFH nursing research and discussion papers, textbooks and other literature were accessed to provide government and industry body information. The ten articles that were included provided detailed information on studies of clinical decision-making. An additional four studies provided contextual information and further depth to the review of decisions in the postnatal setting although they did not provide detail on nurses' decision-making. No articles were found that focused on the decision-making process during postnatal psychosocial assessment. Table 4, below, provides a summary of the literature search results. Appendix 2 provides a Table of Evidence of the literature review.

Table 4: Literature Search Results

Theme	Number of items found
A. Information on clinical decision-making in nursing (other than postnatal)	10
B. Information on decision-making in postnatal nursing, CFH nursing midwifery, public health nursing or health visitors	4
C. Information on nurses decision-making for psychosocial Assessment or Health Screening	0

2.2. Combining Knowledge with Critical Thought

Decision-making is a process of making choices and reaching conclusions. Multiple terms have been used to describe the cognitive processes, metacognition and discipline specific knowledge that is required to gather and analyse patient information, evaluate significance and weigh alternative actions (Simmons 2010).

2.2.1. Clinical Decision-making

Clinical decision-making is a crucial component of all professional nursing practice whereby reason is applied to situations, conclusions are drawn and clinical decisions are made (Daly, Speedy et al. 2005). Clinical decision-making is defined as a process that nurses use to gather and evaluate information and make judgements that affect the provision of care (Bakalis & Watson 2005). Decision-making is discriminative thinking that is used to choose a particular course of action (Cioffi 1998). Clinical decision-making is used synonymously with clinical reasoning, critical thinking and clinical judgement (Simmons 2010).

2.2.2. The History of Clinical Decision Making

Clinical decision-making, or critical thinking, was considered and documented as far back as ancient Greece by the father of philosophy, Socrates (Miller 2012). The work of Glasser, considered the cornerstone of critical thinking, was commenced in the 1920s and progressed in the 1960 through the Watson-Glasser Critical Thinking Appraisal

(Robert & Petersen 2013). In the 1980s critical thinking gained recognition in the education system as a behavioural science construct (Robert & Petersen 2013). Clinical decision-making, initially reported in the medical literature using the term clinical reasoning, was introduced in nursing during the 1980s.

In nursing the term clinical reasoning described the cognitive process nurses use to think about patient issues (Simmons 2010). A nursing perspective on clinical decision-making, developed in the 1980s, identified that expert nurses use humanistic – intuitive ways of making clinical decisions (Benner 1984). For nursing the use of clinical reasoning enables decisions to be made under conditions of uncertainty, risk or complexity (Simmons 2010) rather than use of only rational reasoning which was claimed by medicine (Jefford, Fahy & Sundin 2010). Attributes of clinical reasoning include: data analysis; interpreting information; deliberation; heuristics (informal thinking); inference or speculation; reflective thinking; argument; perception; organizing data; and insight (Simmons 2010).

Clinical decision-making is affected by multiple characteristics including: cognitive flexibility; experience; maturity; skill level; the amount of information that is available and the degree of risk involved (Daly et al. 2005). Cognitive flexibility enables a person to simultaneously assess cues, determine relevance, apply knowledge and experience weigh the value of the data and determine possible interventions (Simmons 2010). Clinical decision-making is dynamic, expansive and recursive, allowing backward/forward movement as information is added, deleted or re-evaluated; as information, interventions and alternative actions are considered or discarded at multiple points (Daly et al. 2005).

Thinking strategies is another term used to describe this process. The term was used by Marsha Fonteyn in the 1998 Thinking in Practice (TIP) Study that looked at the specific strategies that expert nurses used in a variety of clinical specialties. The 17 thinking strategies described in the TIP Study enabled Fonteyn to classify and compare the

different thinking strategies that the nurses used to make decisions in complex clinical situations (Fonteyn 1998). Increasing responsibilities and the complex situations that nurses now work in require competent thinking skills; nurses are knowledge workers, thinkers not just doers, and exposure to clinical problems provides nurses with an opportunity to apply decision-making skills (Martin 2002).

2.2.3. Clinical Decision-making in the Postnatal Period

The search revealed four studies that provide useful, although not detailed, background information on decision-making by nurses caring for women in the postnatal period and will be discussed in relation to this research. These studies provided information on CFH nurses' decision-making experience in sustained nurse home visiting program, community nurses' decision-making and use of evidence-based practice, paediatric telephone triage nurses' decision-making regarding parenting advice and the decision-making of health care professionals regarding postnatal depression. A comparative study of CFH nurses' experience in sustained home visiting compared to the CFH nurse competencies in regard to psychosocial assessment suggested that CFH nurses would benefit from further training and education regarding psychosocial assessment and use of assessment data in decision-making (Kemp et al. 2005).

Clinical decision-making by community nurses was examined in relation to evidence-based practice (Prior, Wilkinson & Neville 2010). Barriers to the use of evidence-based information included difficulties influencing change in the primary health care arena, knowledge and skills of evidence-based practice, attitudes of practitioners and inadequate computer facilities (Prior, Wilkinson & Neville 2010). Further research is recommended into the clinical decision-making by community nurses in relation to evidence-based practice (Prior, Wilkinson & Neville 2010).

Clinical decision-making by telephone triage nurses who provide advice to parents was examined (Smith 2009). The process of telephone triage is complex and knowledge

intensive. Nurses see themselves as essential clinical decision-makers within the interactional process. This research highlighted the need for further research into the knowledge and skills training in relation to providing early intervention and support for families (Smith, 2009).

Armstrong and Small's (2010) study into health professionals caring for women with postnatal depression has a similar focus to the CFH Nurses Decision-Making study. This study, on the disclosure of postnatal depression symptoms, provides a qualitative, multicentre, pragmatic, randomised control trial that investigated the attitudes of general practitioners (GPs) and nurses. The study used in-depth interviews in the workplace, of 25-to-67 minutes, using a purposive sample of 19 GPs and 14 health visitors to explore their attitudes towards women with postnatal depression. The flexible interview framework included open-ended questions and focused questions. Interviews of 20 women were also undertaken in order to compare their views. Analysis proceeded in parallel with the interviews to allow modification in light of emerging themes. Analysis was inductive with a thematic approach. Coding was informed by data and continuing analysis with the thematic categories identified in initial interviews were tested in subsequent interviews. Analysis across data sets allowed comparison between views of women and health professionals. Themes that emerged included: understanding the issues, making diagnosis, facilitating and hindering disclosure of symptoms, and the role of the system in the disclosure of symptoms. The Study concluded that there is broad literature on domestic violence disclosure by women to health professionals, particularly CFH nurses. Also, questions about depression create the most discomfort for both women and for the health care professional due to the stigma of mental illness. This Armstrong and Small's (2010) study has the most similarities to this current study and can provide valuable information on the method and methodology of a study into aspects of clinical decision-making in postnatal depression.

These studies provided useful background information on decision-making by nurses caring for women in the postnatal period. They did not provide specific information on

decision-making or on the thinking strategies that the nurses used to make a decision. The following ten studies provided detailed findings on the nurses' decision-making and the thinking strategies that they used.

2.2.4. Critical Review of Nurses' Decision-Making

Ten studies that identified the specific thinking strategies that nurses used for decision-making were selected for critical review. The participants included nurses who were practicing in: paediatrics; critical care; medical nursing (hospital, geriatric and community); aged-care; home care; emergency department; as well as mental health; and one study where the participants were all considered expert nurses from a variety of clinical specialties. The articles were published between 1998 and 2012. Five of the studies were undertaken in Sweden, two were from the U.S.A., two studies were conducted in Australia and one in Norway.

Decision-making by nurses was the main theme in all of the studies. Due to the type of research question to be answered qualitative methods were utilized. The number of participants in the studies ranged from five-to-135, with the majority of studies having between 11-and-21 participants. Six of the studies utilized the 'think aloud' method for data collection, where participants were asked to express their thoughts without any reflections about their thinking and prompted to 'please continue' or 'please think aloud' to encourage them to continue. Two of the studies used interview, one study used observation, one used interview following observation and one study used focus groups to gather data. The data analysis used in eight of the studies was content analysis, one study used descriptive analysis, one used protocol analysis and one used open coding to identify themes. Five of the studies used patient scenarios or case studies to generate clinician decision-making data.

2.3. Telling a Story of Clinical Decision-making and Thinking Strategies

The thinking strategies that nurses use to make decisions have been described in the literature using various terms. The Thinking in Practice (TIP) Study described 17 thinking strategies that were used by experienced nurses in a variety of clinical specialties (Fonteyn 1998). Of the ten articles on nurses' decision-making that were reviewed, four of these used the thinking strategy classification directly from the TIP study. For the remaining six studies the thinking strategies were classified using the definitions that were provided by each study. This detailed analysis of the nurses' thinking strategies may be transferred to any clinical specialty, including postnatal care, and to any nursing task, including psychosocial assessment. The thinking strategies will be described in order from most frequently used to less commonly used strategies and applied to the critical appraisal of the literature. The study that is most similar to this study was the Thinking in Practice (or TIP) Study by Marsha Fonteyn (1998). From an investigation of fifteen expert nurses Fonteyn developed an exhaustive model of nurses thinking strategies. These 17 thinking strategies provide a comprehensive and ordered framework through which studies on clinical decision-making by different nursing specialties can be compared and contrasted (Fonteyn 1998).

2.3.1. Searching For Information

The thinking strategy of Searching for Information is defined as mentally looking for missing or concealed information and is described in all the reviewed articles (Andersson, Klang & Petersson 2012; Bucknall 2003; Elbogen et al. 2005; Fonteyn 1998; Fossum et al. 2011; Fowler 1997; Funkesson, Anbacken & Ek 2007; Goransson et al. 2007; Hedberg & Larsson 2002; Kihlgren et al. 2003; Usher et al. 2009). The types of information that the nurses searched for varied between studies. Expert nurses in the TIP study and mental health professionals Searched for Information on patient assessment, knowledge of the patient, background factors, signs and symptoms, demographic data, cultural identity, risk assessment and previous history (Fonteyn 1998; Usher et al. 2009). When searching for information the emergency department

(ED) triage nurses requested more detail about the patient's signs and symptoms, including the duration and onset, the patient's previous experience of these symptoms and any actions carried out by the patient (Goransson et al. 2007). In a study of nurses from hospital, geriatric and community settings the information relating to patient's prognosis was also sought (Hedberg & Larsson 2002). Home care nurses, deciding on referral of patients to ED, searched for information about both patient's and relative's wishes in order to make their decision regarding referral (Kihlgren et al. 2003). Mental health clinicians searched for information on personality characteristics and psychological conditions to decide on the risk of patient violence (Elbogen et al. 2005).

Nurses often requested more information than they were initially presented. For example, a scenario based study set in aged-care where the nurses asked for more data regarding the resident's functional ability, medications, equipment, social support and treatment responses (Fossum et al. 2011). Experienced nurses found that they requested additional information related to existing assessment findings (Fonteyn 1998). The findings of Fossum (2011) on experienced nurses are consistent with the findings of Fonteyn (1998).

In all studies the thinking strategy of searching for information was employed early in the decision-making process. Nurses in a medical setting preferred to become acquainted with the patient situation as soon as possible (Hedberg & Larsson 2002). Both critical care nurses and aged-care nurses were concerned with the patient's response to health problems and to treatment during the entire time the patient was in their care (Bucknall, 2003; Funkesson, 2007). Aged-care nurses' decision-making was studied at three points in time: prior to meeting the patient; the day after the patient consultation and three weeks later. Searching for information was utilized at similar frequencies across all three time points (Funkesson, Anbacken & Ek 2007).

Searching for information was used for different reasons in different situations. Critical care nurses searched for information when they focused on diagnosis, treatment and

assessing the patient response to health problems (Bucknall 2003). This study also reported that the nurses frequently used searching for information to determine change in health status; determine change in patient situation; to establish the state of the situation; to ascertain time constraints; and to determine the level of risk of pressure ulcers developing (Bucknall 2003). While Fonteyn (1998) identified expert nurses searched for information about patients' signs and symptoms in order to track the patient's progress over time; identify trends; assess status and further their understanding of the patient situation.

The method most often used by nurses to acquire information was observations, including vital signs and pain (Funkesson, Anbacken & Ek 2007; Hedberg & Larsson 2002). Mental health clinicians most frequently used clinical information and less frequently used historical information and test information, even though historical and testing information were considered more predictive of risk (Elbogen et al. 2005). Cues relating to medical patient health status and prognosis were also obtained through watching, examining the patient and reading the patient record (Hedberg & Larsson 2002).

Once the nurses searched for information there were variations in the result. Medical nurses noted, identified and interpreted cues relating to the patient's situation (Hedberg & Larsson 2002). Many aged-care nurses did not search for information but moved directly to assessing and planning. This was justified in the research as being due to understaffing causing insufficient time. The author suggests that the nurses' decision-making outcomes regarding pressure ulcer care would be improved by an increased use of the strategy searching for information (Fossum et al. 2011).

Paediatric nurses were divided into two groups; novice and experienced groups. The experienced group commonly utilized searching for information, while the novice group spent limited time using this thinking strategy (Andersson, Klang & Petersson 2012). The paediatric nurses have a similar client base to CFH nurses therefore this may

be relevant to the CFH Nurses Decision-Making study. Mental health clinicians were also divided into groups; paraprofessionals and professionals. When searching for information the paraprofessionals were found to spend more time observing for information compared to the professional clinicians who spent more time reading the history or looking at test results (Elbogen et al. 2005). This study by Elbogen et al (2005) has relevance to the CFH Nurses Decision-Making study as in both studies the clinicians were considering a mental health risk. In the study by Elbogen (2005) the clinicians were deciding on the risk that the patient would become violent and in this study the CFH nurses were considering the woman's risk of mental illness.

2.3.2. Recognising A Pattern

Pattern Recognition is defined as identifying characteristic pieces of data that fit together (Fonteyn, 1998). Recognising a Pattern is an essential component of nursing experience and the genesis of all successful early warnings (Benner, 1984). Recognising a pattern is commonly described in the literature on nursing thinking strategies (Andersson, Klang & Petersson 2012; Bucknall 2003; Elbogen et al. 2005; Fonteyn 1998; Fossum et al. 2011; Fowler 1997; Funkesson, Anbacken & Ek 2007; Goransson et al. 2007; Hedberg & Larsson 2002; Kihlgren et al. 2003; Usher et al. 2009).

Paediatric nurses used their previous knowledge as well as recently acquired patient knowledge to recognise patterns of patient care (Andersson, Klang & Petersson 2012). In regard to de-escalating the patient's situation, mental health clinicians recognized behaviour patterns from the past, recalled how the situation had previously been managed and used strategies that had previously worked. These clinicians were more likely to utilize alternative interventions if they knew what had previously been successful (Usher et al. 2009). Aged-care nurses recognised and matched patterns in relation to the resident's general condition and identified a subtheme of lack-of-fit pattern recognition regarding basic human needs such as elimination, pain relief, activity, nutrition and fluids as well as social situation (Fossum et al. 2011). Home care nurses felt safe and were able to make decisions from recognising patterns in their earlier experiences and their medical knowledge to decide if the patient should be referred to hospital (Kihlgren et al. 2003).

Critical care nurses felt more comfortable making decisions when they had the opportunity to reflect on their practice or compare patient situations with other nurses (Bucknall 2003). The more the nurses dealt with particular patient situations the patterns became easier to recognise and the less stressed they felt in their decision-making. Pattern recognition from their prior experience resulted in the critical care nurses appearing more confident (Bucknall 2003). When the situation was unusual these nurses were likely to consider more options, which slowed down the decision-making process (Bucknall 2003).

In those studies that reported the frequency of use of thinking strategies recognising a pattern was the most commonly used thinking strategy. All mental health nurses used pattern recognition to make decisions on 'as needed' medication (Usher, 2009). Two thirds of aged-care nurses used the recognising a pattern strategy in their reasoning about malnutrition and pressure ulcers in resident scenarios (Fossum, 2011).

2.3.3. Judging The Value

Judging the Value was defined as forming an opinion or evaluation about worth in terms of the usefulness, significance or importance of the information (Fonteyn 1998). This thinking strategy was reported in six of the studies (Elbogen et al. 2005; Fonteyn 1998; Fossum et al. 2011; Funkesson, Anbacken & Ek 2007; Goransson et al. 2007; Kihlgren et al. 2003). Expert nurses judged the value on a variety of information including assessment findings, test data and treatments (Fonteyn 1998). Judging the value of information may reduce the risk of problems being undetected. Aged-care nurses judge the value, significance or importance of information in order to reduce the risk of residents' health problems remaining undetected (Fossum et al. 2011). Although one of the less frequently used thinking strategies, when aged-care nurses did utilized judging the value, this strategy was useful in assisting the decision-making process about the adequacy of resident's oral fluid intake (Fossum et al. 2011). ED nurses commonly judged the value of their findings to determine additional data needs or to allocate acuity ratings (Goransson et al. 2007).

Mental health nurses judged the value of readily available information; such as clinical presentation, at a higher value than less readily available historical information; such as social work reports and psychological test results (Elbogen et al. 2005). Home care nurses judged the value of the patient's condition in order to facilitate delegation of work to co-workers (Kihlgren et al. 2003).

2.3.4. Drawing A Conclusion

Nurses used the Drawing a Conclusion strategy in several studies (Andersson, Klang & Petersson 2012; Bucknall 2003; Fonteyn 1998; Fossum et al. 2011; Funkesson, Anbacken & Ek 2007). Drawing a conclusion is defined as reaching a decision or forming an opinion (Fonteyn 1998; Fossum et al. 2011; Goransson et al. 2007). Critical care nurses established the state of the situation, and drew a conclusion of the time constraints and the level of risk involved for both the patient and nurse in treatment decisions (Bucknall 2003). Aged-care nurses used drawing a conclusion as one of the most frequently utilized thinking strategies (Fossum et al. 2011; Funkesson, Anbacken & Ek 2007). In care planning, aged-care nurses used this strategy in conjunction with asserting a practical rule when considering risk of pressure ulcers (Fossum et al. 2011). The expert nurses drew conclusions about the patients' status, condition or situation (Fonteyn 1998) and paediatric nurses frequently utilized drawing a conclusion in relation to assessment of a child's social situation and the possibility of abuse (Andersson, Klang & Petersson 2012).

2.3.5. Forming Relationships

Forming Relationships is defined as connecting information to further understanding and is considered in four of the studies on nurses' decision-making (Fonteyn 1998; Fossum et al. 2011; Fowler et al. 2012; Goransson et al. 2007). Some aged-care nurses commonly linked together relevant data such as symptoms and assessment in order to decide on the risk of the resident developing pressure ulcers (Fossum et al. 2011). However, this thinking strategy was not described in the other study of aged-care

nurses assessment of risk of developing pressure ulcers (Funkesson, Anbacken & Ek 2007).

It was common for ED nurses to form relationships between information on the patient and information on their chosen actions (Goransson et al. 2007). Experienced nurses in the TIP study (Fonteyn, 1998) formed relationships between: a) assessment findings and history; b) assessment findings and treatment or status; c) between test data and the context of the test; or d) between the patient problem and patient status. These nurses found that forming relationships was very useful to clarify their thinking and define ill-structured problems (Fonteyn 1998).

2.3.6. Setting Priorities

The thinking strategy of Setting Priorities is described in six decision-making studies (Andersson, Klang & Petersson 2012; Fonteyn 1998; Fossum et al. 2011; Fowler et al. 2012; Funkesson, Anbacken & Ek 2007; Goransson et al. 2007; Kihlgren et al. 2003). Setting priorities is defined as ordering concepts in terms of importance or urgency, including ordering patient concerns and planning care (Fonteyn 1998; Fossum et al. 2011; Goransson et al. 2007). For example, medical nurses determined that biomedical problems involving patient health status were more important than psychosocial problems (Hedberg & Larsson 2002).

The expert nurses set priorities in relation to information type (Fonteyn 1998) . When these expert nurses planned interventions they referred to their education and their clinical experiences, but did not refer to research findings (Fonteyn 1998). Setting priorities allowed the expert nurses to focus on important decisions, identify when patients were worried, identify when there was a concern and focus on what they perceived as important (Fonteyn 1998). The paediatric nurses were divided into two groups; an action-oriented group and a hypothesis-oriented group (Andersson, Klang & Petersson 2012). The action-oriented group proposed actions for other professionals, setting priorities for both themselves and for the other professionals, while the

hypothesis-oriented group did not propose actions for other professionals (Andersson, Klang & Petersson 2012). Aged-care nurses set priorities when they proposed interventions for care of the residents (Fossum et al. 2011). Aged-care nurses also used setting priorities when organising relevant interventions and set priorities based on the residents' concerns (Fossum et al. 2011). Home care nurses carried a high level of demand on their limited time with clients. The nurses made decisions using setting priorities to organised their work and enabled them to work in solitary roles over large geographical areas (Kihlgren et al. 2003).

2.3.7. Generating Hypothesis

One of the common thinking strategies used in decision-making is Generating Hypothesis, defined as asserting tentative explanations that account for a set of facts (Andersson, Klang & Petersson 2012; Fonteyn 1998; Fossum et al. 2011; Fowler et al. 2012; Goransson et al. 2007). One of the main themes of paediatric nurses was the generation of hypotheses, they mainly formulated hypotheses regarding their young patients' problems after they had proposed questions (Andersson, Klang & Petersson 2012). Aged-care nurses all generated hypotheses as they tried to interpret the reported observations and symptoms of the residents (Fossum et al. 2011). While ED nurses generated hypotheses about possible diagnosis for the problems presented by the patients requiring triage. The nurses with a higher accuracy of triage more commonly utilised the generating hypothesis strategy than their colleagues with lower triage accuracy (Goransson et al. 2007). Home care nurses used generating hypothesis in conjunction with searching for information to plan patient care. In one example, concerning a 72 year-old man with neurological deficits, the nurse first searches for information on the man's behaviour, communication and occupational ability, the nurse then hypothesises if this is indicative of the man being "... locked inside himself or if he was interested in what was going on outside." (Fowler et al. 2012, p. 6).

2.3.8. Providing Explanations

Providing Explanations, defined as offering reasons for actions, beliefs or remarks, is a

thinking strategy described in five of the studies (Fonteyn 1998; Fossum et al. 2011; Fowler et al. 2012; Funkesson, Anbacken & Ek 2007; Goransson et al. 2007; Kihlgren et al. 2003). Providing explanations is utilized nine percent of the time when aged-care nurses use a thinking strategy to make decisions regarding pressure ulcer risk and is the fourth most commonly used strategy by all of the aged-care nurses for interpretation of data that can provide reasons for the residents' situation, the importance of documentation and for care planning (Fossum et al. 2011). The aged-care nurses provided explanations in regard to performance of tasks at three points in time; prior to the resident's arrival at the facility, the day after the resident arrived at the facility and three weeks after the arrival. The use of this thinking strategy was very similar at all three points (Funkesson, Anbacken & Ek 2007). A study of triage accuracy identified ED nurses provision of explanations for their nursing intervention choices mainly focused on the search for additional information that was not accessible in the ED, such as medical history (Goransson et al. 2007).

2.3.9. Making Choices

Making Choices, defined as selecting from a number of possible alternatives to decide on one or to select an alternative, is a thinking strategy that was occasionally described in these studies (Fonteyn 1998; Fossum et al. 2011; Goransson et al. 2007). ED nurses frequently utilized the making choices strategy in regard to allocating acuity ratings, asking questions, and choosing treatments such as pain relief and measurements that were determined by the patient's age, illness, possible diagnosis and access to measurement techniques (Goransson et al. 2007). Aged-care nurses used making choices as their most common thinking strategy when making decisions on risk of pressure ulcer. When any of the nurses in this study made choices none explicitly based these on research findings (Fossum et al. 2011; Funkesson, Anbacken & Ek 2007).

2.3.10. Making Assumptions

In decision-making studies the nurses occasionally utilize the Making Assumptions thinking strategy, defined as taking for granted or supposing (Fonteyn 1998; Fossum et

al. 2011; Funkesson, Anbacken & Ek 2007; Goransson et al. 2007). Aged-care nurses used making assumptions as a starting point for reasoning that is not taken for granted, such as "... there are normally many old people who are thin... " (Fossum et al. 2011, p. 2431).

The expert nurses made assumptions in relation to co-morbidity, assessment, order of symptoms, availability of resources, medication, history, treatment, progress and patient reaction. The making an assumption strategy was used to a limited extent by ED nurses regarding signs, symptoms and patient abilities when making triage decisions (Goransson et al. 2007).

2.3.11. Asserting A Practical Rule

Asserting a Practical Rule is defined as a truism that has been shown to consistently hold true in practice, calling to mind formal rules such as policies and procedures as well as informal rules, or maxims, that the nurses had learned through their practice experience. This thinking strategy for decision-making has been well described in this literature (Fonteyn 1998; Fossum et al. 2011; Fowler et al. 2012; Funkesson, Anbacken & Ek 2007; Goransson et al. 2007; Hedberg & Larsson 2002; Kihlgren et al. 2003; Usher et al. 2009). Mental health clinicians used informal personal protocols much more than formal protocols such as clinical practice guidelines or evidence-based protocols when making decisions about as required medications (Usher et al. 2009). The strategy of Asserting a Practical Rule was used by aged-care nurses regarding pressure ulcer care planning including: rules of treatment, diagnosis and the need for particular interventions based on each resident diagnosis and condition (Fossum et al. 2011). The ED nurses with increased triage acuity utilized asserting a practical rule about procedures, treatment, measurement and acuity ratings. ED nurses with increased triage acuity frequently moved from searching for information to asserting a practical rule (Goransson et al. 2007).

2.3.12. Stating A Proposition

Stating a Proposition is defined as a rule governed by an If–Then (Fonteyn 1989). It is a thinking strategy that is commonly described in the literature on decision-making (Fonteyn 1998; Fossum et al. 2011; Funkesson, Anbacken & Ek 2007; Goransson et al. 2007; Hedberg & Larsson 2002). Stating a proposition was used when the aged-care nurses related the residents' situation to their symptoms or diagnosis (Fossum et al. 2011), or to identify circumstances needed for the trustworthiness of reasoning, such as "It might not be totally wrong to lose a few kilos but she must not do it too quickly either ... " (Funkesson, Anbacken & Ek 2007, p. 1113) The strategy was utilized more often prior to the first consultation and utilised much less frequently the day after the consultation and three weeks later. The ED nurses used stating a proposition; to choose a plan of action based on symptoms; if the electrocardiogram was abnormal then the triage acuity rating would be high and the triage would result in a physician consultation as soon as possible. Importantly resource availability affected intervention choice "... if this was an evening I would have triaged the patient to a primary health care setting...(pp168)" (Goransson et al. 2007) The expert nurses utilised this thinking strategy in a variety of ways including to 'rule in' problems "... if he hasn't urinated by the end of my shift then we have a problem..." as well as to 'rule out' problems " ... if she had respiratory distress she'd be tachycardic ..." (Fonteyn 1998, p. 63)

2.3.13. Lesser Used Thinking Strategies

The least used thinking strategies included Qualifying, Pondering, Making Generalisations, Posing Questions and Making Predictions. Nurses sometimes used the qualifying thinking strategy, defined as modifying, limiting or restricting (Fonteyn 1998; Fossum et al. 2011; Fowler et al. 2012). Expert nurses who spent limited time on assessing data used qualifying to reflected on their suggested interventions in planning (Fonteyn 1998). Aged-care nurses were identified as rarely used qualifying (Fossum, 2011).

Pondering, mentally pausing to reflect on the meaning of a piece of information

(Fonteyn 1998; Fossum et al. 2011; Goransson et al. 2007) was used by the ED nurses when they pondered on patient symptoms and what interventions should be undertaken (Goransson et al. 2007). The aged-care nurses' use of pondering was very limited. (Fossum et al. 2011). Experienced nurses used this pondering strategy to consider the patient's symptoms or level of discomfort and to reflect on test results in relation to treatment or diagnosis (Fonteyn, 1998). Making generalisations, defined as inferring from many particulars or to surmise from many details, is a thinking strategy that was described in two of the studies (Fonteyn 1998; Fossum et al. 2011). Expert nurses made generalisation about diagnosis, interventions, medications, signs and symptoms (Fonteyn 1998). The strategy of making generalisations was used to a very limited extent by aged-care nurses (Fossum et al. 2011)

Posing questions, defined as asking for answers without really expecting to receive them (Andersson, Klang & Petersson 2012; Fonteyn 1998; Fossum et al. 2011; Goransson et al. 2007) was used by expert nurses in regard to interventions, severity of condition, behaviour, history, and medications (Fonteyn 1998). Paediatric nurses generated questions which often led to the generation of a hypothesis (Andersson, Klang & Petersson 2012). It was one of the least frequently used thinking strategies by aged-care nurses (Fossum et al. 2011). Making predictions, defined as declaring in advance, was a thinking strategy occasionally utilized by nurses (Fonteyn 1998; Fossum et al. 2011; Goransson et al. 2007; Hedberg & Larsson 2002). Expert nurses used this strategy to anticipate care predict interventions and treatment in advance (Fonteyn 1998). When triaging patients the ED nurses utilized making predictions to a limited extent in regard to actions to be carried out, such as collection of additional data or medical treatments as well as to make predictions about findings. (Goransson et al. 2007).

2.4. Was the use of these strategies different between areas of nursing?

The process of decision-making is both complex and knowledge intensive. Resolution of complex problems requires knowledge, experience, thinking skills and the ability to think in context (Fonteyn 1998). Therefore it is not surprising that different specialties utilize different thinking strategies in different ways. Although the aged-care nurses used 17 thinking strategies there were considerable differences in how often they used them; recognizing a pattern, stating a proposition and setting priorities are thinking strategies that were used infrequently or not at all (Fossum et al. 2011). One third of aged-care nurses did not use the thinking strategy of recognizing a pattern and support may be required in the aged-care setting as recognising a pattern is an important aspect of clinical reasoning. Similarly the judging the value strategy was infrequently used potentially indicating a lack of risk assessment (Fossum et al. 2011).

In the ED study only 14 of the thinking strategies were used. In this study on triage decisions the asserting a practical rule strategy was used the most frequently, along with forming relationships, making choices, generating hypothesis and judging the value. The strategies of making assumptions, making predictions and posing questions were least frequently used by ED nurses and the strategies of providing explanation, recognising a pattern, searching for information, stating propositions and setting priorities were also used infrequently as others (Goransson et al. 2007). The nurses with high accuracy of triage made more assertions about practice rules, generated more hypotheses and made assumptions more frequently than their colleagues with low accuracy of triage. ED nurses utilized the thinking strategies in different ways to arrive at triage decisions (Goransson et al. 2007).

2.5. Summary of the Studies

Ten studies that describe the decision-making of nurses in terms of thinking strategies have been identified. These studies, from a variety of clinical areas, described the

similarities and the differences in thinking strategies used by nurses in either a specific clinical setting or across different settings clinical settings. Due to the qualitative nature of the subject most of these studies had a small number of participants. All of the studies were undertaken in westernised countries and are therefore culturally bound.

These studies provided in-depth data on a specific clinical situation. However, there is limited transferability of the information to other clinical situations. One study on aged-care nurses mention nine common strategies, the studies on home care discuss six frequently used thinking strategies and the two studies on mental health describe frequent use of the same two thinking strategies. Two articles described all 17 thinking strategies; Fonteyn's original TIP study and Fossum's study of nurses in aged-care (Fonteyn1998; Fossum 2011). The second aged-care nurse study reported the use of 14 thinking strategies (Funkesson, Anbacken & Ek 2007). The study on ED nurses listed the use of 14 different thinking strategies. This literature review has provided the basis for the template that was used in the analysis of the CFH nurses' clinical decision-making. This 17 thinking strategies analysis template has enabled a thorough analysis of the data collected from the CFH nurses working at Tresillian and has been chosen due to its applicability across clinical settings.

2.6. Conclusion

CFH nursing is increasingly filled with complexity, uncertainty and risk due to increasing patient acuity, multiple co-morbidities and enhanced use of technology. Knowledge and expertise required for practice continues to evolve (NSW Department of Health 2011). There is still much more to be known about the decision-making process that nurses use and increased understanding of this concept will enhance nursing education, improve nursing practice and offer direction for further research (Simmons 2010). Decision-making in nursing is concerned with managing a range of information from diverse sources to make professional clinical judgement. As the scope of practice of CFH nurses continues to expand and to increase in complexity it is imperative that the nurses develop a comprehensive range of thinking strategies to support clinical

decision-making (Fowler et al. 2014).

Although there are studies that examine how nursing decisions are made and the factors that influence those decisions, no studies were found that describe how clinical decisions are made following administration of psychosocial questionnaires or describe the specific decision-making practices used in CFH nursing. Further research is required to examine the consequences of critical thinking in specific situations (Simmons 2010). The need for psychosocial assessment has been well documented in the literature. The purpose of this study is not to investigate the benefit of psychosocial assessment but to describe the decision-making of those who conduct the psychosocial assessment. There is a gap in the literature regarding the decision-making of nurses who are experienced in using psychosocial assessment. This study contributes to the body of knowledge on the critical thinking of CFH nurses that is a necessary outcome of conducting a psychosocial assessment. This research provides a detailed description of the thinking strategies that CFH nurses utilize to make decisions following psychosocial assessment in an early parenting setting.

CHAPTER THREE – STUDY DESIGN AND METHOD

3. Introduction

This research project investigates how CFH nurses make clinical decisions when conducting a postnatal psychosocial assessment. The psychosocial assessment to determine risk of mental illness is part of the early parenting centre's admission assessment. Critical Incident Technique (CIT) provides the framework for this research study, as it encouraged the nurses to tell their stories and provided rich, contextual data. Content Analysis (CA), based on an apriori template, provided the first method for analysing the thinking strategies that the nurses used to make decisions. Thematic analysis provided the second method for analysing the domains of information that the nurse used the thinking strategies for. Analysis of both the thinking strategies and information domains have provided a comprehensive description of the nurses' decision-making.

3.1. Study Design

3.1.1. Setting and Context

This research was conducted at three of the Tresillian Family Care Centres, these are identified as early parenting centres (EPCs). Tresillian is located in Australia, in four Sydney suburbs of Willoughby, Belmore, Penrith and Wollstonecraft. The residential services and day-stay services provide early intervention, support and education to parents with well children under three years of age. The research was conducted at both residential and day-stay units at three centres – Willoughby, Belmore and Nepean. The Wollstonecraft centre does not have a residential service. Registered nurses are responsible for conducting the admission of the parent and infant to the EPCs. A psychosocial assessment, including EPDS and PNRQ, is routinely completed for all women admitted to Tresillian EPCs.

3.1.2. Ethical Considerations

Ensuring participant respect and privacy, as well as acknowledgement of their contribution to research, is a crucial part of any project (Australian National Health and Medical Research Council 2007.) This study was approved by the Human Research Ethics Committee (HREC) of the University of Technology, Sydney (Appendix 3 provides UTS ethics approval letter). Tresillian provided approval for data to be collected from staff members (Appendix 4 provides the Tresillian letter of support).

3.1.3. Recruitment of Participants and Consent Process

Information about this research study was presented during meetings at each of the three EPCs to explain The Study aims and method, and answer the nurses' questions. Nurses that volunteered to participate in The Study were telephoned to arrange their preferred interview time. The nurses were encouraged to bring to the interview the medical record for the woman they had selected to discuss. It was anticipated that these records would assist and guide the nurses' recollection of the psychosocial assessment. The nurses were reassured that the researcher would not ask to view these medical records.

3.1.4. Possible Risk and the Right to Withdraw

Participation in The Study was voluntary and the participants were informed that they could withdraw at any time or choose not to answer specific questions without negative consequences or having to provide a reason. The nurses were provided with a participant information sheet (refer to Appendix 5) and a consent form (refer to Appendix 6) which listed the contact details of The Study supervisor and UTS Ethics Officer. Participation in this study held a low level of risk of harm, as these nurses were all experienced in conducting and managing the outcome of psychosocial assessment. All Tresillian nurses participated in regular case management discussions, providing them with access to supportive processes that enabled reflection on any distressing information that they received. In addition, the Tresillian's Employee Assistance Program (EAP) was available throughout The Study to provide confidential counselling

and support if required.

3.1.5. Selection of Participants

The aim of sampling in qualitative research is to obtain data with depth and richness of information (Minichiello et al. 2004; Sandelowski 2009). As the PNRQ is a new tool there were a limited number of nurses with experience in using the PNRQ for psychosocial assessment within the broader nursing and midwifery workforce. All Tresillian CFH nurses routinely used the PNRQ for psychosocial assessment and therefore they were eligible to participate. This study used a purposive approach to recruit participants who had a wealth of experience in decision-making using information from the psychosocial assessment.

3.1.6. Participant Inclusion Criteria

All registered nurses at Tresillian with additional qualifications in CFH nursing and who had administered a PNRQ in the past 2 weeks were invited to participate.

3.1.7. Participant Exclusion Criteria

Nurses were excluded if they had not experienced administration of the PNRQ or if they were unavailable during the data collection period.

3.1.8. Impact of the Study on Participants

Given the nature of the research and the inclusion and exclusion criteria identified above it was anticipated that the nurses would not experience harm or distress.

3.2. Data Collection

3.2.1. Critical Incident Technique

Critical Incident Technique (CIT) provided the framework for how data were obtained in

the context of completing a psychosocial assessment. CIT is a set of procedures for collecting information on human behaviour to facilitate the potential usefulness of these data in training and education (Flanagan 1954, p. 335). It assists solving practical problems as the technique encourages research participants to recall descriptions of actual events rather than how things should be (Bradbury-Jones & Tranter 2008). CIT has been validated through its use in the exploration of many different nursing issues (Bradbury-Jones & Tranter 2008). The main strength of CIT is flexibility as it does not consist of a single, rigid set of rules but should be thought of as a flexible set of principles which must be modified and adapted to meet specific situations. The flexibility of CIT was helpful in adapting this method of collecting data from the nurses as it encouraged them to tell one story of when they had undertaken psychosocial assessment not an amalgamation of assessments. In this way the clinical decision-making process of the nurse was identified.

A critical incident is an observable human activity, sufficiently complete in itself (Flanagan 1954, p. 327). The focus of CIT is on a specific example, incident, situation or occasion (Bradbury-Jones & Tranter 2008). It refers to a clearly demarcated scene with a beginning and an end. It permits inferences and predictions to be made about the activity (Bradbury-Jones & Tranter 2008). Completion of the psychosocial assessment and use of the information obtained to make clinical decisions on the woman's risk of mental illness is a complete activity, with a beginning, middle and an end. The beginning of this incident occurs as soon as information on the woman is available to the nurse. The middle involves the nurse using information to make decisions. The end of this activity is the outcome of the assessment. The incident must have a discernible impact or some outcome, either a negative or positive contribution to the accomplishment of an activity (Flanagan 1954, p. 335). The outcome of a psychosocial assessment is the planning care for the woman, which would contribute to her wellbeing.

Face-to-face interviews were utilized in this study as they are the recommended method of data collection for CIT (Bradbury-Jones & Tranter 2008). The aim of the interview was to investigate how CFH nurses make clinical decisions during a postnatal psychosocial assessment from the relationship between what was said and how it was said in order to ascertain what the speaker was attempting to convey (Streubert & Carpenter 2011). Interviews enabled flexibility for the nurses to exert control, explore their thoughts and allow their ideas to have priority. The interview also provided flexibility for the researcher to prompt for further information and clarify meaning (Holloway & Wheeler 2010). Using a semi-structured interview protocol provided a guide for questions while retaining an inherent opportunity for story telling (Streubert & Carpenter 2011).

3.2.2. Interviews

Interviews were arranged to allow data to be collected from each of three EPCs where the nurses regularly undertake psychosocial assessment and design care plans with the women. Semi-structured interviews were conducted during the nurse's shift, which removed time constraint as a barrier to participation. Interviews lasted between 19 and 50 minutes and yielded 422 minutes of information. The interviews were digitally recorded. One admission story was requested from each nurse in order to provide a comprehensive account of a complete psychosocial assessment process (Flanagan 1954). To enable the nurses to provide a description of one single event a structured approach to data collection was used that included requesting antecedent information (what led up to the psychosocial assessment), a detailed description of the assessment process itself and the outcome of the assessment. The nurses were encouraged to consult the medical record that they brought to the interview whenever they felt the need to clarify their memories of the incident. This approach minimised the chances of the nurses giving an amalgam of incidents and reduced the dilemma of whether to include data that may be rich but does not meet The Study criteria (Bradbury-Jones & Tranter 2008). The interview questions are provided in Appendix 7.

The initial contact at the interview included a discussion of the aims of The Study and confirmation of the consent. Demographic data were obtained by asking the following ten questions. How many years have you been nursing? How many years of postnatal experience have you had? What CFH nurse qualifications do you hold? How many years since you have qualified as a CFH nurse? What other post graduate qualifications do you have? What other areas of nursing do you have experience in? Do you have any mental health nursing experience? How many years have you been with Tresillian? How many months have you been using the PNRQ? What process did you undergo to learn how to use the PNRQ, both formal and informal?

The nurse was then asked the critical incident question:

> *I am now going to ask you to think of a woman you have used the PNRQ with during their admission to the unit. You can refer to the medical records you have brought with you to refresh your memory. Can you recall what occurred in regard to risk assessment for mental illness and the use of the PNRQ?*

Interviews were conducted until theoretical saturation was evidenced that no new information was recurring within the interviews (Dawson 2009; Grbich 2013; Silverman 2010). All attempts were made to look for the most diverse data (Dawson 2009). For this research study an ongoing analysis of the data for theoretical saturation was conducted as a guide to the number of nurses to interview. By the 12th interview similarity and repetition in instances were apparent and no new data were being collected, indicative of data saturation. Once saturation was achieved no further interviews were conducted.

3.2.3. Researcher Field Notes

Field notes provide interview transcription with context or interpretation of behaviour (Grbich 2013; Mulhall 2003). For the CFH Nurses Decision-Making study field notes were made during each interview to record when body language, such as pointing, was used by the nurse or in order to clarify either the context or the nurse's meaning of a

comment. After each interview, observations were added to the field notes to increase understanding of the nurse's story and to enable the data to be understood within the context of the interview. During the analysis process these notes provided a valuable guide to context and are noted in parentheses where used in Chapters Four and Five.

3.3. Data Management

3.3.1. Transcription

Audio recordings were reviewed for initial impressions and to obtain a broad sense of meaning. The audio recordings were then transcribed verbatim and checked for accuracy. The researcher initially transcribed digital audio recordings of the interviews. As transcription was time consuming and the available time for transcription was limited, a professional transcription service (Research Assist) was then employed to complete the transcriptions. This service provides a confidentially agreement for clients. Once all of the transcripts had been saved and backed up they were reviewed for general impressions and to obtain a broad sense of meaning. These transcripts were then imported into NVivo 10.0 for initial analysis of both thinking strategies and information domains.

3.3.2. Data Security

To ensure data security digital recordings are stored in a password protected computer file. The paper transcripts are locked in a secure filing cabinet, in a home office. These data will be kept for five years before being securely destroyed (Australian National Health and Medical Research Council).

3.3.3. Ensuring the Right to Confidentiality, Privacy and Anonymity

To ensure anonymity each participant was given a code and the participant code was used for both audio recordings and field notes prior to transcription. Only the researcher had access to the participant codes. The academic supervisors were also able to access the participant codes if required. As there were only a small number of

staff at each centre there was some risk that participants' comments may be recognised. To minimize this risk all data were aggregated so that the participants cannot be easily identified. The time delay from data collection to publication of results will also assist in ensuring confidentiality. As the researcher or supervisors has no management accountability and no reporting line, information obtained will not be inadvertently passed on within Tresillian.

3.4. Study Participants

All of the 12 study participants were registered nurses and registered midwives, with experience of caring for women in the postnatal period, all with additional CFH nursing qualifications. They all had experience conducting a psychosocial assessment within the previous two weeks. The average length of time that participants had been nursing was 31 years and ranged from 18-to-35 years. The majority of participants held a post-graduate certificate in CFH nursing and two held a Graduate Diploma in Community Health. Some participants had gained additional qualifications including lactation and special care nursery, Graduate Diploma in Counselling, Bachelor in Health Science, Graduate Certificate in Mental Health, Graduate Certificate in Paediatrics, Bachelor of Psychology (currently completing) and Masters of Social Work (currently completing).

The detailed demographic information is not described to protect the anonymity of the participants, as the sample was small and the participants were all from the same organisation. However a general description of the participants experience in nursing and in this clinical area, as well as their tenure with the organisation is provided with the findings of their interview.

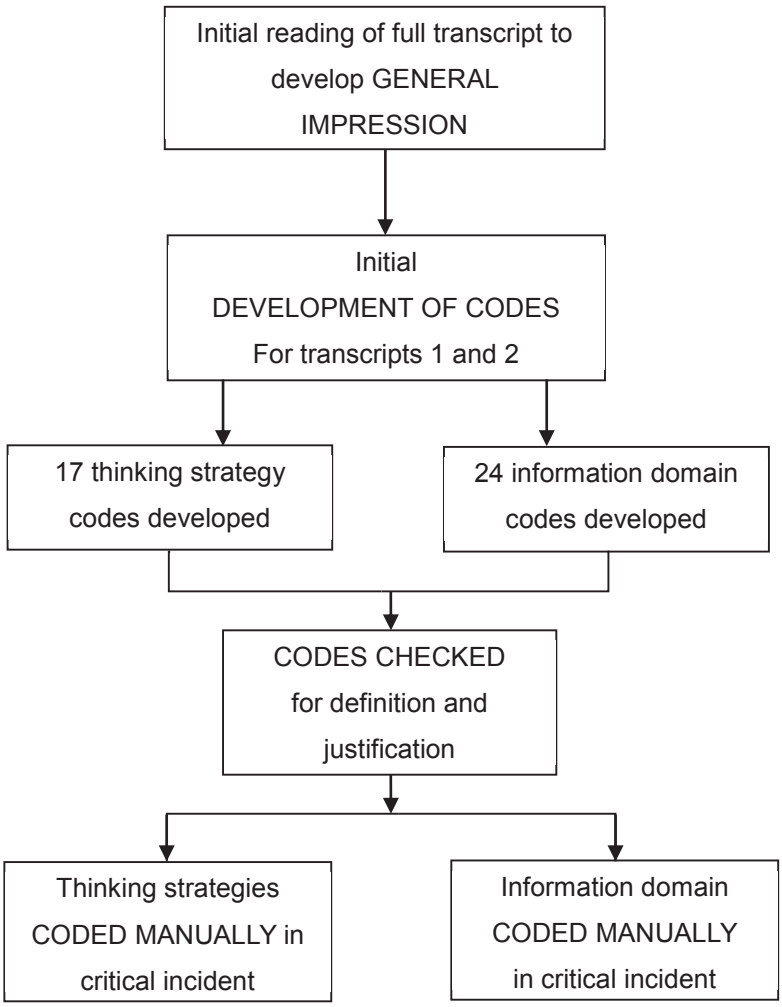
3.5. Analysis

3.5.1. Analysis Procedures

The analysis process progressed in an ordered fashion. It consisted of numerous stages

as demonstrated in Figure 2.

2. Flow chart of analysis procedure



The procedure used to analyse the data required an initial reading of transcripts to provide a general impression and four themes were noted: general information on the woman (... her father is terminally ill ...); general information on the nurse or her practice (... the domestic violence form ... it's not necessarily the form that I think necessarily helps ...); assessment information specific to the woman (... question 11 [on the PNRQ] was very much that the child's been unsettled...); and assessment information specific to the nurse (...the PNRQ gives you a chance to reflect...).

Following this general overview an analysis of each interview transcript was undertaken using NVivo 10.0. qualitative research software. There were two analytic approaches used and two areas of analysis: 1) content analysis was used to identify the nurses' thinking strategies; and 2) thematic analysis was used to identify the information domains. The first two interview transcripts were coded using the thinking strategies coding template from the TIP study that provided a comprehensive set of themes for nurse decision-making. Following completion of this template coding, collaboration with academic supervisors was undertaken to ensure clear agreement of definition and justification for the inclusion of each code. The thinking strategies in the remainder of the transcripts were then coded.

Data were then coded a second time using thematic analysis to identify the domains of information that the nurses draw information from. Again the first two interviews were coded using the emerging themes of domains of information that the nurses draw from to make decisions. Following completion of this coding, collaboration with academic supervisors was undertaken to ensure clear agreement of definition and justification for the inclusion of each code. The information domains in the remainder of the transcripts were then coded.

Once all 12 transcripts had been coded in NVIVO for both thinking strategies and information domains a manual coding was undertaken for just the critical incident within each interview. This provided an additional checking mechanism to ensure that the thinking strategy codes and the information domain codes were accurate for the critical incident in each interview. This system of analysis and re-analysis, from general to specific, provided familiarity with the data and thorough allocation of the most representative themes or codes. Once analysis of these data was completed collaboration with academic supervisors was again undertaken to ensure agreement of coding. The findings were then summarised.

3.5.2. Content Analysis of Thinking Strategies

A common feature of qualitative research is the production of complex and extensive data that requires transition to an understanding of the participant experiences depends upon the data analysis technique (Silverman 2010). Content analysis is a technique widely used to interpret meaning from the content of data, focused on the characteristics of language as communication and attention to the contextual meaning (Hsieh & Shannon 2005). The specific type of content analysis approach used is determined by the problem being studied and the interests of the researcher (Hsieh & Shannon 2005). Direct content analysis is employed when existing research would benefit from further description (Hsieh & Shannon 2005). Coding categories were identified using key concepts from the literature review and the theoretical framework determined operational definitions of each code (Hsieh & Shannon 2005).

Content analysis provided organisation of the interview data through a hierarchy of broad themes based on an assumption that to answer the research question the focus should be on certain aspects of the incident under investigation (Flanagan, 1954.) The apriori template provides a structure for analysis, while allowing flexibility for the template to continue to be developed as the analysis progresses (King, 2002). This template analysis method has been used in other nursing studies (Elo & Kyngas 2008; Holloway & Wheeler 2010; Streubert & Carpenter 2011), predominately in mental health and public health nursing (Elo & Kyngas 2008). Template analysis acknowledges that the researcher's perspective is inevitable, as the analysis is influenced by the inability of the researcher to stand outside the social world (Hammersley 1996).

The apriori themes in this project were determined by the research question and the literature review on clinical decision-making or thinking strategies used for psychosocial assessment. The 17 Thinking Strategies from the Thinking in Practice Study (Fonteyn 1998) provided the initial template to analyse the nurses' thinking in term of the specific strategies that they used for each piece of information. The 17 thinking strategies identified in the TIP study (Fonteyn, 1998) provide a comprehensive

description of all possible strategies that a nurse may use in a clinical situation. These 17 thinking strategies have been used as an apriori template in a number of nursing research projects. Thinking strategies included: Searching for Information, Judging the Value of Information and Recognising a Pattern in the Information. All of the thinking strategies were considered equally. Table 5 below provides an outline of the thinking strategies. A detailed description of each thinking strategy is provided in a Glossary of Thinking Strategies in Appendix 8.

Table 5: Thinking Strategy Definitions

Thinking Strategies	**Definition**
Asserting a practical rule	asserting a truism shown to consistently hold true in practice
Drawing Conclusions	reaching a decision or forming an opinion
Forming Relationships	connecting information to further understanding
Generating Hypothesis	asserting a tentative explanation that accounts for a set of facts
Judging the Value	opinion of worth in terms of usefulness, significance or importance
Making Assumptions	taking for granted or supposing
Making Choices	select from number of possible alternatives, decide on and pick out
Making Generalisations	inferring from many particulars
Making Predictions	declaring in advance
Pondering	mentally paused to reflect on the meaning of a piece of information
Posing Questions	asking for answers without really expecting to receive them
Providing Explanations	offering reasons for actions beliefs or remarks
Qualifying	modifying, limiting or restricting as by given exceptions
Recognising Pattern	identifying characteristic pieces of data that fit together
Searching for Information	mentally looking for missing or concealed information
Setting Priorities	ordering concepts in terms of importance or urgency
Stating a Proposition	stating a rule governed by IF-THEN

3.5.3. Thematic Analysis of Information Domains

Data were identified, analysed, described and reported through thematic analysis. This method offers a flexible approach to analysis of qualitative data that can be undertaken across a range of theoretical and epistemological approaches and used in order to do different things within different frameworks (Hsieh & Shannon 2005). The themes that are developed capture the importance in the relationship between the data and the research question being asked (Hsieh & Shannon 2005). The Nurses Decision-Making study used thematic analysis to determine patterns regarding the domains that the nurses drew information from when they used thinking strategies. The domain or themes of information included the items listed on the PNRQ: such as recent stressors, mental health history, partner support and history of abuse. These domains of information are included in the literature (Austin & Committee 2013; Austin, Highet & Committee 2011; Leigh & Milgrom 2008; Milgrom et al. 2011; National Institute for Health and Clinical Excellence (NICE) 2007). The nurses also included other themes such as sleep, parenting and care of the child, and the woman-determined issues or goals. A secondary outcome of this analysis approach was the quantification of the information domains or the number of times they were spoken about by the nurses. The 24 information domains are listed in Table 6, below, along with an explanation and the total number of times each domain was used in this study.

Table 6: Information Domains

Information Domain Title	Usage
PARENTING AND CARE OF CHILD (include breastfeeding and care of unwell child)	217
ASSESSMENT TOOLS (EPDS and PNRQ)	174
WOMAN DETERMINED ISSUES OR GOALS	127
SLEEP (includes baby settling / sleep, woman sleep and exhaustion)	101
SOCIAL SUPPORTS	72
HEALTH CARE PROFESSIONAL (referral from a health care professional / service)	64
PARTNER SUPPORT	60
FINANCE (includes social situation and housing)	53
MENTAL HEALTH HISTORY	51
ANXIETY (includes feeling nervous)	47
OBSTETRIC HISTORY	43
AFFECT OR MOOD (includes signs and symptoms as well as general well-being)	42
BIRTH EXPERIENCE	36
FAMILY DYNAMIC	25
MEDICAL HISTORY (includes age)	19
HISTORY OF ABUSE (emotional, physical or sexual)	14
RELATIONSHIP WITH OWN MOTHER	14
RECENT STRESSORS (e.g. bereavement)	12
PERFECTIONISTIC TRAITS	10
DOMESTIC VIOLENCE	8
CULTURE OR BACKGROUND	4
GUILT	4
FAMILY HEALTH HISTORY	3
DRUG OR ALCOHOL USE	2

Psychosocial assessment is described through the analysis of the nurses' thinking strategies and the domains of information that they accessed for each thinking strategy. Detailed accounts of what actually happened during the woman's assessment

provided the data for analysis. This critical incident was the basic unit of analysis. Template analysis provided the method of analysing the nurses' response to the psychosocial assessment in terms of thinking strategies. Thematic analysis was used as the method of analysing the type of information, or domain, that the nurse drew the information from. This systematic and objective process of describing and quantifying the incident enabled an understanding of these data by distilling the nurses' words into related categories and assuming that, when classified, the words or phrases share the same meaning. It allowed inferences to be made from the data to the context of the data with the purpose of providing knowledge, insight and a practical guide to the nurse's decision-making.

3.6. Trustworthiness

In qualitative research rigor or trustworthiness provide support to the argument that the findings are worthy of attention (Elo et al. 2014; Shenton 2004). A common feature of trustworthiness criteria is that they report the analysis process accurately and it is important to scrutinise the trustworthiness of every stage of analysis; preparation, organisation and reporting (Elo et al. 2014).

3.6.1. Credibility

Credibility, one of four characteristics of trustworthiness, is demonstrated in presentation of a true picture of the findings (Elo et al. 2014; Shenton 2004). Adoption of well-established research methods can help to present a true picture and promote credibility (Shenton 2004). Use of CIT is well documented in nursing literature as a credible data collection method (Bradbury-Jones & Tranter 2008). Use of CIT ensured the nurse’s story of the psychosocial assessment process provided data that went beyond superficial reflection. Content analysis and thematic analysis are also well documented in the nursing literature as credible methods of analysing the data (Elo et al. 2014; Elo & Kyngas 2008).

Accurate description of participants also provides credibility (Elo et al. 2014). In the

CFH Nurses Decision-Making study the nurses are described by gender, age, experience in the clinical specialty as well as qualifications and experience in the organisation. The development of familiarity with the participating organisation culture promotes confidence in credibility (Shenton 2004). This researcher had previously provided intermittent research assistance over the prior two years at one of the EPCs, which provided the researcher with an understanding of the organisation without immersion that may have detrimentally influenced professional judgement (Shenton 2004).

Frequent supervisor debriefings provided a widening of researcher vision, identified unsound research practices and enabled improved or altered practices to be developed; as well as ensuring a sounding board to test developing ideas (Shenton 2004). The supervision meetings ensured sound methodology and accuracy of coding and supported a developing interest in perinatal mental health assessment into a well-considered project on CFH nurses clinical decision-making during postnatal psychosocial assessment.

In addition, the findings of The Study were presented at three CFH nursing education days provided by Tresillian. Through informal verbal feedback there was an overwhelming interest and agreement from the nurses on the thinking strategies. The frequency of use of the information domains was requested from the attendees and a written vote demonstrated an agreement with The Study findings on frequency of use. (Voting scores are detailed in Appendix 9).

3.6.2. Transferability

Transferability is the potential for extrapolation (Elo et al. 2014). It is demonstrated in presentation of sufficient detail of the context of fieldwork to enable the reader to decide if that environment is similar to an environment the reader is familiar with so that if they believe their situation is similar to The Study situation they will relate their findings. This may include the number of participants, type of people who contributed the data, the data collection methods, the number of organisations taking part and

where they are based (Elo et al. 2014). For the CFH Nurses Decision-Making study 12 CFH nurses who were interviewed for 19-to-50 minutes each regarding their recent experience of postnatal psychosocial assessment in an early parenting centre as part of Tresillian admission procedure for both day-stay care and residential care. Readers who are familiar with a similar assessment situation may determine that these findings provide a baseline understanding which can be compared to similar assessments or similar studies of nurses' decision-making.

3.6.3. Dependability

A third focus of trustworthiness; dependability, refers to the stability of data, both over time and under different conditions (Elo et al. 2014). It determines if future researchers would be able to repeat the work (Shenton 2004). The use of CIT to gather data and the use of content analysis using a template of Fonteyn's 17 Thinking Strategies in combination with thematic analysis of the domains that the nurses drew their information from for each thinking strategy would enable future researchers to repeat the project to investigate other health care professionals behaviours when undertaking postnatal psychosocial assessment. However, the researcher does realise that these findings provide a description that is frozen in the time period of this study and any change to the training, education or procedural requirements of Tresillian CFH nurses' psychosocial assessment may change the findings of future studies.

3.6.4. Confirmability

A fourth focus of trustworthiness, confirmability, demonstrates that the findings emerge from the data, rather than from the researchers' disposition. Confirmability may be increased through the admission of the researcher to beliefs or predisposition that underpin research decisions that have been made or of methods that have been adopted (Shenton 2004). The use of 17 thinking strategy codes from a previous research project and collaboration with academic supervisors demonstrated confirmability that the findings emerge from the data. The thematic analysis of information domains would have been influenced by the clinical experience of the

researcher and the literature reviews that were undertaken throughout the research project.

Familiarity with the data was gained by analysis and reanalysis of the data from general to specific. The use of both template analysis and thematic analysis has provided a detailed and diverse description of clinical decision-making. Use of similar methods and similar codes to those that have been used in other studies of decision-making in nursing allowed the findings of this study to be compared to other nursing decision-making studies. The findings from two of the critical incidents are presented in Chapter Four as case studies of nurses' decision-making. Chapter Five provides a description of the most commonly used thinking strategies and of the most commonly described information domains.

3.7. Conclusion

This chapter has provided a description of this CFH Nurses Decision-Making Study. Chapters Four and Five will provide the analysis findings. Chapter Four describes the thinking strategies and the domains of information that the CFH nurses utilized when conducting postnatal psychosocial assessment. To provide a comprehensive picture of the nurses' clinical decision-making two of the 12 critical incidents are presented in their entirety with all domains of information and the thinking strategies identified. Chapter Five illustrates the complexity of the women's situations as well as the nurses' flexibility of thinking that is required for postnatal psychosocial assessment through the integration of parenting information and the woman's family's situation when assessing the woman's mental health status. The nurses used thinking strategies within 25 different domains of information. The four most commonly used information domains were: Parenting and Care of the Child, Assessment Tools, Woman Determined Issues or Goals and Sleep (Woman's Sleep or Child Sleep) are presented with the most commonly used thinking strategies with in each of these information domains.

CHAPTER FOUR – TWO CASE STUDIES ON DECISION-MAKING

4. Introduction

The aim of this chapter is to describe the thinking strategies that the CFH nurses utilized to make decisions during and from the postnatal psychosocial assessment. To provide a comprehensive picture of the nurses' clinical decision-making two of the 12 critical incidents are presented in their entirety. In these two case studies the thinking strategies that were used are identified and highlighted in bold. This detailed description shows the complexity of thinking required by the nurses in order to provide a psychosocial assessment.

4.1 Nurse Smith

Nurse Smith is an experienced CFH nurse, who has worked at the early parenting centre for many years. Nurse Smith holds post graduate qualifications in midwifery, child and family health, community health, early childhood nursing and counselling. The woman in her care, Susan, and her four month old baby, Taylor, were admitted with sleeping / settling issues.

> *She was referred in with, you know, sleeping / settling issues ... On the referral, which was made by a GP, she did appear to be teary at times and frustrated.*

The nurse began the psychosocial assessment by **Searching for Information** about the woman's reason for admission from the referral form. In this incident the baby had sleeping and settling issues. The referral also provided information that the woman was teary and frustrated. **Searching for Information** from the referral form continued:

> *There was no history of mental health illness. So that was what I read on the referral [*form*].*

The nurse was able to determine that the woman had no history of mental illness. This was confirmed by further **Searching for Information** using the EPDS and the PNRQ:

> *And then during the ... admission she filled out the Edinburgh Postnatal Depression questionnaire and her score was quite low. It was 4, negative on question 10.*

She determined that minimal indication of symptoms or risk factors were present as the EPDS score was four and the response on question 10, regarding risk of suicide or self-harm, was negative. The nurse then **Judged the Value** of the EPDS - her score was quite low. Nurse Smith went on to use the woman's PNRQ responses:

> *She also filled out the PNRQ [*question 4 on recent stressors*] and flagged that her main stress was financial.*

Here the nurse **Searched for Information** from the PNRQ to determine that the woman's main issue is financial. Her **Search for further Information** continued:

> *I did do the domestic violence, and there was no issues around that. And the substance abuse. There were no issues around that.*

The nurse utilized a lack of fit for the thinking strategy **Recognising a Pattern** in order to rule out domestic violence and substance abuse as risk factors. Ruling these out allowed the nurse to focus on Susan's concerns and the issues that required her baby's admission to an early parenting centre.

> *...due to the financial situation, they'd actually moved in with her parents. And I think they did that because they were in the process of trying to buy their own home...*

Searching for Information on the woman's housing situation and **Forming a Relationship** between this and the information that the woman had moved in with her parents enabled the nurse to determine that a significant issue for Susan was financial issues.

Nurse Smith **Searched for further Information** regarding finances:

Her husband was working. She was on maternity leave ... she ran a childcare centre and she was going back to work one day a week. Usually worked ... you know ... Monday to Friday in the past.

The nurse **Searched for Information** regarding Susan's employment situation as well as her husband's employment situation and utilized **Forming Relationships** to relate these to the financial situation. The nurse continued to develop a picture of the woman's financial situation:

... the added stressor, I think, with this family, was that the baby had a hip dysplasia and had been in a harness for weeks, so there was lots of visits to the doctor and added expense.

Here the nurse **Provided An Explanation** that the baby's need for medical intervention placed a strain on the family finances. The nurse used the thinking strategy of **Generating A Hypothesis** to propose that the baby's medical issue added to the family's financial stress.

Following on from the initial information, that Susan felt finances were a stressor, Nurse Smith **Searched for Information** to confirm her hypothesis:

I just went through the questions with her and asked if there was anything that she flagged, and when she said, finance, I sort of asked her a bit more about that, but in sort of context with the rest of the form.

The nurse then went on to **Qualify** this information on finances as a stressor:

Although the financial aspects were worrying her, overall, she actually had quite a lot of family support ... she was moving in with her parents, the partner was quite supportive.

After **Drawing a Conclusion** that the woman's main stressor is financial, the nurse moved on to consider social supports and utilized **Recognising a Pattern** to **Draw a**

further Conclusion that for Susan the support her partner provided and available social supports were good.

Nurse Smith moved on to **Search for Information** on anxiety:

> *She did state that she was a worrier and I think kind of obsessed a bit about what was happening ... she just lost the income because she was [previously] working full-time and now she's not.*

Here the nurse utilized the thinking strategy of **Forming a Relationship** between the woman's recognition that she is anxious; she *did state that she was a worrier*, and the cause of the anxiety; *she just lost the income*.

Nurse Smith returned to her **Search for Information** about a history of mental health:

> ...[the woman] *stated on the PNRQ that she'd had no history of mental health problems in any way, shape or form and that she felt supported when she was growing up, she hadn't seen a counsellor. There was no history.*

The nurse Searched for Information on the psychosocial risk factors and then used **Recognising a Pattern** to determine that for this woman there was no history.

The nurse also considered information on Susan's affect:

> *...she did say that when she saw him* [the GP] *she was pretty tired and fed up.*

The nurse used **Recognising a Pattern** to understand the referrer's reason for admission. The thinking strategy of **Forming Relationships** is used between the information on her affect, mental health history and available support:

> *...she was a bit teary. She just got teary at times and a bit frustrated. There's no history of mental health illness, just tired. Father* [of baby] *supportive, moved in*

with the maternal grandparents [woman's parents.]

The nurse used **Recognising a Pattern** that the woman was tired and frustrated with the current situation, that she had no history of mental illness and that she did have social support. Susan's responses are used by the nurse to decide in what direction the interview will proceed.

> *It really depends on how she's responding, how I observe how she's responding to the questions and how she's responding to the baby and whether or not, you know, there's anything more to sort of tease out. ... based on a conversation and her behaviour, and you know, whether she's teary, whether she's agitated, how she's handling the baby. ... say, well, what else is happening, what's worrying you, is there anything more you want to discuss, sort of provide some open ended questions ...*

The nurse **Judged the Value** of the woman's verbal and behavioural responses to the interview question to decide to **Search for further Information**. Susan's appearance was considered by Nurse Smith:

> *Appearance, that could be very tricky, you know, it's the classic ... if they're very well groomed, they're often struggling. Equally, if they're ...realistic ... she's had three hours of broken sleep, hair might be a bit mussy ... she's got here on time, managed to find somewhere to park, done well to get in the door.*

The nurse **Recognised a Pattern** in the woman's appearance to decide that it is a realistic representation. She also **Judged the Value** of the woman's efforts to attend her appointment - *done well to get in the door*. Nurse Smith used information on Susan's responses and her behaviour to **Draw a Conclusion** regarding what were the woman's issues:

> *...you kind of get a feel whether she's genuine or not, and what she says is congruent with her behaviour, and if not, you know, you kind of ask, explore, find out: what's going on and what's really going on?*

The nurse utilized the thinking strategy of **Stating A Proposition** - *if what she says is*

congruent with her behaviour – she then **Searched for Information** to expand on her understanding of the situation – *what is going on and what is **really** going on*.

The **Pattern Recognition** Lack of Fit strategy was used:

> *...and I think that's where experience helps and you can perhaps identify something or you flag something that doesn't seem quite right.*

The nurse draws on her knowledge to **Assert a Practical Rule** where there is a **Pattern Recognition** of the lack of fit, between what the woman has said and her behaviour. Nurse Smith goes on to determine the woman's issues:

> *And once you've established a rapport with this person, you know, she may disclose what's going on, what's worrying her. Is it the job? Is it the house? Is it the in-laws? Is it the returning to work? You know, is she pressured to go back to work? Does she want to go back to work? Does the bank want their mortgage repayments?*

The nurse **Asserted a Practical Rule** - *once you have established a rapport with this person ... she may disclose what's going on*. She also **Searched for Information** regarding the woman's issues, or what's worrying her.

The nurse was asked if she made an assessment of the risk of mental illness. She responded that she did:

> *...based on the results of the postnatal depression scale* [EPDS] *and the PNRQ and the substance abuse* [questions] *and the referral and what she's told me.*

The nurse utilized the strategy of **Searching for Information** from assessment tools *(postnatal depression scale, PNRQ, substance abuse*), *what she's told m*e and the strategy of **Forming Relationships** between these to determine the risk of mental illness. The assessment tool (PNRQ) is **Searched for Information** regarding the

woman's birth experience.

> *And the question 10, was the birth disappointing or frightening. Most women seem to say, not at all, or somewhat and then occasionally. Like this girl, she's got 5 [very much] for disappointing / frightening, it was very frightening. Mainly to explore that with her, why it was frightening, what sort of delivery did she have, what frightened her?*

The nurse utilized the strategy of **Searching for initial** Information *(a high score for birth experience disappointing or frightenin*g) then **Searched for further Information** (to explore with her why it was frightening ...)

> *...she was planning to have a normal delivery, and ended up having a caesarean because the baby was a breech, and I'm not sure that that was sort of diagnosed until fairly late in the day. So her expectation of having the normal birth just went out the window, ended up going to theatre, having a Caesar, and I think that just threw her.*

The nurse **Generated a Hypothesis** that the woman was disappointed with her birth experience and she then used **Judging The Value** of the information: *that just threw her*.

Nurse Smith also **Searched for Information** from the assessment tools (PNRQ) on birth experience and parenting experience:

> *...although the birth was frightening, she's written that ...* [the experience of] *parenting the baby was a positive one ...*

The nurse utilized **Searching for Information** of the woman's parenting experience, **Formed a Relationship** with the woman's birth experience and used the word *although* to **Generate a Hypothesis**.

Information on parenting, specifically feeding, is considered by the nurse:

> *...and then she just said, the baby's been feeding poorly, and on assessment, I*

mean, the baby wasn't feeding that poorly, the baby was just overtired. But her perception was it was feeding poorly and a lot of the perception is that they're feeding poorly, but in reality, these babies are overtired and that's why they're feeding poorly.

In regard to the woman's perception of feeding the nurse **Provided an Explanation** that *the baby wasn't feeding poorly*, but that the woman perceived that the baby was feeding poorly and the nurse believed that the baby was overtired. She then went on to utilize **Making a Generalisation** - *a lot of the perception is that they're feeding poorly, but in reality, these babies are overtired.*

At the time of interview the woman remained in the residential program and the outcome was not determined. In this critical incident the nurse used 43 thinking strategies from 14 domains of information. The most commonly utilized thinking strategies were **Searching for Information** and **Recognising a Pattern**. The most commonly accessed domains of information were Woman's Issues or Goals, Birth Experience and Parenting Experience.

4.2 Nurse Brown

Nurse Brown is a child and family health nurse, who has worked at Tresillian for many years. She has experience in paediatrics and in neonatal intensive care nursing. She holds post graduate qualifications in midwifery and child and family health nursing and is currently undertaking an additional professional qualification. Nurse Brown recounts the psychosocial assessment of an English woman, Mary, who was admitted to the early parenting centre with her husband, Hugh, and their 12 month old baby daughter, Verity. Mary was under the care of her GP for depression and was pregnant with her second child. The nurse focused on parenting using the thinking strategies of **Providing an Explanation** and **Recognising a Pattern**. She also used the thinking strategies of **Asserting a Practical Rule, Judging the Value, Searching for Information** and **Setting Priorities** in relation to parenting, the woman's issues and her mental health history.

> *The referral that was sent in for this woman came from her doctor ... she is apparently being treated for depression on Cipramil [prescribed to relieve symptoms and prevent relapse in major depression] and she was exhausted, had a severe postnatal depression, was upset and thinking of having an abortion because she actually is currently pregnant with an unplanned pregnancy ...*

The nurse used the thinking strategy of **Searching for Information**, from the letter of referral, regarding the woman's history of mental illness (postnatal depression) and the treatment (antidepressant medication), her current antenatal history of unplanned pregnancy as well as the woman's current situation (exhausted) and issues (*feels unable to cope with another baby, considering termination of pregnancy*). She **Formed a Relationship** and **Generated a Hypothesis** between these:

> *...she feels she can't cope with the child that she's got and have another baby at the same time.*

Nurse Brown also used information regarding Mary's affect and her issues:

> *...her mood was quite low when she came in, she was very teary, she referred to, you know the decision making* [about the abortion] *a number of times in the interview, and it was clearly and obviously at the top of her mind which is not surprising.*

The nurse **Searched for Information** regarding the woman's affect (*low mood and teary*). She also utilized the strategy of **Drawing a Conclusion**, and the strategy of **Judging the Value** that the termination was – *top of mind* – that the decision about termination was a priority for this woman.

The nurse **Searched for Information** regarding social supports:

> *...I get a clear picture of their supports and this lady had no supports at all. She's come out here from the UK about six years ago ... as it turns out she was very isolate...*

Here the nurse used **Recognising a Pattern** that the woman recently immigrated to Australia and that her social supports are limited. The nurse **Drew a Conclusion** that the woman was socially isolated. She went on to look at information on parenting.

> *...but she's been having problems with this child for about the last two months. The baby is just on 12 months old and she was very challenging.*

The nurse **Searched for Information** regarding the current age of the baby as well as how long the issues had been present. The nurse then used **Recognising a Pattern** to determine that the baby is demanding.

Nurse Brown then looked to the woman's family history:

> *But this lady revealed a history of domestic violence, her mother had domestic violence with her father and as a result her mother became severely depressed. Didn't ever get any treatment and as a result, all the siblings are all medicated and depressed. And she* [this woman] *actually didn't get treatment for her depression until she actually arrived in Australia and was actually out of that environment.*

In regard to the family history the nurse **Searched for Information** and used **Recognising a Pattern** that the woman's parents have a history of domestic violence and that the situation has resulted in depression requiring the use of medication for Mary and her siblings, although the woman did not receive assistance until six years ago.

The nurse **Searched for Information** on the woman's mental health history:

> *...this is really quite a long standing depression and one that she's battled for some time all on her own. And actually probably thinking it's probably fairly normal in her ...you know, family of origin.*

The nurse went on from **Drawing a Conclusion** regarding domestic violence and

depression, using information on Mary's affect and her issues, to **Make an Assumption**, based on her family background, that the woman believes that depression is normal.

> *She...described herself as very fragile. She was crying a lot during the interview. ...kept on talking about the pregnancy, that she was...about ten and a half weeks pregnant.*

The nurse **Formed a Relationship** between the woman's perception of her own feelings (*fragile*) her reaction during interview (*that she was crying*) and her repeated reference to the issue of unwanted pregnancy.

> *...and she also talked about how she and her husband are arguing quite a bit and she had lost all interest to do anything, she didn't want to do anything.*

Again the nurse used **Forming a Relationship** between the disharmony in the woman's marital relationship and that the woman had decreased interest and apathy.

> *...she didn't know what she really wanted to do* [regarding the termination] *and even though she was medicated, that wasn't holding her.*

The nurse also **Formed A Relationship** regarding the woman's indecision and her current treatment for depression in order to **Draw a Conclusion** that the current situation was unacceptable.

> *She had high anxiety and high perfectionist traits* [on the PNRQ] *and that showed with what she was talking about.*

The nurse **Searched for Information** on the PNRQ to decide if the woman experienced anxiety or obsessionality. The nurse then **Formed a Relationship** with the interview responses in order to **Recognise a Pattern** of anxious and obsessional symptoms.

Nurse Brown used information on parenting:

And she just felt...because she wasn't managing with this child and she didn't understand what was going on, and she couldn't fix it, so it sort of exacerbated her ... depression.

The nurse used **Recognising a Pattern** that woman felt that solutions were unavailable, her lack of understanding of the situation regarding the baby and her inability to manage the situation. The nurse **Drew a Conclusion** that these issues had exacerbated the woman's depressive symptoms. The nurse looked for information on sleep:

...and then on top of that, she was very sleep deprived. So she was, she was having a hard time.

From **Recognising this Pattern** regarding the issues that exacerbated the woman's symptoms the nurse **Searched for Information** to **Draw a Conclusion** that the woman was sleep deprived. The nurse then **Made a Generalisation** that the woman was having a hard time because of this set of circumstances.

...so we referred her to the psychologist and the psychiatrist and she's seen both and she is feeling a little better.

The thinking strategy of **Making Choices** was used in order to decide to refer the woman. **Drawing a Conclusion** resulted in an opinion being made about how Mary is feeling (a little better.) Nurse Brown then explored information on Mary's issues and **Drew a Conclusion**:

...she's rethinking her decision to have an abortion.

She also **Searched for Information** on partner support in order to **Judge the Value** of that support:

Her husband's aware of her decision-making and he's just very supportive of her. So it was rather nice.

The judgment was signified by the use of the word *nice*. Nurse Brown continued to explore Mary's parenting experience:

> *But her child was ... (pause) ... fearsome. They have reason to be exhausted. Very determined young woman* [Verity] *she was, you know, they loved her and they wanted the best for her and they were very gentle and kind. It was nice, but they just needed to change what they were doing.*

Judging the Value was used to decide that the child was ... *fearsome* ... This **Provided an Explanation** that confirmed the issues identified by the mother and the child's determined personality as the issue. The nurse also used **Asserting a Practical Rule**, based on her clinical knowledge that the gentle and kind approach to parenting would need to change.

Integrating information about Mary's presentation and her interview responses provided insights:

> *...her body language is very different from what she's actually telling me ... but I also really listen to what she's actually saying because it's important ...*

In this situation, the nurse **Recognised a Pattern** between the information that was provided in Mary's verbal response and the information that the nurse gained from observing the woman's body language. The nurse went on to **Judge the Value** of the verbal response that she felt were important.

> *...with this lady I observed first of all she was very distressed.*

While she **Searched for Information** the nurse **Drew a Conclusion** from her observation that the woman was distressed.

> *And almost from the very beginning she started talking about the proposed abortion. So clearly that was on her mind at the highest level and it was a great concern.*

The nurse also used the thinking strategy of **Searching for Information** on Mary's verbal response as well as the thinking strategy of **Setting Priorities** to order the termination as the highest priority.

Information on Mary's issues and her partner support were considered. From **Setting The Priority** for the termination decision the nurse moved to **Search for Information** in order to generate a clearer picture of the woman's situation.

> *...it was something that she didn't really want to do but she felt she literally had no other options. So I guess my thing was to listen to her and then to probe a little bit deeper about what was actually going on. And to also to listen to her husband and watch both of them and watch their body language ... he was very supportive. He wasn't angry with her. He wasn't surprised at some of the things she was saying. So it was clear that he was really quite aware and they were both communicating well. And he was very supportive of what she was saying. So he wasn't going to be judgmental of her, so that was a good thing.*

The nurse **Searched for Information** within the husband's response to Mary's interview answers and utilizing his responses to **Recognise a Pattern** that Hugh was supportive. The nurse also **Judged The Value** that his support was a good thing.

The link between the desire for an abortion and the parenting issues required further clarification:

> *But also I wanted to get really clear as to really why she was deciding to do this really drastic step of having an abortion and why that was she thought the only option for her. And so, you know, so I went into what was actually happening with this other child [Verity] and what was actually going on and what they were doing and what the child's responses were and then what their responses to that were.*

The nurse **Judged the Value** that the woman's decision to terminate the pregnancy was drastic. As an outcome of **Searching for Information** on the parenting issues and the baby's response to parenting, the nurse **Formed Relationships**:

> *And you have to...dig with that because they'll just say, we normally we go in and we pat, and we do all this, and then it doesn't work, but there's a lot more to it than that. And you* [are] *finding interesting things, like these people were, are going in and this child had started refused dinner and started demanding you know, breastfeeds overnight...And they'd started recently giving that. And how they were settling this child was; staying in with her the whole time. No matter how hard she screamed they just stayed the whole time. And of course that reinforced that behaviour because you know, when mum was in there she could smell the milk and she was cranky...*

The nurse **Searched For Information** regarding the parenting issues and **Recognised a Pattern** in the baby's behaviour. The nurse utilized her experience to **Assert a Practical Rule** that *no matter how hard she screamed they just stayed* [in the baby's room] *the whole time. And of course that reinforced that behaviour*. The nurse also **Provided an Explanation** that the baby's behaviour was reinforced when the parents stayed with her the whole time.

Nurse Brown **Searched for Information** on parenting and the parents' behaviour:

> *So we talked about how we could maybe reverse that, maybe get her eating more during the evening so she was not as hungry during the night and also talked about how we could modify some of those behaviours and actually their own behaviour is actually what we were talking about, rather than the baby's behaviour. So that they will get different responses.*

The nurse **Provided an Explanation** that the parenting behaviour required modification.

However, she discusses this in terms of modifying the baby's behaviour. Information on anxiety and perfectionistic traits were considered:

> *So we talked about a lot of those things. And when you're in that, in that way giving them back a little bit more control, and for her particularly because she scored really high on perfectionist and anxiety traits, control is a big issue for her.*

Here the nurse **Searched for Information** from the woman regarding control and used the thinking strategy of **Drawing a Conclusion** to decide that control is a major issue for this woman.

> *So if she feels a little bit more in control in that she knows where she's going, she knows how to get there, she has a fairly realistic idea of how it's going to go and how long it's going to take.*

The nurse then moved on to **Draw a Conclusion** that the woman feels more in control because she has developed a plan that includes *where she's going, how to get there ...how long it's going to take* to improve or resolve the issues.

> *They usually do rather well because you know they need that [a plan].*

Once the nurse decided that the woman has a plan she then utilized **Asserting a Practical Rule** to declare that women improve once they have a plan.

At the time of interview the woman remained in the residential program. Nurse Brown used information from the domains of parenting, partner support, woman's issues, anxiety, perfectionistic traits, the woman's affect, her mental health history, social supports family history and sleep. In this critical incident the nurse used thinking strategies on 53 occasions. The strategies most frequently used were **Searching for Information** (14), **Drawing Conclusions** (9) and **Recognising a Pattern** (8).

4.2 Conclusion

This chapter has provided a detailed description of information domains and the thinking strategies within the context of two of the critical incidences. Placing the strategies in context increases knowledge of the complexity of the psychosocial assessment, the breadth of information that is used and the thinking processes that the nurses use to make clinical decisions. The information elicited in this assessment process is transformed into a coherent story the nurse then uses to work with the

mother (parents) to formulate an intervention plan. The following chapter will explore further the nurses' thinking strategies and information domains from all of the 12 sets of critical incident data.

CHAPTER FIVE – FINDINGS ON THINKING STRATEGIES FOR INFORMATION DOMAINS

5. Introduction

This chapter illustrates the women's situations and the nurses' thinking that is required for postnatal psychosocial assessment. The psychosocial assessment is reliant on the integration of parenting information and the woman's and family's situation when assessing the woman's mental health status. The nurses used thinking strategies within 24 different domains of information. The four most commonly used information domains were: Parenting and Care of the Child, Assessment Tools, Woman Determined Issues or Goals and Sleep (Woman's Sleep or Child Sleep). This chapter presents the most commonly used thinking strategies within each of these four domains. A breakdown of the Thinking Strategy use by Information Domain is demonstrated in tables 7 and 8 below.

Table 7: Commonly used thinking strategy for the frequently used domains of information

THINKING STRATEGY	PARENTING	ASSESSMENT TOOLS	WOMANS DETERMINED ISSUES	SLEEP
Asserting a practical rule	7	1	4	2
Drawing Conclusions	8	2	2	2
Forming Relationships	14	8	3	5
Generating Hypothesis	6	1	3	1
Judging the Value	16	12	10	5
Making Assumptions	3	2	6	2
Making Choices	0	0	0	0
Making Generalisations	1	0	0	0
Making Predictions	0	0	0	0
Pondering	1	0	1	0
Posing Questions	0	1	0	0
Providing Explanations	12	7	6	5
Qualifying	0	2	1	0
Recognising Pattern	14	17	6	10
Searching for Information	23	33	11	10
Setting Priorities	11	0	6	6
Stating a Proposition	0	1	0	0

Table 8: Thinking Strategies by Domain of Information

Information Domain	Most Commonly Used Thinking Strategies
Parenting and Care of Child	▪ Searching for Information ▪ Recognising a Pattern ▪ Judging the Value
Assessment Tools	▪ Searching for Information ▪ Recognising a Pattern ▪ Judging the Value ▪ Forming Relationships
Woman Determined Issues or Goals	▪ Searching for Information ▪ Judging the Value ▪ Recognising a Pattern ▪ Providing an Explanation ▪ Making Assumptions
Sleep	▪ Searching for Information ▪ Recognising a Pattern ▪ Judging the Value

5.1 Parenting and Care of the Child

Information from the domain of Parenting and Care of the Child was the most commonly considered domain in all 12 critical incidents. This domain included issues and concerns regarding parenting, breastfeeding and the care of both the well and unwell child. The nurses used 12 of the 17 thinking strategies to consider information from the domain of Parenting and Care of the Child. The thinking strategy of **Searching for Information** was utilized most frequently, nearly twice as often as the next most commonly used thinking strategies; **Judging the Value, Forming a Relationship** between information and **Recognising a Pattern.**

As well as **Searching** for **Information** on Parenting and Care of the Child, Nurse 1 used the thinking strategies of **Recognising A Pattern** and **Drawing A Conclusion** to make decisions regarding the woman in her care, Tanya.

> *This was her second child ... I think that the eldest was ... age 5 ... she* [Tanya] *found this quite overwhelming.* (Nurse 1)

Nurse 1 **Searched for Information** that this was Tanya's second child and that her first child was five years old. **Recognising A Pattern** of mothering two young children, the nurse then formed an opinion that caring for two young children was overwhelming for Tanya.

Nurse 2 also utilized parenting information when **Searching for Information** and **Asserting a Practical Rule** to consider information on feeding issues.

> *...her perception was* [that the baby] *was feeding poorly and a lot of the perception is that they're feeding poorly ... but in reality these babies are overtired ...* (Nurse 2)

In this instance the nurse **Searched for Information** regarding the woman's perception of feeding and used this information in tandem with a truism that she believes has been shown to hold true in her practice; *babies feeding poorly are overtired*, to intimate that the woman's perception of feeding was inaccurate.

Nurse 5 considered information on Parenting using the thinking strategy of **Drawing a Conclusion.**

> *The child was very difficult to settle in the cot ... had been cuddled to sleep.* (Nurse 5)

In this example, the nurse reaches a decision that the difficulty in settling the baby was because self-settling had not been enabled. She goes on to **Form a Relationship** between the two main reasons that the woman presented to the early parenting centre:

> *...the child presented with frequent night waking and considerable difficulty*

getting back to sleep ...(Nurse 5)

Frequent night waking is the cause but could be expected in a baby of this age. Nurse 5 goes on to identify a priority:

> *...one of the most significant factors [for the mother] was sleep deprivation...* (Nurse 5)

This connecting of information, or **Forming Relationships** between information, to further understanding then leads the nurse to order concepts in terms of importance using the thinking strategy of **Setting Priorities**.

In the retelling of Lorna's assessment, Nurse 6 considered information from the risk domain of Parenting using the thinking strategies of **Recognising a Pattern, Forming Relationships, Asserting a Practical Rule** and **Providing Explanations**.

> *Logan* [Lorna's baby] *was admitted for night waking and day sleeps and reflux and difficult to settle. And he was on an allergy formula which is for allergy ... he also had a wrap that we're not allowed to use, it's a zip up wrap ...an angel monitor for sleep apnoea ...he was born at 36 weeks.* (Nurse 6)

In her presentation of the baby's case the nurse **Recognises a Pattern** of difficulty with settling by identifying various pieces of information; *night waking, day sleep, reflux* and *difficult to settle*. She **Forms a Relationship** between information on the type of formula, and the reason for the use of the formula – *allergy*. This nurse also asserts a truism or Practical Rule that she believes that the *zip-up wrap is not allowed to be used*. The nurse continues on to **Provide the Explanation** for the use of the angel monitor that the baby was premature.

In the use of information from the domain of Parenting and Care of the Child the nurses used a variety of thinking strategy combinations. Both **Searching for**

Information and **Recognising a Pattern** were used in conjunction with **Asserting a Practical Rule**, **Setting Priorities** and **Drawing a Conclusion**.

5.2 Information from Assessment Tools

The next most commonly considered information domain in these critical incidents was Assessment Tools. This domain included information from the PNRQ and EPDS. The nurses used 12 of the 17 thinking strategies to consider information from this domain. The most commonly **Searching for Information** was utilized twice as often as the next most commonly used thinking strategies of **Recognising a Pattern. Judging the Value** and **Forming Relationships** were also frequently used.

Information from Assessment Tools was considered by Nurse 1 who used the thinking strategies of **Searching for Information** and **Drawing a Conclusion** to make decisions about screening results.

> *...no psychosocial screening had been attended and the EDS wasn't available so it hadn't been done previously* (Nurse 1)

Nurse 1 forms an opinion that because the EDS (EPDS) was not available that it had not been completed. She then moves on to **Search for Information** regarding the PNRQ. She **Provided an Explanation** that the PNRQ draws attention to important information that may not be provided in interview alone.

> *...we then went to the PNRQ ... it highlights more information ... Even though you go through* [in interview] *the situation of support networks, concerns, anything that is putting pressure on ... you don't always get the full information* (Nurse 1)

Nurse 1 used the thinking strategy of **Recognising a Pattern** of lack of fit between the woman's PNRQ responses and the woman's interview responses. She also used the thinking strategy of **Recognising a Pattern** of lack of fit between the woman's PNRQ responses and the woman's EPDS responses.

> *...on question 4* [of the PNRQ]*, have you had any changes or losses in the last 12 months and she ticked yes. Hers was a lack of sleep. On the EDS* [EPDS] *she had ticked that she had no problems* [with sleep] *... that was just something that came up there.* (Nurse 1)

The nurse also **Formed a Relationship** between the woman's PNRQ responses in order to determine which area to **Search for** further **Information**.

> *...question 6 in general do you become upset if you do not have order in your life and she circled somewhat but underneath she wrote I felt much more pressure from my Mum-in-Law and my husband when the house is untidy. So I guess that brought up more discussion about what is happening at home and the coping aspect that may not have come to the surface through just a straight interview* ...(Nurse 1)

In this instance the nurse **Forms a Relationship** between information regarding both of the woman's responses to PNRQ question 6 on perfectionist traits. Tanya had indicated that she became somewhat upset when she did not have order. She had also provided information regarding the specific causes of this symptom; pressure from both her husband and her mother-in-law. Once Nurse 1 had identified that there were issues and that these stemmed from specific family members then the nurse mentally looked for further information in her discussion about Tanya's partner and social support.

Nurse 2 utilized information from the domain of Assessment Tools, initially using the thinking strategy of **Searching For Information** on the EPDS.

> *...Edinburgh depression scale ... she scored nine... ... she scored* [on EPDS] *that things were getting on top of her ... ... she was a zero on the thought of harming myself ...* (Nurse 2)

This nurse also used the thinking strategy of **Searching for Information** on the PNRQ:

> *...in regards to the PNRQ, I could see that she had been supported by her own mother when she was growing up ... She hadn't had any periods of depression... She had a very emotionally supportive partner* (Nurse 2)

In both instances the nurse **Drew a Conclusion** to determine the woman's risk of mental illness from the assessment tools.

This nurse also utilized the thinking strategies of **Forming Relationships** and **Drawing a Conclusion** in regard to information from the PNRQ:

> *Her issue with question four [stressors, changes or losses in last 12 months] was that she did write that her father was in renal failure and very ill. So that ... obviously that was something that was impacting on her ...* (Nurse 2)

The nurse connects the information provided by this woman regarding her father's illness, *renal failure,* and his status, very ill, in order to form an opinion that this stressor had affected the woman in her care.

Nurse 6 uses the thinking strategies of **Drawing a Conclusion** then **Searching for Information** in regard to information from assessment tool responses. The nurse then **Judged the Value** of the information that she has obtained.

> *She was stressed and tired ... And her Edinburgh score was only six, which I thought was quite low actually* (Nurse 6)

The nurse reached a decision that the mother is stressed and tired, she then looked for information regarding the EPDS score and formed an opinion about the validity of the EPDS score, that it does not seem high enough to reflect the level of the woman's stress and fatigue.

From the PNRQ the nurse uses the thinking strategies of **Searching For Information** to determine that the woman has a history of depression.

> *...on her PNRQ she had a history of depression and she had sought help for that in the past...*(Nurse 6)

The nurse employed the thinking strategy of **Forming Relationships** between information on the woman's mental health history and her previous care. She also **Searched for Further** Information on the PNRQ to **Recognise a Pattern** in the relationship between Lorna and her father.

> *And she also had a history of abuse from her father and she didn't talk to him anymore and he was quite frightening* (Nurse 6)

Here the nurse uses this information on abuse history, from the PNRQ to **Recognise a Pattern** of disregard and fear of her own father that may be a risk factor to Lorna's mental health.

Nurse 8 uses information from the PNRQ, EPDS and woman's interview responses. This information was assessed using the thinking strategies of **Forming a Relationship** and **Recognising a Pattern** of lack of fit.

> *...when I used the PNRQ I used it in association with the Edinburgh* [EPDS] *scale. So I asked her to complete an Edinburgh ... and then I looked at what she'd also completed on the PNRQ and, using these two sources, I was able to actually look at a little bit of mismatch. ... I was told husband was very supportive ... she put him as a four [indicating a less supportive partner] ... I know that she has had past counselling, failed to put this down. So you build up more of a picture because she is reluctant to put things down.* (Nurse 8)

Nurse 8 uses the thinking strategy of **Recognising a Pattern** by identifying a lack of fit of pieces of information on partner support from the assessment tool and from interview to develop a picture of the woman.

Nurse 12 uses the information from assessment tools in a similar way regarding assessment tool responses for the woman in her care. She uses the thinking strategy of **Searching for Information** regarding the PNRQ score then uses Posing a Question

regarding the PNRQ. The nurse then answers the question by **Providing an Explanation** and moved on to use the **Searching for Information** thinking strategy.

> *...her actual PNRQ was a very low score ... yet my notes actually tell me something differently. I'm kind of wondering why I actually discovered these things ... her PNRQ was not telling me that. ... what I did discover just chatting to her , that she has not planned, it was unwanted, unplanned pregnancy. ... She was actually quite shocked by the pregnancy and actually did seek counselling* (Nurse 12)

The nurse uses the **Searching for Information** strategy to determine that the information from the assessment tool was not rated as highly as expected. Also, from the interview the nurse **Provides the Explanation** that the discovery of being pregnant may have been a distressing experience and also to determine that the woman had received some help to deal with this issue.

The **Value** of Information from Assessment Tools was **Judged** by the nurses to determine if information from the interview was accurate. Nurse 8 **Judged the Value** of information from the woman's response to PNRQ Question 2:

> *...it's about openness and honesty and if the client's failed to tell you, as this client failed to tell me, she has said no, no, no, have you ever had two weeks or more where you felt particularly worried or miserable, no. Well, in fact I know that she seen a counsellor ... she said, I saw a counsellor in the past when I had the death of a partner. So she's already seen a counsellor for a period of time...*(Nurse 8)

In this example the nurse had **Recognised a Pattern** in the information that the woman had previously received counselling and used this to **Judge the Value** that her PNRQ response to the question on previous mental illness was inaccurate.

The significance of the information provided on the Assessment Tools was also **Judged** by the nurses. Nurse 7 **Judges the Value** of information from the EPDS:

> *...the mental state assessment … now makes you look at those women who are maybe not suicidal, but very ... possibly on the brink or not being truthful about it* [suicide]. (Nurse 7)

The nurses use the information from the EPDS to assist her to **Set Priorities** in regard to suicidal thoughts.

When utilized in conjunction with interview the nurses found that the PNRQ gave more data than interview alone. Nurse 7 **Searched for Information** from the PNRQ to determine further direction for the interview:

> *I think it's all very important and I think particularly ... the abuse questions* [Question 8 on the PNRQ], *I think it puts it out there and people, I think people ... will tell you... They'll tick the box more than if I'd actually directly asked them and then because they've ticked the box, it gives you ...*[permission to discuss] *... I guess, a way in. Yeah. I do ... I'm very careful about those questions. I do find they're a bit tricky.* (Nurse 7)

The nurse determined that a response to the PNRQ question on abuse will facilitate **Searching** for further **Information** on this sensitive subject. However, she does note that she *find they're a bit tricky.*

As the PNRQ answers were in writing some of the nurses **Judged the Value** that this increased the likelihood of the women being "honest" or forthcoming. Nurse 5 felt that this was the case:

> *I think most of the time people are fairly honest with it* [PNRQ]. (Nurse 5)

This theme was discussed by other nurses:

> *... it's* [the PNRQ is] *all very official and it's anonymous and they feel that they can unburden ...*(Nurse 3)

In this quote Nurses 3 also identified that the anonymity of this (self-report) format increased the likelihood that the women would *unburden* when responding to the PNRQ questions.

In their use of information from Assessment Tools, including PNRQ and EPDS, the nurses mainly use four thinking strategies and mostly in combination. **Searching for Information** is used with **Forming Relationships**, **Recognising a Pattern** and **Judging the Value**.

5.3 Woman Determined Issues or Goals

The issues and goals that the women determined were a common theme within the critical incidents that the nurses reported. The women's issues and concerns included: relationships, support, settling and sleep. The nurses used 12 of the 17 thinking strategies to consider information from the domain of women's issues and goals. The most commonly used strategies for this domain were **Searching for Information, Judging the Value, Recognising a Pattern, Setting Priorities, Making Assumptions and Providing Explanations**.

Nurse 7 used the thinking strategy of **Searching for Information** regarding the issues and goals for the woman in her care. Initially she **Searched For Information** from the interview and the PNRQ in order to establish the issues of concern. The nurse then used this information to **Set Priorities** for the woman's care.

> *...just from talking with her ... in this section* [of the PNRQ] *where we've got parenting and other issues the only thing that she could think of where the positives, like good support from her family ... there's nothing else going on in her background ... that helps me to see that she's got a very clear path to just working on this one issue. ...her goals were very clear, it seems like it really is this one issue with sleep. Doesn't seem like there's any other multiple issues* (Nurse 7)

In this instance the nurse has **Searched for Information** from the woman's interview responses and the PNRQ to **Judge** that the sleep was the only issue as she believed that there were no other issues. The nurse could then give the issue of sleep importance when helping the woman to set her goals for the admission to the EPC.

Nurse 8 used the thinking strategies of **Forming Relationships, Recognising a Pattern** and **Setting Priorities** as she considered the assessment information:

> *She divulged on this* [PNRQ] *that she had relationship issues, with somewhat supported ... she put him as a four* [between somewhat and not at all] *... I was told husband was very supportive ... it's important to talk to them as well* [as using the PNRQ] *...especially this sort of client that's kind of saying there's nothing wrong. It is only the child that won't sleep at night ... they don't think they need to give you any information about themselves and every so often they give you a little bit more than you expect they will. So that's what I've done, built up a picture of her.* (Nurse 8)

This nurse connects information regarding partner support from both the PNRQ and from the interview information and identified pieces of data that fit together to **Recognise a Pattern** that the woman said that *there's nothing wrong* yet *the child won't sleep at night* as well as the discrepancy between the PNRQ responses and the woman's interview responses regarding partner support. The nurse indicated the importance of using information from both the PNRQ and from the interview to determine the issues. She **Provides** an **Explanation** of how she *builds up a picture* of the woman.

In the next quote, Nurse 9 used the thinking strategy of **Making Assumptions** in regard to the woman's issues.

> *...she's already touched with me on the whole idea that she loves routine and order ... of course she would find that things were getting on top of her ... she starts the day with a to-do list but never quite gets there* (Nurse 9)

The nurse **Assumed** that this woman, who potentially has perfectionistic traits, would feel overwhelmed because she never achieves her daily goals.

The nurse also **Provided an Explanation** and **Judged the Value** of Information that she **Searched** for regarding the woman's issues.

> *...she did have heightened anxiety around those first seven or eight weeks when breastfeeding was difficult. She was sore, she had to use nipple shields ...it was a difficult time for her...* (Nurse 9)

The nurse **Provided the Explanation** that the first weeks were problematic because of breastfeeding issues that had resulted in heightened anxiety for this woman. She **Judges** that the woman found this time to be *difficult*.

5.4 Sleep

The baby's sleep and sleep related problems were often the presenting issues within the critical incident accounts. Baby's settling and sleep were frequent reasons for admission to the EPC and often with the women were focused on their own sleep problems and issues resulting from exhaustion. The nurses used ten of the 17 thinking strategies to consider information from the domain of sleep. The two most commonly used strategies for this domain were **Searching for Information** and **Recognising a Pattern**. **Forming Relationships** between information, **Judging the Value** and **Providing Explanations** were also frequently utilized.

Nurse 4 **Searched for Information** and **Formed a Relationship** regarding lack of sleep and the cause and then **Provided an Explanation** as to why sleep is an issue.

> *...from my assessment ... how she talks, the way she talks, her appearance. ...This mother was very tired, she was very sleep deprived with night waking ... her concern was that the baby was frequently night waking, so she wasn't getting a lot of sleep.* (Nurse 4)

Nurse 4 **Searched for** further **Information** in the woman's affect and her appearance to determine that she is tired. She connects information between the issue of sleep deprivation and the cause, which was *night waking*. She then offers reason why the woman is tired due to the baby frequently night waking.

> *This baby ... had co-slept with mum due to sleep deprivation and mum not being able to address the sleep, broken sleep issues overnight. So the outcome was that we were able to get the baby to settle in a cot and mother got more sleep overnight and the baby also was able to have more sleep and had to learn to settle in the cot prior to discharge* (Nurse 10)

Nurse 10 used the thinking strategies of **Setting Priorities**, **Providing an Explanation** and **Forming a Pattern** to address sleep issues.

5.5 Conclusion

This chapter has identified the information domains used by the nurses when discussing the critical incident of completing a psychosocial assessment. While 24 information domains were determined, the four domains the nurses most frequently used were: Parenting and Care of the Child; Assessment Tools (PNRQ and EPDS); the Issues or Goals that the Women Determined were Important; and Sleep (either the baby's sleeping pattern or the woman's sleeping pattern). Chapter Six provides a detailed report on these findings.

CHAPTER SIX – DISCUSSION AND CONCLUSION

6. Introduction

Clinical decision-making is integral to nurses' work with women and their families. This research looked at the decision-making for one practice that is crucial for CFH nurses to conduct; postnatal psychosocial assessment. The CFH Nurses Decision-Making Study focussed on how the nurses made decisions using thinking strategies and the information domains that they used to inform their decision-making. The findings from this study add detailed information about the complexity of decision-making following postnatal psychosocial assessment within an early parenting centre.

A purposive sample of 12 experienced nurses from Tresillian Family Care Centres were asked to tell the admission story of a woman that they had cared for in the prior two weeks, with a focus on psychosocial assessment and the use of the PNRQ. The findings demonstrate the capacity of the nurses to untangle the complexity of postnatal psychosocial assessment using a range of thinking strategies to provide a comprehensive depiction of the woman's situation.

The postnatal psychosocial risk factors that are frequently listed in the literature include: recent stressors, mental health history, partner support and history of abuse. (Austin & Committee 2013; Austin, Highet & Committee. 2011; Leigh & Milgrom 2008; Milgrom et al. 2011; National 2007). These information domains were also described in the CFH Nurses Decision-Making Study. In addition to these domains much broader domains were found including information on parenting and the care of the child; woman determined issues or woman determined goals for the EPC program and sleep (for both the woman and the baby). This demonstrated the complexity of both the parenting concerns and psychosocial issues that women presented with at admission to an early parenting centre. The outcome of this study has been to demonstrate the importance of acknowledging the interrelationship of the woman's concerns, the nurse's experiences, the parenting challenges and the nurse's ability to use a variety of

thinking strategies in combinations in order to support clinical decision-making.

For this study the nurses were asked to recall a psychosocial assessment in regard to risk of mental illness and use of the PNRQ. The nurses accessed information from 24 different domains, most commonly Parenting and Care of the Child, Assessment Tools (EPDS, PNRQ, Domestic Violence and Substance Abuse) and Woman Determined Issues or Goals. These domains were spontaneously discussed, except for the PNRQ, which the interview question specifically asked about. Inclusion as part of the question may account for the common use of the information from the 'assessment tools' domain.

To process the information from these 24 information domains the nurses used 17 thinking strategies that were identified in the Thinking in Practice Study (Fonteyn 1998). From the review of the literature on thinking strategies it was apparent that different specialties utilize different thinking strategies in different ways. For this CFH Nurses Decision Making Study the strategies most commonly used within these domains were: Searching for Information, Recognising a Pattern and Judging the Value of Information. In this chapter the focus will be on the most commonly used thinking strategies. These thinking strategies will be discussed in term of the four most commonly used domains of information. The table below outlines the most commonly used thinking strategy for each of the frequently used domains of information.

6.1 Thinking Strategies by Domain of Information

6.1.1 Information on Parenting and Care of the Child

Information from the domain of Parenting and Care of the Child was most commonly processed by the nurses using the thinking strategies of Searching for Information, Recognising a Pattern and Judging the Value of Information. The nurses most frequently used the thinking strategy of Searching for Information. This strategy was used in order to: determine the woman's ability to read her baby's cues; understand the woman's concerns regarding her child; determine the issues that had brought the

woman to the early parenting setting; comprehend the woman's perception of her child; establish the woman's perception of her postnatal period; determine the woman's perception of breastfeeding; as well as to verify any areas of parenting that the nurse felt required further discussion. From the literature review the types or domains of information that the nurses searched for varied depending on the task or clinical area that was studied (Fonteyn 1998). The thinking strategy of Searching for Information was employed early in the decision-making process. This was also seen in this CFH Nurses Decision-Making Study. Nurses from different clinical specialties were noted as often requesting more information than they were initially presented with from the patient (Fonteyn 1998). This searching for further information was also apparent in this CFH Nurses Decision-Making Study.

For the information domain of Parenting and Care of the Child the second most commonly used thinking strategy was Pattern Recognition. This strategy was used to: determine the woman's perception of the baby's birth; establish the woman's parenting style; ascertain the baby-care routine; verify any assistance previously sought by the woman; understand the woman's perception of her baby's settling and comprehend the woman's perception of baby feeding issues. Recognising a Pattern is commonly described in the research on nursing thinking strategies in terms of reduced stress and use of alternative interventions. The more often the nurses dealt with particular patient situations the easier the patterns were to recognise and the less stressed the nurses felt in their decision-making (Bucknall 2003; Hedberg & Larsson 2002). Pattern recognition also led to reduced stress in the CFH nurses in this study. In previous research nurses were more likely to utilize alternative interventions if they recognised what had previously been successful (Usher et al. 2009). Use of alternate interventions also followed pattern recognition in this new study on CFH nurses' decision-making.

When considering information from the domain of Parenting and Care of the Child the nurses often utilized the thinking strategy of Judging the Value to assist their decision-

making. For this domain Judging the Value was used by the nurses to identify and understand: the temperament of the baby; the woman's relationship with her baby; the woman's perception of breastfeeding; baby's health status; the woman's and infant's issues around sleep and settling; the woman's concerns about feeding; the woman's parenting strengths; the woman's parenting abilities; and the woman's ability to learn new parenting skills. From the review of the literature nurses in other specialities Judged the Value on a variety of information, commonly they Judged The Value of their findings to determine additional data needs (Fonteyn 1998). This was also seen in this CFH Nurses Decision-Making Study. From the literature some nurses Judged the Value of readily available information; such as clinical presentation, at a higher value than less readily available historical information. However, this was not noted in this CFH Nurses Decision-Making Study.

6.1.2 Information on Assessment Tools

The nurses most commonly used the thinking strategy of Searching for Information when considering responses from the Assessment Tools in order to: determine mental health history; establish the woman's relationship with her own mother; verify any history of abuse; find out any recent mental health symptoms as well as determine any further questions or ascertain direction for further discussion.

Pattern Recognition of information from the Assessment Tools was used to: explain the woman's current symptoms or behaviours; predict the woman's future symptoms or behaviours; determine any stressors; establish the woman's current supports as well as to predict the woman's ability to cooperate or comply with either the admission process or the program of care. Recognition of patterns in information from Assessment Tools assisted the nurses to detect change in the woman's situation by providing a starting point to compare the woman's progress to be made over time, as described by Cox et al (1987) when discussing the importance of using the EPDs.

In this CFH Nurses Decision-Making Study, the nurses demonstrated an integration of information from the PNRQ, the EPDS and responses from the admission interview. The nurses also used the thinking strategies of Recognising a Pattern of Lack of Fit. Use of this strategy to process information from Assessment Tools enabled the nurses to determine areas of focus. As well as being used to determine the actual issues when inconsistencies or mismatches exist, as recommended in the National Guidelines (Austin, Highet & Committee 2011). The nurses used this ability to integrate information from Assessment Tools to confirm the woman's issues or her situation.

The Value of information from Assessment Tools was Judged to make decisions on the accuracy and significance of information from the interview responses. When utilized in conjunction with admission interview the nurses found that the PNRQ gave more data than interview alone. Similarly, when used in conjunction with the EPDS it gave more data than either the EPDS alone or the PNRQ alone. Some of the nurses felt that the woman was more likely to be "honest" or forthcoming because the PNRQ was either answered in a written format or because the PNRQ was self-report, assuming that the woman's English literacy ability allowed questionnaire completion.

6.1.3 Woman Determined Issues or Goals

For the third most commonly considered domain, the Woman's Issues Or Her Goals, the nurses mainly used the thinking strategy Searching for Information to gain an increased understanding of: how long the issues had been present; the details of the woman's issues regarding sleep and settling, support issues, risk factors and the woman's feelings regarding the program. Searching for Information was also used to provide the woman with insight into these issues, to prioritize the goals and to ascertain what the goals were in regard to understanding the needs of the child. The nurses used the strategy of Pattern Recognition to make connections and decisions about the amount and type of information the woman provided on her issues, the woman's concerns about baby care routines, sleep and settling and on her goals for sleep and settling. The Value of the information that the woman provided on her

important issues was Judged by the nurses, as was the value of the woman's ability to address the issues that she determined were important.

6.2 Child and Family Health Nursing Practice

These stories of psychosocial assessment have provided data on how the nurses make clinical decisions on risk of mental illness through the specific task of psychosocial assessment. The findings demonstrated that when making decisions on risk of mental illness the nurses most commonly considered information from the domain of Parenting and Care of the Child. The Professional Practice Framework in CFH nursing emphasise the role of the nurse in assessment of wellbeing within the context of family and providing psychosocial support to parents (Nursing and Midwifery Office 2011b). The role includes consideration of the health needs of children and families, planning of care, appropriate referrals and provision of support in the family partnership approach (Nursing and Midwifery Office 2011b). A pilot project on evaluation of the professional practice framework explains that government health policies on prevention and early intervention for families with children have redefined the role, responsibilities and function of CFH nurses (Guest et al. 2012). In a study of home visiting the CFH nurses reported that '…the publicly held perceptions of the services were a focus on babies and children and providing parents with support around child related problems … [and that] Taking care of women through supporting their emotional health and wellbeing … was described as their hidden agenda …Taking care of the woman was a core, but covert, function of their service.' (Shepherd 2011, pp 140).

In the 2009, the Australian Nursing Federation identified that CFH nurses took the terror out of parenting (Adrian 2009). This was identified as being achieved through the ability to construct the baby's behaviour as normal rather than as an illness (Australian Nursing Federation 2009). CFH nursing education provide these nurses with a comprehensive knowledge of perinatal mental health within child health and parenting framework (Nursing and Midwifery Office 2011b). A preventative focus of determining the risk of mental illness is taken as an integral

component of assessing the entire parenting situation; as this has a significant impact on parenting confidence and ability (Nursing and Midwifery Office 2011b). The woman's mental health status is assessed within the context of her parenting role, protective factors and risk factors. The nurse determines if the woman is vulnerable to perinatal mental illness that may compromise her ability to parent and identify interventions to diminish the risk of a mental illness developing (Nursing and Midwifery Office 2011b). The intent of the assessment is not on labelling or pathologising the women with a diagnosis of mental illness, rather it is to enable the provision of early intervention and support to significantly reduce the risk (NSW Department of Health). Nevertheless, if a woman is identified as having symptoms or risk factors that are linked with mental illness the nurses have established referral pathways that they use to access a mental health professional (Tresillian Family Care Centres 2015).

The nurses continually used parenting and child health as their reference point when assessing risk of mental illness. The Study findings demonstrate that the nurses work within the scope of CFH nursing practice (Nursing and Midwifery Office 2011a; Nursing and Midwifery Office 2011b). The CFH nurse scope of practice provides the professional and legal boundaries that ensure women, babies and their families are provided with safe and competent nursing practice (Nursing and Midwifery Office 2011b). A potential outcome is that women are assisted to identify symptoms of mental illness such as anxiety, feeling of sadness, guilt or an inability to cope with the feeling and demands of parenting (Austin, Highet & Committee 2011; International Marce Society 2014). The nurse is then able to support and facilitate access to specialist mental health services.

The third most commonly considered domain of information was Woman Determined Issues. This is also a key component of CFH nursing. The family partnership model that underpins CFH nursing includes: working in partnership with family members in pursuit of a common goal, shared decision making, shared

responsibility, mutual trust and respect, respecting parents as advocates and recognising them as the most significant influence in their children's lives (Nursing and Midwifery Office 2011b). The family partnership model requires a shift from the traditional role of working for to a role of working with parents to emphasise the expertise of the parent (Davis, Day & Bidmead 2002). This approach is underpin by a belief that with support the parent and child will find their own way, not to deny the expertise of the professional but identifies and engages with the complementary expertise of the parent (Gottlieb et al 2005). Performance indicators for the National Framework of Universal Child and Family Health Services include parents felt that '… providers listened carefully to their needs/concerns …[and]… feel supported as competent parents …'(Schmied et al. 2011, p. 3). The provision of support and guidance to caregivers then strengthens their ability to positively support and development of the child-parent relationship (Nursing and Midwifery Office 2011b). This early intervention can support, strengthen and enable the family to be empowered to reach their greatest potential (NSW Department of Health 2009).The nurses utilized their CFH nursing background throughout the admission process and reported on the psychosocial assessment within the milieu of practice strongly focused on parenting and working in partnership. These stories of psychosocial assessment have provided data on how the nurses make clinical decisions about the specific task of psychosocial assessment, focusing on the risk of mental illness. The nurses utilized their CFH nursing background throughout the admission process and reported on the psychosocial assessment within the milieu of practice strongly focused on parenting and working in partnership.

6.3 Underlying Complexity

Although The Study focus was on psychosocial assessment the findings of this study demonstrate that the nurses undertake and utilise information from the assessment while integrating and considering the woman's parenting, health, social and other psychological concerns and the infant's physical and psychosocial needs. This

information has reinforced the importance of a holistic approach to working with women who are experiencing difficulty with their parenting as often highlighted by others (Austin & Committee 2013). Mental health aspects are entwined within and cannot be isolated from the women's parenting concerns and challenges (Nursing and Midwifery Office 2011a).

Relationship based practices informed and supported by the Family Partnership Model were used by the nurses in this study and are consistent with the accepted practice approach of CFH nurses (Fowler et al. 2012). This approach enables the nurses to work collaboratively with parents to provide information, professional guidance and interventions that are sensitive to the child's and parent's needs and negotiated within the parent, child and nurse relationship (Fowler et al. 2012). Care is focused on building parenting capacity and confidence with the aim of enabling translation by the parents to their home setting and lifestyle.

The findings on the information domains were much broader that those found in the literature. The information domains that the nurses used to make their decisions regarding psychosocial risk were well integrated within a CFH nursing framework.

6.4 Limitations

This project was limited to CFH nurses in an EPC who were experienced at conducting postnatal psychosocial assessment. As the experience described is very specific the findings may not be generalisable outside of these parameters (Elbogen et al. 2005; Elo et al. 2014; Shenton 2004).

This project focused on the nurses' view of their experiences undertaking psychosocial risk assessments and the thinking strategies they used to guide decision-making. For this reason CIT was used as a guide for data collection and the nurses were asked to tell their story. These stories have provided rich, contextual data. However these data may be affected by the act of retrieval of information from the long-term memory which

can result in inconsistent or incomplete information (Fonteyn, Kuipers & Grobe 1993). An observational study of the nurses' assessment process would provide additional information that is unaffected by the process of reflecting back on experience (Elbogen et al. 2005; Fonteyn 1998).

There is an expectation of what nurses should do and more robust research that included observation of real practice situations could provide valuable and different data (Funkesson, Anbacken & Ek 2007).

6.5 Future Research Directions

This study examined the nurses' decision-making and enabled comparability with similar research. For future research CFH nurse practice could be investigated to ascertain if there are thinking strategy differences between an early parenting centre setting and a community setting.

Although the sample was limited to 12 participants, it was a purposeful sample of the nurses who had many years of experience of utilizing psychosocial assessment to make clinical decisions. All of the participants in this study were very experienced in caring for women and families in the postnatal period. The thinking strategies and information domains may be different if less experienced or newly qualified nurses participated in The Study. This difference in thinking strategies was found in the study of novice and experienced paediatric nurses (Andersson, Klang & Petersson 2012). A future study of the thinking strategies of newly graduated CFH nurses undertaking postnatal psychosocial assessment would provide a comparison to the thinking strategies of experienced nurses.

In order to gain a more comprehensive understanding of decision-making a comparison of the thinking strategies required for different tasks in the same setting would further increase the knowledge of Tresillian CFH nurses' decision-making. For example, describing the thinking strategies used for interacting with parents when providing telephone advice or using Facebook or internet chat lines, when planning and facilitating parent groups, undertaking case reviews, providing care and planning discharge activities.

These data were collected from three sites that have diverse populations. The nurses spent very little time at other sites resulting in very limited cross-fertilization of ideas. Tresillian does have practice guidelines that are used across the organisation to enable a level of consistency in clinical practice. The Study results are consistent across the three sites, demonstrating a homogenous tone or consistency of nursing assessment skills at an organisational level; rather than inconsistent practices between the three residential units. A question for future research is: how does organisational culture influence nurses' clinical practice behaviours?

Following an unrelated clinical placement experience that was undertaken by the researcher, after data collection for this study was completed the researcher believes that future findings on CFH nurses' decision-making would be more dependable if an observational component was combined with interview.

6.6 Implications for Practice

Decision-making in nursing practice is a complex process and it is important to determine how nurses make decisions in specific situations and the information that they use in order to achieve the best outcomes (Kihlgren et al. 2003). The nurses in this study have an average of 20 years of experience in caring for women and their families in the postnatal period. Findings from this study of critical thinking strategies used by such experienced nurses has the potential to inform the development of education programs for students or for novice CFH nurses and midwives learning to care for

women and their infants and families in the postnatal period. Novice nurses and midwives may be provided with a variety of thinking strategies and a range of information sources in order to ensure that accurate decisions are made in regards to psychosocial assessment.

These data may also be helpful with the recruitment of CFH nurses by determining suitability of candidates based on their thinking strategies. The study of emergency department nurses proposed that data from thinking strategy studies may help to determine suitability of applicants to specialised clinical areas, where specific decision-making ability is required, such as triage (Goransson et al. 2007).

The findings of this study may have a significant impact for CFH nurses and other health care providers such as midwives working in an Early Parenting setting conducting postnatal psychosocial assessment for women. The ability of the nurses to integrate a range of information domains is crucial; rather than taking a fragmented information approach to the assessment. This integrated approach enabled the nurses to complete a comprehensive assessment that acknowledged the inter-related nature of assessment findings and the impact on the women's ability to parent her infant. Using this approach the nurse is able to develop in consultation with the woman an intervention plan that addresses the immediate parenting concerns that triggered the admission to the EPC. It also enables the nurse to identify other psychosocial and infant related issues that were impacting on the woman's ability to mother her infant. In most instances this will require nursing interventions of assisting the woman enhance her physical and mental health, learn or refine existing parent craft skills, develop an effective support network, and have an opportunity to discuss and normalise many of the woman's concerns. While for other women an escalated response is required when significant psychosocial risk has been identified and referral to a mental health service is indicated (International Marce Society 2014).

Development of thinking strategies can support excellence in knowledge development through mentors in the use of thinking strategies and engagement in thinking strategy skills. The findings from this study could also be used as a framework to guide and

challenge the nurses during case discussions or clinical supervision and to inform curricula for both undergraduate and postgraduate nursing and midwifery students.

To gain a more comprehensive understanding of decision-making it would be helpful to compare the thinking strategies used for the same tasks in different specialties; CFH nurses working in the community, midwives working in antenatal care and midwives working in postnatal care. These data would allow a comparison with the psychosocial assessment decisions of Tresillian CFH nurses and illuminate the relationship between the task itself, the nurses' knowledge structure, and how the nurses use knowledge in different situations.

6.7 Reflection

At the beginning of this study I believed that psychosocial assessment was limited to the 12 questions on the PNRQ and the ten questions on the EPDS. I now realise that, for a new mother, parenting (as well as the other 21 information domains) are integral to the assessment of a woman's psychosocial status. The assessment is dependent on information from all information domains that are relevant to that woman. This assessment is at times so complex that no tool in isolation can provide the answer.

However, these tools provide the nurses with an excellent way to commence a conversation and guide the nurse where to find further information, to relate the information and identify patterns that are present in the information provided by the woman. The nurses extract and compare information from a variety of sources, including referral information, EPDS, PNRQ and then consider how the information matches the woman's verbal responses to develop the most accurate assessment of the woman's psychosocial status.

The more comprehensive the psychosocial assessment is the more able the nurse is, in consultation with the woman, to identify the specific areas that put the woman at risk

of mental illness. This then enables the nurse and woman to more effectively determine a range of strategies or interventions to manage psychosocial risks or symptoms of mental illness. Crucially, this is done within the context of the woman's role as a mother and the need to be responsive to her infant; and in many instances her other children.

6.8 Conclusion

This research has provided specific knowledge on the care of women in an early parenting centre setting. The nurses' decision-making in regard to psychosocial risk is a complex process; the nurse moves through specific domains of information that are relevant to each woman, using a variety of thinking strategies in each information domain. The nurses searched out assessment, historical, social, psychological, parenting and clinical information. They related information from the PNRQ to information on the EPDS. They judged the worth or value of information given in interview and brought their past experiences and knowledge of nursing, midwifery, mental health and child development in order to provide an understanding of the woman's risk of mental illness and make decisions regarding her care. This information on thinking strategies can be utilized in recruitment, training and education of CFH nurses and other health care professionals required to determine risk of mental illness. Improvement of nurses' decision-making will improve the care of the woman and her baby.

BIBLIOGRAPHY

Adrian, A. 2009, *Primary health care in Australia*, Australian Nursing Federation, Commonwealth Department of Health and Aging, Rozelle.

Alfaro - Lefevre, R. 1999, *Critical thinking in nursing: a practical approach*, WB Saunders, Philadelphia.

Andersson, N., Klang, B. & Petersson, G. 2012, 'Differences in clinical reasoning among nurses working in highly specialised paediatric care', *Journal of Clinical Nursing*, vol. 21, pp. 870-9.

Armstrong, S.J. & Small, R.E. 2010, 'The paradox of screening: Rural women's views on screening for post natal depression', *BMC Public Health*, vol. 10.

Austin, M.-P. 2003, 'Antenatal screening and early intervention for "perinatal" distress, depression and anxiety: where to from here?', *Archives of Women's Mental Health*, vol. 7, pp. 1-6.

Austin, M.-P., Colton, J., Preist, S., Reilly, N. & Hadzi-Pavlovic, D. 2011, 'The antenatal risk questionnaire (ANRQ): acceptability and use for psychosocial risk assessment in the maternity setting', *Women and Birth*.

Austin, M.-P. & Committee, T.M.S.P.S.A. 2013, *Marce International Society position statement on psychosocial assessment and depression screening in perinatal women*.

Austin, M.-P., Hadzi-Pavlovic, D., Leader, L., Saint, K. & Parker, G. 2005, 'Antenatal screening for the prediction of postnatal depression: validation of a psychosocial pregnancy risk questionnaire.', *Acta Psychiatrica Scandinavica*, vol. 112, no. 4, pp. 310-7.

Austin, M.-P., Hadzi-Pavlovic, D., Preist, S.R., Reilly, N., Wilhelm, K., Saint, K. & Parker, G. 2010, 'Depressive and anxiety disorders in the postpartum period: How prevalent are they and can we improve their detection', *Archives of Women's Mental Health*, vol. 13, pp. 395 - 401.

Austin, M.-P., Highet, N. & Committee, G.E.A. 2011, *Clinical practice guidelines for depression and related disorders - anxiety, bipolar disorder and puerperal psychosis in the perinatal period. A guide for primary care health profesionals providing care in the perinatal period.*, Melbourne.

Australian National Health and Medical Research Council 2014, *National statement on ethical conduct in human research (2007)*, National Health and Medical Research Council, <https://www.nhmrc.gov.au/guidelines-publications/e72>.

Bakalis, N.A. & Watson, R. 2005, 'Nurses' decision making in clinical practice', *Nursing Standard*, vol. 19, no. 23, pp. 33-9.

Barclay, L. & Kent, D. 1998, 'Recent immigration and the misery of motherhood: A discussion of pertinent issues', *Midwifery*, vol. 14, no. 1, pp. 4-9.

Benner, P. 1984, *From novice to expert: excellence and power in clinical nursing practice*, Addison-Wesley Publishers, Menlo, CA.

beyondblue: The National Depression Initiative 2008, *The national action plan for perinatal mental health*.

Boychuk Duchscher, J.E. 1999, 'Catching the wave: understanding the concept of critical thinking', *Journal Of Advanced Nursing*, vol. 29, no. 3, pp. 577-83.

Bradbury-Jones, C. & Tranter, S. 2008, 'Inconsistent use of the critical incident

technique in nursing research', *Journal Advanced Nursing*, vol. 64(4), pp. 399-407.
Briggs, C. 2013, 'Opportunities and challenges for maternal child and family health nursing', *Journal of Child and Family Health Nurses*, vol. 24, no. 1, pp. 9-14.
Brockington, I. 1996, *Motherhood and mental health*, Oxford University Press, Oxforfd.
Bucknall, T. 2003, 'The clinical landscape of critical care: nurses' decision-making', *Journal Advanced Nursing*, vol. 43, no. 3, pp. 310-9.
Bynum-Grant, D. & Travis-Dinkins, M.M. 2011, *Psychiatric nursing*, McGraw-Hill, Silver-Spring.
Chew-Graham, C., Sharp, D., Chamberlain, E., Folkes, L. & Turner, K.M. 2009, 'Disclosure of symptoms of postnatal depression, the perspectives of health professionals and women: A qualitiative study ', *BMC Family Practice*, vol. 10, no. 7.
Child And Family Health Nurses Association NSW 2009, *Competency standards for child and family health nurses*.
Christl, B., Reilly, N., Smith, M., Sims, D., Chavasse, F. & Austin, M.-P. 2013, 'The mental health of mothers of unsettled infants: is there value in routine psychosocial assessment in this context?', *Archives of Women's Mental Health*, vol. **16**, no. 5, pp. 391-9.
Cioffi, J. 1998, 'Education For clinical decision makingiIn midwifery practice', *Midwifery*, vol. 14, pp. 18-22.
Cowley, S.J., Mitcheson, J. & Houston, A.M. 2004, 'Structuring health needs assessment: The medicalization of health visiting', *Sociology Of Health And Illness*, vol. 26, no. 5, pp. 503-26.
Cox, J., Holden, J. & Henshaw, C. 2014, *Perinatal mental health: The Edinburgh postnatal depression scale (EPDS) manual*, 2nd edn, The Royal College of Psychiatrists, London.
Cox, J.L. 1986, *Postnatal depression*, Churchill Livigstone, Edinburgh.
Cox, J.L. & Holden, J.M. 1987, 'Detection of postnatal depression. Development of the 10-item Edinburgh postnatal depression scale', *British Journal Of Psychiatry*, vol. 150, pp. 782-6.
Daly, J., Speedy, S., Jackson, D., Lambert, V. & Lambert, C. 2005, *Professional nursing concepts, issues and challenges*, Springer Publishing Company, Inc., New York.
Davis, H., Day, C. & Bidmead, C. 2002, *Working in partnership with parents: the parent advisor model*, The Psychological Corporation, London.
Dawson, C. 2009, *Introduction to research methods: a practical guide for anyone undertaking a research project*, How To Books Ltd, Oxford, U.K.
Elbogen, E.B., Huss, M.T., Tomkins, A. & Scalora, M.J. 2005, 'Clinical decision making about psychopathy and violence risk assessment in public sector mental health settings', *Department of Psychology @ University of Nebrask Faculty Publications*
Elo, S., Kaariainen, M., Kanste, O., Polkki, T., Utriainen, K. & Kyngas, H. 2014, 'Qualitative content analysis: a focus on trustworthiness', *SAGE Open*, vol. 4, no. 1.
Elo, S. & Kyngas, H. 2008, 'The qualitative contant analysis process', *Journal Of Advanced Nursing*, vol. 62, no. 1, pp. 107-15.
Facione, M.C. 1995, 'Externalizing the critical thinking in knowledge

development and clinical judgment ', *Nursing Outlook*, vol. 44, pp. 129-36.
Flanagan, J. 1954, 'The critical incident technique', *Psychological Bulletin*, vol. 51, no. 4.
Fonteyn, M.E. 1998, *Thinking strategies for nursing practice*, Lippincott, Philadelphia.
Fonteyn, M.E., Kuipers, B. & Grobe, S. 1993, 'A description of think aloud method and protocol analysis', *Qualitative Health Research*, vol. 3, pp. 430-41.
Fossum, M., Alexander, G.L., Goransson, K.E., Ehnfors, M. & Ehrenberg, A. 2011, 'Registered nurses' thinking stategies on malnutrition and pressure ulcers in nursing homes: a scenario-based think-aloud study', *Journal of Clinical Nursing*, vol. 20, pp. 2425-35.
Fowler, C., Rossiter, C., Bigsby, M., Hopwood, N., Lee, A. & Dunston, R. 2012, 'Working in partnership with parents: the expereince and challenge of practice innovation in child and family health nurisng', *Journal Clinical Nursing*, vol. 21, no. 21-22, pp. 3306-14.
Fowler, C., Schmied, V., Psaila, K., Kruske, S. & Rossiter, C. 2014, 'Ready for practice: What child and family health nurses say', *Nurse Education Today*.
Fowler, L.P. 1997, 'Clinical reasoning strategies used during care planning', *Clinical Nursing Research*, vol. 6, no. 4.
Funkesson, K.H., Anbacken, E.M. & Ek, A.C. 2007, 'Nurses' reasoning process during care planning taking pressure ulcer prevention as an example. A think-aloud study', *International Journal of Nursing Studies*, vol. 44, pp. 1109-19.
Goransson, K.E., Ehnfors, M., Fonteyn, M.E. & Ehrenberg, A. 2007, 'Thinking strategies used by registered nurses during emergency department triage', *Journal Advanced Nursing*, vol. 61, no. 2, pp. 163-72.
Grbich, C. 2013, *Qualititive data analysis: An introduction*, SAGE Publications Ltd, London.
Guest, E.M., Keatinge, D.R., Reed, J., Johnson, K.R., Higgins, H.M. & Greig, J. 2012, 'Implementing and evaluating a professional practice framework in child and family health nursing: A pilot project', *Nurse Education in Practice*.
Halligan, S., Murray, L., Martins, C. & Cooper, P. 2007, 'Maternal depression and psychiatric outcomes in adolescent offspring: A 13-year longitudinal study', *Journal Of Affective Disorders*, vol. 97, pp. 145-54.
Health Department NSW 2010, *NSW Mothers and Babies 2007* Sydney.
Hedberg, B. & Larsson, U.S. 2002, 'Observations, confirmations and strategies - useful tools in decision-making process for nurses in practice', *Journal of Clinical Nursing*, vol. 12, pp. 215-22.
Holloway, I. & Wheeler, S. 2010, *Qualitative research in nursing and healthcare*, Wiley-Blackwell, Iowa.
Hsieh, H.-F. & Shannon, S.E. 2005, 'Three approaches to qualitative content analysis', *Qualitative Health Research*, vol. 15, no. 9, pp. 1277-88.
International Marce Society 2013, *Position statement - psychosocial assessment and depresison screening in perinatal women*.
International Marce Society 2014, *Psychosocial assessment and depression screening in perinatal women - position statement*, Swanesa, Wales.

Jefford, E., Fahy, K. & Sundin, D. 2010, 'A review of the literature: Midwifery decision-making and birth', *Women And Birth*, vol. 23, pp. 127-34.
Jones, C.J., Creedy, D.K. & Gamble, J.A. 2011, 'Australian midwives' awareness and management of antenatal and postpartum depression', *Women And Birth*, vol. 183.
Kalman, N. & Waughfield, C.G. 1987, *Mental health concepts*, Delmar Publishers Inc., New York.
Kardamanidis, K., Kemp, L. & Schmied, V. 2009, 'Uncovering psychosocial needs: perspectives of Australian child and family health nurses in a sustained home visiting trial', *Contemporary Nurse*, vol. 33, no. 1, pp. 50-8.
Kemp, L., Anderson, T., Travaglia, J. & Harris, E. 2005, 'Sustained nurse home visiting in early childhood: Exploring Australian nursing competencies ', *Public Health Nursing*, vol. 22, no. 3, pp. 254-9.
Kihlgren, A.L., Fagerberg, I., Skovdahl, K. & Kihlgren, M. 2003, 'Referrals from home care to emergency hospital care: Basis for decisions', *Journal of Clinical Nursing*, vol. 12, pp. 28-36.
Leigh, B. & Milgrom, J. 2008, 'Risk factors for antenatal depression, postnatal depression and parenting stress', *BMC psychiatry*, vol. 8, no. 24.
Milgrom, J., Schembri, C., Ericksen, J., Ross, J. & Germill, A.W. 2011, 'Towards parenthood: An antenatal intervention to reduce depression, anxiety and parenting difficulties', *Journal of Affective Disorders*, vol. 130, pp. 385-94.
Miller, J. 2012, *The philosophical life*, Oneworld Publications, London.
Minichiello, V., Sullivan, G., Greenwood, K. & Axford, R. (eds) 2004, *Research methods for nursing and health science*, 2 edn, Pearson Education Australia, Frenchs Forest.
Mulhall, A. 2003, 'In the field: notes on observation in quality research', *Methodological Issues in Nursing Research*, vol. 41, no. 3, pp. 306-13.
National Institute for Health and Clinical Excellence (NICE) 2007, *Antenatal and postnatal mental health: The NICE guidelines on clinical management and service guidance CG45*, National Collaborating Centre for Mental Health The British Psychological Sociaety & Royal College of Psychiatrists
NSW Department of Health 2008, *Families NSW supporting families early: Safe start strategic policy*, N. Health, Sydney.
NSW Department of Health 2009, *NSW Health/Families, NSW Supporting Families Early Package – SAFE START Guidelines: Improving mental health outcomes for parents and infants*, N.D.o. Health, North Sydney.
NSW Department of Health 2011, *Child and family health nursing professional practice framework 2011-2016*.
Nursing and Midwifery Office 2011a, *Child and family health nursing: professional practice framework 2011-2016*, NSW Health, Sydney.
Nursing and Midwifery Office 2011b, *Child and family health nursing: professional practice framework 2011-2016, NSW Health, Sydney.*, N.D.o. Health.
Oakley, A. 1993, *Essays on women, medicine and health*, University Press, Cambridge.
Prior, P., Wilkinson, J. & Neville, S. 2010, 'Practice nurse use of evidence in clinical practice: a descriptive survey', *Nursing Praxis In New Zealand*, vol. 26, no. 2, pp. 14-25.

Robert, R.R. & Petersen, S. 2013, 'Critical thinking at the bedside: providing safe passage to patients', *MEDSURG Nursing*, vol. 22, no. 2, pp. 85-118.
Rogal, S. & Young, J. 2008, 'Exploring critical thinking in critical care nursing education: a pilot study', *The Journal Of Continuing Education In Nursing*, vol. 39, no. 1, pp. 28-33.
Sandelowski, M. 2009, 'What's in a name? Qualitative description revisited', *Research in Nursing & Health*.
Schmied, V., Kruske, S., Barclay, L. & Fowler, C. 2011, *National framework for universal child and family health services*, Australian Health Ministers Advisory Council, Canberra.
Shenton, A. 2004, 'Strategies for ensuring trustworthiness in qualitative research projects', *Education for Information*, vol. 22, pp. 63-75.
Silverman, D. 2010, *Doing qualitative research*, 3rd edn, SAGE, London.
Simmons, B. 2010, 'Clinical reasoning: Concept analysis', *Journal of Advanced Nursing*, vol. 66, no. 5, pp. 1151-8.
Smith, S. 2009, 'Helping parents cope with crying babies: decision-making and interaction at NHS direct', *Journal of Advanced Nursing*, vol. 66, no. 2, pp. 381-91.
State Government of Victoria. 2012, *Postnatal care program guidelines for Victorian health services*, D.o. Health, Performance, acute programs and rural health branch, Victorian government, Melbourne.
Streubert, H. & Carpenter, D. 2011, *Qualitative research in nursing*, Wolters Kluwer Health, China.
Talge, N.M., Neal, C. & Glover, V. 2007, 'Antenatal maternal stress and lnog-term effects on child neurodevelopment: How and why? ', *Journal of Chld Psychology and Psychiatry and Allied Disciplines*, vol. 48, no. 3-4, pp. 245-61.
Tresillian 2013, *Annual report*, Tresillian Family Care Centres, Sydney.
Tresillian Family Care Centres 2015, *Tresillian family care centres 2015 clinical practice guidelines - depression and related disorders*, T.F.C. Centres, Belmore.
Usher, K., Baker, J.A., Holmes, C. & Stocks, B. 2009, 'Clinical decision-making for 'as needed' medications in mental health', *Journal of Advanced Nursing*, vol. 65, no. 6, pp. 981-91.
WHO 2009, *Mental health aspects of women's reproductive health: a global review of the literature*, World Health Organisation, Geneva.
Yelland, J., Sutherland, G., Wiebe, J. & Brown, S. 2009, 'A national approach to perinatal mental health in Australia: Exercising caution in the roll-out of a public health initative', *Medical Journal Australia*, vol. 191, no. 5, pp. 276 - 9.

Appendix 1 – Postnatal Risk Questionnaire (PNRQ)

POSTNATAL RISK QUESTIONNAIRE (PNRQ)

Name: _____ Today's Date: ___ / ___ / ____

Phone (h): _____ (w): _____ (m): _____

This questionnaire is confidential information and will remain in your file.
PLEASE COMPLETE ALL ITEMS - *Circle numbers 1-6 or tick YES / NO*

Total

1. When you were growing up, did you feel your mother was emotionally supportive of you? *(If you had no mother circle 6).*
   1 2 3 4 5 [6
   very much somewhat not at all [

2. a) Have you ever had 2 weeks or more when you felt particularly worried, miserable or depressed?
   Yes ❑ No ❑

   b) Do you have <u>any other history of mental health problems?</u>
   eg eating disorders, psychosis, bipolar disorder, schizophrenia
   Yes ❑ No ❑
   Please specify _____

<u>If Yes to 2a or 2b</u>, did this:

   c) Seriously interfere with your work and your relationships with friends and family?
   1 2 3 4 5
   not at all somewhat very much

   d) Lead you to seek professional help?
   Did you see a: Psychiatrist ❑, Psychologist/Counsellor ❑, GP ❑
   Yes ❑ No ❑
   _____
   (Name of professional)

   e) Did you take tablets/herbal medicine? No ❑ Yes ❑
   Please specify: _____

3. Is your relationship with your partner an emotionally supportive one? *(If you have no partner circle 6)*
   1 2 3 4 5 [6
   very much somewhat not at all [

4. a) Have you had any stresses, changes or losses in the last 12 months (e.g separation, domestic violence, unemployment, bereavement?)
   Please list: _____
   Yes ❑ No ❑

   b) How distressed were you by these stresses, changes or losses?
   1 2 3 4 5
   not at all somewhat very much

5. Would you generally consider yourself a worrier?
   1 2 3 4 5
   not at all somewhat very much

6. In general, do you become upset if you do not have order in your life (eg regular timetable, tidy house)?
   1 2 3 4 5
   not at all somewhat very much

7. Do you feel you have people you can depend on for support with your baby?
   1 2 3 4 5
   very much somewhat not at all

8. Were you emotionally abused when you were growing up?
   Yes ❑ No ❑

9. Have you <u>ever</u> been sexually ❑ or physically ❑ abused?
   Yes ❑ No ❑

10. Was your experience of giving birth to this baby disappointing or frightening?
    1 2 3 4 5
    not at all somewhat very much

11. Has your experience of parenting this baby been a positive one?
    1 2 3 4 5
    very much somewhat not at all

12. Overall, has your baby been unsettled or feeding poorly?
    1 2 3 4 5
    not at all somewhat very much

If you would like to seek some help with any of these issues please discuss this with your nurse or doctor.

How comfortable did you feel in completing this questionnaire?
1 2 3 4 5
Very comfortable somewhat not at all comfortable

Appendix 2 – Literature Review Table of Evidence

Reference	Aim / Objective	Context	Sample Size and Data Gathering	Method of Analysis	Findings
(Armstrong & Small 2010)	Describe women's views on screening for postnatal depression	Rural Australia	147 surveys, 80 telephone interviews and 20 in-depth interviews	Thematic analysis	For some women screening was seen as helpful but for others this was not seen as helpful or was even viewed with suspicion and did not result in their receiving help.
(Andersson, Klang & Petersson 2012)	To compare the thinking strategies of novice (newly qualified), experienced (more than three years)and specialist (more than five years plus further education) paediatric nurses	Sweden	21 nurses in case discussion focus groups	content analysis	The novice and the specialist nurses commonly used the thinking strategies of drawing conclusion and prioritising for information while the specialist group spent more time using the strategies of hypothesising, posing questions, making assumptions and pattern recognition.
(Bucknall 2003)	To look at the environmental influences on nurses real decisions in the critical care setting	Australia	18 nurses via observation and semi-structured interview	content analysis	The main factors that influence the nurses decision making were the patient situation, nature of the patient problem and health status. The more frequently the nurses dealt with certain situations the more frequently the thinking strategy of pattern recognition was used. Unusual situations lowered nurses confidence and slowed decision-making process
(Elbogen et al. 2005)	Provide a description of patient violence risk assessment by mental health clinicians.	Four adult inpatient psychiatric facilities in USA	135 clinicians using interview and survey	descriptive analysis	Clinicians searched for information on psychological conditions and personality characteristics. Experienced clinicians considered information on test results more frequently than less experienced clinicians.
(Fonteyn 1998)	Provide a detailed description of thinking strategies used by experienced nurses in various clinical specialties.	USA	15 nurses using Think Aloud interviews	content analysis	Nurses searched for information on patient assessment, background factors, signs and symptoms, demographic data, risk assessment and previous history in order to make clinical-decisions.
(Fossum et al. 2011)	To explore the thinking strategies of aged-	Norway	30 nurses using Think	Content Analysis	The three most commonly utilized thinking strategies were making

	care nurses during simulated risk assessment and care planning for pressure ulcers and malnutrition		Aloud interviews		choices, forming relationships and reaching conclusions. Nurses searched for further information on resident's functional ability, medications, equipment usage, social support and treatment responses.
(Funkesson, Anbacken & Ek 2007)	Provide a description of aged-care nurses decision making in regard to pressure ulcer prevention comparing consultants and carers	Sweden	11 nurses using Think Aloud interviews	Protocol Analysis	Observations of vital signs and of pain as well as drawing a conclusions were thinking strategies used by the nurses to make decisions. Nurses involved in direct patient care used more thinking strategies than consultant nurses.
(Goransson et al. 2007)	Describe and compare the thinking strategies of emergency department triage nurses with high and low accuracy of triage	Sweden	16 nurses using Think Aloud interviews	Content Analysis	The nurses used a variety of thinking strategies including stating propositions, generating hypotheses and searching for information. They searched for information regarding the onset and duration of signs and symptoms, previous experience of the symptoms and any action the patient had taken in regard to the symptoms. Comparison of previous triage accuracy revealed only slight variations in thinking strategies.
(Hedberg & Larsson 2002)	Describe how medical nurses make decisions	Medical wards, geriatric rehabilitation wards and primary health care in Sweden	6 nurses using Think Aloud interviews	Content Analysis	Observation was most often used method used by these nurse to acquire information on patient health status and prognosis. Biomedical information was considered more important than psychosocial information for decision-making.
(Kemp et al. 2005)	To determine if competencies adequately equip nurses to deliver sustained nurses home visiting.	Sustained nurse home visiting program in Australia	nine team-debriefing and one group discussion 1	Thematic analysis	The competencies needed to support the delivery of sustained nurse home visiting are different and more advanced than the generalist nursing or child and family health nursing competencies.
(Kihlgren et al. 2003)	Home care nurses and primary care physicians influences on decision to refer to emergency treatment	Sweden	Four consultant head physicians and ten registered nurses were	content analysis	The nurses searched for information on both the patient's and the relatives wishes. The nurses needed faith in their own competence and knowledge of the patient to make the right

			interviewed		decisions.
(Prior, Wilkinson & Neville 2010)	To describe the practice nurses perception of use, attitudes towards, perception of associated skills / knowledge and the effect of educational preparation on evidence based practice.	General practice in New Zealand	Fifty Five practice nurses answered questionnaires	Descriptive statistical analysis	Knowledge and skills relevant to the implementation of evidence based practice had a positive correlation with both registration preparation and tertiary qualifications. The length of time practicing in primary health care was negatively correlated with knowledge and skills relevant to implementation of evidence based practice.
(Smith 2009)	To report how telephone-triage nurses use clinical knowledge and experience to make decisions on advising parents	National telephone triage centre in England	Eleven telephone calls and a focus group of six nurses.	grounded theory	Nurses used clinical knowledge and experience and confidence in a variety of ways . Decisions concerning medical elements (normal time that baby may cry) it was regarded as safe to use an algorithm (practical rule) while decisions with non-medical elements (such as likelihood of shaking the baby) were treated differently
(Usher et al. 2009)	Mental health clinician decisions to administer 'as required' medications	Acute, rehabilitation and secure mental health units in Australia	nineteen clinicians were interviewed	open coding	Clinicians viewed experience as key to decision-making. Patient signs and symptoms, demographic or cultural identity, previous history and risk assessment information were considered most important for decision-making.

Appendix 3 – UTS Ethics Approval Letter

From: Ethics Secretariat [Research.Ethics@uts.edu.au]
Sent: Wednesday, 5 September 2012 4:40 PM
To: Prof Cathrine M Fowler
Cc: Deborah Sims; Ethics Secretariat
Subject: Eth: HREC Approval Letter - UTS HREC 2012-269A

Dear Cathrine and Deborah,

At its meeting held on 4/09/2012, the UTS Human Research Ethics Expedited Review Committee reviewed your application for your project titled, "Clinical Decision-Making from Psychosocial Assessment. How do Child and Family Health Nurses use Information from the Post Natal Risk Questionnaire to make Clinical Decisions?", and considered it to be low risk. I am pleased to inform you that ethics approval is now granted.

Your approval number is UTS HREC REF NO. 2012-269A

You should consider this your official letter of approval. If you require a hardcopy please contact the Research Ethics Officer (Research.Ethics@uts.edu.au).

Please note that the ethical conduct of research is an on-going process. The National Statement on Ethical Conduct in Research Involving Humans requires us to obtain a report about the progress of the research, and in particular about any changes to the research which may have ethical implications. This report form must be completed at least annually, and at the end of the project (if it takes more than a year). The Ethics Secretariat will contact you when it is time to complete your first report.

I also refer you to the AVCC guidelines relating to the storage of data, which require that data be kept for a minimum of 5 years after publication of research. However, in NSW, longer retention requirements are required for research on human subjects with potential long-term effects, research with long-term environmental effects, or research considered of national or international significance, importance, or controversy. If the data from this research project falls into one of these categories, contact University Records for advice on long-term retention.

If you have any queries about your ethics approval, or require any amendments to your research in the future, please do not hesitate to contact the Ethics Secretariat at the Research and Innovation Office, on 02 9514 9772.

Yours sincerely,

Professor Marion Haas
Chairperson
UTS Human Research Ethics Committee

C/- Research & Innovation Office
University of Technology, Sydney
Level 14, Tower Building
Broadway NSW 2007
Ph: 02 9514 9772
Fax: 02 9514 1244
Web: http://www.research.uts.edu.au/policies/restricted/ethics.htm

Appendix 4 – Tresillian Letter of Support

Tresillian

15 May 2012

Ms Deborah Sims
Faculty of Nursing, Midwifery & Health
University of Technology, Sydney
PO Box 123
Broadway

Dear Ms Sims

Re: proposed Masters Student Research Study

The Tresillian Executive Management Committee has reviewed the documentation for the proposed research study: how Child and Family Health Nurses use information gained from psychosocial assessment to make clinical decisions? I am pleased to provide you with permission to conduct this research with Tresillian registered nurse staff members.

This permission is conditional on gaining approval from the UTS Human Research and Ethics Committee. Once approval has been gained please forward the permission letter to me for our records. I understand that Prof Cathrine Fowler and Dr Joanne Gray will be supervising this research study as part of your Masters in Midwifery (Hons).

When you have received UTS ethic approval you will need to contact the registered nurses working within the 3 residential and 3 day stay units to participate in the proposed research study. Please liaise with the Director of Nursing and Clinical Services, Ms Anne Partridge and she will assist you contact the Centre Managers at each site to arrange for information research sessions and distribution of information sheets.

Yours sincerely

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Parents Help Line (02) 9787 0855 or 1800 637 357 (Outside Sydney Metropolitan Area)
www.tresillian.net

Appendix 5 – Participant Information sheet

PARTICIPANT INFORMATION SHEET AND CONSENT FORM

Study Title: A Study Investigating the Clinical Decision Making of Child and Family Health Nurses Following Administration Of Post Natal Risk Questionnaire

Chief Investigator: Cathrine Fowler, University of Technology, School of Nursing and Midwifery

Invitation
You are invited to participate in a research study into a clinical decision making by child and family health nurses

The study is being conducted by Professor Cathrine Fowler (UTS), Professor Joanne Gray (UTS) and Deborah Sims (Masters Candidate - UTS).

Before you decide whether or not you wish to participate in this study, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish.

What is the purpose of the study?

The purpose of this study is to describe how clinical decision are made by nurses working at Tresillian Family care Centres, from the information that they obtain from the psychosocial assessment tool; Post Natal Risk Questionnaire (PNRQ).

Who will be invited to enter the study?
You are being invited to participate in this study because you have experience with the Post Natal Risk Questionnaire

Do you have a choice?
Participation in this study is voluntary. It is completely up to you whether or not you participate. You will be kept informed of any significant new findings that may affect your willingness to continue in the study. If you wish to withdraw from the study once it has started, you can do so at any time without having to give a reason. However it may not be possible to withdraw your data from the study results if these have already had your identifying details removed.

What will happen on the study?
If you agree to participate in this study, you will be asked to sign the Participant Consent Form. This study will be provided to you when you are first informed about the study and you will be asked to sign it at the start of your interview.
Interviews will occur at Tresillian and will provide you with an opportunity to discuss your experience of introducing the PNRQ to the woman, problem solving and decision making and the outcome of the decision making.

PARTICIPANT INFORMATION SHEET AND CONSENT FORM

Study Title: A Study Investigating the Clinical Decision Making of Child and Family Health Nurses Following Administration Of Post Natal Risk Questionnaire

A series of questions and discussion points will be addressed in the interview, for example When have you found the PNRQ to be useful. When has the use of the PNRQ caused a problem.....It is envisaged the interview will take approximately 45 minutes to complete. The interview will be audio recorded with your permission.

Are there any risks?
It is unlikely that you will experience any discomfort in participating in the study.

Are there any benefits?
This study aims to further nursing knowledge and may improve training of Child and Family Health Nurses however it will not directly benefit you. You are not likely to receive any personal benefit from participating in this study; however your contributions will result to an improved understanding of the decision making process in this particular clinical situation.

Confidentiality / Privacy
All aspects of the study, including results, will be confidential and only the researchers listed above will have access to any information on participants. Participation is entirely voluntary: you are not obliged to be involved and, if you do participate, you can withdraw at any time without giving any reason and without any consequences.

Will taking part in this study cost me anything, and will I be paid?
Participation in this study will not cost you anything. There will not be any reimbursement for your time however light refreshments will be provided.

What will happen with the results?
If you give us your permission by signing the consent document, we plan to discuss the data in a Masters of Midwifery Dissertation. Results may also be disseminated through presentation at state and national professional conferences and publication in peer-reviewed professional journals.

If you would like to know more at any stage, please feel free to contact: Professor Cathrine Fowler in the School of Nursing and Midwifery, University of Technology, Sydney, ph :02 ..... You are able to discuss the study with others and are able to provide them with the chief investigator's contact details. They can contact the chief investigator to discuss their participation in the research project and obtain an information sheet.

Complaints

This study has been approved by the .....Human Research Ethics Committee. If you have any complaints or reservations about the ethical conduct of this research, you may contact (.....) or
The Secretary, ...Human Research Ethics Committee

PARTICIPANT INFORMATION SHEET AND CONSENT FORM

Study Title: A Study Investigating the Clinical Decision Making of Child and Family Health Nurses Following Administration Of Post Natal Risk Questionnaire

Telephone .....or email .....

Contact Details

When you have read this information, the researcher, ... , will discuss it with you and any queries you may have. If you would like to know more at any stage, please do not hesitate to contact her on 02 ..... If you have any problems while on the study, please contact

Professor (leave blank)
Working Hours Telephone No –
After hours Telephone No – (mobile number)

Thank you for taking the time to consider this study.

If you wish to take part in it, please sign the attached consent form.
This information sheet is for you to keep.

PARTICIPANT INFORMATION SHEET AND CONSENT FORM

Study Title: A Study Investigating the Clinical Decision Making of Child and Family Health Nurses Following Administration Of Post Natal Risk Questionnaire

CONSENT TO PARTICIPATE IN RESEARCH

Chief Investigator: Professor Cathrine Fowler

1. I understand that the researcher will conduct this study in a manner conforming to ethical and scientific principles set out by the National Health and Medical Research Council of Australia and the Good Clinical Research Practice Guidelines of the Therapeutic Goods Administration.

2. I acknowledge that I have read, or have had read to me the Participant Information Sheet relating to this study. I acknowledge that I understand the Participant Information Sheet. I acknowledge that the general purposes, methods, demands and possible risks and inconveniences which may occur to me during the study have been explained to me by ... ("the researcher") and I, being over the age of 16 acknowledge that I understand the general purposes, methods, demands and possible risks and inconveniences which may occur during the study.

3. I acknowledge that I have been given time to consider the information and to seek other advice.

4. I acknowledge that refusal to take part in this study will not affect the usual treatment of my condition.

5. I acknowledge that I am volunteering to take part in this study and I may withdraw at any time.

6. I acknowledge that this research has been approved by the .....Human Research Ethics Committee.

7. I acknowledge that I have received a copy of this form and the Participant Information Sheet, which I have signed.

Before signing, please read 'IMPORTANT NOTE' following.
IMPORTANT NOTE:
This consent should only be signed as follows:

1. *Where a participant is over the age of 16 years, then by the participant personally.*

Name of participant _____ Date of Birth _____

Address of participant _____

Signature of participant _____ Date: _____

Signature of researcher _____ Date: _____

Signature of witness _____ Date: _____

Appendix 6 – Consent Form

UNIVERSITY OF TECHNOLOGY SYDNEY

CONSENT FORM

I _____ *(participant's name)* agree to participate in the research project "Clinical Decision Making from Psychosocial Assessment. How Do Child And Family Health Nurses use the Post Natal Risk Questionnaire (PNRQ) to make Clinical Decisions?" (*UTS HREC approval reference number)* being conducted by Deborah Sims, a Masters of Midwifery (Hons) student in the Faculty of Nursing, Midwifery and Health, PO BOX 123, Broadway 2007, telephone [put your mobile] of the University of Technology, Sydney. I understand the purpose of this study is to describe incidents where information from the PNRQ was used by a Child and Family Health Nurse to inform clinical decision making regarding the women in their care.

I understand that I have been asked to participate in this research because I have experience with using the PNRQ and that my participation in this research will involve an interview to address questions and discussion points regarding the PNRQ. The interview is estimated to be 45 minutes to complete and will be undertaken in a private area at the Tresillian where I am currently employed. The interview will be audio recorded and all identification will be removed to ensure my confidentiality. It is unlikely that I will experience any discomfort by participating in this study.

I am aware that I can contact Deborah Sims or her supervisor, Professor Cathrine Fowler (0407 942 916), if I have any concerns about the research. I also understand that I am free to withdraw my participation from this research project at any time I wish, without consequences, and without giving a reason.

I agree that Deborah Sims has answered all my questions fully and clearly.

I agree that the research data gathered from this project may be published in a form that does not identify me in any way.

_____ ___/___/___
Signature (participant)

_____ ___/___/___
Signature (researcher or delegate)

NOTE:
This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer (ph: +61 2 9514 9772 Research.Ethics@uts.edu.au) and quote the UTS HREC reference number. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

Page 1 of 1

Appendix 7 – Interview Questions

1

CLINCIAL DECISION MAKING AND THE PNRQ

INTERVIEW TEMPLATE

Participant:

Date of Interview: Time of Interview:

1. Have you undertaken an admission assessment in previous 14/7?

2. How many years have you been nursing?

3. How many years of postnatal experience have you had?

4. What CFHN qualifications do you hold?

5. How many years since you have qualified as a CFHN?

6. What other post graduate qualifications do you have?

7. What other areas of nursing do you have experience in?

8. Do you have any mental health nursing experience?

9. How many years have you been with Tresillian?

10. How many months have you been using the PNRQ?

11. What process did you undergo to learn how to use the PNRQ? (both formal and informal)

12. Critical Incident Technique Section

I am now going to ask you to think of a woman you have used the PNRQ with during their admission to the unit. You can refer to the medical records you have brought with you to refresh your memory.

INTERVIEWS / INTERVIEW TEMPLATE

Can you provide an overview of that woman's admission. Can you recall what occurred in regard to risk assessment for mental illness and the use of the PNRQ, your findings during the admission and the eventual outcome for the woman?

How did you determine what were important factors in the assessment? Recall in as much detail as possible how you had been thinking and what you had observed, how the problem had been identified and which alternative measures had been considered. Examples of questions about decision making concerned assessment, intentions, knowledge, previous experience, aids and interventions.

13. What were the outcomes of your clinical decision making and how do you measure the outcomes?

14. For that woman list the important factors that you used to assess the woman's risk of mental illness.

15. Help make clinical decisions

16. Did you assess the woman's risk of mental illness?

17. Did you use clinical information to assess risk / what clinical information?

18. Did you use particular questions from the PNRQ to assess for risk of mental illness?

19. Did you use the score from the PNRQ to assess for risk of mental illness?

20. Do you have any other ways of assessing the woman's risk of mental illness? Any additional questions?

21. Key questions?

22. Did you find comparison in this woman's situation to other women at you previously assessed?

INTERVIEWS / INTERVIEW TEMPLATE

23. Other strategies for CDM?
24. What clinical decision making steps did you use in your assessment?
25. Did you have any initial concerns about using the PNRQ? If so, have these now been addressed?
26. How important was the PNRQ to your clinical decision making ability with this woman?
27. Do you think that the format of the PNRQ is easy to use? In what way?
28. Do you find the time that you spend with the woman is helpful? How?
29. What do you like least about the PNRQ?
30. What do you like best about the PNRQ?
31. What else informs your clinical decision making in regard to psychosocial issues?
32. PNRQ beneficial to your practice?

Did you use the woman's history to assess risk / what historical information?

Did you use the PNRQ to assess the woman's risk of mental illness?

How did you use the answers to these questions to assess the woman's risk of mental illness?

Do you regularly make decisions about risk assessment for women in your care?

How did you decide what needs, care or support this woman required?

Can you provide an example of your interaction with this woman that was a direct outcome of her responses to the PNRQ?

Do you find the PNRQ to be helpful? In what way?

Do you find the score of the PNRQ to be helpful? How so?

INTERVIEWS / INTERVIEW TEMPLATE

Appendix 8 – Thinking Strategies Glossary

GLOSSARY of THINKING STRATEGIES

1. Asserting A Practical Rule

The first thinking strategy of *asserting a practical rule* is defined as asserting a truism that has shown to hold consistently true in practice. This can include organisational policies and procedures as well as informal rules and maxims that have been learned throughout practice. Organisational policies and procedures provide rules of practice that the employees are expected to follow. Policies and procedures make the rules explicit. Asserting a practical rule facilitates other thinking strategies that my assist in solving a dilemma (Fonteyn 1998).

2. Drawing Conclusions

Drawing conclusions is a thinking strategy whereby the nurse forms an opinion. Nurses primarily draw conclusions about their client's status or condition or about a situation. The nurse may or may not explain their reasons for the conclusion, mentally justifying the validity (Fonteyn 1998).

3. Forming Relationships

The thinking strategy *forming relationships* is defined as connecting information to further understanding. Forming relationships between information assists thinking by clarifying and defining ill-structured problems (Fonteyn 1998).

From the TIP Study nurses form relationships to connect various forms of information. These include forming relationships between assessment findings and: client status, history, other assessment findings, problems and treatments. Also between treatment information and: actions, problems and other treatments; between history and problems or status and;

between test data and the context of the data or between test data and the status of the client (Fonteyn 1998).

Forming these relationships helps the nurse to assemble important data and evoke a mental image of the problem. New information is associated with information that is already known in order to define and refine the problem which assists the nurse to develop a plan of care (Barrows and Pickell, 1991).

Forming relationships helps the nurse to connect information to recognise the familiar pattern of a similar problem that they have dealt with previously. Nurses gain a better understanding of clients' problems by forming relationships between assessment findings and other information. Where patterns and trends are clear definite actions produce a quick response (Benner, Tanner and Chesla 1996).

4. Generating Hypotheses

The critical thinking strategy *generating hypothesis* is defined as asserting tentative explanations that account for a set of facts (Fonteyn, 1998).

This clinical thinking strategy is used to speculate about the possibilities of diseases or problems. Nurses are confronted with data from a variety of sources, including the history, assessments, interview, referral form and other health care providers. These data stimulate hypotheses about the disease conditions or client problems (Fonteyn, 1998).

In some instances recognising a pattern is used prior to generating hypotheses. Studies of nurses have demonstrated that nurses hypothesise by recalling disease processes or recognising a pattern with similar features that they encountered in the past (Fonteyn, 1998).

5. Judging The Value

Judging the value is a thinking strategy for forming an opinion or evaluation about worth in terms of usefulness, significance or importance. Judging the value is used by nurses when thinking about assessment findings, treatments and test data. Judging the value of assessment findings and test data is usually within the context of other findings or data. Judging the value of treatments usually occurs in terms of significance, including the value of risk versus benefit (Fonteyn, 1998).

6. Making Generalisations

The thinking strategy *making generalisations* is defined as inferring from many particulars (Fonteyn, 1998). Making generalisations allows the nurse to development a simplification or overview of the clinical situation.

7. Making Assumptions

Making assumptions is defined as taking for granted or supposing (Fonteyn 1998). For this thinking strategy the nurse formulates a belief that something is true without having proof or evidence to support it.

8. Making Choices

Making choices is a thinking strategy used for selecting from a number of possible alternatives, to decide on or to pick out one. Much of nurses' thinking about a clinical dilemma focuses on making choices about interventions, actions, treatments and test data. These choices represent a range of autonomy from independent, through interdependent to dependent choices (Fonteyn, 1998).

9. Making Predictions

The thinking strategy *making predictions* is defined as declaring in advance (Fonteyn 1998).

Findings from the TIP study showed that nurses make predictions about: interventions, outcomes, situation, findings, an event, a response and about client needs (Fonteyn 1998).The more experienced the clinician the more elaborate the framework for predicting outcomes. Fonteyn (1998) found that nurses made predictions as a way of envisioning then thinking about future clinical events.

Clinical experts employ matching strategies, or pattern recognition, with predictive reasoning to refine hypotheses (Patel et al, 1989). Nurses use predictions prior to deciding on clinical treatments (Carnevali et al, 1983). They make predictions to anticipate client outcomes. In many cases the nurses make predictions about the client's status. By anticipating a negative outcome the nurse prepares for it in advance and tries to intercede with preventive measures. In this way the nurse is alert to identifying assessment results and making choices to determine what action to take (Fonteyn, 1998).

10. Pondering

The thinking strategy of *pondering* is defined as mentally pausing to reflect on the meaning of a piece of information. A brief pause allows the nurse to collect her thoughts before continuing. (Fonteyn, 1998).

Barrows and Pickell (1991) describe pondering as putting conscious effort into thinking, asking self; how well am I doing in my thoughts? Do I require assistance, advice or more information? In the thinking strategy pondering the pace and the duration of the reflection-in-action, which reshapes what the nurse is working on, *while* the nurse is working on it, will vary with the pace and duration of the situation (Schoenberg, 1983.)

11. Posing a question

The thinking strategy *posing a question* is defined as asking for answers without expecting an answer (Fonteyn, 1998). Inquisitiveness is an important disposition towards critical thinking. (Facione et al 1995)

12. Providing Explanations

The thinking strategy of *providing explanations* is defined as offering reasons for actions, beliefs or remarks. One purpose of the thinking strategy providing an explanation is to identify the goals of therapy. Another purpose of this thinking is to verify a hypothesis in explanation of the purpose of a test. By providing an explanation for an interventions the nurse can ensure that they follow and maintain professional standards (Fonteyn, 1998)..

A rational choice for a treatment or action is listed by Fonteyn (1991) as one of the cognitive processes inherent in expert nurses clinical reasoning. Describing a process, stating a meaning, justifying or explaining a hypothesis or conclusion are all types of explanation described by Ennis (1996) .

In the TIP Study nurses used this thinking strategy to suggest reasons for therapy, tests, interventions and actions as well as to explain their concerns and predications (Fonteyn 1998).

13. Qualifying

The thinking strategy *qualifying* is defined as modifying, limiting or restricting as by giving exceptions (Fonteyn 1998). The meaning, scope or strength of something may be restricted, made less extreme or a quality or characteristic may be attributes to it when the nurse qualifies it.

14. Recognising a Pattern

The thinking strategy *recognising a pattern* is defined as identifying characteristic pieces of data that fit together. This occurs automatically in common thinking; dark, cloudy sky, wind starting to blow, air feels damp and heavy, hear the distant sound of thunder all together mean that it is going to rain. A scowling face, wrinkled brow dark, narrowed eyes and a sharp tone of voice indicates a pattern of anger. The TIP study provides several varieties of thinking patterns recognised by nurses: case type, standard treatment, familiar circumstances and lack of fit.

Case type patterns may represent disease conditions, the most likely explanation on findings (hypothesis), and the seriousness of a condition or clinical situation.

The skill of case type pattern recognition (diagnosis and disease condition) is essential as the accuracy and quality of diagnosis determines the effectiveness of the treatment (Carnevali and Thomas, 1993). Recognising a pattern in assessment findings facilitates the meaning in the interpretation including the severity of condition. This essential component of nursing experience and the genus of all successful early warnings are based on pattern recognition (Benner, 1984).

The second category of pattern recognition is for standard treatment protocol. Practice experience provides familiarity with treatment protocols and facilitates anticipation, preparation and initiation of treatment.

The third pattern of recognition is of familiar situation. Ability to recognise a familiar situation facilitates recall to past actions in similar situations, which strategies worked, or did not, how much energy the situation demanded and what resources were needed to allow the most effective outcome.

The fourth category is a lack of fit of the pattern, or pattern discrimination, that is recognised as it assists in ruling out hypothesise of particular problems or diagnoses. The discrepancy between 'what is' and 'what should be' provides necessary data to determine if a clients condition is improving or deteriorating (Fonteyn 1998).

15. Searching for Information

The thinking strategy *searching for information* is defined as mentally looking for missing or concealed information. This can include vital signs, logistical information, medication information, the care plan and test results. When a nurse first encounters a client they will always need more information than is initially available. Since nurses focus on treating the client response to health problems as much as they focus on diagnosis or treatment they also need information during the entire time the client is in their care. One type of information that nurses search for is signs and symptoms. They use this information to compare the client's progress over time, to identify trends and to assess status, as well as to further their understanding. Searching for information can be obtained by examining a client as well as by searching for information that represents assessment findings. This includes searching for additional information that is relevant to information already available. Also a search for information about the assessment findings that may be relevant to care or treatment planning or for clusters of information related to the assessment findings (Fonteyn, 1998).

16. Setting Priorities

The thinking strategy *setting priorities* is defined as ordering concepts in terms of importance or urgency. The TIP study describes two distinct types of priority setting; plan of action and client concerns. Use of the thinking strategy setting priorities enables the nurse to choose the order (systematic arrangement) in which to carry out a plan of action (Fonteyn 1998). Setting priorities helps the nurse to decide how to proceed with a plan of

action (Carnevali and Thomas, 1993). Sometimes setting priorities for a plan of action assists the nurse to identify important areas of focus when conducting an assessment. The urgency or importance of client concerns, identifying things about the client that do not worry them and are thus not a concern. As well as those things that are more and those things that are less worrisome. This allows the nurse to concentrate on what is important (Fonteyn 1998).

17. Stating a Proposition

The thinking strategy *stating a proposition* is defined as stating a rule governed by IF-THEN. In the IF-THEN scenario certain circumstances would have to exist and if that was the case a certain event would happen. Nurses use this thinking strategy to rule out or to rule in a disease, health problem or plan of action. Much of the thinking that nurses do focuses on identifying actual and potential problems. Nurses collect data and interpret the meaning. IF-THEN rules give meaning to the data concerning problems, making them easier to identify, more rapidly verified and the associated interventions can be initiated more quickly (Fonteyn 1998).

Appendix 9 – CFH Nurses Vote from Education Presentations

Table 9: Table of Informal Vote from Education Presentation to CFH Nurses

Domain of information	Vote
Abuse	1
affect or mood	41
anxiety traits	1
assessment tools	24
birth experience	3
culture or background	1
domestic violence	1
family dynamic	3
family health history	0
mental health history	23
mother relationship	8
obstetric history	2
parenting experience	12
partner support	7
perfectionistic traits	7
physical health	0
referral information	3
sleep issues	2
social supports	23
Stressors	13
substance abuse	0
woman determined issues or goals	23