

AN INVESTIGATION OF EXPERIENCES AND DEPRESSION
RATES IN WOMEN WHO HAVE DIFFICULTIES IN
ESTABLISHING A SATISFACTORY BREASTFEEDING
PROCESS WITH THEIR BABY- AN EXPLORATORY STUDY

ELIZABETH BOLYOS

DOCTOR OF PSYCHOLOGY (CLINICAL PSYCHOLOGY)

SCHOOL OF SOCIAL SCIENCES AND PSYCHOLOGY

VICTORIA UNIVERSITY

2010

ABSTRACT

This study investigated the experiences and post-natal depression rates in women experiencing problems in establishing and maintaining a successful breastfeeding process with their babies. There were two phases in the project. Phase 1 gathered categorical data about this client group, their partner and baby, the breastfeeding problems experienced and screened the women for post-natal depression. Phase 2 involved semi-structured, in-depth interviews with ten of the women involved in Phase 1. The interviews explored women's physical and emotional experiences of the breastfeeding problem(s); how this/these impacted on their relationship with their baby and partner; sought to elicit and evaluate the professional assistance they have received to remedy the problem(s); examined the amount and quality of family and social support received by the women; and invited participants to provide suggestions as to how other women in the same situation could be assisted. The results obtained found that this sample group had a higher level of PND than found by most previous researchers; that breastfeeding problems had a considerable physical and emotional impact on the women; they supported previous findings that professional, family and social supports are very important to new mothers; and that professional assistance and support to these women could be improved. It is recommended that further investigation is warranted – with a larger and more representative sample - to explore whether breastfeeding problems contribute to the aetiology and exacerbation of post-natal depression.

DECLARATION

I, Liz Bolyos, declare that the Doctor of Psychology (Clinical) thesis entitled:” An investigation of experiences and depression rates in women who have difficulties in establishing a satisfactory breastfeeding process with their baby – an exploratory study” is no more than 40,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the awarded of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Liz Bolyos

30th March 2010

DEDICATION

This thesis is dedicated to the memory of Rob Lewis, a much respected, valued and missed clinical supervisor and mentor who, with patience and by example, taught me the power and value of psychoanalytic psychotherapy for the healing of the mind, body and spirit.

ACKNOWLEDGEMENTS

There are many people I wish to thank:

Firstly I wish to thank the women who participated in this study. Their interest and support of the project and willingness to share their experiences was much appreciated.

My thanks also go to the staff at the Maternal and Child Health Care Centres and the Lactation Consultants who referred suitable participants to the project. Special thanks in this regard go to Ms Eve Vines who so generously gave of her time and extensive knowledge gained over many years as a privately practising lactation consultant.

I would also like to express my appreciation to the staff and volunteers at the Lactation Centre, Australian Breastfeeding Association, Melbourne, for their guidance to information and literature re breastfeeding and related topics.

My supervisors, Associate Professor Jenny Sharples and Professor Jill Astbury are also thanked for their academic support..

Very special thanks go to Kim and David Dorin for all their understanding, support, encouragement and for never failing to believe in me in all my years of academic endeavours.

Thanks also goes to my family – my sister Suzanne, brother-in-law John and brother, Joseph - for being there for me.

Last but not least, I would like to thank my many friends and colleagues for their interest, encouragement and support over my many years of study. Special mention in this regard goes to Julie Knight, Heather Gridley, Colleen Turner, Betty Kotler and Jacquie Grady.

CONTEXT OF THE PRESENT STUDY

This study is largely the result of my discussions with a female psychologist colleague about her experiences regarding problems with breastfeeding following the birth of her daughter (first child). This woman had been happily married for some years, was enjoying a successful career in her chosen profession and was in her early 30's. She and her partner had been planning to have a family and were eagerly awaiting the arrival of their baby. Apart from some expected and manageable morning sickness in the first 3 months she had a normal pregnancy and natural delivery. Her partner attended the birth and both parents were delighted to welcome their daughter. However, my colleague had problems with establishing a satisfactory breastfeeding process from the beginning. The baby would not attach to the breast properly, refused to breastfeed and cried a lot (creating anxiety in her mother that she was continually hungry). Despite various advice and assistance in the hospital (some of it inconsistent) and from Maternal and Child Healthcare Nurses, the problems were not satisfactorily resolved. My colleague developed mastitis and thrush and ended up with very sore breasts which exacerbated the problems greatly. The mother tried to find resources, relevant literature and further assistance to remedy the problems without much success. After considerable stress and frustration, she was finally referred to a private lactation consultant by a friend and the problems were rectified. Her experiences made my colleague think that breastfeeding problems (especially when they persisted over time) could be a factor in the development or exacerbation of postnatal depression, given all the other changes and adjustment new mothers undergo following the birth of their infant. She tried to find some literature in this regard, but found no studies. As I was looking for a research topic for postgraduate study in Clinical Psychology, she recommended this area to me and introduced me to the lactation consultant who had finally been able to help her overcome her breastfeeding problems. This professional informed me that breastfeeding problems were

quite common and concurred that they caused much frustration, anxiety and distress to new mothers, their babies, partners and families.

Over the past few decades breastfeeding has been recognised as one of the most important contributors to infant health, as well as having many health and financial benefits for mothers, families and the wider community (Minchin, 1998; Ball, 1999; Heining, 2001; Lawrence & Lawrence, 2005; Riordan, 2005). Thus, in Australia and most other parts of the world, it has become a high priority to encourage mothers to fully breastfeed their infants until the age of six months and partially beyond that age (Short, 1994; Campbell, 1996; Amir, 2000; Brodribb, 2004). Therefore it is important to expand knowledge in this area and gather as much information as possible about factors which impede or prevent breastfeeding.

Postnatal depression (PND) – its levels among mothers; factors contributing to its aetiology and exacerbation; and its impact on mothers, babies and families, has been extensively researched and well documented (Buist, 1996; Horan-Smith & Gullone, 1998, Righetti et al, 1998, Beck, 2001; Beck, 2004; James, 2005; Beck, 2006; Beck & Driscoll, 2006; Paulson et al, 2006; Watson Driscoll, 2006; Kendall-Tackett, 2007).

The impact of PND on the duration of breastfeeding, as well as links between PND and increased levels of bottle-feeding had also been investigated (Stamp & Crowther, 1994; MCGill et al, 1995; Astbury et al, 1996; Lane et al, 1997; Henderson et al, 2003; Hatton et al, 2005; Verinder, 2008).

However, to date no research has specifically investigated depression rates in women who have difficulty in establishing a satisfactory breast-feeding process with their newborn infant (Coombes, 1996).

Anecdotal evidence from new mothers and the health professionals assisting them suggests that breastfeeding problems are common and has raised the question whether they may be a factor in the aetiology and/or exacerbation of PND.

This study attempted to broaden understanding of the factors which contribute to difficulties in breastfeeding; find out directly from participants how these difficulties impacted on them physically and emotionally; whether the problems affected their relationship with their baby or partner; the type of professional assistance received to overcome the problems and what was helpful in overcoming the difficulties experienced with breastfeeding.

The study also investigated PND rates among women who were experiencing breastfeeding problems. As well it explored and evaluated the personal, social and professional supports received by the women.

TABLE OF CONTENTS

ABSTRACT	2
DECLARATION	3
DEDICATION	4
ACKNOWLEDGEMENTS	5
CONTEXT OF THE PRESENT STUDY	7
TABLE OF CONTENTS	10
CHAPTER 1. BREASTFEEDING	15
1.1 Brief History of Breastfeeding	15
1.2 Importance of Breastfeeding	16
1.3 Benefits of Breastfeeding for Babies.....	17
1.4 Comparison of Breastfeeding with Formula Feeding.....	18
1.5 Benefits of Breastfeeding for Mothers	19
1.6 The Economic Value/Importance of Breastfeeding	19
1.7 Breastfeeding Levels Recommended by the World Health Organisation (WHO) and UNICEF	21
1.8 Breastfeeding Prevalence in Australia	22
1.9 Breastfeeding and Work.....	24
1.10 Other Factors Influencing Breastfeeding Rates	29
1.11 Federal and State Government Initiatives to Improve Promote Breastfeeding Rates in Australia.....	30
1.12 Organisations And Health Professionals Assisting Mothers With Breastfeeding Difficulties	32
1.12.1 The Australian Breastfeeding Association – ABA (Formerly The Nursing Mothers Association of Australia).....	33
1.12.2 Lactation Consultants	35
1.12.3 Maternal and Child Health Care Centres	35
1.13 Feminism and Breastfeeding	35

1.14	The Breastfeeding Process.....	37
1.15	Problems Which May Arise When Breastfeeding.....	38
1.15.1	Nipple Pain and Trauma.....	38
1.15.2	Candida (Thrush)	39
1.15.3	Eczema and Dermatitis	39
1.15.4	Too Much Milk (Engorgement).....	39
1.15.5	Too Little Milk.....	40
1.15.6	Blocked Ducts (Non-Infective Mastitis)	40
1.15.7	Infective Mastitis	40
1.15.8	Breast Abscess.....	41
1.15.9	Blood in the Milk	41
1.15.10	Breast Refusal.....	41
1.15.11	The Crying Infant.....	41
1.15.12	Lactose Intolerance	41
1.15.13	Gastro-oesophageal Reflux and Oesophagitis	42
1.15.14	Physiological Jaundice (Early-onset Jaundice).....	42
1.15.15	Breast milk Jaundice (Late-onset Jaundice)	42
CHAPTER 2.	POSTNATAL DEPRESSION (PND)	44
2.1	Definition.....	46
2.2	Levels of Post-Natal Depression (PND).....	46
2.3	Physical, Emotional and Social Changes which may Increase Vulnerability to Depression in New Mothers.....	47
2.4	Onset and Prevalence of Post-Natal Depression.....	49
2.5	Factors Contributing To The Aetiology Of Post-Natal Depression.....	53
2.5.1	Feminist Perspectives	53
2.5.2	Hormonal Changes and Other Biological Risk Factors	54
2.5.3	Past History of Clinical Depression.....	55
2.5.4	Psychosocial Factors.....	55
2.5.5	General Social Support	56
2.5.6	Specific Relationship Factors	57
2.5.7	Mother Infant Relationship	59
2.5.8	Stressful Life Events	60
2.5.9	The effects of Mothers' Cognitive Style and Appraisal of Self and Others in PND ..	60
2.5.10	Interaction of Mother and Infant Variables in PND	63
2.6	Effects Of Mothers' PND On Infants.....	64
2.6.1	In the First Few Months.....	64
2.6.2	Longer Term	66
2.7	Measurement Of Postnatal Depression	67
2.8	Treatment of Post Natal Depression.....	68
2.8.1	Reasons for Under Detection	68
2.8.2	Important Considerations for Health Professionals for Diagnosis of PND	70
2.8.3	Factors To be Addressed in the Prevention, Identification, Assessment and Management of PND	71
2.8.4	Treatments	73

CHAPTER 3. CONCEPTUALISATION AND DESIGN OF THE PRESENT STUDY	77
3.1 Rationale for the Present Study	77
3.2 Aims of the Present Study	78
3.3 Design	79
3.4 Method of Research	80
CHAPTER 4. METHOD.....	83
4.1 The Sample	83
4.2 Recruitment of Participants	83
4.3 Materials	84
4.4 Procedure	84
4.5 Treatment of Data	86
4.5.1 Phase One.....	86
4.5.2 Phase Two	86
CHAPTER 5. RESULTS.....	93
5.1 Summary of Demographical Data	93
5.1.1 Information About Babies	93
5.1.2 Breastfeeding Problems	95
5.1.3 Information About Mother	97
5.1.4 Information About Father	98
5.1.5 Other Demographical Data.....	99
5.1.6 Edinburgh Postnatal Depression Scale Findings	100
5.2 Interview Findings	101
5.2.1 Information About Babies and Mothers.....	101
5.2.2 Breastfeeding Problems	101
5.3 Professional Assistance Sought/Received To Remedy Breastfeeding Problems	103
5.3.1 Hospital	103
5.3.2 Maternal and Child Health Care Centres	105
5.3.3 Private Lactation Consultants.....	107
5.3.4 General Practitioners (GP's)	108
5.3.5 Australian Breast Feeding Association.....	109
5.3.6 Maternal Helpline.....	109
5.3.7 Internet.....	109
5.4 Factors Investigated Specifically During Interviews	109
5.4.1 Physical Impact of Breastfeeding Problems on Mothers	109
5.4.2 Emotional Impact of Breastfeeding Problems on Mothers	110
5.4.3 Relationship with Baby	112
5.4.4 Relationship with Partner.....	114

5.4.5	Family Support	115
5.4.6	Support From Partners.....	116
5.4.7	Support Received from Mothers (Maternal Grandmothers).....	117
5.4.8	Support Received From Mothers-in-Law.....	119
5.4.9	Support Received from Other Female Relatives.....	119
5.4.10	Social Support.....	120
5.5	Mother and Babies Groups	121
5.6	Additional Points Which Arose During Interviews	121
5.7	Suggestions by the Women of What Would Have Been Helpful To Them And Therefore To Women In Similar Circumstances In The Future.....	127
5.8	Post Natal Depression And Breastfeeding Problems	130
CHAPTER 6. DISCUSSION		132
6.1	Results of the Edinburgh Postnatal Depression Scale	132
6.2	Breastfeeding Problems	135
6.3	Physical and Emotional Impact of Breastfeeding Problems on Mothers	136
6.3.1	Impact of Breastfeeding Problems on Mothers' Relationship with Their Babies....	138
6.3.2	Impact of Breastfeeding Problems on Mothers' Relationship with Their Partners	138
6.3.3	Professional Assistance Received Regarding The Breastfeeding Problems.....	139
6.3.4	Family and Social Supports	141
6.4	Suggestions by the Women of What Would Have Been Helpful to Them to Address the Breastfeeding Difficulties and May be Helpful to Other Mothers	143
6.5	Limitations of the Study	145
6.6	Summary	146
CHAPTER 7. IMPLICATIONS OF THE PRESENT STUDY: FOR PRACTICE AND FOR FUTURE RESEARCH.....		147
7.1	Implications for Practice	147
7.2	Implications for Clinical Psychologists	150
7.3	Implications for Future Research.....	151
REFERENCES.....		154
APPENDICES		176
APPENDIX 1 – LETTER TO MATERNAL AND CHILD HEALTH CARE PROFESSIONALS.....		176

APPENDIX 2 – LETTER TO LACTATION CONSULTANTS177

APPENDIX 3 – INVITATION TO PARTICIPATE IN A RESEARCH STUDY178

APPENDIX 4 – CONSENT FORM FOR PARTICIPANTS INVOLVED IN RESEARCH.....179

APPENDIX 5 - QUESTIONNAIRE 1181

APPENDIX 6 - QUESTIONNAIRE 2.....183

APPENDIX 7 - QUESTIONNAIRE - (IN-DEPTH INTERVIEWS).....186

CHAPTER 1. BREASTFEEDING

1.1 Brief History of Breastfeeding

This chapter outlines the history of breastfeeding, including changing trends; the importance of breastfeeding for infants, mothers, families and the wider community, comparing it with formula feeding; the breastfeeding process, breastfeeding level recommended by the World Health Organisation (WHO), UNICEF and Australian health authorities; past and current breastfeeding prevalence in Australia; factors influencing breastfeeding rates; Australian Federal and State Government initiatives aimed at improving breastfeeding rates in Australia; breastfeeding problems which may occur; and organisations and health professionals which assist mothers with breastfeeding difficulties.

Until the 1930s and '40s most babies were breastfed in nearly all societies (Riordan & Auerbach, 1993; Minchin, 1998; Lawrence & Lawrence, 2005; Riordan, 2005).

This period was followed by several decades during which in the industrialised countries childbirth came to be viewed primarily as a medical rather than a biological and social event and bottle feeding became much the preferred and socially acceptable way of infant feeding (Riordan, 2005). Several factors contributed to this change.

With the introduction of general anaesthesia and other changes in medical practices, birthing moved from home to hospitals. After the birth mothers and babies were separated for most of the time to allow the mother to recuperate following childbirth. During this period babies were bottle fed by nurses. This resulted in mothers and babies returning home with impaired breast milk supply, no established breastfeeding routine and baby used to being bottle fed (Lawrence & Lawrence, 2005). The introduction of formula infant foods, purporting to be better for babies and more convenient, especially for feeding regulation and mobility of the mother, was another factor that contributed to this change (Brodrigg, 2004).

Introduction and acceptance of oral contraception in the 1950's – 60's may have also reinforced the decline in breastfeeding. Contraceptives containing oestrogen and progestin reduced breast milk volume and thus contributed to lactation insufficiency. Mothers were also concerned about passing these hormones to babies through breast milk (Riordan, 2005).

However, since the 1970s there has been a reversal of the trend to bottle-feed babies. This has been due to medical evidence about the overwhelming benefits of breastfeeding for babies, mothers and the wider community compared with formula feeding (Campbell, 1996; Dermer, 1998; Brodribb, 2004; Riordan, 2005). Mothers are now being strongly encouraged to breastfeed their babies until at least 6 months and preferably longer (Cafarella, 1996; Riordan, 1997; Ball & Wright, 1999; Heining, 2001). In Australia a national breastfeeding target has been set for the year 2000 to have 90% of babies breastfed at birth and 50% exclusively and 80% partially breastfed at the age of six months (Amir, 2000).

However, the actual breastfeeding rates have fallen considerably short of these target levels. Although new born infants are being breastfed close to the 90% target level – the rate fluctuating between 86-88% between 1995 and 2004 - there is a rapid reduction in the rates after discharge from hospital. At 3 months after birth for the same period breastfeeding rates dropped to 63-64% and only 46-50.4% of 6 month old infants were being breastfed, falling far behind of the target levels of 80% (Amir & Donath, 2008).

1.2 Importance of Breastfeeding

Most pregnant women plan to breastfeed because they see it as the best thing for their baby and given the right support, accurate information and management, it should be possible for nearly all mothers to breastfeed (Minchin, 1998).

There are many reasons why breastfeeding is preferable for babies, mothers and the community at large. (Riordan & Auerbach, 1993; Campbell, 1996; Minchin, 1998; Ball & Wright, 1999; Heining, 2001; Lawrence & Lawrence, 2005; Riordan, 2005). Breastfeeding is

one of the most important contributors to infant health. It provides a range of benefits to the infant's growth, immunity and development (Cunningham et al, 1991; Heining, 2001). In addition, breastfeeding improves maternal health and contributes economic benefits to the family, the health care system and the workplace (Lawrence, 1997; Australian Breastfeeding Strategy, 1997; Riordan, 1997; Ball, 1999).

Continuing or ceasing breastfeeding is significantly associated with many factors. Lower educational level of parents, younger maternal age, mothers' physical and emotional health, lower socioeconomic status, as well as the direct experience of increased fatigue, lack of freedom, delayed return of sexuality and return to paid employment tend to lead to early cessation of breastfeeding (Cooper et al, 1993; Misri et al, 1997). While higher educational levels of parents, higher socioeconomic status and older maternal age lead to continued breastfeeding (Amir & Donath, 2008; Binns, 2004; Cooklin et al, 2008).

1.3 Benefits of Breastfeeding for Babies

It is now accepted by world health authorities that breastfeeding to the age of six months gives the best nutritional start to infants and is closely related to immediate and long-term health outcomes (Binns, 2004). Human milk is the perfect food for human infants because it contains all the nutrients and energy needs of babies until the age of four to six months (Riordan & Aucherbach; Riordan, 2005). As well colostrum, the first milk produced after birth, is rich in antibodies which protect infants from infection and disease such as respiratory, gastrointestinal and staph infections (Jellife et al, 1991; Gordon, 1995, Lawrence & Lawrence, 2005).

Breast milk seldom causes allergic reactions and is easily digested and absorbed. It is sterile, convenient, cheap and the right temperature (McCauley, 1994).

Longer term breastfeeding, beyond six months, reduces the risks of allergies (such as asthma and eczema); multiple sclerosis and other auto-immune diseases; juvenile insulin

dependent diabetes mellitus (IDDM); Crohn's disease and ulcerative colitis in adulthood and coeliac disease; and heart disease (Lawrence & Lawrence, 2005; Riordan, 2005)

Breastfeeding also contributes significantly to better speech and jaw development and reduces the risk of malocclusion and tooth decay (Lawrence, 1997). As well, breast milk contains fatty acids assisting visual and central nervous system development and which are important for brain development. This has been shown to have measurable implications for the intellectual functioning of primary school age children (Lucas, 1992).

It has been found that breastfeeding also leads to decreased risk of sudden infant death syndrome (Riordan, 2005).

Mother-baby bonding, namely the establishment of a close physical and emotional relationship between mothers and their infants (Winnicott, 1990) is also assisted by breastfeeding. This has been shown to be important for the emotional /psychological development of the child (Cox, 2004; Bartlett, 2005).

Breastfeeding involves a lot of physical closeness between a mother and her baby which facilitates a reciprocal emotional closeness. This generates feelings of trust, security, a sense of belonging and of being loved in the infant. These are important in the healthy development of a child's confidence, self-esteem and ability to develop satisfactory relationships later in life (Winnicot, 1990).

1.4 Comparison of Breastfeeding with Formula Feeding

The infant health risks of artificial feeding are widely documented (Cunningham 1991 Riordan, 1997; Ball & Wright, 1999). Even in developed countries like Australia "formula" fed babies are significantly more likely to be hospitalised than breast-fed infants (Howie al, 1990). Popkin, Lasky et al 1994 concluded that artificially fed infants suffered twice as much illness as breast-fed infants even after controlling for confounding variables such as socioeconomic status. A controlled study by the National Health Strategy (NHS, 1992) found

that children fed on artificial milk for at least three months were 12-31% more likely to suffer serious chronic illness.

"Formula" fed babies in developed countries have a substantially increased risk of necrotizing enterocolitis (NED), a significant cause of illness and death of premature babies; neonatal sepsis; sudden infant death syndrome (SIDS); higher risk of respiratory tract infection and middle ear infection; diarrhoeal disease; gastrointestinal illness and rotavirus gastroenteritis; H influenza bacteraemia (HIB) and meningitis (Howie et al, 1990)

1.5 Benefits of Breastfeeding for Mothers

Breastfeeding provides mothers with many short and longer term benefits which include: faster post-birth recovery by speeding up the restoration of the uterus to its non-pregnant size and consequent decreased risk of postpartum haemorrhage; loss of some extra weight gained during pregnancy; contraception; reduced risk of later development of some diseases such as breast, cervical and ovarian cancer and osteoporosis (Dewey, 1993; McCauley, 1994; Riordan, 1997; Siskind et al, 1997; Marcus et al 1999;)

Drane (1997) argues that breastfeeding is convenient, saves time and is very cost effective compared with formula feeding.. It is also reassuring for mothers to know that breast milk contains all the nutrients required for their baby. Breastfeeding can be a very satisfying experience for mothers. When everything is going well, breastfeeding is a very enjoyable and sensual experience for mother and baby. It is also empowering for women to know that their bodies are capable of producing food (Riordan and Auerbach, 1993).

1.6 The Economic Value/Importance of Breastfeeding

Not only is breastfeeding of great benefit to mothers and babies, it is also of economic value to families and the wider community.

Breastfeeding is cost-free compared with formula feeding, it reduces the use of health services which benefit both families and the community (Riordan, 1997; Ball & Wright, 1999) and also benefits the environment through reduced waste materials compared with other feeding methods (Weimer, 2001).

A substantial body of research has focussed on extending conventional measures of economy such as Gross Domestic Product or National Income to include, along with household economy such as unpaid work, the costs of environmental degradation and depletion of natural assets, the value of breastfeeding (Oshaug and Botton 1994; Smith et al, 1998).

These researchers have shown that there are substantial economic gains to the community from breastfeeding and huge economic losses from artificial feeding. They argue that the inclusion of human milk in measures of economic production would make this politically invisible food visible; it would assist in the promotion of breastfeeding; and would also be a positive recognition of one of women's unique contributions to society (Minchin, 1998; Smith et al, 1998; Riordan, 2005).

Artificial formula feeding makes demands on national resources that breastfeeding does not. It has economic consequences at various different levels, sectors and institutions - nations, governments, health care organisations and families (Weimer, 2001).

Based on the prevalence of breastfeeding levels during 1992, the total market value of human milk in Australia for that year was estimated to be \$2.3 billion (Smith et al, 1998). Had breastfeeding been at optimal levels at the time, this amount would have been \$5.7 billion - an increase of \$3.4 billion. The latter figure is potentially worth around 1.3% of GDP or some 40% of public sector spending on health (Smith et al, 1998).

Health benefits of breastfeeding accrue only partly to a breastfeeding family. Benefits would also accrue to the public sector or employers, as reduced public health costs and less

absenteeism or higher productivity by parents due to infant illnesses (Jones & Matheny; 1993; Cohen et al, 1995; Smith et al, 1998).

Riordan, (2005), lists the value of breastfeeding as: the avoidance of the expenses of the goods necessary for artificial feeding; the health producing effects of breastfeeding; the avoidance of disease producing or harmful effects of artificial feeding; the avoidance of the time spent in artificial formula feeding .

However, the most critical element in the economic value of breastfeeding is the health cost implications.

Drane (1997) estimated the public hospital costs of illness statistically attributable to formula feeding in Australia for just three common infant illnesses (NED, gastroenteritis, eczema) and assuming a breastfeeding prevalence of 60% at 3 months of age to be \$18 million per annum.

Riordan (1997) estimated the health costs of not breastfeeding infants in the US to have been over \$1 billion per annum - from higher rates of infant diarrhoea; respiratory syncytial virus; otitis media and insulin dependent diabetes mellitus.

The above estimates only take into consideration hospitalisation costs, but these are only a component of public and private health costs associated with illness in infants. The above estimates exclude private financial and economic costs associated with post hospital consultations with GPs and paediatricians, pharmaceutical and nursing costs, household disruption and productivity losses, and long term morbidity costs (Smith et al, 1998).

1.7 Breastfeeding Levels Recommended by the World Health Organisation (WHO) and UNICEF

Optimum levels of breastfeeding may be defined by the WHO/UNICEF "Innocenti Declaration on Protection, Promotion and Support of Breastfeeding", signed in 1990 by representatives from 30 countries which states:

"All infants should be fed exclusively on breast milk from birth to four to six months of age. Thereafter, children should continue to be breastfed for up to two years of age or beyond, while receiving appropriate and adequate complementary foods". (WHO/UNICEF, 1991 in Smith et al 1998, p.14).

This was further reinforced and supported by the above organisations' "Global Strategy for Infant and Young Child Feeding" of 2002 and their "Innocenti Declaration on Infant and Young Child Feeding" of 2005.

Exclusive breastfeeding is defined as that no other drink or food is to be given to the infant; the infant should feed frequently and for unrestricted periods.

The above declarations state that the achievement of the optimal levels of breastfeeding as recommended would "arrive at the highest attainable standard of health and development for infants and young children, which is the universally recognised right of every child". They also stress that inappropriate feeding practices – sub-optimal or no breastfeeding and inadequate complementary feeding – remain the greatest threat to child health and survival globally. They estimate that improved breastfeeding alone could save the lives of more than 3,500 children every day, more than any other preventive intervention (WHO, 2005).

According to WHO only 1-5% of women in industrialised countries are physiologically incapable of sustaining breastfeeding (WHO, 1991). Hence "optimal" breastfeeding by the 95-99% of women physiologically capable of it, would involve exclusive breastfeeding until 4-6 months of age and then continued breastfeeding up to two years of age and beyond (WHO, 2005).

1.8 Breastfeeding Prevalence in Australia

During the 1960s and 1970s breastfeeding rates in Australia declined dramatically, reaching an all time low during 1970-72 before returning to 1950s levels by the latter 1980s (Riordan, 2005).

However, until the mid-1990s there were no comprehensive or reliable national statistics on the prevalence of breastfeeding in Australia. There was no ongoing data collection at the national level and only sporadic collections at the state level (NHMRC, 1995). Also, as virtually all studies limited data collection to breastfeeding on discharge hospital, at 3 and 6 months, very little knowledge was available on breastfeeding rates at 9, 12 months and beyond (Lester, 1994, Amir, 2000; Amir & Donath, 2005). The only data on long term trends were those compiled by the Nursing Mother's Association of Australia (NMAA) – now the Australian Breastfeeding Association (ABA) - on breastfeeding prevalence at hospital discharge and at 3 months and 6 months of age (NMAA, 1993, NMAA, 1995). These figures from the early 1970s to early 1990s, compared with the national health target levels and recommended optimal WHO levels, are presented in Figure 1 below.

TABLE 1- Breast Feeding Statistics for Australia 1972, 1992

AGE	1972	1992	National Health Target Levels of Breastfeeding	Optimal (WHO) Levels of Breastfeeding
Birth	60%	76%	90%	95%
3 mths	21%	58%	80%	95%
6 mths	11%	44%	80%	95%

As can be seen from the above breastfeeding rates have increased considerably over the two decades from 1972 to 1992. However, they are still well below the levels recommended by WHO and the national health target levels on breastfeeding (NHMRC, 2003).

Since the mid-1990's Donath and Amir (2000, 2005, 2008) have been compiling and publishing more comprehensive and regular statistics on Australian breastfeeding rates – refer to Figure 2 below.

**TABLE 2 – Breastfeeding Statistics for Australia
1995, 2001, 2004**

	1995	2001	2004	Norway	Australian Target Levels	Optimal WHO Levels of Breastfeeding
Birth	86%	87%	87.7%	99%	90%	95%
Hospital Discharge	82%	83%				
3 months	63%	64%	64.4%	92%	80%	95%
6 months	46%	48.9%	50.4%	80%	80%	95%
12 months	21.3%	24.8%	23.3%			

Donath and Amir from their deeper analysis of the figures have concluded that overall breastfeeding rates have remained unchanged between 1995 and 2001. For comparison they have included the breastfeeding rates from Norway, which are the rates that the National Health and Medical Research Council Infant Feeding Guidelines recommend Australia should aim to achieve (NHMRC, 2003; Donath & Amir, 2005)

Breastfeeding continues to provide substantial nutritional, immunological and other benefits into the second year of life (Amir, 2000). However, in Australia breastfeeding into the second year is not common. Only about one in five infants are breastfed at 12 months of age (Donath & Amir, 2005), around 9% of infants at 18 months and 5% at 24 months (Australian Institute of Family Studies, 2008)

1.9 Breastfeeding and Work

Most people in Australia believe that breastfeeding is best for the baby, supporting the WHO/UNICEF recommendations of breastfeeding rates. However, while over 80% of

Australian babies are breastfed at birth, only about half this rate is still being breastfed at 6 months (Donath & Amir, 2008). Studies have shown that mothers returning to work are a major reason for early weaning (Visnes, 1997; Australian Family Studies, 2008).

Ladomenou et al 2007 list possible loss of mothers' employment opportunities as a cost of breastfeeding. Visnes et al, 1997 suggest urbanisation brings increased opportunities for mothers to engage in activities that are incompatible with breastfeeding.

Once women return to work artificial formula feeding becomes more convenient. Difficulties in combining breastfeeding with working for some groups of low income or ethnic women have been noted in several studies (Visnes et al, 1997; Ladomenou et al, 2007).

Noble & Team (2001) have found that not only do women give up breastfeeding when returning to work, but some women who intend to return to work soon after the birth of their baby do not initiate breastfeeding at all.

Much of this data provides support for the hypothesis that the preferred feeding choice for infants made by Australian families is related to economics rather than nutrition.

For working mothers to maintain successful lactation, supportive worksite health-promotion policies are required that provide education and facilitate for either frequent feeding or frequent expression and storage of breastmilk, as required (Binns, 2004)

TABLE 3 FACTORS INFLUENCING BREASTFEEDING (BF) INITIATION AND DURATION

Authors	Sample	Setting	Method	Results	Critiques
Novotny et al 2000	1574 women – survival analysis of weaning	Multiethnic population in Hawaii	Retrospective descriptive survey	Factors associated with early weaning were: mother not born in USA, Japan or Philippines, first language not English, employed full time outside home, introduced formula or solids before 60 days, citing convenience as reason for stopping, breast problems, problems in initiating breast feeding, insufficient milk, baby refusing breast and sick baby.	Convenience sample, generalization of findings may be difficult as population of Hawaii is multi-ethnic.
Lande et al 2003	2383 women 4 months postpartum	A sample of Norwegian women	Retrospective study with some prospective information collected retrospectively	Exclusive breastfeeding at 4 months was associated with maternal age, education and urbanization, infant gender, parity and marital status.	Norwegian study, large sample size strengthened reliability of findings., but generalizability could be a problem as results may be influenced by cultural factors.
Henderson et al 2003	1745 women at 2, 6 and 12 weeks postpartum	Women recruited from 2 Australian hospitals	Prospective cohort survey	Postnatal depression was associated with a reduction in breastfeeding duration.	A large proportion of the women in the study were from a high socioeconomic background, findings may not be readily generalized to populations such as socially disadvantaged groups. Study strengths include large sample size and the minimal possibility of measurement error in measuring PND due to the use of validated diagnostic psychological interviews.
Taveras et al 2003	1163 women at 1-2 days, 2 and 12 weeks postpartum	Low risk mothers in a Californian health maintenance organization	Descriptive study of risk factors associated with weaning, prospective cohort	Weaning by 2 weeks was associated with lack of confidence in ability at 1-2 days, early breastfeeding problems, Asian ethnicity and lower maternal education level. Weaning by 12 weeks was associated with lack of encouragement from mother's clinician, experiencing maternal depression symptoms and returned to work.	Large sample, spread of sampling times gives a good view of reasons for breastfeeding cessation over time from 1-2 days after birth to 3 months postpartum.
Sullivan et al 2004	115 women at 3-4.5 months postpartum	Primiparous urban ethnically diverse women in Chicago	Descriptive prospective	Weaning at 3-4.5 months was associated with parental relationship stress, greater maternal responsibility for household tasks, less maternal involvement with infant care and working more	Sample of ethnically diverse, middle-class urban women and their male partners. Interviewing both partners strengthens validity and reliability of

				than 20 hours/week.	results. However these may be difficult to generalize to lower socioeconomic samples
Ong et al 2004	2149 survival analysis of weaning	All women delivering in 8 Singapore hospitals	Information from Singapore National Breastfeeding Survey – prospective	Return to work was associated with weaning from 6-8 weeks of age onwards.	Large sample, spread over 8 hospitals enhances validity and reliability and generalizability of findings.
Porter Lewallen et al 2006	379 women at 8 weeks postpartum	Women from south-eastern USA planning to breastfeed for at least weeks after an uncomplicated delivery	Descriptive prospective	Reasons for stopping breast feeding before 8 weeks included insufficient milk supply, painful nipples/latching on problems, personal reasons, return to work, drugs and illness of mother or baby.	Convenience sample, more than half the women from not first time mothers, with most of them well educated and receiving strong support from lactation consultants while in hospital may have affected results.
Amir & Donath 2007	Systematic review of literature on maternal obesity and breastfeeding	Community Sample, Missouri, USA	Prospective study	Studies have found that obese women plan to breastfeed for a shorter period than normal weight women and are less likely to initiate breastfeeding. They also breastfed for a shorter duration than normal weight women even after adjusting for confounding factors.	Systematic review of literature from Medline and CINAHL databases (19 studies) from the USA, Australia, Denmark, Kuwait and Russia) to examine the relationship between maternal overweight and breastfeeding intention, initiation and duration. Strength of findings assisted by cultural spread of research.
Weiser et al 2009	1789 women at 2 and 12 months postpartum	Department of Health, Missouri, USA	Mailed out surveys and telephone follow-up	Mothers who smoked (31%) initiated breast feeding less often and weaned earlier than non-smoking mothers, after controlling for sociodemographic characteristics, the presence of other smokers in the household, alcohol use, mode of delivery and infant hospitalisation.	Stratified sample of new mothers, classified as non-smokers, smokers who quit during pregnancy, light smokers (<10 cigarettes per day) or moderate/heavy smokers (>10 cigarettes per day). Large sample, examining different levels of smoking enhanced reliability and validity of study.

Dennis & McQueen 2009	Review of 75 articles related to postpartum depression and breastfeeding		Systematic review of literature	The results suggest that women with depressive symptomatology in early postpartum period may be at increased risk for negative infant-feeding.	Health databases searched from 1966 to 2009. Seventy-five articles extracted with 49 specifically providing data related to postpartum depressive symptomatology and infant feeding outcomes. Both authors independently extracted data, including study design, participants (number and characteristics) and results. The large number of studies examined, spanning decades of research and data extraction by 2 independent researchers support the validity and reliability of the results obtained.
-----------------------	--	--	---------------------------------	--	---

1.10 Other Factors Influencing Breastfeeding Rates

Table 3 (on the previous page) sets out some research finding about factors which influence breastfeeding initiation and cessation. As well as returning to work, past researchers have found that women's decision whether to continue or cease breastfeeding is significantly associated with a broad range of other issues. These include lower educational levels; younger maternal age; lower socioeconomic status; women smoking; as well as the direct experiences of increased fatigue, lack of freedom and a delayed return of sexuality (Misri et al, 1997; Scott & Binns, 1998; Pope, 2000; Hamlyn et al, 2002; Donath & Amir, 2008).

Binns (2004) further reported that factors associated with women's decision whether or not to breastfeed included the fathers of their infants and maternal grandmothers preferring this mode to formula feeding; mothers deciding pre-pregnancy to breastfeed; mothers who were primiparous; mothers who were born in Australia, the United Kingdom, Asia, Middle East or North Africa; and women whose husbands were professionally employed.

Many epidemiological studies of breastfeeding in developed countries have found a relationship between socioeconomic status and duration of breastfeeding – with disadvantaged women less likely to initiate and also continue breastfeeding in the longer term (Ladomenou et al, 2007; Taylor et al, 2006; Bonet et al, 2007; Goodnadottir et al, 2006).

In Australia, Amir & Donath (2008) have found similar trends. Analysing data from the National Health Survey and the Longitudinal Study of Australian Children for the decade between 1995 and 2005 they have found that while the overall rates of breastfeeding have remained unchanged, the broad figures mask an increasing divide between the highest and lowest socio-economic groups.

Amir & Donath (2009) reported that infants in higher socioeconomic groups were more likely to be breastfed than in previous years, but little change has occurred in lower

socioeconomic groups. They stated that women from lower-income families are less likely to breastfeed for a number of reasons, including less family support for breastfeeding, less ability to seek help with breastfeeding problems, less flexibility with working arrangements, and concerns about breastfeeding in public. These women are also more likely to interact socially and be influenced by women who are less inclined to breastfeed, who are younger, less educated and less health conscious (Amir & Donath,2008).

Comparing depressed and non-depressed women, it has been found that while there was no difference between the cohorts in their original intention to breastfeed, depressed women had generally stopped breastfeeding by eight weeks. This trend was attributed to women not wanting their babies to be exposed to the effects of antidepressant medication (Pope, 2000).

1.11 Federal and State Government Initiatives to Improve Promote Breastfeeding Rates in Australia

The Commonwealth and State Governments are committed to protecting, promoting and supporting exclusive breastfeeding for at least the first four to six months of life. Australia is one of the few developed countries in the world to include a guideline on breastfeeding in its dietary guidelines for adults (NHMRC, 2003). This guideline recognises the role the whole community plays in encouraging and supporting breastfeeding.

At a national level Australia has the “Goals and Targets for Australian Health to the Year 2000 and Beyond” which includes recommendations for breastfeeding. The recommended goal for breastfeeding initiation in this country is 90%, with 80% both at 3 and 6 months of age (NHMRC, 1995).

At a State level “Promoting Breastfeeding: Victorian Breastfeeding Guidelines” was published by the Department of Human Services in January 1998 (DHS, 2005). It covers such topics as “Promoting breastfeeding - the essentials”; “Establishing breastfeeding”; Solving common breastfeeding problems”; “Breastfeeding babies with special needs”;

“Maintaining breastfeeding at home”; and “Further breastfeeding information and resources for health workers”. The policy statement calls for hospitals and other organisations that provide maternal services, to develop and implement explicit breastfeeding policies. They emphasise that while strongly supporting breastfeeding as an option, specific information should also be provided about all the options for infant feeding and that “the right of the mother to make an informed choice” needs to be recognised. It also advises on the need for developing community awareness about the benefits of breastfeeding (DHS, Victoria, 2005).

Australia has also included breastfeeding in its national health goals and targets (Donath & Amir, 2008) and various projects have been established in the past decade to improve awareness of the benefits of breastfeeding and increasing breastfeeding rates. The projects included the:

- development and dissemination of the "Dietary Guidelines for Australians" (NHMRC, 2003) highlighting the nutritional, health, social and economic benefits of breastfeeding and stressing its importance for the whole community
- development and dissemination of the "Dietary Guidelines for Children and Adolescents" (NHMRC, 2003), with the message to encourage and support breastfeeding highlighted as the most important guideline
- - development of the "Infant Feeding Guidelines for Health Workers" (NHMRC, 2003) with the aim of assisting health workers to promote, encourage and support breastfeeding in a consistent way
- facilitation of a self-regulatory model for implementation of the World Health Organisation's International Code of Marketing Breast Milk Substitutes (WHO Code) in the 1990's. The resulting voluntary agreement is the 1992 "Marketing in Australia of Infant Formulas Agreement" and covers the marketing of infant formula by manufacturers (NHMRC, 2003)

In its 1996-97 Federal Budget the Commonwealth Government through its "Health Throughout Life" policy statement further expressed its support of breastfeeding initiatives (Department of Health and Family Services, 1996). This policy introduced a range of new public health measures in the areas of maternal and child health, including the \$2 million "Breastfeeding Strategy". A number of projects were funded under this strategy, targeting health professionals, health and community organisations and the general public (National Breastfeeding Strategy: Summary Report, 2001).

These projects had a multifaceted approach that included: community and family education; education and skilling of health professionals; increasing hospital and community support for breastfeeding; improving the capacity to monitor trends in breastfeeding by using consistent measurement tools.

The Health Throughout Life Policy also included an allocation of \$15 million to a National Child Nutrition Program, to fund community-level projects to improve the diet and eating habits of young children from the pre-natal stage through to the primary school years. Through this policy a further funding of \$50,000 per annum for the 3 years commencing 1998-1999 was also been allocated to the Nursing Mothers' Association of Australia to assist its ongoing work of supporting breastfeeding in the community. (National Breastfeeding Strategy: Summary Report, 2001).

1.12 Organisations And Health Professionals Assisting Mothers With Breastfeeding Difficulties

There are a range of health professionals to assist mothers with issues regarding breastfeeding from the midwives and nurses who help deliver their babies to doctors, maternal and child health care nurses and lactation consultants (in hospitals and privately practising).

There is little research about new mothers' evaluation of the services they have received from health professionals after the birth of their baby and existing studies have mainly dealt with hospital care provided to these women. Schmied et al (2009), researching service delivery in a metropolitan Australian hospital, found that following birth women have reported physical health problems, difficulty with breastfeeding, a lack of parenting self-efficacy and that there is a high occurrence of postnatal distress and depression. However, despite these significant needs women were frequently dissatisfied with the advice and support they received from hospital based postnatal care. These researchers recommended that midwives needed to have better developed skills and more time to be able to sensitively listen to and work with new mothers. Guest & Stamp (2009) postnatal care in a rural facility, reported similar findings. They reported that in the postnatal period women were often less than happy with the services they received and felt they were left to manage on their own. They recommended that new mothers need more individualised care.

1.12.1 The Australian Breastfeeding Association – ABA (Formerly The Nursing Mothers Association of Australia)

Established over 40 years ago, the ABA is a national breastfeeding support organisation providing a wide range of services (often by volunteers) to breastfeeding mothers, their families and the wider community. These services include a 24 hour helpline in each Australian State and Territory; a bi-monthly magazine mailed to members; informal local gatherings where women can discuss breastfeeding and parenting issues; books, booklets and audio-visual items on all aspects of breastfeeding and related issues (which can be purchased or borrowed); a wide range of useful products for parents sold by local groups via the Internet, or by mail order from the association's own training company, Mothers Direct; community information/education; Lactation Resource Centre, which collects and catalogues the latest information on breastfeeding from world-wide sources. ABA literature includes:

- An Introduction to Breastfeeding.
- Mother and Baby: a survival guide for the first 12 months.
- Breast and Nipple Care.
- Breastfeeding and Hospitalisation.
- Postnatal Depression and Breastfeeding.
- Mother Friendly Workplace Initiative Information sheet.
- The Caregiver's Guide to the Breastfed Baby.
- Expression and Storing of Breast milk.
- Breastfeeding, Women and Work.

The ABA is also highly instrumental in the promotion of improved initiation and duration of breastfeeding throughout Australia. It's 2004 Australian Breastfeeding Leadership Plan contained strategies and actions that aimed to result in breastfeeding rates and duration in Australia moving closer to the six months exclusive breastfeeding recommended by WHO (2001) and NHMRC (2003) with ongoing breastfeeding to 12 months and beyond for as long as mother and child desire. Implementation of the plan requires a multi sector partnership approach, with Governments and the community working together.

This Plan proposed actions in four strategic areas:

- I. Establishment of policies, legislation and institutions protective and supportive of breastfeeding.
- II. Development of a breastfeeding friendly healthcare system – hospitals, health professionals, pharmacies.
- III. Promotion of breastfeeding friendly workplaces and childcare services.
- IV. Strengthening breastfeeding friendly communities and families. (ABA, 2004)

1.12.2 Lactation Consultants

Lactation consultants are breastfeeding specialists who usually have a nursing background in maternal and child healthcare. They are employed by hospitals, maternal and child healthcare centres or work privately. They can assist women to establish a satisfactory breastfeeding routine with their newborn baby or help with any breastfeeding difficulties they may experience later on.

1.12.3 Maternal and Child Health Care Centres

Nurses in maternal and child health care centres have regular contact with mothers and infants up to the age of 5 years to ensure the healthy physical and emotional development of children and to assist mothers (and fathers) with the many facets of parenting.

If a mother cannot visit the centre with her baby, outreach maternal and child healthcare nurses can visit her at home. Not only can these workers help with breastfeeding and other relevant issues, but they are also vigilant about other needs the mother, baby and family may have and provide appropriate referrals when required. Postnatal depression is something they are expected to be very alert about, ensuring that the mother is linked into suitable treatment options as soon as there are signs of this.

1.13 Feminism and Breastfeeding

Although breastfeeding is a uniquely female activity and all literature and practices concerned with infant feeding are by definition about women, it has held little interest for feminists (Carter, 1995). When any feminist discourse does occur, it is around the discussion of the desirability (pros and cons) of breastfeeding (Carter, 1995).

Some feminist thought has been influential in the promotion of breastfeeding as a resistance to “the medicalization” of childbirth and motherhood, associating it with women’s personal agency and empowerment.(it is only something women can do – a positive/vital

contribution) (Van Esterick, 2009). They state that in undermining this uniquely female activity we may overlook the human needs and possibilities which arise from these and further perpetuate the importance of production over and above reproduction (Wolf, 2006).

Others however, regard it as far from being an empowering act and pose that breastfeeding may have become more of a “normalized” moral imperative that many women experience as anything but liberating (Crossley, 2011). Thus it has been pointed out that the demand on women to breastfeed places stresses on new mothers and discriminates against some. Breastfeeding has become equated to being a good mother – or breastfeeding mother = good mother. This is a dangerous assumption as there are many women who are not able to breastfeed for physiological and other reasons and discriminates against younger, less educated, lower sociocultural and black women (Dettwyler, 2009).

Thus the argument leads to the question – does formula feeding promote feminism (and vice versa?) as it allows women much more freedom in terms of being able to go back to work, reduce the amount of reliance a baby has on them and get them “back to normal” post birth? Or conversely does breastfeeding promote feminism as it gives women a sense of confidence about their bodies and mothering?

Carter (1995) and Crossley (2011) recommend that rather than focusing on the differences between women, we need to address women’s wish to have control over their bodies and their lives. Thus the emphasis should be on enabling women to expand their choices about how they engage with reproduction and sexuality rather than limit them to what appears as natural womanly behaviour.

Thus we need to direct our energies to the necessity of emphasizing and working with individual difference amongst women. There needs to be an acceptance of women who choose not to or cannot breastfeed. Women need to be supported to make their choices re breastfeeding – defending their right to do what they like, what suits them best. Women need to be supported in their choices (Carter, 1995).

1.14 The Breastfeeding Process

Colostrum, which is produced in the breast during late pregnancy and for the first 30 to 40 hours after birth, is the first food a breastfed baby receives. It is yellow in colour and thicker than mature milk due to its high concentration of immunoglobulins (Riordan, 2005).

Milk "coming in" occurs about 48 to 72 hours after birth (Minchin, 1998) and is perceived by the mother as the start of lactation. The correct positioning and attachment ("latching on") of the infant at the breast are the keys to successful breastfeeding (Days, 2006). They are vital in achieving the correct milking action for removal of milk from the breast without nipple pain or trauma (Cox, 2004).

Bartlett (2005) outlined the process of breastfeeding as follows. For feeding the mother should be seated comfortably in an upright position so that her breasts fall naturally. The infant should be unwrapped to allow easy handling and to avoid over-heating, it should be supported behind the shoulders and facing the mother, latching onto not just the nipple but the breast tissue around it which contain the milk glands and achieving the correct sucking or milking action with her tongue. Within seconds of a baby stimulating the sensory nerve endings around the nipple by sucking the breast, the process of milk ejection or milk let-down starts. The infant should stop feeding of her own accord by coming off the breast spontaneously (Days, 2006).

There is evidence that starting to breastfeed within the first hour or so of birth is good for mothers, infants and for ongoing breastfeeding (Minchin, 1998). A successful first breastfeed has a number of positive effects:

- it builds the mother's confidence in her ability to breastfeed
- the infant starts to receive the immunological benefits of colostrum
- the infant's digestion and bowel function are stimulated

- correct sucking at the breast at this early time may avert later sucking difficulties
- the bonding and attachment of mother and infant are enhanced (Minchin, 1998; Cox, 2004; Bartlett, 2005)

Days (2006) also highlights that unrestricted feeding, both day and night, is an important factor in successfully establishing breastfeeding and results in optimum milk production. The infant will vary her feeds according to her needs and the rate of milk transfer. The mother should be encouraged to allow her to finish the first breast before offering the second breast. Both breasts should be offered at each feed. The infant may or may not feed from the second breast according to its appetite (Days, 2006).

1.15 Problems Which May Arise When Breastfeeding

Although most women can breastfeed successfully, some problems can and do occur in the breastfeeding process. The most common ones are listed below.

1.15.1 Nipple Pain and Trauma

While nipple sensitivity in the early days after birth is to be expected, nipple pain is not normal and it indicates that something may be wrong (Minchin, 1998). Nipple pain is the second most common reason stated for abandoning breastfeeding (Minchin, 1998). Causes of nipple pain are:

- incorrect positioning and attachment of the infant
- engorgement
- infant causes (hard “chewing” on nipple by baby)
- incorrect sucking action
- mouth or palatal abnormalities

- nipple causes (cracked/bleeding nipples, due to dryness of skin)
- nipple variations, eg, flatness or inversion
- thrush; and
- eczema or dermatitis (Bartlett, 2005)

1.15.2 Candida (Thrush)

A lactating woman suffering from candida infection of the nipples and breast may have any or all of the following symptoms: breast pain, nipple pain, rash (Brodribb, 2004).

1.15.3 Eczema and Dermatitis

These affect the nipples and breasts of breastfeeding women and are of three main types (Lawrence & Lawrence, 2005)

- I. atopic eczema, where the nipples are affected by more widespread skin disease
- II. irritant contact dermatitis occurring in response to an agent being applied to the nipples
- III. allergic contact dermatitis which is a hypersensitivity reaction to an allergen in contact with the nipple (Lawrence & Lawrence, 2005).

1.15.4 Too Much Milk (Engorgement)

If breast milk is not effectively removed, engorgement (an over supply of milk) will follow. This causes the breasts to distend causing discomfort and pain. It is primarily a problem in the early days of lactation and is resolved naturally by the body which adjusts milk production to the requirements of the feeding infant over time (Riordan, 2005).

1.15.5 Too Little Milk

It is important to distinguish between genuine low milk supply and perceived low milk supply.

While most problems of under supply can be resolved by improving the management of breastfeeding, a very small proportion of women do not have the metabolic capacity to produce enough breast milk for their infants. Perceived low milk supply is a cause of much anguish to mothers and the most common cause for stopping breastfeeding early (Riordan, 2005).

1.15.6 Blocked Ducts (Non-Infective Mastitis)

Non-infective mastitis can result from a blocked milk duct. Usually one segment of a breast becomes tender, reddish and hardened. The inflammation occurs because milk in the blocked duct cannot be removed and banks up, causing localised distension and tenderness. If the blockage is not cleared rapidly, milk is forced into the surrounding breast tissue. Initially, a blocked milk duct will not be accompanied by systemic symptoms such as fever, aches and pains, but as the breast becomes more inflamed, 'flu-like' symptoms may develop (Lawrence & Lawrence, 2005).

1.15.7 Infective Mastitis

Infective mastitis generally results from either an immense overgrowth of pathogenic bacteria or conditions that give bacteria access to breast tissue while at the same time preventing the body from destroying the bacteria. Mastitis can have a rapid onset (Lawrence & Lawrence, 2005).

1.15.8 Breast Abscess

A breast abscess is a serious and painful condition which is usually the result of untreated or inadequately treated mastitis and requires urgent medical attention (Brodrribb, 2004).

1.15.9 Blood in the Milk

This may be due to traumatised nipples, when excess duct cells are dislodged, during feeding or expressing of milk. If only a small amount of blood is involved, breastfeeding can continue as normal. However, if bleeding persists beyond a few days, medical attention is required (Riordan, 2005).

1.15.10 Breast Refusal

The causes of breast refusal are numerous, varying with the infant's age and often a cause cannot be found - possible causes may be an unwell baby, hormonal changes in the mother which may affect both the taste and supply of milk and low milk supply (Brodrribb, 2004).

1.15.11 The Crying Infant

Prolonged crying in infants is often mistakenly interpreted as hunger due to an inadequate supply of milk by anxious and distressed parents (Minchin, 1998). However, crying is an essential part of human development and research has found that about 10% to 35% of healthy babies seem to cry for long periods of the day and night (Minchin, 1998).

1.15.12 Lactose Intolerance

The incidence of lactose intolerance is very low in breastfed infants and is rarely severe enough to warrant a breastfed infant being weaned onto a low lactose formula (Lawrence & Lawrence, 2005).

1.15.13 Gastro-oesophageal Reflux and Oesophagitis

Gastro-oesophageal reflux (GOR) and oesophagitis are a common occurrence and may show in approximately 40% of infants less than three months. Recurrent regurgitation or vomiting is the most often reported symptom and may be accompanied by failure to thrive and recurrent aspiration, which may be associated with apnoeic episodes and pneumonia (Lawrence & Lawrence, 2005).

1.15.14 Physiological Jaundice (Early-onset Jaundice)

Some degree of physiological jaundice occurs in almost half of all infants and shows up after 24 hours of age, peaks on the third or fourth day of life and declines steadily through the first week (Lawrence & Lawrence, 2005). An early first breastfeed (within an hour or so of birth) and frequent breastfeeds with no restrictions will have a positive effect in preventing or reducing jaundice.

1.15.15 Breast milk Jaundice (Late-onset Jaundice)

This is prolonged jaundice affecting a small percentage of infants, manifests itself in the second week of life with a rising serum bilirubin concentration and appears to be a syndrome associated with the milk of a particular mother (Lawrence & Lawrence, 2005).

In summary, breastfeeding is very important for babies, mothers, families and the wider community. It is the best food for infants in the first six months of life, providing all the nutrients and energy they need for growth and development, as well as antibodies which protect them from infections and illnesses, and reduce the risks of many child and adulthood health problems. Breastfeeding also improves maternal health and assists in the establishment of mother-infant bonding which is very important for the emotional and psychological development of children. For families and the community breastfeeding is economically beneficial, reducing health and other costs. Thus it is very important to

improve and maintain optimal levels of breastfeeding, assisting mothers to breastfeed for as long as possible.

CHAPTER 2. POSTNATAL DEPRESSION (PND)

This chapter deals with the many facets of postnatal depression (PND). The definition, prevalence, measurement and treatment of PND are outlined and the factors which contribute to its aetiology and exacerbation are also discussed. The effects of PND on mothers, their babies and families, both in the short and longer term are also discussed.

Postnatal depression (PND) is the most prevalent mood disorder associated with childbirth (Hauptberger, 1997; Pope, 2000; Beck, 2001; Buist et al, 2002; Wheatley, 2005; Beck, 2006; Beck & Driscoll, 2006). It is a diagnosis which meets the Diagnostic and Statistical Manual for Mental Disorders criteria (DSM-IVR, 2000) (American Psychiatric Association, 2000) and the International Classification of Diseases (ICD-10) (World Health Organization, 1992) for major or minor unipolar depression arising during the first postnatal year.

While these diagnostic tools stipulate its onset within 4 and 6 weeks postpartum, clinical practice and recent research highlights that the first 12 months postpartum are considered to be the period in which PND is most likely to arise (Pope, 2000, Saddock et al, 2005).

Barnett & Fowler 1995 (cited in Pope, 2000) have described additional psychological symptoms encountered in clinical practice in addition to those described in DSM-IVR and ICD-10 criteria for depression. These were

- extreme and unreasonable disappointment concerning the labour and delivery, breastfeeding or other aspects of motherhood
- decreased desire for any physical contact with partner
- decreased interest in social contact and lack of social confidence
- feelings of inadequacy, failure, inability to cope
- feeling extremely angry (especially directed at the partner)

- experiencing anxiety or panicky feelings
- fear for the infant (and sometimes fear of the infant)
- fear of being alone with or going out with the infant
- fears of harming the infant
- distressing thoughts of leaving or running away
- fear of being rejected and unwanted by partner; and
- fear of harm or death of partner

The term “post-natal depression” was coined by Pitt (1968, cited in Pope, 2000) who differentiated it from general depression and identified it as a specific mental health problem occurring after childbirth.

There are several other mood and anxiety disorders which can occur in relation to childbearing and should be differentiated from PND in terms of prevalence, clinical presentation and course (time of onset, duration and recurrence). These disorders include depression during pregnancy, antenatal and postnatal anxiety disorders, maternity blues and puerperal psychosis (O’Hara et al, 2000, Pope, 2000).

Depression at any time of life has a major negative impact on a person, profoundly affecting his/her self-perception, behaviour and functioning, especially in relation to social interaction and interpersonal relationships (Beck, 2001; Beck & Driscoll, 2006). When it occurs after childbirth, as new mothers and couples have to adjust to the many changes involved with the arrival of a new baby, its impact can be even more devastating. It may last for months, disrupting parental relationships and family life, affecting parents’ ability to care for themselves and their children (Buist, 1996; James, 2004; Beck & Driscoll, 2006). PND also places women at increased risk of future depressive episodes and their children at increased risk of emotional, cognitive and social problems (Beck, 2001; Hay et al, 2001; Misri & Kostaras, 2004; Beck & Driscoll, 2006).

Considerable research has been carried out in the area of PND in the past few decades. Its focus has been on the biological and psychosocial factors which contribute to its aetiology and, exacerbation and its impact on the mother-infant relationship and on the baby (O'Hara & Swain, 1996; Beck, 1996; Murray & Cooper, 1997; Hauptberger, 1997; Horan-Smith & Gullone, 1998; Affonso et al, 2000; Da-Costa et al, 2000; O'Hara et al, 2000; Buist et al, 2002; Milgrom, 2003; Wheatley, 2005).

2.1 Definition

While the definition of PND has been subject to controversy, it is generally accepted that it is an episode of major depression which is experienced by women within the first six months after the birth of their infant, with potentially significant consequences for the mother and her family (Boyce and Stubbs, 1994; Beck, 2001; Beck, 2006). It is marked by a persistent depressed mood, diminished interest or pleasure, disturbed sleep and appetite, loss of self-esteem, lethargy, feelings of worthlessness, poor concentration, anxiety and irritability (Buist, 1996; Bishop, 1999; Pope, 2000, Beck, 2001; Beck & Driscoll, 2006).

2.2 Levels of Post-Natal Depression (PND)

Three postpartum mental states have been described, namely "maternity blues", post-natal depression, and puerperal psychosis (O'Hara et al, 2000; Watson Driscoll, 2006).

It is estimated that about 80% of all mothers experience a mild transient mood disorder called "the blues" in the first week after delivery, with a peak on the third to fifth day. Symptoms include mood swings from tearfulness to elation with irritability or increased sensitivity. These feelings have been attributed to the hormonal changes of childbirth. Empathy, support and encouragement from partners, family and the health professionals attending to the women are all the interventions that are necessary (Pope, 2000, Beck, 2006).

PND is diagnosed if symptoms of “maternity blues” are marked and prolonged (lasting two weeks or more), especially loss of appetite, insomnia, constantly lowered mood and feelings of guilt and worthlessness (Hauptberger, 1997). Medication and sometimes hospitalisation may be required with tricyclic antidepressants, which are not overly sedating, being the medication of choice. These medications are advantageous as they enable women to continue breastfeeding (NHMRC, 2003).

Postpartum psychosis is a severe psychiatric illness which begins acutely within the first three weeks of delivery (O’Hara et al, 2000). It affects approximately two women per 1000 deliveries and is characterised by major confusion and indecisiveness. The mother may have hallucinations or delusions with a mixture of affective (manic, depressive or manic-depressive) or schizophrenic symptoms. Hospitalisation, ideally in a specialised mother-baby unit, and appropriate medication is necessary (O’Hara et al, 2000). Antipsychotic medications are often needed in the first few days of treatment, and if these are used, breastfeeding needs to be stopped temporarily. Health professionals can help mothers to maintain their breast milk supply by helping them express by hand or with a breast pump, discarding the milk (NHMRC, 2003).

2.3 Physical, Emotional and Social Changes which may Increase Vulnerability to Depression in New Mothers

Each pregnancy and delivery brings physical as well as psychological and social changes for a woman (Buist, 1996; Hauptberger, 1997; Pope, 2000; Beck, 2001; James, 2004; Kendall-Tackett, 2005; Beck & Driscoll, 2006). She has to come to terms emotionally with a variety of new bodily changes, including changes in physical factors such as hormone levels, ratios of one hormone to another, distribution in the body of salts and water, the blood circulation and kidney function (Gregoire, 1995; Pope, 2000). Psychologically, a mother needs to deal with the experience of the labour itself and also the notion of becoming a

mother. Her identity, activities, friends, interests, home and employment circumstances, degree of independence and financial status can change radically, as can her relationship with her parents and her partner (Hauptberger, 1997; Pope, 2000; Kendall-Tackett, 2001; Leahy-Warren, 2007). Frequent feeding of the new baby also means that she usually misses out on sleep (Goyal & Lee (2007) which is likely to exacerbate the bodily changes experienced by the mother.

If other factors such as unwanted pregnancy, medical complications, difficult delivery, unsupportive or absent partner, financial difficulties, social isolation, lack of social support and a genetic predisposition to or a past history of depression are also present, the physical, psychological and social burdens are multiplied and can be overwhelming for the new mother (Kendal-Tackett, 1996; Beck, 2001; Beck, 2004; James, 2004; Beck & Driscoll, 2006) and lead to a vulnerability for depression.

Although it has not been researched systematically, another factor which could contribute to the onset of depression in new mothers may be the inability to satisfactorily breastfeed their baby. Apart from the great benefits of breastfeeding, women often have idealised expectations about it (that it is natural, womanly, intuitive, an essential element of being a female and mother and is better for closeness with the infant) (Minchin, 1998). Thus, women who are not able to establish a satisfactory breastfeeding process with their baby may feel a sense of failure, shame, guilt and self-doubt (Brodribb, 2004). There may also be significant expectations on new mothers to breastfeed by relevant professionals and society at large. Such pressure may also be perceived coming from the mother herself (Riordan, 2005). Health care workers assisting mothers who experience breastfeeding problems have posed that all of these feelings combined with the physical and emotional stresses brought on by childbirth and motherhood, may also predispose some women to depression.

2.4 Onset and Prevalence of Post-Natal Depression

Research has found the incidence of post-natal depression to be greatest in the first three months after birth (O'Hara & Swain, 1996; Pope, 2000; Beck, 2001; Beck & Driscoll, 2006) and it has been suggested that about 4% of women show little improvement after one year (Hauptberger, 1997), with a 20-30% recurrence rate described with subsequent births (O'Hara & Swain, 1996; Pope, 2000).

Reported estimates for the prevalence of PND have varied greatly depending on the design of studies, the recruited sample size, the timing of assessments and the use of different diagnostic criteria or rating scales (Pope, 2000). In a meta-analysis of 59 studies O'Hara & Swain (1996) has found the prevalence rate to be 13% and it is generally accepted that PND affects between 10 and 20% of all childbearing women (Beck, 2006; Warren & McCarthy, 2007).

From a Australian perspective, screening of a sample of first time mothers, approximately 6 weeks after childbirth, indicated that as many as 25% were at risk of experiencing depression, and 9 to 15% were suggested to be at a risk of severe depressive symptoms (Horan-Smith & Gullone, 1998). Other Australian studies have shown prevalence rates of PND to be 9% at six weeks after birth (Stamp & Crowther, 1993), 14% at four months (Astbury et al, 1994) and 15.4% at eight months (Small et al, 1994).

TABLE 4 – FACTORS CONTRIBUTING TO THE ONSET ON POSTNATAL DEPRESSION

Authors	Sample	Setting	Method	Results	Critiques
Hickey et al 1997	All 749 women delivering over a 3 month period were recruited. Of the 522 participants, 425 women completed the study.	Tertiary referral hospital in western Sydney, Australia	Prospective cohort design consisting of an initial interview and six-weekly assessment for 24 weeks using a self-report questionnaire and the Edinburgh Postnatal Depression Scale. Women discharged within 72 hours after birth were compared with the remaining women.	The women who were discharged within 72 hours had a significantly increased risk of developing PND (twice as high). This risk persisted when other sociodemographic, obstetric and psychosocial risk factors were controlled for in a logistic regression analysis.	Large convenience sample. Study seeking to explore possibility of a causal link between early discharge from hospital and PND. Women assigned to early or standard discharge group, controlling for parity, social support and past history of PND. Six weekly assessments for 24 weeks after birth ensured detection of early and late onset of PND. Using the EDPS as well as a self-report questionnaire strengthened the validity and reliability of the findings.
Beck 2001	-	Meta-analysis of literature	A meta-analysis of 84 studies published in the decade of the 1990's was conducted to determine the magnitude of the relationships between postpartum depression and various risk factors.	Thirteen significant predictors of postpartum depression were revealed. Ten of these risk factors had moderate effect sizes while 3 had small effect sizes. The predictors ranged as follows: prenatal depression, self-esteem, childcare stress, prenatal anxiety, life stress, social support, marital relationship, history of previous depression, infant temperament, maternity blues, marital status, socioeconomic status and unplanned/unwanted pregnancy.	Meta-analysis of 84 studies published in the 1990s carried out to determine the magnitude of the relationship between PND and various risk factors. Results confirmed the findings of an earlier meta-analysis and revealed 4 new predictors of PND – self-esteem, marital status, socioeconomic status and unplanned/unwanted pregnancy.
Johnstone et al 2001	490 women planning to give birth.	4 participating hospitals	A prospective study. Obstetric information was obtained from the New South Wales Midwives Data Collection, completed shortly after delivery. Personality, psychiatric history and life events information were obtained from a questionnaire administered within 1 week postpartum. Depression status was assessed at 8 weeks postpartum	None of the obstetric variables were significantly associated with increased risk of PND. However, some sociodemographic, personality factors, past personal or familial history of depression and recent life events were found to be risk factors.	Convenience sample, obtained from 4 hospitals. Prospective study exploring relationship between obstetric risk factors and PND. Obstetric information obtained from the women's medical records, depression status assessed at 8 weeks postpartum. Later onset of PND than this time may have been a factor influencing results.

			using the Edinburgh Postnatal Depression Scale.		
Koo et al 2003	55 women who had an emergency delivery and 191 women who delivered normally at least 6 weeks postpartum.	Cohort part of a previous study examining the prevalence of PND	A retrospective comparative cohort study design.	When compared with women having a non-emergency delivery, women having an emergency delivery had almost twice the risk of developing PND.	Malaysian study seeking to find out whether emergency delivery is a risk factor for PND. Multicultural sample, data divided into 2 cohorts, 55 women who had an emergency delivery and 190 who delivered normally. Multicultural sample, results may be difficult to generalize to other cultures.
Robertson et al 2004	Meta-analysis of previous research findings	Systematic review	Meta-analysis of existing literature to identify antenatal risk factors for postnatal depression	The strongest predictors of postpartum depression were: depression during pregnancy, anxiety during pregnancy, experiencing stressful life events during pregnancy or the early puerperium, low levels of social support, and a previous history of depression.	Meta-analysis, focus on antenatal factors. Critical approach of the literature revealed a number of methodological and knowledge gaps that the researchers recommended need to be addressed in future research.
McCoy et al 2006	209 women 4 weeks postpartum	3 university medical clinics in Tulsa Okla	Data gathered at routine 4-week postnatal visits were obtained from the patient records and participants in study needed to complete the Edinburgh Postnatal Depression Scale.	Formula feeding in place of breastfeeding, a history of depression and cigarette smoking were all significant risk factors for PND.	Study exploring possible correlation between incidence of PND and the following patient characteristics: age, breastfeeding status, tobacco use, marital status, history of depression and method of delivery. Convenience rather than random sampling, but finding support data of various other randomised findings. Population poorer than in other areas and/or indigent, this could have led to a higher rate of PND. Also PND assessment at 4 weeks did not take into account the possibility of later onset.

Azimi-Lolaty et al, 2007	422 pregnant women	Mother Child Health Care Clinics	Participants recruited antenatally and followed up at 6-8 weeks postnatally. Administered the Edinburgh Postnatal Depression Scale.	Risk factors for PND were identified as family support, stressful life events, health of baby, perceived ability to care for the baby.	Iranian study, convenience sample of antenatal women to measure risk factors for PND for this cohort of pregnant women. Differences were found in the level of depression in self-reports and interview based measures. Cultural make up of sample may lead to a difficulty in the generalizability of results. d
Rahman & Creed 2007	701 antenatal women in third trimester of pregnancy	A rural sub-district of Pakistan	The Schedule for Clinical Assessment in Neuropsychiatry (SCAN) was used to identify depressed women in the third trimester of pregnancy (n = 160). These women were re-assessed at 3, 6 and 12 months postnatally. Persistently depressed women (depressed at all 3 points) were compared with the remainder. Psychiatric symptoms, disability and life events were measured using the Self-Reporting Questionnaire (SRQ), Brief Disability Questionnaire (BDQ) and a modified Life Events Checklist.	56% of mothers (73 from 129) were depressed at all points of assessment. These mothers had higher SRQ and BDQ scores prenatally and had experienced more stressful life events in the year preceding the third pregnancy trimester than the mothers whose depressive disorder resolved. Persistent depression was significantly associated also with poverty, having 5 or more children, an uneducated husband and lack of a confidant or friend.	Antenatal screening of women for depression in the third trimester of pregnancy to study antenatal depression as a risk factor for PND. Depressed women were assessed 3, 6 and 12 months postnatally and those depressed at all 3 point compared with the remainder of the sample. The use of several measures strengthened the robustness of the findings. However, sample was from one rural sub-district of Pakistan which could limit generalizability of results. Also the women were not assessed for physical conditions such as anaemia and thyroid deficiency which may have been a risk factor for PND.

2.5 Factors Contributing To The Aetiology Of Post-Natal Depression

It is generally accepted that the aetiology of PND is multifactorial and includes physiological, psychological and social variables among others. (McGill et al, 1995; Buist, 1996; Beck, 1998; Pope, 2000; Beck, 2001; Beck & Driscoll, 2006). Table 4 (on the previous page) sets out some research findings regarding factors associated with aetiology of PND.

A personal history of mood disorder, previous psychiatric hospitalisation and anxious or depressed mood in pregnancy are consistently found to be predictor of PND O'Hara & Swain, 1996; Beck, 2001; Scottish Intercollegial Guidelines Network, 2002).

Poor parental care, especially poor maternal care and neglect in childhood (Boyce et al, 1998) and childhood sexual and physical abuse contribute to adult depression and appear to be associated with PND (Buist & Janson, 2001). Women who have been sexually abused in childhood also have increased anxiety about their own children's safety and feel inhibited in providing intimate parenting to their infants (Douglas, 2000).

Australian studies (Small et al, 1994; Meager & Milgrom; 1996) have shown that PND was associated with lack of support; having conflictual relationships with one's partner, mother or members of one's social group; being single, divorced or separated; not breastfeeding; having a caesarean or forceps delivery; feeling dissatisfied with various aspects of maternity care; and being a non-English speaking migrant. These findings have been confirmed cross-culturally (Pope, 2000; Beck, 2001; Chan et al, 2002)

2.5.1 Feminist Perspectives

A feminist body of literature opposes perspectives that locate vulnerability factors for the development of PND "within" women and do not consider the broader social constraints on women's social roles and experiences (Homewood et al, 2009). From this perspective the

transition to motherhood has been unhelpfully presented as an idealized time of contented maternal fulfilment. However, in reality this is very different from the experiences of many new mothers who struggle in adjusting to their maternal role and the many other changes which having a baby brings. The discrepancies between culturally imbued expectations of motherhood and women's actual experiences have repeatedly been found to negatively affect their sense of themselves and to be related to the development of depression in motherhood (Beck, 2002; McLean and Durkin, 2007).

2.5.2 Hormonal Changes and Other Biological Risk Factors

There are major changes in progesterone, oestrogen, cortisol and beta-endorphin levels associated with pregnancy and the postpartum period (Harris, 1994, Ingram et al, 2003). Thus, hormonal changes during pregnancy and after childbirth have been implicated by some researchers as providing a biological basis for PND (Taylor et al 1994; Sichel & Driscoll, 1999)

However, given that there are a high number of diagnoses occurring after the third and ninth months of birth, hormonal changes in themselves have been considered an incomplete explanation for PND that sustains over time (Harris, 1994; Pope, 2000).

As well there are two medical conditions which may contribute to altered mood after childbirth. The incidence of abnormal thyroid function is higher in the first six months after birth (Epperson, 1998). Hypothyroidism has been associated with fatigue, lowered mood and impaired volition while agitation and excessive weight loss are linked to hyperthyroidism. Postnatal haemorrhage and lactation are associated with iron deficiency anaemia, which contributes to fatigue and lowered mood (Epperson, 1999). These conditions are often under-recognised.

2.5.3 Past History of Clinical Depression

There is overwhelming evidence that women with a history of clinical depression were more vulnerable to PND and other affective disorders during the postpartum period (Campbell et al., 1992; O'Hara & Swain, 1996; Beck, 1998; Beck, 2001). A high level of recurrence of PND following the birth of subsequent children has also been found in this cohort (Buist, 1996; Pope, 2000).

Furthermore in a British study Appleby et al (1994) found that women who reported past treatment for depression were 3 times more likely to develop PND compared with women with no treatment history.

A past experience of depression can also interact with other factors, such as obstetric complications or dissatisfaction with the marital relationship, to increase the likelihood of PND (Murray & Cooper, 1995). Depression during pregnancy is also a strong indicator that women may experience PND postpartum (O'Hara & Swain, 1996; Beck, 1998; Beck, 2001; Beck & Driscoll, 2006). This result may indicate the continuity of psychological distress through pregnancy into the postpartum months.

Other probable risk factors for PND include a family history of psychopathology, genetic vulnerability to depression and severe maternity blues (O'Hara & Swain, 1996; Murray et al, 1996; Beck, 1998).

2.5.4 Psychosocial Factors

Previous research has emphasised psychosocial issues as a major contributing factor in the development of PND. A large number of studies have found that general social support (actual and perceived), the quality of primary intimate relationships and stressful life events play a considerable part in PND (Beck, 1996; Pierce et al., 1999; Logsdon et al., 2000; Swendsen & Mazure, 2000; Johnstone et al., 2001; Beck & Driscoll, 2006).

In particular, social support and especially support from significant others such as the partner, have been shown to be an important determinant of capacity to cope in new mothers (Beck, 1996; Pierce et al, 1999; Longsdon et al, 2000; Swendsen & Mazure, 2000; Johnstone et al, 2001; Pajulo et al, 2001). In addition, the way the mother appraises her support network has also been demonstrated to be important (Richards, 2000), as has the support the woman receives from her mother (Meager & Milgrom, 1996). Moreover, the way the mother thinks about herself as a mother and about her infant, also appears to influence outcome (McMahon et al., 2001). This may also lead to associated behaviours in the child which may in turn impinge on the mother's capacity to cope. For example if a mother lacks confidence about her ability to properly care for her baby she may interpret the latter's crying or not feeding/sleeping properly as her fault, reinforcing her negative feelings about her mothering skills. She becomes more anxious in handling her child, who is unsettled by this and as a result exhibits more of the behaviours which cause her mother anxiety.

2.5.5 General Social Support

Many studies have found a significant association between low social support and increased incidence of post-natal depression, thus indicating that social support appears to be a central factor for new mothers' coping and well-being (Beck, 1996; Pierce et al, 1999; Longsdon et al, 2000; Swendsen & Mazure, 2000; Johnstone et al, 2001; Pajulo et al, 2001).

Sheppard (1994) elucidated the different aspects of social support as – intimacy, emotional support, instrumental support, source of support, social network, social integration and embeddedness, defined as a sense of a social belonging.

A meta-analysis of 44 studies by Beck 1996 found that social support accounted for approximately 40% of the variance in predicting post-natal depression. Other researchers also supported these findings, indicating a significant correlation between low social support and increased incidence of post-natal depression (Chung & Yue, 1999; Seguin et al, 1999;

Pajulo et al, 2001). Not only was actual support found to be important, but also women's perceptions of support (Richards, 2000). Logsdon et al (2000) found that the perceived importance of support for the woman was a better indicator of outcome than how much support a woman actually received, and that communication of need for support was important. Furthermore, in a study conducted by Pierce & Lowe (1999), perception of low social support was linked with dejection and with a greater discrepancy between self/ideal and self/actual in a group of depressed mother 3-12 months postpartum.

Positive social support coupled with mothers' coping responses was also shown to have a stress reducing effect upon mothers (Swendsen & Mazure, 2000), while frequent conflictual episodes with members of one's social network and maternal health problems were shown to be predictive of later PND (Seguin et al, 1999). This factor also played a role in the hospital readmission of women with postpartum psychosis (Terp et al, 1999).

Thus research on social support implicates a broad range of supports and intimate relationships including the relationship with the partner, the mother's mother and friends, as well as the wider social network. Women at different stages of the post-natal period, as well as ante-natally and in different economic groups and cultures show sensitivity to these factors (Righetti et al, 1998; Seguin et al, 1999; Pope, 2000; Kotler, 2003). The woman's social relationships, the quality of her interaction with her social world and her perception of this are clearly a factor influencing her adjustment to the stresses inherent postnatally.

2.5.6 Specific Relationship Factors

The quality of a woman's relationship with her partner has been found to be a major contributing factor in PND across studies from a broad range of social groups and cultural backgrounds (Hauptberger, 1997; Pope, 2000; James, 2004; Williamson, 2004; Willinck, 2004). A poor marital relationship conceptualised as including increased conflict, poor adjustment, low satisfaction and unhappiness; men being less less available after delivery;

partners providing insufficient practical or emotional support; and holding rigid traditional sex role expectations; has been frequently cited in studies on PND (Wilson et al, 1996; O'Hara & Swain, 1996; Cooper & Murray, 1997; Beck, 2001; British Intercollegiate Guidelines Network, 2002). Very similar findings have emerged from transcultural studies. An unsatisfactory marital relationship – variously described as inability to confide in an intimate partner; lack of support; arguments and tension in the relationship – has been found to distinguish depressed from non-depressed women in Hong-Kong, China (Chan et al, 2002), India (Chandran et al, 202), Pakistan (Rahman et al, 2003), Brazil (Da Silva et al, 2003) and Viet Nam (Fisher et al, 2004). In Australia, Meager & Milgrom, 1996 found that poor marital relationships, a poor parental relationship and lack of social supports played a part in PND.

Marital dissatisfaction has been found to be predictive of depression in the latter months after birth as well at six and nine months respectively by Hock et al, (1995) and Demyttenaere et al, (1995). Further, negative relationships with a partner affected the self-esteem of women suffering PND, thereby reducing their ability to manage stress (Hall et al, 1996; Williamson & McCutcheon, 2004; Willinck & Cotton, 2004). In contrast positive relationships with spouses increased women's sense of self-efficacy in the parenting role and reduced relapse rates in post-natal depression (Marks et al, 1996; Pope, 2000; Beck, 2001). Bi-directional effects can also occur, with the depressed affect in the woman leading to a negative appraisal of the support she is receiving from her partner and others (Hauptberger, 1997; Pope, 2000; James, 2004).

Thus, research has shown that both intimate and social relationships and the supports they provide have a major role to play in how a new mother copes with the demands of her changed role physically and emotionally.

2.5.7 Mother Infant Relationship

The nature of the mother-infant relationship itself may be implicated in PND, affecting the way a mother views her child from a very early stage (Holden, 1991; Murray et al, 1996).

There is evidence that depressed women are more likely to express feelings of dislike, indifference, or negative feelings towards their infant (Pope, 2000) and perceive them as temperamentally more difficult to care for than non-depressed mothers (Holden, 1991; Campbell et al, 1992; Beck, 1998). A meta-analysis of 19 studies concerning the effect of depression on maternal-infant interaction during the child's first two years concluded that PND has a medium to large effect on maternal-infant interaction during the first year of life (Beck, 1998).

A sub-group of women with postpartum onset major depressive disorder have been found to have obsessive thoughts in regard to the infant. For example, a study by Wisner et al (1999) showed that 95% of participants with the diagnosis of PND had aggressive thoughts regarding the baby. The most frequent thoughts were that they may cause harm to their infants. The presence or number of thoughts was described as not related to the severity of the depression.

Similarly, Jennings et al (1999) showed that 41% of depressed mothers had thoughts of harming their baby. Some mothers also had fears of being alone with the baby and felt unable to care for the baby. It was concluded that thoughts of harming the baby are common in depressed mothers. Lucas (1994) also described that some severely depressed mothers may believe they ought to kill the child to save him or her from further suffering.

It is pertinent then to consider that a large number of women with symptoms of PND may experience different degrees of fear regarding their relationship with their baby and their capacity to care for him or her.

2.5.8 Stressful Life Events

Interpretation of findings concerning other psychosocial stressors such as extraneous life events have varied. Some earlier researchers minimised any relationship between unplanned pregnancy or complicated delivery to the incidence of depression (Pitt, 1968, cited in Pope 2000) or claimed that stressful life events and poor social support were not associated with PND (Hopkins et al. 1987). Others had found that recent stressful life events (such as housing or financial problems, unemployment and bereavement) were factors involved in the development of PND (O'Hara, 1995; Buist, 1996; Pierce et al, 1999; Kendall-Tackett, 2005). Boyce et al, (2001) found that a mother experiencing health problems also increased the incidence of PND, and stress related to delivery or to child care was also found to be a contributing factor to PND (Gotlieb et al, 1991; Brown & Lumley, 1994). Pre-term birth and bereavement were singled out as life events related to the onset of depression both antenatally and post-natally (Beck, 2001; Beck, 2004). Bishop, (1999) suggested that reaction to life events, including the stress of childbirth itself, was linked with the occurrence of depression. Acute adverse life events in general were shown to be a significant risk factor by Swendsen and Mazure (2000).

Varying indices of life stress and variability in their measurement, may partially account for inconsistency of findings. The recency or distance of events, and their interaction with other population, personality and psychosocial variables, may also account for different findings in the literature, and attest to the complexity of the factors to be understood (Kotler, 2003).

2.5.9 The effects of Mothers' Cognitive Style and Appraisal of Self and Others in PND

A review of research evidence suggested that negative cognitive and attributional styles in women during the postnatal period increases cognitive vulnerability to depression just as it

contributes to depression occurring at any other time in the life span (Whitton et al, 1996; Beck, 1998; Pope, 2000; Kendal-Tackett, 2001). Negative cognitive and attributional styles were indicated by maladaptive beliefs and attitudes such as poor self-evaluation especially in relation to motherhood; unrealistically high expectations of the self; learned helplessness and possible role conflicts (Warner et al, 1996; Beck, 1996). As well, depressed mothers have been found to experience an external locus of control and accordingly, to feel less in control of their lives (Beck & Driscoll, 2006).

In addition, women with PND have been shown to make relatively negative appraisals of their infants, describing their infants as difficult (McMahon et al, 2001), expressing negative or ambivalent feelings about them (Righetti-Veltema et al, 2002; Paulson et al, 2006) and interacting with them less adaptively, being either withdrawn or less sensitively responsive (Field, 1998; Beck & Driscoll, 2006). Further, mothers with PND have also been found to view their infants as difficult in temperament (Campbell, 1992; Righetti, 2002), possibly leading to the expression of negative or mixed feelings about their infants (Kumar, 1984; Beck, 1996).

Doubts and ambivalence about pregnancy and about the child have been found to be associated with post-natal depression (Hauptberger, 1997, Pope, 2000). While conflicts about the mothering role have also been raised as a contributing factor to PND (Williams, 2004).

Individual coping style was found to be an effective predictor of depression levels antenatally and six weeks after delivery (Demyttenaere et al., 1995). Self-esteem was shown to mediate the effects of everyday stressors and the quality of primary intimate relationships on depressive symptoms 1-2 months post-natally (Hall et al., 1996). Self-esteem rather than optimism was associated with lower levels of depressive symptoms in the early postpartum period (Fontaine & Jones, 1997). Self-esteem in women was also found to exert a direct

effect on depression levels in both the pre-natal and the postpartum periods (Ritter et al, 2000).

As well as appraisal of the self being found to be a potent factor, mothers' appraisals of their infants after birth have also been identified as significant (Milgrom, 1994). While it has been shown that depressed mothers tend to perceive their infants as more bothersome and difficult to care for (Campbell et al, 1992), some evidence has suggested that they attribute such perceptions to inadequacies of their own care-taking capacities rather than to characteristics of the infant (Bishop, 1999). However, it has also been found that infants of women who become depressed exhibit a more difficult temperament and therefore are harder to care for (Field, 1998). A cycle of negative interaction has been posited as a process of reciprocity of effect. This model has been demonstrated amongst older age groups (Hammen & Stansbury, 1990; Tisher et al, 1994; Kotler, 2003) as well as being applied to the earlier developmental period.

As with psychosocial stressors, effects have been shown to be bi-directional, such that associated behaviours occur in the infant. Observational measures of infant temperament "difficulty", administered in conjunction with subjective measures by Cutrona & Troutman (1986) indicated that the results found were not merely effects of maternal bias in perception, although the latter also appeared to play a role. They found that observational measures of infant "fussiness" in fact accounted for 30% of the variance predicting maternal depression.

Notably, it has been shown that poor motor scores and high irritability in infants were predictive of maternal depression by eight weeks post-natally, although these were not predictive of the persistence of depression, or of the quality of the mother/infant interaction (Murray et al, 1996).

Sugawara et al (1990) exploring 5 dimensions of infant temperament in a Japanese population suggested that the dimensions of rhythmicity (wants to sleep at the same times and has feeding (or meals) at the same times each day)) and attention span and persistence

(plays with toys (or parents) under 1 minute and with favourite toys for over 10 minutes)) showed a reciprocal relationship with postnatal depression, the mother's experience of the infant being affected by these aspects of infant temperament. However, they concluded that unidirectional effects of maternal depression on infant temperament occurred for the dimensions of frustration tolerance (accepts nail clipping without protest, tolerates having to wait) and fear of strangers and strange situations (reaction to strangers, adjusts to new places in 10 minutes).

2.5.10 Interaction of Mother and Infant Variables in PND

An increasing number of investigators have continued to explore bi-directional effects amongst mothers and infants. A transactional empirical model implicating bi-directional effects has evolved (Kotler, 2003). According to this model, certain patterns of infant behaviour appear to exacerbate a depressed woman's mood. Reciprocally, aspects of the mother's interaction with her infant may pre-dispose the infant to be more difficult to care for (Field, 1998).

It has been shown that depressed mothers are, for example, more withdrawn, disengaged and less sensitively or affectionately involved with their infant, (Goodman & Brumley, 1990). Reduced positivity of dyads was noted in face to face interaction which generalised to other contexts within the home (Cohn et al, 1990). Irritability and intrusiveness of the mother have also been implicated (Cohn et al, 1990). Field (1998), suggested that maternal depression may negatively affect infants as early as the neonatal period. From birth, infants of depressed mothers have been found to show dysregulation in their behaviour, physiology and biochemistry (Jones et al, 1997). Effects were described as being compounded by the mother's interaction style, which was withdrawn or intrusive, providing to the infant inadequate stimulation and inadequate arousal modulation (Murray, 1996).

2.6 Effects Of Mothers' PND On Infants

2.6.1 In the First Few Months

All facets of maternal care are crucial for the healthy physical, emotional and intellectual development of infants (1992; Beck, 1996; Murray & Cooper, 1998, Beck, 2001). This development is moulded by their early experiences and the emotional climate provided by parents (Pope, 2000; Paulson et al, 2006).

It is important for mothers to attend to and respond appropriately to their infant's communications and to provide physical and emotional care as well as cognitive and social stimulation (Pope, 2000). A depressed mother's ability to be fully present for her baby and provide it with optimum physical and emotional nurturing is, usually, greatly impaired (Campbell et al, 1992; Hauptberger, 1997) and these women who are suffering PND are emotionally and physically compromised, finding coping difficult. Thus their infants could be placed at risk of abuse or neglect (Pope, 2000).

The mother may find it hard to focus on the baby's experience and instead remain pre-occupied with her own feelings, causing her to miss infant cues and appear withdrawn and disengaged (Murray et al, 2003). Depression is sometimes associated with intrusive and even hostile play, when the mother may fail to recognise the baby's discomfort and persist in trying to gain the baby's attention, possibly by poking the baby roughly or being otherwise over stimulating (Murray et al, 2003).

Research has consistently shown that mother-infant attachment and bonding can be severely affected by PND. This negatively impacts on mothers' ability to provide the sensitive caretaking environment so necessary to the physical and emotional development of their baby as discussed above (Field, 1998; Beck, 2001; Brockington et al, 2001; Klier, 2006; McMahon et al, 2006).

A meta-analysis of 19 studies concerning the effect of PND on maternal-infant interaction during the child's first two years concluded that PND has a medium to large effect on maternal-infant interaction during the first year of life (Beck, 1996).

In particular, Cohn et al (1990). studied depressed and non-depressed mother-infant dyads at two months postpartum in both structured and unstructured interaction. It was found that depressed mothers showed higher levels of negative affect, primary irritation and intrusiveness during face to face interaction.

Aspects of the mother-infant interaction have also been found to be related to developmental outcomes for infants. Infants of depressed mothers were shown to be less competent cognitively at two months of age (Cohn et al, 1990). and to show increased negative emotionality during testing, showing less tolerance to stress.

Further, Jones et al (1997) found differences in babies of depressed mothers as early as one month of age, corresponding to findings at three months. Babies showed greater EEG asymmetry, which was related to more frequent negative facial expression. They showed more indeterminate sleep, were less active and cried less. Research has also shown striking sensitivity of infants under 3 months old to their interpersonal environment was as described by (Murray, 1996) and toddlers' on-going distress and entrenched disruptive behaviours were interpreted as a consequence of mothers' undiagnosed PND during the period of the children's infancy (Emanuel et al 2006).

However, it is important to bear in mind that the emotional climate experienced by infants is not determined only by the mother's mood, but by interactions between the parents which can be significantly affected by depression in either or both of them (Gelfand & Teti, 1990)

For example, Carro et al, (1993) have implicated maternal and paternal depressive symptoms as risk factors for later child maladjustment, both alone and in combination with each other. Further evidence of this was provided by Paulson et al (2006) who reported that

mothers' and fathers' individual and combined effects of PND negatively impacted on their parenting behaviour. They were found to be 1.5 times less likely to engage in healthy feeding and sleeping practices with their infant, and both parent's depressive symptomatology was negatively associated with engaging in positive enrichment activities with their children, for example, reading, singing songs and telling stories to them.

2.6.2 Longer Term

A separate body of research has been instrumental in revealing long term effects of PND on the development of the child and on mother-child interaction.

Murray and Cooper (1997) showed adverse cognitive and emotional outcomes for children aged twelve to twenty one months. In particular, Edhborg et al, (2001) found a relationship between depression and attention skills during play with the mother, in the context of either an insecure or secure attachment that showed restricted joy. It was suggested the children developed representations of the mother and interaction with her as less joyful, which remained beyond the period of the mother's depressed mood. A number of studies have reported sustained effects of PND on children. Hay and Kumar (1995) found an ongoing association between PND in the mothers and impaired cognitive abilities in the child. Independent teacher reports rather than maternal reports were used to investigate adjustment to school in five year olds whose mothers had been post natally depressed (Sinclair & Murray, 1998). Both post-natal and recent depression were associated with raised levels of child disturbances, particularly among boys and among children of lower social class. Ante-natal maternal anxiety was also shown to predict behavioural or emotional problems in boys and girls at age four (O'Connor et al, 2002).

Furthermore, Hay et al (2001) linked PND and lower intelligence scores at age eleven years, including attentional difficulties. It has been suggested that the impaired quality of

mother-child interaction occurring in the context of depression, rather than the exposure to depressive symptoms, was the mediating influence.

An experience of a mother with PND has also been shown to predispose children to psychopathology later in life. For example, Pawlby et al, (2008) in a study of 11 year olds found that children who had a mother with a history of PND, had 4 times the risk rate of psychopathology compared with the offspring of non-depressed mothers. Halligan et al, (2007) also reported higher rates of anxiety disorders among 13 year olds, whose mothers had a history of PND.

Finally, research findings concerning the effects of PND on both younger and older children, demonstrates a relationship between children's psychological functioning and social behaviour with parental pathology (Goodman & Brumley, 1990; Emanuel, 2006; Paulson et al, 2006; Pawlby et al, 2008). Affectional involvement and responsiveness on the part of parents as well as modes of regulating punishment and discipline have been cited as significant factors often negatively affected by parental depression (Paulson et al, 2006; Halligan et al, 2007).

2.7 Measurement Of Postnatal Depression

The Edinburgh Postnatal Depression Scale (EPDS) was developed at health centres in Scotland by Cox et al (1987) specifically to detect mood disorder, in particular depression and anxiety among mothers in the post-natal period.

The scale is composed of ten items, such as being able to laugh and enjoy, being anxious or scared or worried, self-blaming, inability to cope, depressive thoughts, sleeping difficulties based on depression and suicidal thought. The scale rates depressive symptoms that present during the previous 7 days. Scores for each item range from 0 to 10 – with a score of 13 or above indicating post-natal depression. However, some researchers in the field had

contended that women who has a score above 10 may be experiencing significant dysfunction (Buist et al, 2002).

Since its inception hundreds of studies have been carried out to test the scales' validity and reliability of the EPDS across many cultures and populations (Whiffen, 1988; Murray & Carothers, 1990; Pop et al 1992; Guedeney & Fermanian, 2009; Ying et al, 2010). High results over time have been achieved in convergent, discriminant and construct validity and good internal consistency of the global scale. It has been found that the EPDS successfully discriminated among nondepressed, mildly and clinically depressed groups; and its short-term test –retest reliability was high.

In Australia the EPDS has been validated for use by Boyce et al, 1993). It is now an established test routinely used in most States and Territories (including Victoria) to screen women as part of their postnatal care. It is also the most commonly used measure for PND worldwide (Harvey & Pun, 2007; Small et al, 2007).

2.8 Treatment of Post Natal Depression

As outlined earlier depressive illness in mothers has been recognised for a long time, with current research suggesting a diagnosis of PND between 14 -16% of all postnatal mothers (Horan-Smith & Gullone, 1998; Beck, 2006; Warren & McCarthy, 2007). However, it is believed that many more women experience symptoms but are not diagnosed (Buist et al, 2002). This means that each year many thousands of women in Australia, their children, family and the wider community suffer from the debilitating consequences of this disorder.

2.8.1 Reasons for Under Detection

There are many reasons why PND remains undetected. The major ones are as follows:
Failure of mothers and families to recognise the illness (Lumley & Austin, 2001).

Some major symptoms of PND such as exhaustion, anxiety, sleep deprivation or disturbance, feelings of anger and inadequacy and loss of confidence are often attributed to women trying to adjust to the demands and challenges of motherhood or a new baby in the family and all that this entails. Thus the possibility of PND is not considered or thought of by the mother, her partner and other family members or explored by the health professionals attending her. (Wisner et al, 2004). Consequently her PND symptoms are often presumed to be a normal and self-limiting side effect of pregnancy. (Buist et al, 2005).

In our society the generally accepted view of motherhood is that it is an intensely joyous, satisfying, rich and fulfilling experience. Thus very few mothers are prepared for the awful side of motherhood – the enormous changes in lifestyle a new baby brings, the continuous demands and health and other problems which may occur. So, many women find that in reality motherhood for them is not the joyful event they had anticipated. (Beck, 2006). They then feel guilty and “abnormal” for having negative thoughts about it and their baby. These mothers often present to their maternal and child health nurse or general practitioner on a regular basis with concerns for the baby, while never admitting to experiencing unhappy feelings or feeling unwell (Hope, 2000).

Depression can cause cognitive distortions that lead to refusal of help from partners and friends and sufferers are often trapped by a reluctance to admit mental problems/illness (Kendal Tackett, 2001). Mothers may hide emotional problems or fail to discuss them with their doctor or other health professionals in order to avoid indicating that they are not coping. (Kendall Tackett, 2005).

Another reason for not seeking help may be that women feel that to seek help indicates failure as women and mothers, so that the problem(s)/PND symptoms are downplayed or not perceived as being severe enough to require assistance or treatment (Kendall Tackett, 2005).

Some mothers avoid seeking professional assistance because they fear that the ensuing diagnostic label could question their mothering ability and limit access to future employment (Oddy et al, 2009).

Failure of health professionals to search for or recognise possible signs or symptoms of PND or a failure to conclude that the observed symptoms justify a diagnosis (Hope, 2000).

Health workers focusing on the baby's health and physical development and mother's physical well-being, neglecting to explore emotional difficulties or trauma the mother may be experiencing (Webster et al, 2001).

2.8.2 Important Considerations for Health Professionals for Diagnosis of PND

Health professionals need to be open to the possibility that women presenting in the postnatal period may be suffering from depression or distress. (Buist et al., 2002). This increased awareness will enhance the process of early recognition, identification, diagnosis and treatment (Buist et al, 2002). They need to be emphatic and demonstrate understanding when a woman is not coping which can add to the feelings of guilt she has. As well, they need to recognise and respond appropriately and adequately when a depressed mother presents. They have to actively seek/explore the signs for postnatal distress/ depression in those women who do not readily seek help for their emotional needs/problems (Bishop, 1999).

The experience of PND is unique to each individual, caused by a unique combination of factors and stressors and presenting in a combination of symptoms. Treatment therefore needs to take many different forms. Ideally treatment should address all aspects of a person's functioning – physical, psychological, emotional, social, spiritual – and be offered by services that understand PND and the need for recovery (The Monash Division of General Practice Inc., 1999).

PND presents along a continuum, and the type of treatment selected is based on the severity and type of symptoms present. Before initiating psychiatric treatment, medical causes for mood disturbance (e.g. thyroid dysfunction, anaemia) must be excluded. Initial evaluation should include a thorough history, physical examination and routine laboratory tests (Beck, 2006).

2.8.3 Factors To be Addressed in the Prevention, Identification, Assessment and Management of PND

The Monash Division of General Practice Inc (1999) has developed a comprehensive Postnatal Depression Handbook for general practitioners (GP's), outlining all aspects of the disorder and recommendations for its treatment. This would be a very valuable resource/guide for other health workers providing services to mothers as well. According to this handbook the diagnosis and treatment process of PND needs to incorporate the following factors/areas.

Prevention – some of the predictors (risk factors) of PND can be evident prior to the commencement of, some during pregnancy or the birth process or during the postpartum period itself. Learning to recognise the predictors can be instrumental in identifying the symptoms early and thus prevent the long-term effects of PND. Prevention begins with identification, assessment and then management.

Identification – GPs can assess and identify a woman's PND risk factors and any symptoms of depression from the latter's first antenatal visit. Another good time is the six weekly postnatal check-up – currently the most common time a woman is assessed or shows signs of PND. It is important to evaluate risk factors and the severity of depressive symptoms. It may help to talk with partners and extended family members to obtain a clear picture of the severity of symptoms. Getting the woman to complete the EPDS is also a quick and efficient way to elicit the presence of PND symptoms.

Assessment – in assessing the woman with PND it is important to have a clear picture of her pregnancy, labour and birth, and postnatal period up to the point of her presentation, as well as a personal and social history. The latter two areas should include: family and personal history of psychiatric disorders; obstetric history; hormonal factors, societal factors (including emotional and practical supports provided to her by partner/family/social networks); marital relationship; financial situation; accommodation; life stresses; infant factors e.g. unsettled baby, difficulties with breastfeeding); personal adaptation to motherhood, past and present violence experienced (including physical and sexual abuse in childhood, rape, domestic violence); loss and grief issues (especially if these are unresolved); network of friends and family. Asking specifically about symptoms of depression and their severity and getting the woman to complete an EPDS is strongly recommended. Explore with the woman what is ‘her priority/ies’ in addressing and managing the PND e.g. interactive concerns, maternal physical problems, maternal feelings. Workers are reminded to keep in mind that most women can be managed at home.

Management – in this phase the health worker provides the woman (and her family) with information about her PND; its severity and likely duration; about options and services available /she and her family can access to assist with her specific needs; they work out priorities and options for management and treatment and appropriate referrals collaboratively. Referrals may be to agencies which can provide her with practical assistance to childcare for time out or to update her mothercraft skills; she may need specific physical treatment or medication, a stay in an early parenting centre for assistance with childcare issues, a hospital stay in a Mother and Baby Unit for psychiatric management; or individual counselling or group work to sort out emotional or relationship problems. A woman needs to have a professional diagnosis from the GP and be encouraged to access as many forms of treatment and supports available that are appropriate for her given her circumstances and degree of depression or anxiety. (The Monash Medical Practice (Moorabbin Inc, (1999).

2.8.4 Treatments

The treatment approach should be holistic and may include medication, psychotherapy, support groups and natural therapies.

There have been a number of randomised controlled trials of treatments for PND, but many are limited because of high rates of loss to follow up, a short follow up period, or potential bias because most eligible respondents refused to participate (Fisher, Cabral de Mello & Izutsu (2009).

Most mild depression in the postpartum year resolves as women become more experienced and confident about their mothering role. However, more severe depression can persist, becoming chronic and recurring from time to time (Cooper & Murray, 1995).

Appleby, Koren & Sharp (1999) have found that both pharmacological and psychological treatments reduced the severity of symptoms and the duration of depression.

Medication – antidepressants correct chemical imbalances in the brain that are thought to contribute to depression and anxiety, and are usually prescribed for a period of six months to two years (Fetling & Tune, 2005). The benefits of antidepressants include a rapid decrease in symptoms, easy administration and research has demonstrated their effectiveness in treating depressive disorders. Medication primarily addresses symptom reduction and does not assist in altering the conditions that contribute to or maintain depression (NHMRC, 2000). Many women are reluctant to take antidepressants because they fear they may be harmful both to themselves (in terms of addiction or over-tranquillising effects) and to their infant, especially if they are breastfeeding. Research in this area is inconclusive and conflicting. Some findings assert that antidepressants can be safely taken by women who are breastfeeding (Nylen et al, 2006). Other researchers have strongly argued against their use. For example, Stuart et al, 2003 have pointed out that there has been little research regarding the safety of antidepressants that are used while breastfeeding. They assert that while there is

some data regarding the transmission of antidepressant medication in breast milk, there has been little research regarding their effect on the developing infant (Stuart et al, 2003).

Given the effectiveness of current group and individual interventions, and the inconclusive nature of how antidepressant medications can affect the unborn child or breastfeeding infant, there is strong argument for not using them as the first treatment option for PND. Studies of combined use of antidepressant medication and psychotherapy have not shown any additional effects when combination treatment is utilised (Stuart et al, 2003).

Therapy – there are many forms that therapy for PND can take. The efficacy of psychotherapeutic interventions for the treatment of many disorders including PND is strongly supported by empirical data (Milgrom et al, 1999). Particularly in cases of mild PND, counselling is of benefit as a stand-alone treatment and is often recommended as a “first line” intervention (Stuart et al, 2003). In more severe cases often a combination of counselling and medication may be the most effective treatment (Pope, 2000).

Individual counselling may be offered by a psychiatrist or psychologist for women with mild to moderate PND. These sessions are usually used to discuss how the new mother feels about herself, her relationship to motherhood; to identify and attempt to resolve problems that she had prior to pregnancy and childbirth that may have contributed to the development of PND, as well as issues that have arisen as a result of PND (Fetling & Tune, 2005; Saddock et al, 2009).

Group approaches can include self-help, support, education or therapy groups and each has a role in treating PND (Williamson & McCutcheon, 2004). For example, support groups are regular, informal meetings that are often led by a woman who has recovered from PND. Therapy groups are slightly different from support groups, in that they are facilitated by a health professional with expertise in the area of PND and are usually ‘closed groups’, meaning that they run for a set period of time and newcomers are not admitted to the group after the first session (Fetling & Tune, 2005). Women with mild depression may benefit

from self-help or therapy groups and women with moderate to severe depression usually require a combination of individual and group treatment (NHMRC, 2000). Group treatment is more cost effective than individual approaches and offers the possibility of increased social support.

Natural Therapies – these may include naturopathy, Bush Flower and Bach Flower remedies, massage and meditation or relaxation techniques. (Monash Handbook for General Practitioners, 1999).

All the treatments listed above are helpful in women's recovery from PND.

Antidepressant medication in conjunction with support and counselling, is a very effective treatment for many women with PND. They do not necessarily treat the cause of depression or take it away, but they can speed up the recovery process and support other forms of treatment by stabilising brain chemicals which reduces the level of depressed mood and anxiety (Leahy-Warren & McCarthy, 2009).

Counselling (individual and group) can help women to understand what has contributed to their postnatal depression. With any degree of postnatal depression, especially longer term, it is important to investigate all the possible contributing factors (eg unrealistic expectations of motherhood, rigid and controlling thinking, past history of child abuse, or grief and loss) to help prevent depression in any future pregnancies and to develop problem-solving strategies (Beck, 2006).

Support (physical and emotional) from family and friends is a crucial factor in a woman's recovery from PND as is self-care and self-nurturing. Following a healthy diet, getting regular exercise and enough sleep are vital and are often pushed to the side in the busy, demanding life of a new mother (Appleby et al, 1999).

PND is a very debilitating mental health problem which affects a considerable proportion of new mothers. It may last for months and even years, compromising the mother's ability to physically and emotionally care for her baby and herself; can severely disrupt parental

relationships and family life; and places women at increased risk of future depressive episodes and their children at increased risk of emotional, cognitive and social problems.

The cause of PND are multifactorial, including physiological, psychosocial and social factors.

The early detection and treatment of PND is of utmost importance in order to avoid its harmful effects.

CHAPTER 3. CONCEPTUALISATION AND DESIGN OF THE PRESENT STUDY

3.1 Rationale for the Present Study

This chapter sets out the rationale for the study, the specific aims and design of the project and presents the reasons for the research methodologies selected.

There has been extensive research on PND over the past few decades. This has focused on rates of PND in new mothers, causal factors, impact of the illness on the women, their children, family and the wider community and treatment options. It appears that a large gap in the literature relates to the subjective experience of breastfeeding problems by affected women who have not been specifically investigated as a group. Moreover, the research which has investigated the relationship between PND and breastfeeding has focused on how they affected each other, that is whether PND influenced the continuation or cessation of breastfeeding, not the possibility that breastfeeding problems contribute to the development of PND or even exacerbate it.

In addition, the importance of breastfeeding to babies, mothers, families and the wider community has also been acknowledged for some time. Thus there is a great expectation on women to breastfeed, especially in the first 6 months after birth. However, many problems can occur in the breastfeeding process, some lasting for considerable periods or recurring over time. These, added to the changes and challenges following the birth of a baby, create extra anxiety and stress for new mothers. They can negatively impact on their self-concept as women and mothers and undermine their confidence in their ability to take adequate care of their infant.

Thus, mothers who have experienced problems with breastfeeding and the professionals assisting them (midwives, maternal and child health care nurses and lactation consultants)

have expressed the view that breastfeeding problems may be a contributing factor in the aetiology and exacerbation of PND. Given this, the present study was designed to begin an exploration into this possibility.

3.2 Aims of the Present Study

There were two phases in the present study and the aims were:

Phase One

- To gauge the type of breastfeeding problems experienced by mothers; their time of onset after birth and their duration
- Investigate PND rates in women who have problems with establishing a satisfactory breastfeeding process with their infant

Phase Two

- Explore the subjective experiences of these mothers regarding the breastfeeding problems
- Explore whether the breastfeeding problems had a negative impact on the mother's relationship with her partner or baby
- To gauge and evaluate the professional, family and social supports available to the women to help them overcome the breastfeeding problem(s)
- Explore what additional support/assistance would have been helpful to the women

3.3 Design

The present study was conceptualised as having two phases.

Phase One

Demographical data from women who were experiencing breastfeeding problems; investigation of breastfeeding problems experienced and level of postnatal depression among these women was collected.

The EPDS was selected to investigate the women's level of PND. This 10 item self-report test has been specifically developed to detect depression and anxiety among mothers in the postnatal period. It has been found to have a satisfactory sensitivity and specificity and is the most widely used measure of PND both in Australia and worldwide (Cox et al 1987; Boyce et al, 1993; Small et al, 2007).

The data sought in this phase was about the breastfeeding problems experienced (including the time of onset after the birth of the baby and its duration); information about the baby and the birth; information about the mother (age, educational level, marital status, occupation, nationality, previous history of depression); information about the father (same data collected as for mothers); and whether the breastfeeding problems were experienced with any previous children.

These factors were specifically investigated as they have been found to be influential in the aetiology and exacerbation of PND - especially those relating to the birth and the mother – by previous researchers.

Phase Two

A semi-structured interview was designed and carried out with a sub-group of the women involved in Phase One, who volunteered for this task. A semi-structured interview mode was selected to obtain specific information from the women regarding their experiences of the breastfeeding problems, but at the same time allowing further exploration into the issues

raised and enable the women to convey any other information they felt was relevant to their experience in the matter under study.

The interview was semi-structured to explore women's subjective physical and emotional experiences of the impact of the breastfeeding problems; how these problems affected their relationship with their infant and partner; the level of family and social support received by the women; investigation and evaluation of the professional support received to overcome the breastfeeding problems; and eliciting from the women any additional information/suggestions that may assist women experiencing breastfeeding problems in the future.

Again in this phase most of the factors investigated have been found to contribute to PND by previous researchers.

3.4 Method of Research

As the study was investigating women's PND levels and subjective experiences of the breastfeeding problems they experienced, both quantitative and qualitative research methods were utilised.

A quantitative method was used to examine PND levels among participants and a qualitative method to investigate their physical and emotional experiences of the breastfeeding problems; how these impacted on their relationship with their partner and baby; the quantity and quality of professional, family and social assistance and support they have received; and suggestions of what else would have been helpful to them and of possible assistance to mothers experiencing breastfeeding problems in the future..

Although there are several different approaches in qualitative psychology, behind each is a concern with human experience in its richness, attempting to gauge and understand a small number of participants' own frame of references or view of the world rather than trying to test a preconceived hypothesis on a large sample (Smith, 2003). Some qualitative methods

use interviewing transcripts (structured semi-structured and unstructured interviews) or written accounts to collect data in the form of naturalistic verbal reports. These are then analysed and interpreted on a thematic basis (Smith, 2003).

From the different approaches to qualitative psychology qualitative content analysis was utilized in the present study. This is a widely used qualitative research technique. Rather than being a single method, current applications of content analysis show three distinct approaches: conventional, directed and summative (Hsieh & Shannon, 2005). All three approaches are used to interpret meaning from the content of text data and thus adhere to the naturalistic paradigm. The major differences among the approaches are coding schemes, origins of codes, and threats to trustworthiness (Hsieh & Shannon, 2005). In conventional content analysis, coding categories are derived directly from the text data. With a directed approach, analysis starts with a theory or relevant research findings as guidance for initial codes. A summative content analysis involves counting and comparisons, usually of keywords or content followed by the interpretation of the underlying context (Hsieh & Shannon, 2005).

In this study conventional content analysis was used as existing theory and research literature is limited on the phenomenon being studied, so preconceived categories for the analysis and interpretation of data were not available (Kondracki & Wellman, 2002).

This study was concerned with individuals' personal experience rather than broad social interpretations of an event. Thus participants were instructed and supported to provide subjective accounts of their experiences and how these impacted on them and on their relationship with their baby and their partner.

Phase One

During this phase data was gathered about babies, breastfeeding problems experienced, mothers, fathers and mothers' history of depression. Participating women were also asked to complete the EPDS.

Phase Two

In Phase Two a sub-group of volunteering respondents from Phase One were interviewed. A semi-structured questionnaire, utilising open-ended questions was used. The questions were constructed to explore and learn about the physical and emotional impact of the breastfeeding problem(s) on the mothers; how these problems have impacted on the women's relationship with their baby and their partner; the professional, family and social supports received by the women; their evaluation of these supports; and their suggestions what other such supports would have been valuable to them.

CHAPTER 4. METHOD

4.1 The Sample

The sample consisted of women experiencing breastfeeding problem(s) after the birth of their infant. Participants' babies were to be aged from birth to six months as this was the time frame during which most breastfeeding difficulties occurred.

No previous research has specifically investigated the PND levels or the subjective experiences of a group of women experiencing breastfeeding problems. This may be because this group is a vulnerable population, undergoing significant transition and therefore difficult to access. Other samples have been from health settings, where women were receiving treatment where the research focus was on seeking prevalence rates or risk factors of PND, rather than on breastfeeding difficulties and their implication in PND. Thus this was a self-selecting, community sample, in which inclusion was chosen by the women themselves in response to a letter seeking participants for the study.

4.2 Recruitment of Participants

Maternal Child and Health Care Centres in the Melbourne metropolitan area and privately practising lactation consultants were contacted through The Directory of Victorian International Board of Certified Lactation Consultants to enlist their assistance in the recruitment of participants. The contact with these health professionals was made by telephone during which the study was introduced and described and they were asked about the possibility of referring appropriate clients to participate in the study. When their response was in the affirmative, they were sent the required number of research information and form packs to hand out to prospective participants.

4.3 Materials

With each parcel of information and form packs posted, a letter was enclosed to the maternal and child health care nurse or lactation consultant, outlining the objectives of the study and requirements of participation in the research as already verbally communicated to them over the telephone in the initial contact (refer to Appendices 1 and 2). Included was also a sample of materials they were to hand out to the women who wished to participate in the study.

The research information and form packs handed out to prospective research participants comprised:

- a letter outlining the aims of the research; an invitation to participate in the study, requirements of participation and confidential treatment of data – Appendix 3.
- a questionnaire for the collection of categorical data – Appendix 4.
- a copy of the Edinburgh Post-Natal Scale (EPDS) (Cox et al, 1987) to measure post-natal depression – Appendix 5.
- an invitation to be interviewed at a later date, detailing the requirements of the interview and a consent form to be completed in this regard – Appendix 6.A
- a stamped, addressed envelope for the return of the information to the researcher.

4.4 Procedure

One hundred packs were sent out to 3 Maternal and Child Health Care Centres and 8 privately practising lactation consultants in the Melbourne metropolitan area.

Thirty-two questionnaires out of the 100 sent out were completed and returned (representing a return rate of 32%) Twelve respondents volunteered to be interviewed.

Ten women, based on availability, were selected from the above 12 and contacted by the researcher by telephone, who ascertained they were still available to be interviewed and if so, to arrange a mutually convenient time for this to take place. All 10 women consented to be interviewed. Participants were provided with the choice of being interviewed in their homes or at an alternative venue (alternative venue choices included a place of their own choice, the Psychology Clinic at Victoria University or, the researcher's home). All the women chose to be interviewed in their own homes, stating this option was the most convenient to them, allowing them to be more relaxed and to be able to better attend to the needs of their infant during the interview.

Upon meeting with each participant, the researcher again presented her with the information statement describing the study, briefly reiterated what would be entailed in the interview and that all data obtained would be treated confidentially. Participants were also encouraged to ask questions and clarification on any issues they wished to during the interview process. As well, they were again reminded that they were free to withdraw from the study at anytime without consequence.

The semi-structured interview was then carried out, focusing on the women's experiences of the breastfeeding problems, the assistance they have received regarding these from health professionals and the support they were receiving from their partners, family and socially. Participants were also asked to state what other help would have been useful in all these areas. The semi-structured interview schedule is presented in Appendix 7. The women were also encouraged to raise any other issues they felt were relevant or pertinent to their experience of the breastfeeding problems throughout the interview which was not specifically referred to or was omitted by the researcher.

After the interview, participants were invited to provide feedback to the researcher about the interview process, its delivery and any suggestions for improvements in this regard.

Interviews usually lasted one hour and were tape recorded upon consent by the participant. At the end of each interview participants were advised they could contact the researcher at any time and convey further information or elaborate on any responses they had made in the interview. Once all the interviews were completed, a professional transcriber was employed to make transcripts of the recorded interviews. After reading through each transcript several times, the researcher systematically analysed the data collected.

4.5 Treatment of Data

4.5.1 Phase One

Demographic data was collected and categorised as follows: babies' sex, age at completion of questionnaire and birth order in the family; mothers' age, educational level, occupation and nationality; fathers' age, educational level, occupation and nationality; and parents' marital status.

Information was also collected and categorised about: babies' delivery; breastfeeding problems experienced; time of onset of these after baby's birth; most common concurrent breastfeeding problems; whether previous babies were breastfed; breastfeeding problems (if any) experienced with previous babies; and whether the mother had a previous history of depression.

Each woman's scores on the EPDS were totalled to determine her PND status and the level of PND in the cohort calculated.

4.5.2 Phase Two

Demographic data was collated. Recorded interviews were transcribed verbatim by an independent assistant. The transcribed data from each interview was read through several times by the researcher and analysed according to the themes researched and set out under

the headings set out below. When using direct quotations from the interviews to highlight, women's experiences, pseudonyms were used for participants to protect their identity.

1. How long has the breastfeeding problem been experienced?
2. What was the difficulty experienced in breastfeeding? Any physical problems (such as inverted/cracked nipples)?
3. How did the breastfeeding problem(s) affect you physically?
4. How did the breastfeeding problem(s) affect you emotionally?
5. How did the breastfeeding problem(s) affect your relationship with your baby?
6. How did the breastfeeding problem(s) affect your relationship with your partner?
7. What help have you received regarding the breastfeeding and breastfeeding problem(s) from professionals – when and from whom?
8. Was this help adequate? If not, what else would have been helpful?
9. What support have you received generally from your family and socially since the birth of your baby?
10. Anything else you wish to add – any other issues you wish to raise regarding the difficulties experienced with breastfeeding?

Once these categories were established, all the data referring to them was carefully scrutinized again for subcategories. For example for Question 3 above the following subcategories were found:

Extra tiredness

Pain

Discomfort

Stress

Tension

For Question 4 above:

Frustration

Anger

Sense of Failure

Anxiety

Worry/Concern

Guilt and Inadequacy

Depression

Confusion

Feelings of Helplessness and Hopelessness

Lowered self-confidence about Mothering Abilities

For Question 7. above, they were:

Hospital

Maternal and Child Health Care Centres

Lactation Consultants

General Practitioners

Australian Breastfeeding Association

Maternal Helpline

For Question 8 the sub-categories which emerged were:

Partners

Mothers (Maternal Grandmothers)

Mothers-in-Law

Other Female Relatives

At the end of each major category (Questions 1-10) and at the end of the list of sub-categories another sub-category was added headed as “Other” for any other issue(s) raised by the interviewee to ensure that all information provided by them was coded.

During the coding, quotes which highlighted the issues raised by the women in any of the categories were also extracted and recorded for possible inclusion in the final write up of the thesis.

SAMPLE OF A CODED INTERVIEW

INTERVIEWEE 1

Mother’s Age 31

First Baby

Baby’s Age – 8m2wks

Still at home with baby –planning to return to work part-time (lawyer).

Diagnosed and treated for PND

1. Off and on for 3 months after birth. Initially difficulty in attaching to breast, later on cracked nipples and mastitis.

2. Cracked (and very sore) nipples, then mastitis. Both treated by GP.

3. Very stressed and tired. Needed so much extra time, when already so busy and exhausted.

Quote: The breastfeeding problems caused me pain, discomfort, extra tiredness, stress and tension.

4. Anxious – how much food was my baby getting? Would this negatively affect my bonding with my baby?

Angry – I am doing all the right things, why is it not working?

Feelings of failure and depression - this is supposed to be natural, what

is wrong with me? Why me, everyone else seems to be managing

alright?

Emotionally vulnerable and fragile.

5. The breastfeeding problems actually seemed to bring us closer together, it was something we needed to work on and overcome together.

By persevering with breastfeeding I felt closer to my baby both physically and emotionally.

6. Relationship did not change – in fact it probably improved.

Understanding and supportive of my efforts to continue with my endeavours to breastfeed. Encouraging and praising my efforts which boosted my confidence and self-esteem.

Quote: No. our relationship did not change, if anything it actually improved. He has always been very involved in everything. He was very supportive of me when I wanted to continue feeding despite the difficulties – very encouraging and praising my efforts which boosted my confidence and self-esteem. He is a great husband and father.

7. Hospital (private patient) – very happy with assistance received.

Assistance with breastfeeding provided on an as needs basis. Lactation room provided for mothers to b/feed in – companionship, sharing experiences with other mothers very beneficial.

Maternal Child and Health Care Centre – dissatisfied with service – seeing different nurses, lacking consistency re information, did not feel properly listened to re concerns about feeding. Found the mothers' group at the Centre very helpful and socially enjoyable.

Private Lactation Consultant – 4 visits, very helpful, professional, knowledgeable and experienced, supportive. Home visits great.

General Practitioner - found her GP (family doctor) very helpful and supportive, both with breastfeeding problems (cracked nipples and mastitis) and with diagnosis and treatment of her PND.

Australian Breastfeeding Association – found their help positive, especially information/resources re breastfeeding and PND.

8. Partner – very helpful and supportive both emotionally and physically.

Helping with taking care of baby.

Helping with cooking and housework.

Giving her time out to herself.

Mother – lives close by, semi-retired. Great on-going support (still), has Daily contact with her. Sometimes by phone.

Much practical help with baby and around the house – giving her time to self.

Not “bossy” or overbearing/taking over.

Sister and Sister-in-Law – both a bit older than her, with small children

Good sources of information, knowledge of resources

Visiting, companionship.

Social – 2-3 close female friends – one of them expecting, one has a small child.

Sharing information, experiences, resources

“Being there” if she needs to talk, have a coffee with someone she feels comfortable with.

9. Since experiencing breastfeeding difficulties has found these are common and a lot of women suffer. So why is there a myth that breastfeeding is natural; easy and will just fall into place. This myth needs debunking.

Importance of early detection of PND. However, difficult to know what are PND symptoms and what is tiredness, loss of energy, anxiety due to the demands of a small baby and adjustment to motherhood.

Feels lucky with amount and quality of professional, family and social support. What happens to other mothers who are not so fortunate?

First baby – a very steep learning curve.

Need to improve services to new mothers especially at MCHC's.

Would be good to have a leaflet with suggestions re assistance with breastfeeding and other problems and PND handed to women upon leaving hospital and listing of organizations which can help with these.

Surprised and angered about negative responses re breastfeeding in public.

CHAPTER 5. RESULTS

5.1 Summary of Demographical Data

5.1.1 Information About Babies

Table 5: Gender of Sample

Female	17
Male	15
Total	32

The babies' sex in the sample was fairly evenly divided, with 17 females and 15 males.

Table 6: Delivery Status of Sample

Normal	18
Induced	8
Caesarean	5
Premature	1 (3 weeks, 1 day)
Total	32

Eighteen babies had a normal birth, 8 were induced, 5 had a caesarean birth and 1 was premature.

Table 7: Babies' Age at Completion of Questionnaire

1-2 Weeks	6
2-4 Weeks	10
4-6 Weeks	2
6-8 Weeks	8
8-10 Weeks	3
10-12 Weeks	3
Total	32

The babies' age in the sample varied from 2 to 12 weeks, with 50% being between 1 and 4 weeks old at the completion of the questionnaires. This fits well within the time when most breastfeeding problems tend to occur.

Table 8: Birth Order in Family

1st	21
2nd	6
3rd	4
4th	1
Total	32

Most of the babies (66%) were the first child in the family.

5.1.2 Breastfeeding Problems

Table 9: Type, Frequency, Mothers with more than one problem

Type	Freq.
Attachment to Breast	21
Mastitis (blocked milk ducts)	13
Thrush	13
Cracked Nipples	12
Breast Refusal	6
Not getting enough milk	5
Mothers with more than one breastfeeding problem	10

As found in previous research attachment to the breast was the most common breastfeeding problem (21) especially with the younger babies. Mastitis (13), thrush (13) and cracked nipples (12) were also commonly occurring difficulties, especially longer term and with older infants. Breast refusal (6) and not getting enough milk (5) were less frequently reported problems, albeit present in this sample.

Almost 30% of the mothers had experienced more than one breastfeeding problem. The most common concurrent breastfeeding problems were mastitis and thrush.

Table 10: Time of Onset of Problem(s) after Birth of Baby

Onset D(ay), W(eeks)	Frequency
1D	14
2D	4
3D	2
4D	2
7D	2
9D	1
2W	2
2.5W	1
4.5W	1
5W	1
6W	1
8W	1

Time of onset of breastfeeding problems varied from day 1 to 8 weeks. Fourteen women reported problems from day 1 – these were mainly attachment difficulties, breast refusal and baby not getting enough milk. Later occurring problems were mastitis, thrush and cracked nipples.

5.1.3 Information About Mother

Table 11: Mothers' Age

Age	Frequency
25-30	8
30-35	17
35-40	5
40-45	2
Total	32

Most of the mothers (66%) were over 30 years old.

Mothers' age range was between 25 and 43 years with a mean age of 31 years.

The educational level of the mothers in the sample was fairly consistent, 88% having completed tertiary studies and 12% having completed years 11 or 12 at secondary school.

Table 12: Mothers' Occupation

Home Duties (6)	Accountant
Kindergarten Assistant	Engineer
Marketing Officer	Public Servant (4)
Solicitor	Food Scientist
Primary School Teacher (3)	Project Manager
Retail Planner	Customer Relations Manager
Speech Pathologist	Cleaner
Registered Nurse (3)	Social Worker
Physiotherapist	Art Director
Editor	IT Projects Manager

Most of the women were professionally employed before the birth of their baby, with some opting to remain at home to raise the child (and other children). Occupations varied considerably from health, welfare, teaching and management positions. For a full list of maternal occupations, please refer to the table above.

The majority of the mothers (94%) came from an Anglo-Saxon background and 13% of them had a history of previous depression.

5.1.4 Information About Father

Table 13: Fathers' Age

Age	Freq
25-30	3
30-35	19
35-40	6
40-45	4
Total	32

Most fathers (90%) were over 30 years old, the majority (78%) had some or have completed tertiary education courses and 88% were from an Anglo-Saxon background.

All of the fathers in the study were employed. Similarly to the mothers, the majority were in professional occupations in the areas of management, information technology, various consultancies and human welfare. For a full list of paternal occupations, please refer to the table below.

Table 14: Fathers' Occupation

Police Officer	General Manager
It Manager	Investment Consultant
Accountant	Finance Consultant
Secondary School Teacher	Warehouse Manager
Draftsperson	Lawyer
Business Manager (2)	Concreteer
Sales Director	Engineer
Public Servant (2)	Printer
Company Director (2)	Property Developer
Management Consultant	Web Developer
Rabbi	Photo Journalist
Carpenter	Community Support Worker
Computer Consultant (5)	

5.1.5 Other Demographical Data

All of the couples responding have been together in a committed relationship for some time, with most of them married. All previous children have been breastfed.

Most of the current breastfeeding problems were also experienced with previous babies. These were attachment problems, thrush, mastitis, cracked nipples; sore/damaged nipples and baby not getting enough milk

5.1.6 Edinburgh Postnatal Depression Scale Findings

Table 15: EPNDS Scores

Scores	Frequency
21	2
18	1
15	2
13	4 Cut Off Point
12	1
11	4
10	7
9	3
8	3
7	2
4	1
3	2
0	1

Nine of the 32 women (28%) had a significant score for PND on the EPDS (obtaining a score of 13 or above). Two of the women scored 21 points out of 30 on the scale. Both of these mothers were also in the interview sample and were receiving medical treatment for PND.

There were also a large number of women who scored close to the cut off point of 13, with one achieving 12, four 11 and seven of them 10 points.

5.2 Interview Findings

5.2.1 Information About Babies and Mothers

Six of the babies of the mothers interviewed were female and four male. The babies' age range at the time of interview was two to ten months old, with an average age of four months. Six of the babies were the first child in the family, two the second child, one the third and one the fourth child. Five of the babies had a natural birth, three were born by Caesarean section and two were induced. Two of the mothers were being treated for PND – one had a past history of depression.

Two of the mothers were working part-time (2 and 2.5 days per week respectively), with childcare being shared by partners and grandparents. Three of the mothers were planning to return to full-time work in a few months' time with childcare being shared with partners, grandparents and professional childcare providers. Four mothers were not planning to return to work in the longer term, opting to stay at home and care for their baby (and in some cases, other children). One mother was not returning to work until her child reached school age – she was also planning to have another baby in the next 18-24 months. A total of 4 mothers were planning to have another baby in the next 18-24 months.

At the time of interview five mothers were still breastfeeding. Their babies were 7, 5, 4, 3 and 2 months old. Two mothers fed their babies until they were 9 and 8 months old and 3 until they were over 3 months old.

5.2.2 Breastfeeding Problems

Attaching and remaining satisfactorily attached to the breast until feeding was completed was the most frequently reported breastfeeding problem. Other problems experienced were: thrush; fussy eater, a lot of screaming while feeding; breast refusal (intermittent and constant); not staying on breast long enough to get enough milk; no milk supply at the

beginning; loss of milk supply due to baby refusing breast or other breastfeeding problems; cracked, sore and bleeding nipples; mastitis; sore breasts; baby not sucking properly or vigorously enough; mothers continually worrying babies were not getting enough milk due to poor, slow feeding; babies not gaining adequate weight as they were not getting enough milk; babies unwell.

The duration of the problems varied from about four weeks to over three months. Problems could also arise intermittently. Four of the mothers initially overcame attachment problems then developed sore, cracked nipples, mastitis, thrush or temporary loss of milk later on. In addition, most mothers experienced multiple problems, for example one mother experienced attachment problems and sore breasts soon after the baby's birth. When the baby was three months old the mother developed nipple and breast thrush and mastitis in one breast. There was also evidence in this sample of recurring breastfeeding problems with a different baby, with mothers who had other children experiencing problems with previous too, the problems may have been the same or different or both.

All mothers reported great concern, distress, worry, frustration and anger about the breastfeeding problems they experienced. All were also very worried how these would affect the well-being of their babies physically and emotionally. They were also concerned about the effect of the problems on their bonding with their babies.

Each mother really wanted to breastfeed her baby and thought this was essential especially until the infant was at least three to six months old. They went to extraordinary lengths to keep feeding their babies and if that was not possible at times (when breasts too sore; baby just could not be attached or just kept refusing breast constantly; or milk supply unreliable), they expressed their milk to feed their babies or mixed as much breast milk as they could with formula food. All of them had sought professional advice and assistance from various sources, including the services of private lactation consultants.

All mothers breastfed (whether on breast or by expressing their milk) until their baby was at least three months old, generally at great physical and emotional cost to themselves, their partners and families.

5.3 Professional Assistance Sought/Received To Remedy Breastfeeding Problems

5.3.1 Hospital

There were mixed reports about the quantity and quality of the assistance the women received in and through the hospitals where they had their babies. This seemed to a degree to depend on whether they were private or public patients.

All mothers had received some assistance re the breastfeeding problems they experienced from lactation consultants and had access to the lactation clinic while in hospital. Following discharge, private patients (6 of the women interviewed) received 1-3 home visits (including at least one from a lactation consultant), had free access to the lactation clinic at the hospital and have also received some follow-up telephone calls to check how things were progressing. Public patients had received 1 home visit (usually from a lactation consultant) and had to pay to attend the hospital's lactation clinic following discharge. Four of the women attended a lactation clinic at the hospital after leaving, with two attending for 2 sessions. For the women who were private patients this service was provided free of charge, the woman who was a public patient paid \$126 for the session. The sessions lasted for most of the day and covered other aspects of caring for a baby, such as sleeping and bathing. Six mothers also saw lactation consultants at the hospital, either while there or after discharge.

The women who had Caesarean section births received an additional home visit from a nurse at the hospital to ensure they were recovering well after the procedure.

Evaluation of Assistance Received

The women who were private patients reported general to fairly high satisfaction with the assistance and support they received. Each of them especially appreciated the home visits, as this meant that difficulties could be worked on in the context of the mother and baby's environment.

One mother reported great satisfaction with the arrangements in the hospital she attended, where assistance with feeding was provided on an as needs basis. The hospital also had a lactation room for mothers to feed their baby in, where a lactation consultant was on duty to help with any difficulties as they arose. She stated that apart from this *“there was a lot of sharing of information and experiences between the feeding mothers which I found very valuable. I also appreciated the companionship of the other women, being with them reduced my sense of isolation and the stress and frustration about the problems I was experiencing with breastfeeding my baby (Lucy, first time mother with PNDP).*

There was also considerable dissatisfaction expressed about treatment and the services received regarding breastfeeding in the hospitals and by hospital staff following discharge.

Four women complained about the attitude, lack of adequate knowledge and incomplete or inconsistent advice being given by the hospital lactation consultants. These experiences were highlighted by a report from *Tina, first time mother - “You were seeing different lactation consultants/nurses in the hospital. Their advice was often inconsistent and incomplete – it was frustrating and unhelpful”*. As well there were complaints from the women that they were not being listened to, they were not heard, felt their problems were minimised, they felt patronized, not treated as individuals, that the professionals lacked empathy, patience and often seemed pressed for time, stressed, tired and overworked. The following verbatim reports express the women's feelings and experiences in this regard. .

“The staff in the hospital often seemed to lack time to explain things properly and let you experience with techniques. They seemed stressed and tired a lot of the time”. (Kim, second time mother).

”I had the midwives come out 3 times after the birth because I was discharged from hospital very quickly. I found their support not very helpful at all... they were really unhelpful. They often seemed impatient and, did not listen properly to my concerns. They also contradicted each other and I did not think they had very good knowledge (Miriam, first time mother).

These experiences seemed to exacerbate the women’s already low confidence and heightened their anxiety, stress and frustration about their ability to establish a satisfactory breastfeeding routine with their baby.

“I had a Caesaren Section, it was my first baby, I was exhausted and in pain and then on top of everything she just would not breastfeed properly. It was just too much ... and not being helped properly by the lactation nurse at the hospital was dreadful. She ran through the process of attachment (of baby to breast) quickly and did not give me time to practise it but went off. I tried and tried, but it still did not work. I became very despondent and kept wondering what was wrong with me.... It really affected my already low confidence about my mothering ability.” (Marcelle, first time mother).

5.3.2 Maternal and Child Health Care Centres

All of the women attended a Centre even if it was for just a couple of sessions. Nine of the mothers joined the babies and mothers’ groups organized by the Centre and seven were still attending these at the time of interview – generally once a week. The tenth mother (who had 3 children already and attended these groups in the past) did not attend with this, her fourth child. She had 2 friends who were expecting and having children around the same time with whom she exchanged a lot of mutual support. She did state that she experienced

her past attendance of the groups as very positive, with much exchange of knowledge, information and mutual support between the mothers.

Evaluation of Assistance Received

All of the women had complaints about the services – or lack of them – at the Maternal and Child Health Centres they attended.

A lot of the complaints were about lack of clear, specific, consistent, useful and individualized information and advice in how to avoid and rectify problems (e.g. avoid PND and overcome breastfeeding problems). The women reported that the nurses seemed to only do the routine things such as the measuring and weighing of the infant and were critical if the latter was not thriving physically, but did not explore why this might not be happening.

The manner of service delivery was also a source of complaint – most women reported that they were treated formally and routinely – “by the book” rather than in a personal, empathic, individualized manner. They stated that often they did not feel heard or felt that their concerns were minimized or brushed aside.

The lack of regular, permanent staff at the Centres was another common complaint. This led to a lack of consistency and continuity in the services received with the information and advice received being often conflicting.

Being provided with relevant and appropriate resources and referrals, especially re breastfeeding problems and PND seemed also to be a common problem at the Centres.

Other negative points raised about the service provision at the Centres was that the staff there often seemed to be busy and stressed and it would have been preferable to be able to attend when the need for assistance arose rather than at specified times (according to the child’s stage of development) only.

One service provided by the Centres that all the mothers valued greatly was their organizing and linking them in with mothers’ and babies’ groups, the attendance of which

every woman found enormously beneficial and supportive. Three of the mothers were also referred to private lactation consultants by their MCHC nurse.

Some of the women's comments re services received at the Centres are:

“The MCHC nurse was extremely unhelpful, not at all sympathetic or anything. Very disappointing really – I ended up changing to another Centre” (Tina, first time mother).

“The MCHC nurses were not very helpful. There were lots of different nurses. There was no consistency or continuity and the information and advice I was given was often conflicting. They seemed overworked. I did not get much help with the PND either. You need so much help with a first baby and I wonder what happens to other mothers” (Clare, first time mother).

The MCHC nurse just seemed to do routine things, measuring, weighing. When I was feeling depressed at the 3 months mark, I was told just to leave it for now because I was going through a lot of stress, but she did not refer me to anyone. My friend was the one who gave me a contact if I needed help” (Jane, mother of two).

“I would have liked to have been treated in a personal, individualized manner, not so formally and routinely – it was more of the same. They should be taught to deal with new mothers, who may be or are emotionally fragile” (Kerry, mother of four).

5.3.3 Private Lactation Consultants

Every mother interviewed has accessed the assistance of such a professional. Their referrals were either through the hospital, through Maternal and Child Health Care Centres, but most through word of mouth – through friends and family who have accessed this service in the past.

Private lactation consultants' fees are not rebated by Medicare or private health insurance companies and although reasonable, can add up especially if and when several sessions are required. While this service was affordable for the women in the current sample, each

woman interviewed expressed concern about the costs for women generally and especially those who were financially struggling.

Evaluation of Services Provided

The assistance provided by private lactation consultants was found to be either helpful or very helpful by all the women. They appreciated the individualised help and that the consultants came to their homes, working with them and their babies in their own environment. Most of the women saw one at least twice, with some of them having 4-5 sessions. The consultants were experienced as knowledgeable, empathic, positive and able to impart valuable information, advice and techniques. After some on-hands sessions, they also provided assistance and support over the phone, which was also greatly appreciated as the mothers requiring this could get help with specific issues as they were occurring.

Some verbatim reports about the services of the private lactation consultants are as follows:

“The lactation consultant was helpful, very helpful. I think I knew things in my head but found it hard to put them into practice, the main thing she helped me was with technique. Once I had that I was alright, the rest followed”. (Clare, first time mother).

“I had 3-4 sessions with the lactation consultant which were very helpful. It was good to have her come to the home, especially useful to get assistance in the home environment”. (Kim, mother of two).

“I found the lactation consultant very helpful. Even when the baby was 4-5 months old, I could ring her at anytime and she gave me lots of advice”. (Lucy, first time mother).

5.3.4 General Practitioners (GP's)

Most women had visited their GPs at some stage especially when experiencing mastitis, thrush and cracked and bleeding nipples. Two were treated for PND by their GPs. The

majority had family doctors and highly rated the assistance they received. However, their GPs could not assist them with breastfeeding problems and the techniques to overcome these.

5.3.5 Australian Breast Feeding Association

Four mothers made contact with this organization by phone. Two of them subsequently joined it for further information, resources and assistance.

All mothers reported positively about the assistance they received. They appreciated that such an organization existed, there for all mothers not matter what their needs may be.

5.3.6 Maternal Helpline

Five women contacted the helpline and found the information and support provided by the counsellors they spoke with helpful. Being able to access the helpline out of hours was found to be very valuable and reassuring for the mothers

5.3.7 Internet

Most of the women reported looking for resources and information on this medium. However, there is so much information and at times they felt swamped or too tired to keep searching for the specific information or material they required

5.4 Factors Investigated Specifically During Interviews

5.4.1 Physical Impact of Breastfeeding Problems on Mothers

Every woman interviewed stated that she experienced considerable negative physical consequences related to the breastfeeding problems such as pain, discomfort, extra tiredness, stress and tension. Mothers who also had other children especially reported tiredness and concern about having time/energy for their needs and care as well.

Continuous and prolonged attempts to overcome the breastfeeding problems and ensure their babies received enough breast milk whether by improving feeding or expressing milk took up a lot of extra time and physical effort, leaving the mothers drained of energy and stressed. The extra effort and time spent thus meant that there was less time and energy for all the work and adjustment needed with the arrival of a new baby. Most of the mothers also reported having spent considerable time in expressing breast milk and sterilizing equipment when breast milk was fed to their baby by bottle or augmented with formula food.

A major negative physical effect also included being much more housebound during the weeks after birth, leaving the mothers isolated and cut off from their social networks. Mothers were reluctant to venture out and contend with a screaming baby in public during attempts at breastfeeding.

Their verbatim reports are as follows:

“I was housebound for about 5 weeks to be around to express, keep trying to breastfeed and when he refused, bottle-feeding the expressed milk” (Jenny, first time mother).

“I experienced breastfeeding problems with both of my babies. It caused me pain, discomfort, extra tiredness, stress and tension” (Maria, second time mother)

“A lot of extra work and effort was needed to continually express milk, sterilizing equipment – on top of everything it was so tiring” (Marcelle, first time mother).

5.4.2 Emotional Impact of Breastfeeding Problems on Mothers

Each woman reported feeling greatly affected emotionally by the breastfeeding problem(s) she experienced. The main feelings were frustration; anger; confusion about their milk supply; concern and worry about their babies not getting food or thriving; incredulity when it just did not happen easily and naturally as they expected it to; feelings of helplessness, failure (as women and mothers), guilt and inadequacy; depression; and great professional and social pressure to breastfeed no matter what. A couple of them said they felt

guilty for not being able to fulfil this central maternal role, both of these women started bottle feeding after 3 months. Most stated that experiencing the breastfeeding problems had made them feel emotionally more vulnerable or fragile.

The women compared themselves unfavourably with other mothers, who did not experience difficulties, felt there was something wrong with them, that they failed as women. This affected their self-esteem and confidence about their general capacity to care for their infant.

First time mothers were unprepared for the pain, discomfort and difficulties caused by the breastfeeding problems. They continually worried about the effect of the problems on their milk supply “it is difficult to know how much milk there is as it cannot be seen” and many mothers were anxious they were not producing enough milk and that their baby was not getting enough food.

They stated that as there is a general belief that breastfeeding is an easy and natural process, experiencing difficulties made them feel inadequate, “a bad mother”, guilty and isolated. It had made the adjustment to motherhood much more difficult for them.

Mothers who had experienced problems with previous children felt angry and frustrated when they were again experienced with the new baby.

Women who had given birth by Caesarean Section and were recovering from the procedure reported that the breastfeeding problem(s) were another major burden to overcome when they were already feeling physically and emotionally below par.

Some of the women’s verbatim emotional responses were as follows:

“I felt frustrated and annoyed, unprepared for all the pain and problems. It was troubling and I was upset, got down and cried sometimes...”. (Tina, first time mother).

“It seemed to affect my confidence and self-esteem. I was wanting and needing lots of encouragement and positive reinforcement about all the other things I was doing right for my

baby. There were feelings of helplessness, not doing the right thing and I felt emotionally more vulnerable and fragile”. (Nancy, mother with 3 other children).

“I was really surprised that satisfactory breastfeeding did not just happen naturally – as soon as she was born the guilt sunk in – guilty mother – have I done this wrong, have I done that wrong – it can be really damaging psychologically. Why can’t I do this?” (Clare, first time mother).

“My mother and sister breastfed successfully, I wondered what was wrong with me. I felt like a failure and got depressed”. (Kim, second time mother).

“I think there is a lot of misinformation about breastfeeding, especially the supply – because you can’t see it, it is difficult to know how much there is. There is an anxiety, you don’t know how much she is getting and you don’t know if you are producing enough” (Miriam, first time mother).

“I think there is an expectation that it is easy, I think it is very isolating. I felt isolated when I had the (breastfeeding) problem(s). Even though my head said I would be fine, I would get over it, I had twinges of what is wrong with me, am I a bad mother?” (Maria, first time mother).

5.4.3 Relationship with Baby

Seven of the women said they were concerned that bonding with their baby could be negatively affected because of the breastfeeding problems, especially when the babies just did not seem to want to get on or stay on the breast and screamed a lot during feeds. They felt they may be emotionally harming their child by persevering and forcing them to keep breastfeeding. In contrast, two mothers reported that if anything their relationship with their baby was enhanced by the difficulties, it was something they worked on and overcame together.

The mothers who put their babies on the bottle after struggling with the breastfeeding problems for over 3 months, both stated their relationship with their child vastly improved once this had taken place. Both mother and child were comfortable, relaxed and freed up emotionally to enjoy the feeding experience.

One of the mothers who was diagnosed with and treated for PND said she kept persevering with the breastfeeding as a way to keep physically and emotionally bonded with her baby, especially when she felt physically run down or feeling below par emotionally.

Most mothers stated that although they were often stressed, angry and frustrated about the difficulties, they did not blame their baby for the problems – they felt the problem was theirs and they needed to fix it.

Here are some of the women's comments: about how the breastfeeding problems affected their relationship with their infants.

“I disliked feeding her a lot of the time. It was a chore, not a fun time. I hated it at times – it was very much like a job, not a lovely, natural, cuddly time” (Kerry, mother of four).

“I never felt angry or frustrated with her, only with myself for not being able to attach and keep her attached (to the breast). It was my fault, it was never her.” (Tina, first time mother).

“I felt no bonding or being as close as I would like to have been. It was difficult with his continued breast refusal and screaming. I experiencing feelings of rejection and felt like saying ‘take him away, take him away’” (Kim, second time mother).

“No negative effects, but I did keep asking him ‘why, why won’t you take the breast?’ But I did not want to let it affect our relationship because although it was obviously a problem for him, it really was my problem, something I needed to fix.” (Maria, first time mother).

“I felt a much better bonding with the baby once bottle feeding commenced. Both of us were much more relaxed. He seemed much more comfortable, no longer screaming through

feeding. He cuddled much more. I felt angry about the problem, not necessarily him”
(Jenny, first time mother).

5.4.4 Relationship with Partner

All the women interviewed reported having an understanding, caring and supportive partner and most said that the breastfeeding problem(s) in fact improved their relationship with their partner rather than the reverse.

Most stated that the added complication of feeding problems seemed to bring out an extra, different dimension of strength, empathy and tenderness in their partner. The difficulties drew them closer and made the couple appreciate each other more. Supporting the women and trying to solve the breastfeeding problems also involved the men much more with their baby.

Some of the women felt they put much more demand on their partner both emotionally and physically because of the breastfeeding problem(s). A couple said they probably vented their anger and frustration on their partner more than they would have liked to. One mother said that at times she was a bit resentful that she was the one who had the continual responsibility for the breastfeeding and to try and fix the problems. She felt men could not really understand what women go through no matter how empathic they are or how hard they try to.

The majority of the women stated that their partners did not pressure them to continue breastfeeding and a couple actually encouraged them to try bottle feeding when the difficulties seemed too great or continued over a long period of time.

Some responses were as follows:

“He was extremely supportive and helpful in getting him (baby) into position at the breast and making sure I was comfortable – he wanted it to work. I felt sympathetic towards him – he had to put up with me being frustrated, baby crying, being a new dad, a lot of

burden I think. But he was realistic about it as well and did not push me either way – it was ‘whatever works for you’” (Miriam, first time mother).

“I became more demanding of him, needing more help and support emotionally and physically – he supplied this, he is a great partner. He was encouraging, empathic, reassuring, calming, he put things more into perspective” (Kerry, mother of four).

“No, our relationship did not change, if anything it actually improved. He has always been very involved in everything. He was very supportive of me when I wanted to continue feeding despite the difficulties – very encouraging and praising my efforts which boosted my confidence and self-esteem. He is a great husband and father” (Lucy, first time mother, with PND).

“I feel it was hard for him because I was so stressed and took it out on him. He was good, supportive, did not worry about continued breastfeeding. He was concerned about me, the baby and the whole family. So he supported me to bottle feed, because that seemed to help” (Kim, second time mother).

“I used to think bloody hell, why can’t he do it (breastfeeding) and then he would understand” (laughing). I also sort of resented a bit being always on demand, always. I could never finish anything, arghh. Even now, sometimes he goes out surfing and I think, lucky you.... It annoys me a bit but really, generally we are fine” (Clare, first time mum).

5.4.5 Family Support

Family support was greatly valued by the women interviewed. Input from partners the women’s mothers as well as other female relatives – mothers-in-law, sisters and aunts were cited by most of them.

All mothers reported receiving considerable family support. Each one ranked this as extremely important not only in coping with breastfeeding difficulties but also with a new baby, adjusting to their roles as mothers (especially with a first child), in running the

household and looking after other children. This help also freed up the mothers to spend more time with their infants and for self care.

Apart from assistance and support provided by partners, a lot of help was also received from the women's mothers. Several of the women reported valuable input by mothers-in-law, sisters and aunts as well.

However, several of the women stated that they would have received more family support – especially from extended family – if they asked. They were reluctant to do so, preferring to be more independent and to try to manage by themselves or with the help of their partners.

5.4.6 Support From Partners

As stated earlier each woman reported receiving a lot of physical, emotional and practical support from her partner. All fathers had taken some paternity leave to be home and on hand at least for a few days (but in most cases 2-3 weeks) when mother and baby came home from the hospital. While on leave they provided a lot of practical support in assisting mothers with the day-to-day care of the infant, housework, cooking, giving the women time/space to focus on their babies, recover from the birth and take care of themselves. Later on (when they had returned to work) the support continued in the evenings and on weekends, with several fathers taking over some of the night feeds, giving their baby bottles of expressed breast milk so that the mothers could get extra sleep.

Four of the fathers had planned to work part-time once their wife was ready to return to work so that they could share the childcare and parenting.

While the women did appreciate their partner's physical and practical input, they especially stressed the importance of the emotional care and support provided by them. Much of this was already cited under the section "Relationship with Partner".

However, here are some extra comments:

“My husband was very supportive and encouraging... I needed him to be extra supportive physically and emotionally and he was – he is a great partner” (Kerry, mother of four).

“My husband was very understanding, supportive and helpful. He took some time off from work to spend with the baby and I after we came home from the hospital” (Miriam, first time mother).

“My husband was great – he had 3 weeks off from work when the baby and I came home (from hospital), helping out physically and emotionally. Later he was here at night doing the same” (Lucy, first time mother with PND).

5.4.7 Support Received from Mothers (Maternal Grandmothers)

Most of the women also reported having received some much appreciated assistance and support from their mothers, even when the latter were not living geographically close by or were still working. The support received was physical and emotional, as well as encouragement and useful advice.

Three women had mothers living interstate and two in country Victoria. Four grandmothers came to help out soon after the birth of their grandchild and one new mother visited her mother interstate for a while with her baby when he was three weeks old.

As some of the grandmothers still worked, the physical support varied, however, some was provided in all cases.

Grandmothers especially provided a lot of practical support during the first few weeks after the birth, helping out with the housework, laundry, shopping, cooking and looking after the other children. This freed up the mothers to focus on their new baby and to take physical and emotional care of themselves.

Later on some grandmothers continued helping out with the tasks outlined above and also by babysitting the new infant, giving the mothers some time out for themselves.

Grandmothers also provided emotional support and advice about all facets of baby care, including breastfeeding.

Three women reported having extensive support from their mothers for several weeks after the birth. One of them had 3 other children, one had PND and the third one's baby had physical problems with bones dislocated in his neck and shoulder.

While much of the practical and emotional support from their own mothers was appreciated by the women, some reported difficulties due to the generational differences in beliefs and attitudes in child rearing generally and breastfeeding versus bottle-feeding specifically. Many of the grandmothers had bottle fed their children (as was the trend in the 1960's – 70's) and found it difficult to understand why their daughters kept persevering with breastfeeding given the problems they were experiencing with it.

Some comments re the input of grandmothers were as follows:

“My mother lives two hours away in the country. She came to stay and help out for a week after I came home from hospital” (Jenny, first time mother).

“My mother took over the running of the household, freeing me up just to focus on and care for my baby. Without all her help I don't know how I would have managed” (Maria, first time mother with PND).

“My mother provided a lot of practical support with the older child and the housework”. (Jane, mother of two).

“My mum visited (from interstate) soon after the birth and helped out with the physical things around the house. However, she bottle fed her children so could not understand my determination to keep up the breastfeeding despite the pain and the problems – she was from a different generation”. (Clare, first time mother).

5.4.8 Support Received From Mothers-in-Law

Mothers-in-law were also reported to be a source of practical and emotional support by several women, especially when they were living close by.

Verbatim statements about their input are as follows:

“My mother-in-law came around regularly to help with housework and looking after and taking the other children out” (Kerry, mother of four).

“I received a lot of emotional support and physical assistance from my mother-in-law too” (Kim, mother of two).

“My mother-in-law lives around the corner and she is also very caring, supportive and helpful” (Miriam, first time mother with PND).

5.4.9 Support Received from Other Female Relatives

Sisters and aunts were other members of the women’s extended family cited as being helpful by five interviewees. One mother had an aunt who was a midwife and another who was a mothercraft nurse, who assisted professionally as well as practically.

Sisters who had children themselves were reported to be a good source of information and support, providing advice, knowledge and sharing their experiences with the new mothers.

Some reports regarding the support of female relatives was as follows:

“I received extensive support from my sister too” (Miriam, first time mother with PND).

“My sister has two young children. She also has experienced breastfeeding problems in the past so knew what I was going through. It was great to have her understanding and support.” (Marcelle, first time mother).

“My aunt is a midwife, so she could provide a lot professional advice which really helped” (Kerry, mother of four).

5.4.10 Social Support

Social supports were also very important to the women in this group. Mostly this was received from good, close, female friends, some of whom have experienced breastfeeding difficulties themselves in the past. There was a lot of sharing of information, knowledge and experiences which new mothers found beneficial, reassuring and comforting.

About half of the women interviewed had a friend or friends who were either expecting a baby at the same time they were or had small infants, so had often a lot in common with the mothers in the study sample.

Apart from the practical and emotional support received from friends, they also provided much needed and valued companionship to the new mothers, visiting and later having them visit with their babies. This helped alleviate social isolation and loneliness, especially during the first few weeks after the birth when new mothers tended to be housebound.

Later on the women often established mutually beneficial arrangements with their friends with child minding, shopping trips, outings – another much valued facet of social support.

The importance of support from friends is expressed in the statements below:

“I have several friends who were expecting or having babies around the same time as I which really helped. They had varied experiences and we all learnt from each other” (Tina, first time mother).

“Friends have been great – understanding, empathic, supportive. They were helpful in trying to find out what the (breastfeeding) problem was and in sorting out and managing my feelings, dealing with the guilt and in persevering” (Kim, mother of two).

“There was a lot of support from friends who have breastfed and overcame difficulties in the past, lots of encouragement and sharing of experiences” (Kerry, mother of four).

5.5 Mother and Babies Groups

Every woman has expressed having gained great benefits by attending these groups. They all cited this as being one of their major sources of support, not just with getting encouragement and assistance with breastfeeding problems, but also the myriad other issues faced by new mothers and babies. They found exchanging information, resources, experiences and advice invaluable and enjoyed the company of the other mothers. They also thought that attendance of the groups helped their infant's socialisation, not just with other babies, but adults as well.

Seven of the mothers were still attending the groups at the time of interview.

Here are some of the comments they made about being part of the groups:

"Yes, we attend a group still, once a week, we are now meeting at each other's houses (instead of the Centre). It has been really, really important for me to have those contacts, to meet other mothers with babies and share stories about stuff like breastfeeding and to compare notes – to have those local contacts. We have not lived around here long and I don't know many people" (Jenny, first time mother).

"We started attending a group when he was 2 months old and still go. It is great, lots of support, a great resource, good for babies and mothers – sharing knowledge, information, experience" (Miriam, first time mother).

"Attending the group was great in the past. Fabulous support and mutual care" (Nancy, mother of 3).

5.6 Additional Points Which Arose During Interviews

Many other issues were raised by the women interviewed. These are set out below.

It was important for the women that their partners agree with them about breastfeeding, especially whether to keep on persevering or getting baby on the bottle; working on timelines on how long to keep trying as a couple. *My husband supported me in my desire to keep on*

breastfeeding, but he could see what a struggle it was and suggested we set a limit – when to stop trying and put him on the bottle (Clare, first time mother).

Perceived or projected pressures from others were factors in some mothers' experience of breastfeeding. Often these pressures by others did not actually exist, but were a justification used by the women themselves who wanted to keep on breastfeeding. This led to feelings of guilt. Even when the women were aware that they were projecting, it was difficult for them to know to what degree the expectation to breastfeed was from others and how much from themselves. *“Sometimes it was difficult to know whether the expectation to keep on breastfeeding came from other people or myself, I felt guilty about wanting to stop (Marcelle, first time mother).*

The extent mothers went to in establishing satisfactory breastfeeding with their babies was significant. They were inventive, innovative and persevering. All mothers were aware of the benefits of breastfeeding, hence all their efforts. All the women wanted to breastfeed to at least three months, but preferably to six months and beyond. *“Of course I would try anything to make breastfeeding work, it is the best nutrition for a baby” (Kerry, fourth time mother).*

I wanted to breastfeed until my baby was at least 6 months old to give it a good start in life” (Tina, first time mother).

Mothers wanted support, empathy and understanding about their difficulties with breastfeeding, but they did not want to be told what or what not to do, especially by family and friends. Conversely they actually needed specific advice about skills and techniques from the professionals assisting them, which they often felt was not forthcoming and made their problems so much worse, leading to feelings of frustration and helplessness. *“I did not want my family or friends to keep on giving me advice about the breastfeeding, just to be understanding. I wanted the health professionals to be giving me specific advice and teach*

me skills to help my baby breastfeed properly. When they did not, I got frustrated, angry and felt helpless” (Jenny, first time mother)

There was also reluctance by mothers to ask for help or more assistance from family and friends due to a sense of independence and wanting to be self-reliant. It seemed important for the women to feel confident about being capable mothers, for positive self-esteem and a sense of efficacy. It appears that refusing to seek help from others was a way of proving to themselves that they were fine, were coping and managing. *“I could have asked my family and friends for more help, but wanted to be able to manage on my own. It made me feel good, positive and confident to be able to cope on my own” (Kim, second time mother).*

Another difficulty mothers experienced with breastfeeding was not knowing how much food their baby was getting. Other aspects of this theme included worrying about variability of feed times, especially when the baby went for a long time without wanting a feed. Moreover, not knowing whether to leave babies asleep or wake them up for feeding also caused women stress and worry. *“It was so difficult to know if he had enough milk, or whether to wake him up for a feed or wait until he woke by himself. It was a constant worry” (Maria, second time mother).*

Mothers also reported becoming housebound and socially much more isolated when experiencing breastfeeding problems. Many of these mothers did not want to breastfeed in public as it was experienced as too problematic, not socially acceptable, time consuming and baby often crying a lot, drawing negative attention to itself and the mother. Furthermore, mothers experienced discomfort when breastfeeding in public, as if people were looking at them and being critical. At times mothers felt self-conscious, conspicuous and embarrassed. Most mothers also reported being angry and frustrated about the negative response to their breastfeeding in public. *“He would scream a lot during feeding time, so I was embarrassed to feed him in public and we stayed at home a lot in the first few months”. (Kim, second time mother). “You felt as if people were negatively judging you when you breastfed in public...*

for goodness sake it is natural and should be accepted as such” (Lucy, first time mother with PND).

Having a first baby was experienced as a huge learning curve for the women in this situation. All first time mothers reported that the differences between theoretical knowledge and the reality of adjusting to and caring for an infant are enormous and very often daunting.

The written and other information the women received before their baby’s birth about breastfeeding problems they may experience in the future were found by most mothers to be useless and theoretical only. Women stated that mothers did not know whether there will be problems after the birth of the baby and, if so, what problems will be experienced. These needed to be worked out between mother and baby when they did occur on an individual basis as each mother/ baby unit is different, with different needs. *“Having your first baby is a real learning curve! No matter how prepared you are, there is just so much more to it than you think and then on top of it all you cannot breastfeed properly” (Miriam, first mother with PND) “No one can prepare you for the possibility of breastfeeding problems ahead of time” (Nancy, third time mother).*

Most of the mothers interviewed reported being negatively affected by the general societal expectations that breastfeeding is natural, women are equipped for it, baby knows what to do and does it as it is an innate, basic survival skill which should happen automatically between mother and baby. They stated that the reality is often very different, causing much distress to both mother and baby. *“You hear so much about what a lovely experience breastfeeding your baby will be, what a natural process it is with it knowing exactly how to go about it and then it just does not happen, he keeps refusing the breast and it is really awful” (Maria, second time mother).*

They stressed it was very important to accept that breastfeeding problems can and do occur and that some women will just not be able to breastfeed or continue breastfeeding for

any length of time for whatever reason. There needs to be more understanding, empathy, acceptance of this and support for these mothers socially and by health professionals.

The majority of the women acknowledged that professional, family and social “permission” is important for mothers to stop attempts to breastfeed and put the baby on the bottle. *“I feel there is so much pressure on women to breastfeed, that if you don’t you are not, doing the right thing by your baby. It should be recognised that some women – for whatever reason – will not be able to breastfeed and there should be more acceptance of this and support for these mums” (Kerry, fourth time mother).*

None of the women were put off breastfeeding despite the difficulties they had experienced with each one stating, that despite the problems, they would try breastfeeding again in the future. *“No, I would not let my difficulties with breastfeeding stop me from doing it again, but if I had problems in the future I would get help sooner” (Lucy first time mother with PND).* *“I am planning to have another baby in a couple of years and will definitely be breastfeeding him/her as well” (Clare, first time mother).. (*

Paternity leave for husbands/partners was deemed to be very important by the women and experienced as being most helpful for mum, baby, dad and the whole family. It was found to be enormously beneficial by all women, emotionally and physically, helping them adjust and for first time mothers making the transition to motherhood much smoother. *“My husband was home for 3 weeks after I came home from hospital with the baby and it was great. He took care of practical things like cooking, washing and cleaning, which helped me focus on caring for the baby. It really helped me to adjust to being a mother” (Jenny, first time mother). (*

Several women raised the issue that most women are carrying a lot of extra weight after the birth which also impacts negatively on them. It affects their self-image and confidence, causes extra lethargy and elicits negative comments from others. For new mothers, this is an additional burden to carry with everything else happening. *“I put on a lot of weight during*

my pregnancy, it did not help to get all the comments about it, just another thing to knock your confidence” (Marcelle, first time mother).

According to the mothers, unfavourable comparison of self with others is common among women experiencing breastfeeding problems – feelings of failure because their mothers, sisters, friends, work colleagues had been able to breastfeed satisfactorily. *I could not help but wonder what was wrong with me. Everyone else I knew could breastfeed easily, why couldn't I?” (Miriam, first time mother with PND).*

Experiencing feelings of not being listened to, being “brushed off” by professionals was another common report. Most of the women interviewed stated that a clear, concise explanation of the physical reasons for the problem(s) from professionals were often lacking. They have felt that there is a lot of information, resources and assistance on PND compared with breastfeeding problems. *“Hard to understand why health professionals could not explain why I was experiencing the breastfeeding problems. They just seemed to brush you off when you kept asking”. (Kerry, fourth time mother).*

Some women stated that combining the use of formula food with breast milk (when there was not sufficient of the latter) made women feel better, less guilty. They felt their baby was not missing out on all the nutrients and antibodies provided by breast milk. *“I felt better when I started giving her some formula food as well. She was getting enough to eat and still getting the nutrients from the breastmilk”. (Nancy, third time mother).*

The women expressed concern that the expenses for treatment of breastfeeding problems by private lactation consultants and other professionals would be a great deterrent for many mothers and families in seeking their assistance. All the women interviewed stated that they felt very fortunate to have the resources to seek the right professional assistance, and the financial funds to access and afford their services. They expressed concern for mothers who were not in this situation and stated that assistance should be provided to them through Medicare or some other government subsidy. *“I feel lucky to have been able to get*

assistance from a private lactation consultant, but what happens to women who cannot afford to pay for their services?” (Kim, second time mother). “I think women who can’t afford to see private lactation consultants should get some Medicare support in doing so”. (Tina, first time mother).

5.7 Suggestions by the Women of What Would Have Been Helpful To Them And Therefore To Women In Similar Circumstances In The Future

The mothers interviewed reported a range of other assistance that could have been useful to them and may be extended to other mothers with breastfeeding problems in the future.

Firstly, here could be some linking in of mothers who are not breastfeeding satisfactorily when they leave the hospital with professionals who can assist them if they need further help. For example, they could be given appropriate contacts, and telephone numbers for relevant services. Another option could be for mothers experiencing difficulties with breastfeeding to have the opportunity to recontact the hospital a couple days after leaving to report how they are progressing. Mothers also suggested that it would be helpful to receive some sort of regular following-up and if needed, appropriate assistance or referrals to access professional assistance. *“I think hospitals should do more for women who are experiencing breastfeeding problems, provide following up to see how they are going once they have left and linking them up with professionals who can help them”.* (Jenny, first time mother).

Secondly, many mothers suggested that having a lactation consultant visit the mother who had breastfeeding difficulties upon leaving the hospital soon after discharge to ensure she was managing the breastfeeding would be helpful. Mothers reported that sometimes a nurse from hospital visited (especially when they gave birth by Caesarean Section) or a MCHC nurse called. However, these professionals were not trained to assist with

breastfeeding problems and could not help them in this regard. *“A good idea would be is to a lactation consultant visit mothers who were experiencing breastfeeding problems while in hospital soon after discharge to check how they were managing”*. (Maria, second time mother). *“Because I had a Caesarean Section I had a nurse visit me, but she was not able to help me with the breastfeeding problems I was experiencing”*. (Tina, first time mother).

Thirdly, many mothers suggested that more resources, specific information about breastfeeding problems and how to overcome them should be available at MCHC Centres. In addition, the MCHCC nurse could make referrals available to professionals in the community where the mothers live. *“The MCHCCs should have resources and information about breastfeeding issues and about how to overcome breastfeeding problems, as well as provide women with appropriate referrals in their locality”* (Lucy, first time mother with PND).

Despite being somewhat prepared for breastfeeding problems before the birth of the baby by written and other information, it is theoretical only and cannot be applied or practised. Rather, hands-on assistance with breastfeeding after the birth, especially if or when problems emerge, is the assistance mothers in this sample would have experienced as beneficial. There is also a need to monitor how things are going while mother and child are in hospital to ensure a satisfactory breastfeeding routine has been established before they go home. This issue was raised by most of the women, who reported that the short time women are now staying in hospital after the birth of a child does not often allow for the breastfeeding process to be established satisfactorily. *“It is difficult to provide women with information about possible breastfeeding problems before the baby is born, you need individual assistance if and when you experience problems”*. (Kerry, fourth time mother). *“Mothers experiencing problems while in hospital should be monitored to ensure that the breastfeeding problems have been rectified before they go home”*. (Maria, second time mother).

Fourth, some mothers reported a need for there to be less pressure on mothers to breastfeed. It was felt there needed to be acknowledgment and acceptance by professionals

and the wider community, that for whatever reason some women will just not be able to breastfeed. These women should be treated with understanding and empathy and be supplied with information and assistance re bottle feeding options. *“There needs to be less pressure on mothers to breastfeed no matter what, they have to be informed about other options as well”*. (Kim, second time mother).

Fifth, it was conveyed that a more holistic approach to breastfeeding problems was required. There needs to be acceptance by professionals that breastfeeding is not just a matter of putting a baby to the breast and everything will fall into place. Rather, it is a much more complex procedure and there can be many reasons (especially physical) why it may be difficult to achieve by some mothers and their infants. *“There should not be an assumption that mothers and babies instinctively know all about breastfeeding and everything will just naturally fall into place. Rather there needs to be an acknowledgement that the breastfeeding process is different for every mother and baby – something that needs to be worked out between them”*. (Nancy, third time mother).

These women strongly recommended that mothers with breastfeeding problems who cannot afford private lactation consultants be given funding for these (at least some sessions) or provided with publicly funded assistance through hospitals or MCHC centres.

Sixth, it was expressed that more consistent information and assistance from nurses and lactation consultants in hospitals was critical in assisting mothers with breastfeeding problems. The women reported that problems were often experienced in the consistency and continuity of patient care with health professionals changing shifts, casual employees, relieving staff etc. It was recommended that written notes be kept in the patient file about new mothers' progress with breastfeeding so that any problems could be followed up by the various staff involved in their care. Most mothers had problems in this regard, it was very confusing, frustrating and at time distressing for them. As one mother put it – *“There are so many of them (professionals involved) and there were so many different people giving you*

advice that I got confused about the whole feeding thing and thought it was my fault that it was not working". (Tina, first time mother).

A group information session on breastfeeding for mothers soon after the birth of the baby (eg day after or so), so that anyone who had a problem could have it sorted out quickly and people could ask questions about breastfeeding and have them answered. This would also help in bringing the other mothers together to talk about it – the women said often there was not much contact with other mums and this could lead to some of them feeling isolated, especially when experiencing problems. This sort of get-together or meeting would be good to get them to share information and experiences – it would also help to normalise problems more and thus reduce the women's worry/anxiety about them. *"Bringing new mums together for an information session about breastfeeding would be good, they could discuss any concerns they may have, share information, ask questions". (Lucy, first time mother with PND).*

More general information about the process of breastfeeding to be available in hospitals (e.g. how long to feed on either side; ensuring both breasts are used equally to reduce the possibility of mastitis occurring; how and when to feed baby; do you wake up sleeping baby to feed it etc., etc.). One of the women stated – *"Breastfeeding will always be an issue for new mums, hands on education is so important, after the birth, I think it is the most important thing"(Jenny, first time mother)*

5.8 Post Natal Depression And Breastfeeding Problems

Two of the women interviewed were being treated for PND. One had a history of depression before the baby's birth and thus was vigilant about the possibility of PND occurring. For the other it came as a surprise. Being a first time mother, initially she put down her emotional lability, constant tiredness and seemingly groundless anxiety to the physical and emotional demands of having to adjust to a newborn and the resulting new

lifestyle changes this required. Fortunately, her doctor made a timely diagnosis and she was able to get the right medical treatment before her condition became acute. Both of the women who suffered PND also attained a significant score on the EPNDS. Both were on antidepressant medication at the time of the interview and managing well.

Two other women were found to be borderline PND when given the EPNDS at the MCHC centre they attended. While none of the women thought that the breastfeeding problems were the sole factor responsible for their PND status all four stated that they felt these would have contributed considerably.

This was also the belief of the other interviewees. Each woman said that given all the other things new mothers have to go through physically and emotionally, in terms of adjusting to having a new baby and expanding families, breastfeeding problems are a great stressor. They all expressed the view that had they not had the family and social supports; loving and supportive partners; financial resources to engage professionals to assist them; personal resources to seek information and assistance, they probably would have been vulnerable to PND. *“I can understand how new mothers can get really depressed. I had a lot of help and emotional support from my partner, family members and friends and still at time I was so overwhelmed with it all I got teary. On top of everything she just would not feed properly and I developed cracked nipples and then later mastitis” (Clare, first time mother).*

CHAPTER 6. DISCUSSION

6.1 Results of the Edinburgh Postnatal Depression Scale

The results obtained need to be considered with caution due to the small sample size, non-random and the fact that this was an exploratory study.

Nine of the 32 respondents (28%) had obtained significant scores (13 and above) on the EPDS, with 2 scoring 21 points out of 30 on the scale (both of these women were also in the interview sample and were receiving medical treatment for PND). This result is high compared with the majority of previous research findings in this area. However, they are consistent with those reported by Australian researchers Horan & Gullone (1998) who found that approximately 25% of a sample of first time mothers was at risk of experiencing PND six weeks after the birth.

There were also a large number of women just under the cut off point of 13, with one achieving 12, five achieving 11 and seven of them 10 points. These findings highlight the suggestion of Buist et al (2002), who contended that women with a score above 10 may be experiencing significant PND symptoms and dysfunction, but are actually not categorised as having the disorder according to their EPDS score. These scores also emphasise the need for additional data to be sought rather than totally relying on the scores of the EPDS or any other test measuring depression. For instance, some of the women may have felt extra tired, stressed or anxious at the time of filling out the EPDS which could have affected their responses to the questions. Others may have been struggling to cope with symptoms of depression even though their PND score was not significant according to the EPDS (Buist, 2002).

Nevertheless, the EPDS results in the present study appear to be high, particularly given the women's fairly privileged backgrounds. These women were more mature in age than the general cross-section of new mothers (Righetti et al, 1998); they were physically, emotionally and mentally well prepared for motherhood; they were well educated, financially generally secure (O'Hara , 1995) and well able to obtain information, resources and professional assistance they required; with supportive and caring partners and considerable family and social supports (Chung & Yue, 1999; Pierce et al, 2004). They did not have any significant illness, nor did their babies. (Boyce et al, 2001). Thus, they were well protected from the major risk factors which play a part in the development of PND.

Some of the factors contributing to the higher than might be expected PND rates in the sample, as supported by previous research findings, may be as follows.

The majority of the women in this cohort were first time mothers. No matter how well prepared they were physically, emotionally, financially and in other ways for the birth of their baby, its arrival, as well as being a longed for and joyous experience, would have also meant many changes and adjustments in their lives (Hauptberger, 1997; Bishop, 1999). They had to come to terms emotionally with a variety of new bodily changes during the latter stages of the pregnancy and following the birth, as well as a change in identity (O'Hara, 1995). Their activities, interests and lifestyle had to be altered to cater for the baby who was dependent on them for all her/his needs 24 hours a day, every day of the week (Barnett, 1991). They had to leave or put on hold for a while their careers and sacrifice their independence (Barnett & Fowler, 1995). Their relationship with their partner, parents and friends would also have changed. It is likely that much of this change would have occurred in close succession and would have been experienced in the strongest way when the women were still feeling physically and emotionally vulnerable and recovering after the birth. These circumstances would have lead to a significant amount of stress and anxiety in first time mothers, who would also have been sleep deprived due to being continually on demand to feed their new

infant (Campbell, 1991, Goyal & Lee, 2007). Thus it would be reasonable to speculate that the adjustment to mothering that occurs the first time is uniquely significant and may, for some women, lead to depression (Horan & Gullone, 1998).

Moreover, it could also be argued that given the mothers' educational level, and comparatively privileged background, they may have had much higher expectations of themselves as mothers and felt frustrated and distressed when these expectations could not be met. Satisfactory breastfeeding was considered to be of the utmost importance by these women, a central role for them as mothers, and the best nutrition and nurturing for their infant. When problems set in and prevented this, they may have become anxious, frustrated and stressed. Given that breastfeeding is considered to be a natural and innate process between mother and infant, it is possible they felt failures as women and mothers and their self-esteem and confidence may have suffered as a result (Minchin, 1998).

Another factor to consider would be that being older mothers the adjustments these women had to make in their professional, personal and social lives around the birth of a new baby may have been more difficult to come to terms for them both physically and emotionally than it would have been for younger women. This adjustment, combined with the adjustment associated with becoming a mother for the first time, may have exacerbated their vulnerability to depression.

With regard to the breastfeeding problems, these women were certainly aware of its benefits and very much wanted to breastfeed their babies. Their inability to do so and the emotions associated with this may also have been a factor for the higher than expected PND levels, especially when combined with the stresses, demands and anxieties of new motherhood.

Eighteen of the babies had a normal delivery, eight were induced, five were delivered by Caesarean Section and one was premature. Difficulties with the birth are a risk factor for

PND (Beck & Driscoll, 2006) and almost half of the women in the sample experienced problems, which would have impacted on them physically and emotionally.

Four of the mothers (13%) in the study had reported a previous history of depression which would have predisposed them to PND (O'Hara & Swain, 1996; Beck, 2001). All of them have also obtained significant scores on the EPDS, highlighting again that antenatal depression is a high risk factor for PND.

6.2 Breastfeeding Problems

As in previous research, (Bartlett, 2005; Lawrence & Lawrence, 2005), this study found that a wide variety of breastfeeding problems can occur and they can greatly vary in duration. It was also found that the problems can be intermittent or recur or that new problems(s) may be experienced later on. There can also be concurring problems. Another factor that emerged is that the same breastfeeding problem(s) (or new ones) can be experienced with subsequent babies. These findings also support those of previous studies (Brodribb, 2004; Riordan, 2005)

As in previous research the women in this study also found that the breastfeeding problems can also be short or longer term, some beginning soon after the birth of the infant, others later on. Earlier problems consisted mainly of attachment difficulties, breast refusal and baby not getting enough milk. Later occurring problems included breast infection and damage such as mastitis, thrush and cracked nipples. All these findings concur with those of previous research (Minchin, 1998, Lawrence & Lawrence, 2005). Also nearly a third of the mothers of the overall sample had experienced more than one breastfeeding problem. The unexpectedness and randomness of continuing and recurrent breastfeeding problems were a source of major frustration, stress and anxiety to the women. Apart from the physical pain and discomfort they were experiencing, they continually worried about their baby not getting enough milk and thus being hungry, as well as missing out on health growth and

development. Their inability or difficulty to feed their babies negatively affected their confidence in themselves. In turn their anxiety, stress and reduced self-esteem increased their risk to developing PND.

All previous children had been breastfed. The fact that the mothers had not been deterred by experiencing earlier problems from breastfeeding subsequent babies indicates that they were very determined to do everything to ensure their infant received all the benefits of breast milk. Breastfeeding problems experienced with previous babies were attachment, thrush, mastitis, cracked nipples, sore/damaged nipples and baby not getting enough milk.

6.3 Physical and Emotional Impact of Breastfeeding Problems on Mothers

All the mothers interviewed were aware of the importance of breastfeeding and were very determined to breastfeed their infant at least until the latter was three – six months old. They all reported experiencing great concern, distress, frustration and anger when breastfeeding problems interfered in this regard. They were very worried that their inability to adequately breastfeed would affect the well-being and development of their baby both physically and emotionally. They were constantly stressed about their baby not getting enough food and about the thought of the discomfort she/he must be suffering through hunger in the short term and her/his general growth, health and development longer term. Emotionally they thought that their inability to breastfeed would negatively affect their bonding with their baby and lead to the latter being adversely affected psychologically. The constant stress, worry and frustration about the breastfeeding problems and their impact on their baby would have reduced the women's ability to cope and made them more vulnerable to PND (Bishop, 1999).

Each mother stressed that the breastfeeding problem(s) impacted enormously on her confidence as a mother. They found trying to cope with and overcome the problem(s)

emotionally and physically draining. This applied to all the mothers, however, first-time mothers experienced the difficulties more severely, given the huge changes and adjustments they were undergoing. They reported that the longer the problems continued the more frustrated, distressed and helpless they became. Overall, every mother interviewed stated that in their opinion breastfeeding problems could be a major factor in PND, “tipping women over the edge”, especially if they lacked the financial resources to seek professional assistance, and did not have adequate family and social supports. These helped to counteract the negative impact of the breastfeeding problems and served as protective factors against PND (Hauptbrger, 1997; Beck, 2001).

Although experiencing breastfeeding problems had a considerable negative effect on all mothers interviewed, their impact on first-time mothers was even more profound. They were often incredulous about not being able to feed their baby. The more severe and long-term the problems became the more the women, their babies and families suffered. Trying to overcome the problems was time consuming, physically tiring and emotionally draining. The fact that major and long-term breastfeeding difficulties were not generally expected by new mothers made the problems more difficult to cope with. They were also another major hurdle to overcome when the women were already compromised physically and emotionally, following the birth, and were often struggling to cope with the many changes and adjustments that a new baby brings. It seems reasonable to expect that if the women were experiencing other problems, did not have the resources to seek professional assistance to remedy the difficulties quickly and lacked adequate family and social supports, the breastfeeding problems may have made them more vulnerable to the onset or exacerbation of PND.

All the women in this study conveyed that since having experienced breastfeeding problems, they were surprised at how common such difficulties were. Each one of them had subsequently heard of numerous stories of other women also having had difficulties. They were concerned about the myth that “breastfeeding is easy – all you need to do is put the

infant to the breast and it all just falls into place”. They stated this general belief makes things so much harder for the many women who are having problems, because it makes them feel personally inadequate.

6.3.1 Impact of Breastfeeding Problems on Mothers’ Relationship with Their Babies

Each mother feared that her relationship with her baby would be negatively affected by the breastfeeding problems they experienced. They were especially worried that these would greatly disrupt the bonding process with their baby, which in turn could have longer-term repercussions for their relationship with their child and the emotional development of the infant. They also feared that their perseverance with attempts to breastfeed their baby despite the difficulties may be causing physical discomfort and emotional hardship and distress to their infant. However, most of the women found the opposite to be true – they reported that if anything their relationship with their baby was enhanced by the difficulties, it was something they kept working on and in the majority of cases eventually overcame together.

As found by previous researchers (Bishop, 1999), the women did not blame their babies for any of the problems experienced. Instead they had taken responsibility for the difficulties and the need to find solutions themselves.

6.3.2 Impact of Breastfeeding Problems on Mothers’ Relationship with Their Partners

This study also revealed that the breastfeeding problems experienced by mothers did not impinge negatively on their relationship with their partner, who was the father of their baby. The women reported that if anything, the problems drew them and their partner closer. They all reported having a good relationship with their partner, with most of them stating that the breastfeeding problems seemed to make the men even more receptive, emphatic and

supportive to their physical and emotional needs. Several women said that they probably put more demands on their partner physically and emotionally due to the problems, but felt understood and supported by them. Every woman interviewed stated that their partner's emotional and practical support was invaluable in helping them manage and cope. It helped them retain their confidence and optimism in being able to overcome the breastfeeding problems and ward off PND. Their reports about the importance of partner support and good marital relations in preventing PND concur with previous finding (O'Hara & Swain, 1996; British Intercollegiate Guidelines Network, 2002).

The majority of the women stated that their partners were very understanding of what they were going through, assisted them in getting the appropriate help to solve the problem(s) and did not pressure them to continue with their efforts to breastfeed. A couple of the partners had actually encouraged the women to try bottle feeding when the difficulties seemed too great or persisted over a long period of time. However, in each case the ultimate choice whether to continue or not with breastfeeding was left to the mother.

These findings again highlighted that this group of women was atypical and privileged, to have enjoyed such a level of marital harmony. Their positive marital relationship would have been a major factor in reducing other PND risks (Beck, 1996; Swendsen & Mazure, 2000).

6.3.3 Professional Assistance Received Regarding The Breastfeeding Problems

As it is important to address and rectify breastfeeding problems as soon as they occur thereby reducing and eradicating their negative impact, the investigation and evaluation of the professional assistance available to women experiencing them was an important part of this study.

The women's reports about the professional services received, especially through the hospitals and Maternal and Child Health Care Centres, were concerning.

Hospital staff is there at the beginning and looked to for assistance, support, information and referrals, not just with breastfeeding problems, but many other issues as well while the women are in their facility with their babies. Not only is it important that they have the appropriate knowledge and experience, but they also need to be able to deliver it in a caring, helpful, consistent, empathic, patient and individualised manner. They also have to bear in mind the physical and emotional vulnerability of new mothers. Given that women's stay in hospital following the birth is very short now (often only a couple of days) it is crucial that that breastfeeding any other major problems the new mothers are experiencing are dealt with promptly and if possible rectified before discharge. If for some reason this is not possible the woman should be provided with follow up support once she leaves hospital to ensure she and her baby are alright and given any necessary referrals to other health professionals who can assist her if she and baby need longer term treatment.

MCHCCs too, are crucial to the well- being of babies and mothers in the first few months after birth and staff are expected to provide a comprehensive service to their clients, not just by the families which need them, but also the wider community.

Yet several of the women interviewed complained about the service(s) or the manner in which they were delivered by hospital staff and all of them appraised the services delivered at the MCHCCs negatively. They reported being greatly disappointed and frustrated by the lack of individualised practical advice, resources, information and referrals to other services/ professionals; by the lack of consistency and continuity of service delivery; being given conflicting information and advice; not being listened to and having their problems "minimised". Some mothers stated that they received more useful assistance, information and advice from friends and family members (especially about resources and referrals) than from the nurses at the hospital or the MCHC Centre.

Given that many new mothers do not have access to these personal resources, nor can they afford other professional help but rely solely on hospitals or MCHCC staff for guidance and assistance, these findings are disconcerting.

While the services of the private lactation consultants were unanimously experienced to be positive by the women interviewed, they could prove to be financially too costly and therefore out of reach for many new mothers.

6.3.4 Family and Social Supports

Family and social supports received by the women were also key factors examined in the study as they have been found to be very important factors in the aetiology or prevention of PND by previous investigators (Pierce et al, 1999; Beck, 2001; Swendsen & Mazure, 2000; Kendall-Tackett, 2001; Logsdon et al, 2000; Beck & Driscoll, 2006).

As found in previous research (Beck, 1996; Logsdon et al, 2000; Johnstone et al, 2001; Beck & Driscoll, 2006), each mother had found family and social supports extremely important not only in coping with the breastfeeding problems but also with the many facets of adjusting to motherhood and looking after a new baby. The support of partners was crucial in this regard, with all women interviewed stating that they received a lot of physical, emotional and practical support from the father of their child. They reported that this was essential and of enormous value to them.

These findings also support the outcome of previous studies (Meager & Milgrom, 1996; Richards, 2000) which have consistently found that not only was support from partners and other family members of vital importance to new mothers, the lack of it was in fact a strong predictor of PND.

Apart from the support provided by partners, assistance provided by the mothers' mother (maternal grandmothers) was also viewed to be very beneficial, with each woman receiving help from her own mother especially in the first few weeks after the birth. The practical help

provided by grandmothers was especially appreciated, as this freed up the mothers to concentrate on their babies and take care of their own needs (Meager & Milgrom ,1996).

Grandmothers also provided emotional support and advice about all facets of baby care, including breastfeeding. However, some women experienced difficulties regarding generational differences with their mothers regarding beliefs and attitudes to baby care and breastfeeding.

The input of other female relatives was also valuable to the women – mothers-in-law, sisters, aunts were mentioned by most of them as having been supportive both emotionally and practically.

Another great source of support to the mothers was that of their peers, which also concurs with past research findings (Righetti et al, 1998; Pope, 2000). Close female friends, some of whom have experienced and overcome breastfeeding problems in the past were a great source of information, reassurance and comfort to the women. Sharing of experiences, knowledge and information with friends who were either expecting or had small infants was also reported to be beneficial to the mothers.

Friends also provided much needed and valued companionship to the new mothers, visiting and later having them visit with their babies. This helped alleviate social isolation and loneliness, especially during the first few months after the birth when new mothers tended to be housebound.

As well, attendance of Mothers and Babies Groups was experienced by new mothers to be a major source of peer support. They stated that the exchange of information, resources, experiences and advice with other mothers in the group was invaluable and that they also enjoyed the company of the other women.

As can be seen from the above findings the women interviewed had received a lot of practical and emotional support from their partners, mothers, other female relatives and their peers. This should have minimised their risk for PND considerably.

6.4 Suggestions by the Women of What Would Have Been Helpful to Them to Address the Breastfeeding Difficulties and May be Helpful to Other Mothers

During the interview the women were asked for their suggestions as to what would have been helpful to them in addressing the breastfeeding difficulties and therefore could help other mothers in this situation in the future. This was considered to be important information, which would be valuable for use in the faster diagnosis and treatment of breastfeeding problems, thereby reducing their negative physical and emotional impact and improving the well-being of mothers, babies, and families.

The major suggestions by the women as to what would have been helpful were as follows:

All the mothers concurred that there needs to be a prompt, appropriate, individualised response to the breastfeeding problems when they occur. They would have found more relevant information and resources very beneficial in gaining an understanding of what was happening, why and what could be done to remedy the situation. Each woman interviewed emphasised the need to address the breastfeeding problems very quickly in order to solve them as fast as possible. The longer they continued, the more distressed the infant and the more stressed and anxious the mother became, thus the likelihood that the mother may experience PND.

The women all also concurred that there needs to be an acceptance by the health professionals attending to new mothers that breastfeeding is a more complex process than merely putting a baby to the breast and everything working out well from there on. It has to be acknowledged that problems can – and often do – occur and they need to be worked out on an individual basis, as each mother/baby dyad is different. Coupled with this there needs to be a professional and societal reduction of pressure on mothers to breastfeed regardless of their capacity to be able to do so. For various reasons some women will just not be able to

breastfeed, they should be treated with empathy and assisted to utilise formula feeding options. This study highlighted that this would remove or reduce the stress and guilt these mothers often feel.

An overwhelming need for consistent information from health professionals about breastfeeding generally, and breastfeeding problems specifically was expressed by the women interviewed. Contradictory information confused and frustrated the women, further stressing and distressing them, and undermining their confidence in their capability to nurture their infant.

From the women's reported that there also needs to be clearer general information available in hospitals and MCHCCs about the process of breastfeeding, so that mothers can feed more confidently, thereby reducing their stress and anxiety about such issues as knowing when their babies have had enough food, using both breasts equally (and so avoiding blocked milk ducts) and whether or not to wake a sleeping infant to feed.

Most of the women also felt that there needs to be a debunking generally about the idealisation of early motherhood (as recommended by feministic theorists (Homewood et al, 2009)) –that it is a blissful time for both mother and child, with no problems. They stated that this sets up unrealistic expectations for new mothers, their families, friends and society in general. Therefore new mothers are not adequately prepared emotionally for the realities and demands of motherhood, the many adjustments they will need to make and the difficulties that may arise such as major problems with breastfeeding, a sick baby and the sheer exhaustion experienced by most new mums during the first few weeks after the birth of their child. However, they did state that there needs to be a balance between presenting motherhood realistically and frightening women with tales of all the possible things that may go wrong. What some suggested was that instead motherhood needs to be presented as a rewarding, challenging and enriching experience and women and their partners educated about how to deal with the difficulties should they arise.

Another issue the women raised was the necessity for social acceptance of mothers breastfeeding in public. Most of them reported wishing to be able to do this without being embarrassed or feeling criticised. However, they tended to do it privately to minimise the social negativity about it. This in turn limited their general freedom of going out and about to public places with their baby, especially in the first few months

6.5 Limitations of the Study

There were several limitations to this study.

Firstly, the women who participated in the study were not a random sample of women experiencing breastfeeding problems, having been recruited through Maternal and Child Health Care Centres and Private Lactation Consultants whose clients they were. They were also residents of the City of Melbourne, although an attempt was made by the researcher to include inner city as well as more outlying suburbs. Thus women from country Victoria did not participate in the study.

Secondly, since the sampling approach required mothers to self-select in response to a letter, the sample is not representative of the broader population of mothers in terms of breastfeeding aspirations and experiences or demographics.

The sample was comprised of older (more mature), Angle-Saxon, middle-class parents, who were well educated, professionally employed, financially secure, with access to information, resources and private health care services. Generally they enjoyed good physical and mental health and were in long-term, stable relationships, with most of the couples married. Most of the women in the sample were also first time mothers – 66% of the overall sample and 50% of the women interviewed.

Thirdly, the study was also limited in that it only obtained data from women, not their partners or the health professionals who attended to them.

Fourthly, the sample size was relatively small for any firm conclusions to be made from the findings of the study. As well these women comprised a community sample, whereas most of the previous studies recruited participants from health settings, where women presented for ante or postnatal service delivery or for the birth of their child.

6.6 Summary

The study found that breastfeeding problems severely impact on women, their babies and family life. On an emotional level they cause mothers a great deal of distress, anxiety, stress, frustration, anger, confusion and feelings of guilt. Physically there is pain, discomfort and tiredness from continual attempts to overcome such difficulties. They lead to feelings of inadequacy and failing, undermining women's belief in themselves as capable females and mothers. The breastfeeding problems were often unexpected and were experienced as a major burden when the women were already emotionally and physically below par.

The findings indicate that assistance/service delivery to women who are experiencing breastfeeding problems needs to improve, both in quantity and quality. There needs to be a rapid response to the problems and the assistance needs to be delivered in an efficient, consistent, individualised and emphatic manner.

Current data obtained support past findings about the importance to new mothers of family and social support, with every woman interviewed emphasising the great value derived from the understanding, support and practical help received from partners, family and friends.

Despite the sample of women in the study having greatly reduced risk factors for PND, the rate of PND found in the group was higher than in many other previous studies.

CHAPTER 7. IMPLICATIONS OF THE PRESENT STUDY: FOR PRACTICE AND FOR FUTURE RESEARCH

Based on the outcomes of this study some implications/suggestion which could be addressed by future practice and research are as follows.

7.1 Implications for Practice

Reports by new mothers and the professionals assisting them indicated that breastfeeding problems are a common occurrence, sometimes lasting for a considerable time or recurring over time and with each birth. They cause much emotional distress and physical discomfort and fatigue for mothers already trying to adjust to a new baby or a growing family.

At present little is known about the incidence and duration of breastfeeding problems as no records are kept by hospitals or MCHCCs. However, anecdotal evidence from mothers and the professionals assisting them suggests that this is a much more wide spread problem than is generally perceived by the community. Therefore, it would be beneficial to set up data collection facilities to gather this information. Hospitals and Maternal and Child Health Care Centres could easily incorporate this into their current client notes. They could also set up some follow-up procedures to monitor outcomes for women who have had breastfeeding problems while receiving services at their facilities.

The responses from interviewees in the current study suggested changes and improvements in the following areas:

1. Improved availability of information and resources to be made available when problems are experienced so that they are quickly remedied.
2. Improved service delivery to mothers who are experiencing breastfeeding problems.

3. Community education.

All the women interviewed stressed that it is very important that breastfeeding problems are addressed and rectified as soon as possible for the wellbeing of the mother, her baby and the rest of the family.

Some specific suggestions by the women of what assistance would have been useful to them that could be extended to other mothers with breastfeeding problems in the future were as follows.

All mothers concurred that it is difficult to prepare expectant mothers about possible breastfeeding problems before the birth. Giving specific, detailed information prior to the arrival of the baby was not appropriate and could be counterproductive, as it may just worry or scare women unnecessarily. However, they stated that there should be more resources and specific information about breastfeeding problems and how to overcome them to women who are experiencing these.

Most of the women stated that more individualised, hands-on assistance by hospital staff would have been helpful. Also monitoring of mothers and babies while they are in hospital to ensure that a satisfactory breastfeeding process has been established before they go home would be beneficial.

Another suggestion was that there could be some linking in of mothers, who are not breastfeeding satisfactorily when they leave the hospital, with professionals who can assist them if they needed further help – e.g. they could be given contacts and telephone numbers. Alternatively they should be followed-up or given the opportunity to recontact the hospital to report on how they are progressing or to receive further assistance

All women interviewed emphasised that the manner in which service delivery is provided is also very important. Being listened to, understood and treated in an empathic, patient and individualised manner was often lacking and would have been much appreciated by the mothers, both in the hospitals and by staff at MCHCCs. New mothers are also often

physically exhausted and emotionally vulnerable and need specialised treatment.

Professionals attending to them need to be mindful of this and interact with them in an appropriate manner.

Receiving consistent information and advice from nurses and lactation consultants in hospital and at the Centres was also of paramount importance and was reported to be often lacking. Most mothers interviewed experienced problems in this regard, which left them confused, frustrated and distressed.

From the women's responses it seems that a more holistic approach to breastfeeding problems is required. An acknowledgement by professionals that breastfeeding is not just a matter of putting a baby to the breast/nipple and everything falling into place. It is a much more complex procedure and there can be many reasons (especially physical) why it may be difficult to achieve by some mothers and their infants. Thus, often new mothers need to be taught by the relevant professionals how to establish and maintain a successful breastfeeding process.

Mothers in this study also reported a need for debunking of idealised notions of breastfeeding, particularly that it is natural, easy, women are equipped for it; the baby knows what to do and does it soon after birth as it is an innate, basic survival skill. Rather, it would be more helpful to present it as a process which needs to be established between every mother and her baby. This would allow for the normalisation of breastfeeding problems, freeing mothers up from the sense of failure and feelings of guilt they experience when they do occur.

Written and other information before baby's birth about possible breastfeeding problems was found by most mothers to be useless, theoretical only. It is not possible to know whether there will be problems, and if so what they will be and they need to be worked out between mother and baby if and when they occurred. Each mother/baby dyad is different, with different needs, assistance needs to be individualised.

Changing expectations of health professionals and the community that every woman must breastfeed her baby was also strongly recommended by the women interviewed. It was very important that there be recognition that some women just will not be able to breastfeed or continue breastfeeding for any length of time for whatever reason. There needs to be understanding, empathy, acceptance of this by the professionals providing services to them and the wider community, and these mothers need to be supported.

Given the above, the women interviewed recommended that it is very important that mothers who are experiencing breastfeeding problems are provided with fast and appropriate treatment by qualified health professionals. Thus they strongly advised that all women whose difficulties become entrenched should have access to privately practising lactation consultants, with women on low incomes receiving financial assistance to engage their services.

There also needs to be more community education about the normalisation and acceptance of breastfeeding in public. At present, this is not generally socially acceptable in Australia, and the mothers who attempt to do it receive negative feedback and attention, causing them discomfort, embarrassment and frustration. Unfortunately, much of the negativity is due to the fact that female breasts in our society are predominantly viewed as sexual objects rather than existing for the feeding of the human infant. (Minchin, 1998). This view does not exist in many other parts of the world, where women can feel free to feed their infants anywhere, anytime they are hungry, without feeling that they are “exhibiting” or exposing themselves to male attention or disapproval and ridicule from the general public.

7.2 Implications for Clinical Psychologists

The results obtained in this study reinforce the need for vigilance by clinical psychologists providing counselling or psychotherapy for women in the antenatal and postnatal phase. As found by numerous other researchers in the past, these findings

confirmed that there are many risk factors and issues which contribute to the aetiology and exacerbation of depression in women during this time. As clinicians we need to be aware of them, especially about past unresolved trauma (such as child sexual abuse), past mental health problems, family history of psychiatric problems and antenatal anxiety and depression which are strong triggers for PND. Also we need to bear in mind that PND can surface relatively soon after birth as well as some months afterwards and therefore investigate any symptoms which may be indicative of it regardless of timelines.

When treating women with PND we need to remember that a small percentage may develop postpartum psychosis which is a severe psychiatric illness usually requiring antipsychotic medication and hospitalisation. An early diagnosis is crucial to ensure the safety of the mother and her baby.

As well as risk factors, there are also many protective factors which may reduce the likelihood of women developing PND – for example a positive relationship with and support from their partner (the father of their child) family and social support, access to professional assistance and self care (healthy diet, exercise, adequate sleep and relaxation). We need to explore what these are for each woman we are treating and help them strengthen the protective factors wherever possible.

7.3 Implications for Future Research

The current study has shown that breastfeeding problems do severely impact on mothers physically and emotionally at a time when they are already vulnerable and are undergoing many changes and adjustments in their life after the birth of their baby. The problems cause frustration, anxiety and distress for women about their capacity to attend to the needs of their baby and undermine their confidence as females and mothers.

PND is a mental health disorder which impacts severely on the women who experience it, on marital relationships, child development, social relationships and the wider community. It is also a very complex illness with many contributing factors. More research needs to be done into all aspects of the illness to enable its prevention, early diagnosis and most appropriate treatment, thereby reducing its incidence, duration and often devastating consequences.

The PND rate (28%) of mothers in the current study is high compared with many previous research findings which have found PND rates to be between 10 and 15%. The present findings also need to be considered in the light that the women in this sample came from relatively privileged backgrounds which would have to a considerable extent protected them from the development of PND – they were older mothers well prepared and ready for motherhood; in committed and happy relationships with the father of their baby; well educated; professionally employed; financially comfortable; and enjoyed high levels family and social supports.

The findings of the present study indicate that further investigation is warranted regarding breastfeeding problems and their possible role in the aetiology and exacerbation of PND.

Future research could be conducted with larger, more representative samples of women with breastfeeding problems and might investigate the following.

First time mothers as a group may be specifically studied given that they experience additional stress and anxiety in the adjustment to motherhood and all the changes this entails. Therefore emotionally and physically they could be more vulnerable and thus more at risk of PND.

Mothers who are experiencing longer-term or recurrent breastfeeding problems might also be focused on in future studies, as they experience extra on-going stress and distress due to the continuing difficulties.

Mothers from different socio-economic groups could be researched and compared. It would be interesting to see the PND levels of different groups.

It would be also beneficial to investigate how many women actually give up breastfeeding because of breastfeeding problems. This may assist in the improvement of diminishing rates of breastfeeding, especially after the first three months after birth.

Future research could also include health professionals who are providing services to new mothers (e.g. hospital staff and nurses from MCHCCs) to determine what their views are about service delivery to this client group and how it could be improved.

It is also recommended that future research be more “qualitative” rather than quantitative in nature as this would reveal more subtle factors that contribute to the aetiology or exacerbation of PND

REFERENCES

- Affonso, D.D., De, A.K., Horowitz, J.A., Mayberry, J.A (2000) An international study exploring levels of postpartum depressive symptomatology. *J Psychosom Res* 49: 207-16
- American Psychiatric Association (2004). *Diagnostic and Statistical Manual of Mental Disorders. IV-R*. Washington DC, American Psychiatric Association.
- Amir, L.H. (2000). Key Centre for Women's Health, University of Melbourne. *Cited in The Age Newspaper, May 16, 2000.*
- Amir, L.H. & Donath, S.M. (2002). Does maternal smoking have a negative physiological effect on breastfeeding. The epidemiological evidence. *Birth* 29(2)112-23.
- Amir, L.H. & Donath, S.M. (2007) A systematic review of maternal obesity and breastfeeding intention, initiation and duration. *BMC Pregnancy and Childbirth*, 7:9
- Amir, L.H. & Donath, S.M. (2008). Socioeconomic status and rates of breastfeeding in Australia: evidence from three recent national health surveys., *MJA* 189; (5) 254-256.
- . Appleby, L., Gregoire, A., Platz, C. et al. (1994) Screening women for high risk of postnatal depression. *Journal of Psychosomatic Research*, 38: 539-545.
- Appleby, L., Koren, G. & Sharp, D. (1999) Depression in pregnant and postnatal women: an evidence-based approach to treatment. *British Journal of General Practice*, 49(447): 780-782.
- Astbury, J., Brown, S., Lumley, J. and Small, R. (1994) Birth Events: Birth Experiences and Social Differences in Postnatal Depression. *Aust J of Public Health*, 18: 176-184.
- Australian Bureau of Statistics. (2001). *National Health Survey Users' Guide*. Canberra, Australia.
- Australian Institute of Family Studies (2008). *Growing up in Australia: The longitudinal study of Australian children*. 2006-07 Annual Report

Avery, M., Duckett L., Dodgson J., Savik, K., Henly, S.J. (1998). Factors associated with very early weaning among primiparas intending to breastfeed. *Maternal Child and Health Journal*. 167-179.

Azimi-Lolaty, H., Danesh, M., Hosaini, S.H., Khalililian, A. & Zarghami, M. (2007) Prevalence and predictors of postpartum depression among pregnant women referred to Mother Child Health Care (MCH) Clinics. *Research Journal of Biological Sciences*, 2(3): 285-290.

Ball, T.M. and Wright, A.L. (1999) Health care costs of formula feeding in the first year of life. *Pediatrics*, 103(4): 870-876.

Barnett, D. (1991). *Coping with postnatal depression*. Melbourne, Australia: Lothian Books.

Barnett, B. & Fowler, C. (1995). *Caring for the family's future*. NSW, Norman Swan Medical Communications.

Bartlett, A. (2005). *Breastwork*. UNSW Press Ltd: Sydney.

Beck, C.T. (1996) A meta-analysis of predictors of postpartum depression. *Nursing-Research*, 45(5): 297-303.

Beck, C.T. (1996). Postpartum depressed mothers' experiences interacting with their children, *Nursing Research*, 45(2): 98-104.

Beck, C.T. (1998). The effects of postpartum depression on child development: A meta-analysis. *Archives of Psychiatric Nursing*, 12(1), 12-20.

Beck, C.T. (1999). Maternal depression and child behaviour problems: A meta analysis. *Journal of Advanced Nursing*, 29: 623-629.

Beck, C.T. (2001). Predictors of postnatal depression: an update. *Nurs Res* 40 275-85.

Beck, C.T. (2003). Birth trauma: in the eye of the beholder. *Nurs Res* 53(1): 28-35.

Beck, C.T. (2006). Postpartum depression: it isn't just the blues. *AJN* Vol 106(5): 40-47.

- Beck, C. T. & Driscoll, J. (2006). *Postpartum mood and anxiety disorders: a clinician's guide*. Sudbury, MA: Jones and Bartlett Publishers.
- Binns, S.C. (2004) Encourage and support breastfeeding. *Journal of HEIA*, 11(1): 28-38.
- Bishop, L. (1999). *Postnatal depression, families in turmoil*. Halsted Press, NSW.
- Boyce, P.M. & Condon, J.T. (2001) Psychological debriefing: providing good clinical care means listening to women's concerns. *British Medical Journal*, 322(7291): 928.
- Boyce, P.M., Stubbs, J.M. and Todd, A. (1993) The Edinburgh Postnatal Depression Scale validation for an Australian Sample. *Aust NZ J of Psychiatry* 27: 472-476.
- Boyce, P.M. and Stubbs, J.M. (1994) The importance of postnatal depression. *MJA*, 161(8): 71-472.
- Boyd, R. & McIntyre, E. (2004) Improving community acceptance of breastfeeding in public: a collaborative approach. *Breastfeeding Review*, 12(2): 5-10.
- Brodribb, W. (2004). *Breastfeeding Management*. 3rd Ed. Australian Breastfeeding Association, Malvern, Australia.
- Brooker, S., Oleinikova, K., Wands, S. (2002). *Infant Feeding 2000*. The Stationery Office. Norwich.
- Brown, S. & Lumley, J. (1994) Satisfaction with care in labour and birth: A survey of 790 Australian women. *Birth*, 21: 4-13.
- Buist, A. (1996). *Psychiatric disorders associated with childbirth: a guide to management*. Sydney, Australia: McGraw-Hill Book Co.
- Buist, A. Westley, D. & Hill C. (1998). Antenatal prevention of postnatal depression. *Archives of Women's Mental Health* 1: 1-7.
- Buist, A.E., Barnett, B.E., Milgrom, J., Pope, S., Condon, J.T., Ellwood, E.A., Boyce, P.M., Austin, M-P. V., & Hayes, B.A. (2002). To screen or not to screen - that is the question in perinatal depression. *Medical Journal of Australia*, 177: S101-105.

- Buist, A. & Bilszta, J. (2001-2005). *The beyondblue National Postnatal Depression Program: Prevention and Early Intervention*. Vol. 1 National Screening Program. P.8
- Bundrock, V. (1992). *The economic benefits of breastfeeding in Australia*. Topics in Breastfeeding. Melbourne, Nursing Mothers Association of Australia.
- Cafarella, J. (1996). *Breastfeeding ...naturally*. NMAA, Melbourne, Australia.
- Campbell, S.B (1991) Prevalence and correlates of postpartum depression in first-time mothers. *Journal of Abnormal Psychology*, 100: 594-599.
- Campbell, S.B., Cohn, J.F., Flanagan, C. et al (1992) Course and correlates of postpartum depression during the transition to parenthood. *Development and Psychopathology*, 4: 29-47.
- Campbell, C. (1996) Breastfeeding and health in the Western World. *British Journal of General Practice*, 46: 613-617.
- Carro, M.G, Grant, K.E., Gotlieb, I.H. et al (1993) Postpartum depression and child development: An investigation of mothers and fathers as sources of risk and resilience. *Development and Psychopathology*, 5: 567-579.
- Carter, P. (1995) *Feminism, breasts and breastfeeding*. McMillan Press Ltd., UK.
- Chan S.W. et al (2002) A qualitative study of the experiences of a group of Hong Kong Chinese women diagnosed with postnatal depression. *Journal of Advanced Nursing*, 39: 571-579.
- Chandran, M. et al (2002) Post-partum depression in a cohort of women from a rural area of Tamil Nadu, India. Incidence and risk factors. *British Journal of Psychiatry*, 181: 499-504
- Chung, P.Y.K. & Yue, X.D. (1999) Postpartum depression and social support: A comparative study in Hong Kong. *Psychologia: An International Journal of Psychology in the Orient*, 42(2): 111-121.

Cohn, J., Campbell, S., Matias, R. & Hopkins, J. (1990) Face-to-face interactions of postpartum depressed and non-depressed mother-infant pairs at 2 months. *Developmental Psychology* 26(1): 15-23.

Cooklin, A.R., Donath, S.M., & Amir, L.H. (2008). Maternal employment and breastfeeding results from the longitudinal study of Australian children. *Acta Paediatrica*, 97(5): 620-3.

Coombes, F. (1996). Postnatal depression and the breastfeeding woman. Topics in Breastfeeding.. Set VIII December 1996. *Lactation Resource Centre, Nursing Mothers' Association of Australia*, Nunawading, Australia.

Cooper, P. & Murray, L. (1997) Prediction, detection and treatment of postnatal depression. *Arch Dis Child* 77: 87-89

Cooper, P.J. & Murray, L. (1997). The impact of Psychological Treatments on Maternal Mood and Infant Development. In L. Murray & P.J. Cooper (Eds.). *Postpartum Depression and Child Development*. Guilford Press: London.

Cooper, P.J. & Murray, L. (1998). Postnatal Depression. *British Medical Journal* 316: 1884-86.

Cox, J.L., Holden, J.M., & Sagovsky, R. (1987) Detection of Post-natal Depression. Development of the 10-item Edinburgh Post-natal Depression Scale. *British Journal of Psychiatry*, 150: 782-786.

Cox, S. (2004). *Breastfeeding with confidence*. Finch Publishing: Sydney.

Crossley, M.L. (2009) Breastfeeding as moral imperative: An ethnographic study. *Feminism & Psychology*, 19(1): 71-87.

Da Costa, D., Larouche, M.P., Drista, M. & Brender, W. (2000) Psychosocial correlates of prepartum and postpartum depressed mood. *Journal of Affective Disorders* 8:31-40

Days, J. (2006). *Breastfeeding naturally*. Australian Breastfeeding Association, Melbourne.

Demyttenaere, K., Lenaerts, H.L., Nijs, P. & Van-Assche, F.A. (1995). Individual coping style and psychological attitudes during pregnancy predict depression levels during pregnancy and during postpartum. *Acta Psychiatrica Scandinavica*, 91 (2): 95-102.

Dennis, C.L. (2002). Breastfeeding initiation and duration: A 1990-2000 literature review. *Journal of Obstetric Gynecologic and Neonatal Nursing* 31: 12-32.

Dennis, C.L. & McQueen, K. (2009) The relationship between infant feeding outcomes and postpartum depression: a qualitative systematic review. *Pediatrics* 123; e736e 751.

Dennis, C.L. & Ross L. (2005) Relationships among infant sleep patterns, maternal fatigue and development of depressive symptomatology. *Perinatal Care*, 32(3) 187-193.

Dermer, A. (1998) Breastfeeding and women's health. *Journal of Women's Health*, 7(4): 427-432.

Dettwyler, K.A. (2009) Is breastfeeding advocacy anti-feminist? *Journal of Pediatrics*, 155, 663-667.

Dewey, K.G., Heinig, M.J. and Nommsen, L.A. (1993) Maternal weight loss patterns during prolonged lactation. *Am J of Clinical Nutrition* 58: 162-166.

Donath, S.M. & Amir, L.H. (2003). The relationship between prenatal infant feeding intention and initiation and duration of breastfeeding: a cohort study. *Acta Paediatr* 92: 352-56.

Drane, D. (1997) Breastfeeding and formula feeding: a preliminary economic analysis. *Breastfeeding Review* 5(1): 7-16.

Driscoll, J.W. (2006). Postpartum depression: the state of the science. *J Perinat Neonat Nurs* 20(1): 40-42.

Duckett, L. (1992). Maternal employment and breastfeeding. *NAACOGS Clinical Issues in Perinatology and Women's Health Nursing*, 3(4): 701-712.

Edhborg, M., Lundh, W., Seimyr, L. & Widstroem, A.M. (2001). The long-term impact of postnatal depressed mood on mother-child interaction: A preliminary study. *Journal of Reproductive and Infant Psychology* 19(1): 61-71.

Emanuel, L. (2006) Disruptive and distressed toddlers: the impact of undetected maternal depression on infants and young children. *Infant Observation*, Vol 9(3): 249-259.

Fetling L. & Tune, B. (2005) Women's experience of postnatal depression: Kitchen table conversations. *IP Communications, East Hawthorn, Victoria, Australia*.

Field, T. (1998) Maternal depression effects on infants and early interventions. *Preventive Medicine: An International Journal Devoted of Practice and Theory* 27(2): 200-203.

Fontaine, K.R. & Jones, L.C. (1997) Self-esteem, optimism and postpartum depression. *Journal of Clinical Psychology*, 53(1): 59-63.

Gelfand, D.M. & Teti, D.M. (1990) The effects of maternal depression on children. *Clinical Psychology Review*, 10: 329-353.

Glover, V. (1992) Do biochemical factors play a part in postnatal depression? *Progressive Neuro Psychopharmacology Biological Psychiatry*, 16: 605-615.

Goodman, S. & Brumbly, H. (1990) Schizophrenic and Depressed Mothers. *Developmental Psychology*, 26(1): 3-38.

Gotlieb, I.H., Whiffen, V.E. & Wallace, P.M. (1991) Prospective investigation of postpartum depression: Factors involved in onset and recovery. *Journal of Abnormal Psychology*, 100:122-132.

Goyal, D. & Lee, K.A. (2007) Patterns of sleep disruption and depressive symptoms in new mothers. *J Perinat Neonat Nurs*, Vol 21 No2: 123-129.

Gregoire, A.J. (1995) Hormones and postnatal depression. *British Journal of Midwifery* 3: 99-105.

Gudnadottir, M., Gunnarsson, B.S. & Thorsdottir, I. (2006) Effects of sociodemographic factors on adherence to breastfeeding and other important infant dietary recommendations. *Acta Paediatrica*, 95(4): 419-424.

Guest, M.L. & Stamp, G.E. (2009) South Australian rural women's views of their pregnancy, birthing and postnatal care. *Rural Remote Health*, 9(3): 1101.

Hagen, E. H. (1999) The functions of postpartum depression. *Evolution and Human Behaviour*, 20(5): 325-359.

Hall, L.A., Kotch, J.B., Browne, D. & Rayens, M.K. (1996) Self-esteem as a mediator of the effects of stressors and social resources on depressive symptoms in postpartum mothers. *Nursing Research*, 45(4): 231-238.

Halligan, L.S., Murray, L., Martins C. & Cooper, J.P. (2007) Maternal depression and psychiatric outcomes in adolescent offspring. A 13 year longitudinal study. *Journal of Affective Disorders*, 97(1-3): 145-154.

Hamlyn, B., Brooker, S. & Oleinikovak, et al (2002). *Infant feeding 2000*. Stationery Office, London, UK.

Hammen, C., Burge, D. & Stansbury, K. (1990) Relationship of mother and child variables to child outcomes in a high-risk sample: A causal modelling analysis. *Developmental Psychology*, 26(1): 24-30.

Harris, B. (1996) Hormonal aspects of postnatal depression. *International Review of Psychiatry*, 8: 27-36.

Hatton, D.C., Harrison-Hohner, J., Coste, S. et al (2005) Influence of postnatal depression on breastfeeding. *J Human Lact* 21: 444-449.

Hauptberger, S. (1997). *On thin ice: Experiences of Australian women pre and postnatal depression*. Australia: Affinity Publishing.

Hay, D.F. & Kumar, R. (1995) Interpreting the effects of mothers' postnatal depression in children's intelligence: A critique and re-analysis. *Child Psychiatry and Human Development*, 25(3): 65-181.

Hay, D.F., Pawlby, S., Sharp, D., Asten, O., Mills, A. & Kumar, R. (2001). Intellectual problems shown by 11-year-old children whose mothers had postnatal depression. *Journal of Child Psychology and Psychiatry & Allied Disciplines*, 42(7): 871-889.

Hay, D.F., Ancold, A., Pawlby, S., Harold, G.T. & Sharp, D. (2003). Pathways to violence in the children of mothers who were depressed postpartum. *Developmental Psychology*, 39: 1083 - 1094

Heining, M. (2001) Host defense benefits of breastfeeding for the infant. *Pediatr_Clin Nth Am* 48(1): 105-123.

Henderson, J.J., Evans, S.F. Stratton, J.A. et al, (2003) Impact of postnatal depression on breastfeeding duration. *Birth*, 30: 175-180.

Hickey, A. R., Boyce, P.M., Ellwood, D. & Morris-Yates, A.D. (1997) Early discharge and risk for postnatal depression. *Medical Journal of Australia* 167: 244-247

Hock, E. Schirtzinger, M.B., Lutz, M.B. & Widaman, K. (1995). Maternal depressive symptomatology over the transition to parenthood: Assessing the influence of marital satisfaction and marital sex role traditionalism. *Journal of Family Psychology*, 9(1): 79-88.

Hoddonit, P., Pill, R. & Hood, K. (2000). Identifying which women will stop breastfeeding before three months in primary care: a pragmatic study. *British Journal of General Practice*, 888-91.

Holden, J.M. (1991) Postnatal depression: Its nature, effects and identification using the Edinburgh postnatal depression scale. *Birth* 18: 211-221.

Homewood, E., Tweed, A., Cree, M. & Crossley, J. (2009) Becoming occluded: the transition to motherhood for women with postnatal depression. *Qualitative Research in Psychology* 6: 313-329.

- Hopkins, J., Campbell, S. & Marcus, M. (1987) Role of infant-related stressors in postpartum depression. *Journal of Abnormal Psychology*, 96(3): 237-241.
- Horran Smith, J. and Gullone, E., (1998) Screening an Australian community sample for risk of postnatal depression. *Australian Psychology*, 32(2): 138-142.
- Howie, P.W., Forsyth, J.S., Ogston, S.A., Clark, A., V. Florey, C. (1990) Protective effect of breast feeding against infection. *BMJ*, Vol 300.
- Hsieh, H.F.& Shannon, S.E. (2005) Three approaches to qualitative content analysis. *Qualitative Health Research* 15(9): 1277-1288.
- Hynd, A. (2007) *Working with mums and dads. A community-based response to postnatal depression.* Perth, W.A., Australia.
- Jain, S.K. (1996). *Breastfeeding in Australia.* Canberra, Australian Bureau of Statistics.
- James, J. (2004) Through despair and into the light:a journey through postnatal depression. *Alca Galaxy* 16(2): 14-19.
- Jennings, K.D., Ross, S., Popper, S. & Elmore, M. (1999) Thoughts of harming infants in depressed and nondepressed mothers. *Journal of Affective Disorders*, 54(1): 21-28.
- Johnstone, S.J., Boyce, P.M., Hickey, A.R., Morris-Yates, A.D. & Harris, G.M. (2001) Obstetric risk factors for postnatal depression in urban and rural community samples. *Australian and New Zealand Journal of Psychiatry*, 35(1): 69-74.
- Jones, E.G. and Matheny, R.J. (1993) Relationship between infant feeding and exclusion rate from child care because of illness. *J Am Diet Assn* 93(7).
- Jones, N.A., Field, T., Fox, N.A., Lundy, B. & Davalos, M. (1997) EEG activation in 1-month-old infants of depressed mothers. *Development and Psychopathology* 9(3): 491-505.
- Kendall-Tackett, K.A. (1996) When a new mother is depressed. *Leaven*, 32(3): 35-37.
- Kendall Tackett, K. (2001). *The hidden feelings of motherhood.* New Harbinger.
- Kendall Tackett, K. (2005) New studies on postpartum depression. *Leaven*, 41(4): 75-79.

Klier, C.M. (2006) Mother-infant bonding disorders in patients with postnatal depression: The Postpartum Bonding Questionnaire in clinical practice. *Archives of Women's Mental Health*, Vol 9(5): 289-291.

Koo, V., Lynch, J. & Cooper, S.(2003) Risk of postnatal depression after emergency delivery. *Journal of Obstetrics and Gynaecology Research*, 29(4): 246-250.

Kotler, B. (2003) Representing self and infant: Maternal experience in post-natal depression. *Unpublished Doctoral Thesis*, Victoria University, Melbourne.

Kumar, R. (1994) Postnatal mental illness: A transcultural perspective. *Social Psychiatry and Psychiatric Epidemiology*, 29(6): 29(6), 250-264.

Kurstjens, S. & Welke, D. (2002) Effects of maternal depression on cognitive development of children over the first 7 years of life. *Journal of Child Psychology and Psychiatry & Allied Disciplines*, 42(5): 623-636.

Labrok, M.H. (2001). Effects of breastfeeding on the mother. *Pediatric Clinics of North America*, 48, 143.

Ladomenou, F., Kafatos, A., Galanakis, E. (2007) Risk factors related to intention to breastfeed, early weaning and suboptimal duration of breastfeeding. *Acta Paediatr* 96: 1441-1444.

Lande, B. et al (2003) Infant feeding practices and associated factors in the first six months of life: The Norwegian Infant Nutrition Survey. *Acta Paediatrica*, 92(2): 152-161.

Lawrence, R. (1997). *Maternal and Child Health Bulletin: A review of medical benefits and contraindications to breastfeeding in the United States*. Government Printing Office: Washington, DC.

Lawrence, A.A. & Lawrence, R.M. (2005). *Breastfeeding: a guide for the medical profession*. 6th Ed. Elsevier Mosby. Philadelphia, USA.

Leahy-Warren, P. & McCarthy, G. (2007) Postnatal depression: prevalence, mothers' perspectives and treatments. *Archives of Psychiatric Nursing*, Vol 21(2): 91-100.

- Lester, I.H. (1994). *Australia's food and nutrition*. Canberra, AGPS.
- Logsdon, C., Birkimer, J.C. & Usui, W.M. (2000) The link of social support and postpartum depressive symptoms in African-American women with low incomes. *American Journal of Maternal Child-Nursing* 25(5): 262-266.
- Lucas, R.(1994) Puerperal psychosis: vulnerability and aftermath. *Psychoanalytic Psychotherapy* 8(3): 257-272.
- Lumley, J. & Austin, M.P. (2001). What interventions may reduce postpartum depression. *Current Opinion in Obstetrics and Gynaecology*: 13(6): 605-611.
- Lumley, J., Austin, M.P. & Mitchell, C. (2004). Intervening to reduce depression after birth: a systematic review of randomised trials. *International Journal of Technological Assessment of Health Care*, 20: 128-144.
- McCauley, L. (1994) Preventative health - medical advantages of breastfeeding. *Topics in Breastfeeding*: Set VI, December 1994. Lactation Resource Centre, Nursing Mothers' Association of Australia, Nunwading, Australia.
- McCoy, S.J.B., Beal, J.M., Shipman, S.B.M., Payton, M.E. & Watson, G.H. (2006) Risk factors for postpartum depression: A retrospective investigation at 4-weeks postnatal and a review of the literature. *JAOA*, 106(4): 193-198.
- McGill, Benzie-Burrows, V.L., Holland, L.A. et al (1995) Postnatal depression: a Christchurch study. *New Zealand Medical Journal*: 162-165.
- McLeod, D., Pullom, S. & Cookson, T. (2002). Factors influencing continuation of breastfeeding in a cohort of women. *Journal of Human Lactation* 18, 335-343.
- McMahon, C., Barnett, B., Kowalenko, N., Tennant, C. & Don, N. (2001) Postnatal depression, anxiety and unsettled infant behaviour. *Australian and New Zealand Journal of Psychiatry*, 35(5): 581-588.
- Marcus, S.M., Flynn, H.A., Blow, F.C. et al (2003) Depressive symptoms among women screened in obstetrics settings. *J Women's Health* 12(141):373-380.

- Marhsall, F. (1993). *Coping with postnatal depression. Why it happens and how to overcome it.*: London:UK, Sheldon Press.
- Marks, M. & Lovestone, (1995) The role of the father in parental postanal mental health. *British Journal of Medical Psychology*, 68: 157-68.
- Marks, M., Wieck, A., Checkley, S. & Kumar, C. (1996) How does marriage protect women with histories of affective disorder from post-partum relapse? *British Journal of Medical Psychology*, 69(4): 329-342.
- Meager, I. & Milgrom, J. (1996) Group treatment for postpartum depression: A pilot study. *Australian and New Zealand Journal of Psychiatry*, 30(6): 852-860.
- Meerschoek, S. (1993) The economic value of breastfeeding. *Breastfeeding Review* II (8, November): 354-357.
- Miles, M (1999) *Postnatal depression: a handbook for general practitioners*. Monash Division of General Practice (Moorabbin) Inc., East Bentleigh, Victoria.
- Milgrom, J. Martin, P. & Negri, L. (1999) *Treating Postnatal Depression: A Psychological Approach for Professionals*. John Wiley and Sons: England.
- Milgrom, J., Ericksen, J., McCarthy, R. & Gemmill A. W. (2006) Stressful impact of depression on early mother-infant relations. *Stress & Health* 22(4): 229-238.
- Milgrom, J., Gemmill, A.W., Bilszta, J.L., Hayes, B., Barnett, B., Brooks, J., Ericksen, J., Ellwood, D. and Built, A. (2008) Antenatal risk factors for postnatal depression: a large prospective study. *Journal of Affective Disorders* 108 (1-2): 147-167.
- Miller, W.F. & Crabtree, B.F. (2005) Clinical Research. In *The Sage Handbook of Qualitative Research* (A.K. Denzin & Y.S. Lincoln eds.) Sage, Thousand Oaks, 605-640.
- Minchin, M. (1998). *Breastfeeding matters*. 4th Ed. Alma Publications: Melbourne.
- Misri, S., Sinclair, D.A. & Kuan, A.J. (1997). Breastfeeding and postnatal depression: Is there a relationship? *Canadian Journal of Psychiatry*, 42, 1061-1065.

Misri, S., Kostaras, X., Fox D. & Kostaras, D. (2000). The impact of partner support in the treatment of postpartum depression. *Canadian Journal of Psychiatry*, 45, 554-58.

Moehler, E., Brunner, R., Weibel, A., Peck, C. & Resch F. (2006). Maternal depressive symptoms in the postnatal period are associated with long-term impairment of mother-child bonding. *Archives of Women's Mental Health* 9, 273-278.

Murray, L., Stanley, C., Hooper, R. & King, F. (1996). The role of infant factors in postnatal depression and mother-infant interactions. *Developmental Medicine and Child Neurology*, 38(2): 109-119.

Murray, L., & Cooper, P.J. (1997). *Postpartum Depression and Child Development*. New York: Guilford Press.

Murray, L. & Cooper, P.J. (1998) Postpartum depression and child development. *Psychological Medicine*, 27(2): 253-260.

Murray, L., Sinclair, D., Cooper, P., Ducournau, P. & Turner, P. (1999) The socioemotional development of 5-year old children of postnatally depressed mothers. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 40(8): 1259-1271.

Murray, L., Cooper, P., & Hipwell, A. (2003) Mental health of parents caring for infants. *Archives of Women's Mental Health*, 6(2): 71-77.

Murray, L. , Cooper, P.J., Wilson, A., Romaniuk, H. (2003). Controlled trial of the short- and long-term effect of psychological treatment of post-partum depression II: Impact on the mother-child relationship and child outcome. *British Journal of Psychiatry*, 182, 420-427.

National Breastfeeding Strategy: Summary Report (2001). Commonwealth Department of Health and Aged Care, Canberra, Australia.

(NHMRC) National Health and Medical Research Council (1995). *Dietary guidelines for children and adolescents*. Canberra, Australia: AGPS.

(NHMRC) National Health and Medical Research Council (1996). *Infant feeding guidelines for health workers in Australia*. Canberra, Australia: AGPS.

(NHMRC) (2003). *Food for Health – Dietary Guidelines for Children and Adolescents in Australia, Incorporating the Infant Feeding Guidelines for Health Workers*. Commonwealth of Australia, Canberra.

(NMAA) Nursing Mothers' Association of Australia (1988). *Mother and Baby: a survival guide for the first 12 months*. Nunawading, Victoria.

(NMAA) Nursing Mother Association of Australia (1990). *Breast and Nipple Care*. Nunawading, Victoria.

(NMAA) Nursing Mothers' Association of Australia (1993). *Compendium of breastfeeding statistics*. Nunawading, Victoria.

(NMAA) Nursing Mothers' Association of Australia (1995). *Prevalance and duration_of breastfeeding in Australia*. Nunawading, Victoria.

Noble, S. & Team, T.A.S. (2001) Maternal employment and the initiation of breastfeeding. *Acta Paediatr*, 90: 423-428.

Novotny, R., Hla, M.M., Kieffer, E.C., Park, C-P., Mor, J.B. & Thiele, M. (2000) Breastfeeding duration in a multiethnic population of Hawaii. *Birth*, 27(2): 91-96.

Nutbeam, D., Wise, M., Baiman, A., Harris, E. and Leeder, S. (1993). *Goals and Targets for Australia's Health in the Year 2000 and Beyond*. Commonwealth Department of Health, Housing and Community Services, 1993.

Nylen, K.J., Moran, T.E., Franklin, C.L. & O'Hara, M.W. (2006). Maternal depression: a review of relevant treatment approaches for mothers and infants. *Infant Mental Health Journal*, 27, 327-343.

O'Brien, M., Buikstra, E. & Hegney, D. (2008) The influence of psychological factors of breastfeeding duration. *Journal of Advanced Nursing*, 63(4), 397-408.

O'Connor, T.G., Heron, J., Golding, J., Beveridge, M. & Glover, V. (2002) Maternal antenatal anxiety and children's behavioural/emotional problems at 4 years: Report from the Avon Longitudinal Study of Parents and Children., *British Journal of Psychiatry* 180(16): 502-508.

Oddy, B., Rowe, H. & Fisher, J. (2009) Consumers' views on the use of diagnostic labels to describe psychological distress in the postpartum: implications for health care. *Australian Journal of Primary Health*, 15, 9-16.

O'Hara, M.W. (1995). *Postpartum depression – causes and consequences*. New York, Springer-Verlag.

O'Hara, M.W. & Swain, A.M. (1996) Rates and risk of postpartum depression – a meta analysis. *International Review of Psychiatry*, 8: 37-54.

O'Hara, M.W., Stuart, S., Gorman, L.L. & Wenzel, A. (2000). Efficacy of interpersonal therapy for postpartum depression. *Archives of General Psychiatry* 57, 1039-45.

Ong G. et al (2004) Impact of working status on breastfeeding in Singapore: Evidence from the National Breastfeeding Survey, 2001). *European Journal of Public Health*, 15(4): 424-430.

Oshaug and Botton. (1994). Human milk in food supply statistics. *Food Policy*, 19(5): 479-482.

Pajulo, M., Savonlahti, E., Sourander, A., Helenius, H. & Piha, J. (2002) Antenatal depression, substance dependency and social support. *Journal of Affective Disorders*, 65(1): 9-17.

Paulson, J.F., Dauber, S. & Leiferman, J.A. (2006) Individual and combined effects of postpartum depression in mothers and fathers on parenting behaviour. *Pediatrics*, 118(2): 659-668.

Pawlby, S., Sharp, D. & Hale, D. (2008) Postnatal depression and child outcomes at 11 years: The importance of accurate diagnosis. *Journal of Affective Disorders*, Vol 107: 1-3.

Pierce, K.M., Strauman, T.J. & Lowe-Vandell, D (1999) Self-discrepancy, negative life events and social support in relation to dejection in mothers and infants. *Journal of Social and Clinical Psychology*, 18(4): 490-501.

Pitt, B. (1968) "Atypical" depression following childbirth. *Brit. J. of Psychiatry*, 114: 1325-1335.

Pope, S. (2000). *Postnatal depression: a systematic review of published scientific literature to 1999*. National Health and Medical Research Council (NHMRC), Australia.

Popkin, B.M., Lasky, T. et al. (1994) *The infant-feeding triad, infant, mother and household*. W.H. Moseley. New York Plenum Press.

Porter Lewallen, L. et al (2006) Breastfeeding support and early cessation. *Journal of Obstetric, Gynecologic and Neonatal Nursing*, 35(2): 166-172.

Pritchard, D.B. & Harris, B. (1996) Aspects of perinatal psychiatric illness. *British Journal of Psychiatry*, 169: 555-562.

Rahman, A. & Creed, F. (2007) Outcome of prenatal depression and risk factors associated with persistence of the first postnatal year: Prospective study from Rawalpindi, Pakistan. *Journal of Affective Disorders*, 100(1-3): 115-121.

Richards, M.P.M. (2000) Commentary: Assessment of women's well-being and social and emotional needs in pregnancy and the postpartum period. *Birth Issues in Perinatal Care*, 27(2): 102-103.

Righetti, V.M., Conne, P.E., Bousquet, A. and Manzano, J. (1998) Risk factors and predictive signs of postpartum depression. *Journal of Affective Disorders*, 49(3): 167-180.

Righetti, V.M. (2002) Postpartum depression and mother-infant relationship at 3 months old. *J Affect Disord*, 70: 291-306.

Riordan, J.M. (1997). The cost of not breastfeeding. *Journal of Human Lactation*, 13(2): 93-97.

Riordan, J.M. (2005). *Breastfeeding and human lactation*, 3rd Ed. Jones & Bartlett Publishers, Boston, USA.

Riordan, J. M. & Auerbach, K.G. (1993). *Breastfeeding and human lactation*. London:UK, Jones and Bartlett Publishers International.

Ritter, C., Hobfoll, S.E., Lavin, J., Cameron, R.P. & Hulsizer, M.R. (2000). Stress, psychosocial resources and depressive symptomatology during pregnancy in low-income inner-city women. *Health Psychology*, 19(6): 576-585.

Robertson, E., Grace, S., Wallington, T. & Stewart, D.E. (2004) Antenatal risk factors for postpartum depression: a synthesis of recent literature. *General Hospital Psychiatry*, 26(4): 289-295.

Saddock, B.J., Saddock, V.A., & Ruiz, P. (Eds) (2009). *Comprehensive Textbook of Psychiatry*. Philadelphia: Williams & Wilkins.

Schmied, V., Cooke, M., Gutwein, R., Steinlein, E. & Homer, C. (2009) An evaluation of strategies to improve the quality and content of hospital-based postnatal care in a metropolitan Australian hospital. *J.Clin. Nurs* 18(3): 1850-1861.

Scott, J.A. & Binns, C.W. (1999). Factors associated with the initiation and duration of breastfeeding: a review of the literature. *In: Breastfeeding Review*. P. 5-16.

Scott, J.C. & Binns, E. (2006) Predictors of breastfeeding duration: Evidence from a cohort study. *Pediatrics*, 117: 646-655.

Scottish Intercollegiate Guidelines Network (2002) *Postnatal depression and puerperal psychosis*. A national clinical guideline. Edinburgh, Royal College of Physicians.

Seguin, L., Potvin, L., St-Denis, M. & Loiselle, J. (1999) Socio-environmental factors and postnatal depressive symptomatology: A longitudinal study. *Women and Health*, 29(1): 57-72.

Short, R.V. (1994) What the breast does for the baby and what the baby does for the breast. *Aust NZ J Obstet Gynaecol*, 34(3): 262-264.

- Sichel, D. & Driscoll, J. (1999). *Women's moods; what every woman must know about hormones, the brain and emotional health*. William Morrow: New York.
- Sinclair D. & Murray, L. (1998) Effects of postnatal depression on children's adjustment in school. *British Journal of Psychiatry*, 172: 58-63.
- Siskind, V., Green, A., Bain, C. & Rurdie, D. (1997). Breastfeeding, menopause and epithelial ovarian cancer. *Epidemiology* 8: (2) 188-191.
- Small, R., Brown, S. Lumley, J. and Astbury, J. (1994) Missing voices: what women say and do about depression after birth. *J Reprod.*
- Small, R., Lumley, J. & Yelland, J. (2003). Cross-cultural experiences of maternal depression. *Ethn Health* 8: 189-206.
- Small R., Lumley, J. & Yelland, J. (2007) The performance of the Edinburgh Postnatal Depression Scale in English speaking and non-English speaking populations in Australia. *Social Psychiatry and Psychiatry Epidemiology*, Vol 42(1): 70-78.
- Smith, J.A. (2003) Ed. *Qualitative Psychology: A Practical Guide to Research Methods*. Amazon, UK.
- Smith, J.P., Ingham, L.H. and Dunstone M.D. (1998). *The Economic Value of Breastfeeding in Australia*. National Centre for Epidemiology and Population Health. The Australian National University. Canberra, Australia.
- Smith, J.P., Thompson, J. F. & Ellwood, D.A. (2002). Hospital system costs of artificial infant feeding: estimates for the Australian Capital Territory. *Australian & NZ Journal of Public Health*, 26, 543-551.
- Stamp, G.E., Williams, A.S., & Crowther, C.a. (1996) Predicting postnatal depression among pregnant women. *Birth*, 23: 218-23.
- Stuchberry, M., Matthey, S. & Barnett, B. (1998). Postnatal depression and social supports in Vietnamese, Arabic and anglo-Celtic mothers. *Social Psychiatry and Psychiatric Epidemiology*, 33(10): 383-490.

Sugawara, M., Kitamura, T., Toda, M.A. & Shima, S. (1999) Longitudinal relationship between maternal depression and infant temperament in a Japanese population. *Journal of Clinical Psychology*, 55(7): 869-880.

Sullivan, M.L., Leathers, S.J. & Kelley, M.A. (2004) Family characteristics associated with duration of breastfeeding during infancy among primiparas. *Journal of Human Lactation*, 20(2): 196-205.

Swendsen, J.D. & Mazure, C.M. (2000) Life stress as a risk factor for postpartum depression” Current research and methodological issues. *Clinical Psychology Science and Practice*, 7(1): 17-31.

Taveras, E.M. et al (2003) Clinician support and psychosocial factors associated with breastfeeding discontinuation. *Paediatrics*, 112(1): 109-115.

Taylor, A., Adams, D. Glover, V. (1994) Postnatal depression: identification, risk factors and effects. *British Journal of Midwifery*, 2: 253-257.

Terp, I.M., Engholm, G., Moller, H. & Mortensen, P.B. (1999). *Acta Psychiatrica-Scandinavica*, 100(1): 40-46.

Tisher, M., Tonge, B.J.& de Horne, L. (1994). Childhood depression, stressors and parental depression. *Australian and New Zealand Journal of Psychiatry*, 28: 1-7.

Tronick, E.Z., & Weinberg, M.K. (1997). *Depressed mothers and infants: Failure to form dyadic states of consciousness*. In: L. Murray & P.J. Cooper (Eds), Postpartum Depression and Childhood Development. P. 54-81. New York: Guilford Press.

Van Esterick, P. (2009) *Breastfeeding: A Feminist Issue*. Prepared for the World alliance for Breastfeeding Action , Faculty of Arts, Department of Anthropology< York University, Ontario, Canada.

Visnes, C.M. and Kennedy, K.I. (1997) Maternal employment and breastfeeding: findings from the 1988 National Maternal and Infant Health Survey. *American Journal of Public Health*, 87: 945-950.

Warner R., Appleby, L. Whitton, a. et al (1996) Demographic and obstetric risk for postnatal psychiatric morbidity. *British Journal of Psychiatry*, 168: 607-611.

Watson Driscoll, J. (2006) Postnatal depression: the state of the science. *J Perinat Neonat Nurs*, Vol 1: 40-42

Weimer, D. (2001). *The economic benefits of breastfeeding: a review and analysis*. Economic “Research Service, US Department of Agriculture, Food Assistance and Nutrition, Research Report, March 2001. Report No 13.

Weinberg, M.K., Tronick, E.Z., Beeghly, M., Olson, K.L., Kernan, H. & Riley, J.M. (2001) Subsyndromal depressive symptoms and major depression in postpartum women. *American Journal of Orthopsychiatry*, 7(1): 87-97.

Weiser, T.M., Lin, M., Garikapaty, V., Feyerharm, R.W., Bensyl, DM. & Zhu, B-P. (2009) association of maternal smoking status with breastfeeding practices: Missouri, 2005. *Pediatrics*, 124(6): 1603-1610.

Wheatley, S.L. (2005) *Coping with postnatal depression*. Sheldon Press, London.

Whiffen & Johnson, (1998) An attachment theory framework for the treatment of childbearing depression. *Clinical Psychology Science and Practice*, 5(4): 478-493.

Whitton, A., Appleby L. & Warner R. (1996) Maternal thinking and the treatment of postnatal depression. *International Review of Psychiatry*, 8: 73-78.

Williams, N. (2004) When the blues arrive with baby. *New Beginnings*, 21(3): 84-88.

Williamson, V. & McCutcheon, H. (2004) Postnatal depression: a review of current literature. *Aust Midwifery*, 17(4): 11-16.

Willinck, L.A. & Cotton, S.M. (2004) Risk factors for postnatal depression. *Aust Midwifery*, 17(2): 10-15.

Winnicott, D.W. (1990). *The Maturation Process and the Facilitating Environment*, London: Karnac Books.

Wisner, K.L., Peindl, K.S., Gigliotti, T. & Hanusa, B.H. (1999) Obsessions and compulsions of women with postpartum depression. *Journal of Clinical Psychiatry*, 60(3) : 176-180.

Woolf, J.B. (2007) Is breast really best? Risk and Total Motherhood. The National Breastfeeding Campaign. *Journal of Health Politics, Policy and Law*. Vol 32, No 1, August, 2007

World Health Organisation (WHO)/UNICEF. (1990) Innocenti Declaration on the Protection, Promotion and Support of breastfeeding. *Breastfeeding in the 1990's: a Global Initiative*. Florence, Italy.

World Health Organisation (WHO) (1992). *The ICD-10 Classification of Mental and Behavioural Disorders. Clinical descriptions and diagnostic guidelines*. Geneva, World Health Organisation.

World Health Organisation (WHO) (2002) *Global Strategy for Infant and Young Child Feeding*. World Health Organisation, Geneva.

World Health Organisation (WHO) (2005) *Innocenti Declaration on Infant and Young Child Feeding*. World Health Organisation, Geneva.

Work and Family Unit. (April 1998). Combining breastfeeding and employment. *Work and Family Unit Newsletter Insert. In Balancing breastfeeding and Work*. Commonwealth of Australia, 2000.

APPENDICES

APPENDIX 1 – Letter to Maternal and Child Health Care Professionals

My name is Liz Bolyos, I am a Clinical Psychology Doctorate Course Student, supervised by Ms. Jenny Sharples, Department of Psychology, Victoria University, St. Albans Campus.

I am undertaking research to investigate the experiences and depression rates of women who are having difficulties in establishing a satisfactory breastfeeding routine with their baby.

As health care professionals providing services to these women, I would like to enlist your assistance in recruiting participants for this study.

Participation in the study would generally involve the completion of some questionnaires (estimated time required 15 minutes), which would then be sent back in a prepaid envelope provided. I would also like to interview some women. The interviews will focus on their experiences with the difficulties of initial breastfeeding. They will take an hour and will be audio taped with participants' consent. Data collected will be treated confidentially, no identifying details from interviews will appear in the final report and only group results will be published.

Thanking you in anticipation.

Yours sincerely,

Liz Bolyos

APPENDIX 2 – Letter to Lactation Consultants

My name is Liz Bolyos. I am a psychologist and a Clinical Psychology Doctorate Course Student, supervised by Ms Jenny Sharples, Department of Psychology, Victoria University, St. Albans Campus.

I am undertaking research to investigate the experiences and depression rates of women who are having difficulties in establishing a satisfactory breastfeeding routine with their baby.

As health care professionals providing services to these women, I would like to enlist your assistance in recruiting participants for this study.

Participation in the study would generally involve the completion of some questionnaires (estimated time required 15 minutes), which would then be sent back in a prepaid envelope provided. I would also like to interview some women. The interviews will focus on their experiences with the difficulties of initial breastfeeding. They will take between 30 – 60 minutes and will be audio taped with the consent of participants. Data collected will be treated confidentially, no identifying details from interviews will appear in the final report and only group results will be published.

I hope you can assist and thank you in anticipation.

Yours sincerely,

Liz Bolyos

APPENDIX 3 – Invitation to Participate in a Research Study

My name is Liz Bolyos, I am a Clinical Psychology Doctorate Course Student, supervised by Ms. Jenny Sharples, Department of Psychology, Victoria University, St. Albans Campus.

I am undertaking research to investigate the experiences and depression rates of women who are having difficulties in establishing a satisfactory breastfeeding routine with their baby. In this regard I would like you to complete the enclosed questionnaires and may approach you for an interview at a later date.

The questionnaires will take about 15 minutes to complete. I recognise that many demands are made on your time and energy. A response will enable me, and once the project is complete, other relevant health professionals to gain a better understanding of the difficulties and needs of mothers who are experiencing problems with breastfeeding. Information given will be treated as confidential by the researchers; questionnaires will be identified only by number, and only group results will be published. Interviews are expected to take no longer than an hour, and will be audio taped with your consent.

If you are willing to participate, please complete the questionnaires within the next two weeks. I have enclosed a reply paid envelope. If you are willing to be interviewed as well, please complete the enclosed consent form, place it in the envelope labelled "Willing to be interviewed", and return it with your questionnaires, which will be stored separately. No identifying details from the interviews will appear in the report.

Should you have any concerns regarding the manner in which this research project is conducted, please do not hesitate to inform the researchers directly, or the Psychology Department Ethics Committee on (03) 9365 2336.

Results will be available at the end of the project from the Department of Psychology. If you have any queries you can contact myself or Ms Jenny Sharples on (03) 9365 2336.

Thanking you in anticipation.

.Yours sincerely,

Liz Bolyos

APPENDIX 4 – Consent Form for Participants Involved in Research

PLEASE PLACE CONSENT FORM WITH YOUR CONTACT DETAILS IN ENVELOPE MARKED “CONSENT FORM” AND RETURN IT WITH YOUR COMPLETED QUESTIONNAIRES IN PRE-PAID SELF-ADDRESSED ENVELOPE. THANK YOU.

VICTORIA UNIVERSITY

PSYCHOLOGY DEPARTMENT

Consent Form for Participants Involved in Research

We would like to invite you to be part of a study into the experiences and depression rates of women who are having difficulties in establishing a satisfactory breastfeeding routine with their baby.

If you are willing to participate as an interviewee in this project could you please complete this consent form.

I

.....

.....

of

.....

.....

(Address and Telephone Number)

certify that I am at least 18 years old and that I am voluntarily giving my consent to participate in the study entitled:

INVESTIGATION OF EXPERIENCES AND DEPRESSION RATES OF WOMEN WHO ARE HAVING DIFFICULTIES IN ESTABLISHING A SATISFACTORY BREASTFEEDING ROUTINE WITH THEIR BABY

being conducted at Victoria University by Liz Bolyos.

The objectives of the study, together with any risks to me associated with the procedures to be carried out listed below, have been fully explained to me by Liz Bolyos and I freely consent to participation involving the use of these procedures.

Participation Involves:

An interview not longer than an hour, which is to focus on my experiences in establishing a satisfactory breastfeeding routine with my baby. The interview may be audio taped.

I have had the opportunity to have any questions answered and I understand that I can withdraw from the interview at anytime and that this withdrawal will not jeopardize me in any way.

I have been informed that the information I provide will be kept confidential.

Signed.....

Date.....

Any queries about your participation in this project may be directed to the researcher (Liz Bolyos, ph: (03) 9365 2336). If you have any queries or complaints about the way you have been treated, you may contact the Secretary, University Human Research Ethics Committee, Victoria University, P.O. Box 14428 MCMC, Melbourne, 8001 (PH: (03) 9688 4710).

APPENDIX 5 - Questionnaire 1

QUESTIONNAIRE 1

Breastfeeding Problem

.....

Time of onset of problem after baby's birth (i.e. no of days, weeks, months):

.....

How long did the breastfeed problem last.....

Information about Baby

Baby's Date of Birth Age Sex

Baby's Birth (please circle) - normal induced Caesarean Section

Was baby born prematurely? Yes No

(Please circle correct answer)

If answer "yes", please state at what term delivery (in weeks)

.....

Information about Mother

Mother's Age

Mother's Educational Level (Please circle correct answer)

Up to and Years Some Tertiary Completed

Yr. 10 11 and 12 and Further Tertiary

Training

Mother' Occupation

Mother's Nationality

Past History of Depression Yes No

(Medically Diagnosed and Treated)

Information About Father

Father's Age

Father's Educational Level (Please circle correct answer)

Up to and Years Some Tertiary Completed
Yr. 10 11 and 12 and Further Tertiary
Training

Father's Occupation

Father's Nationality

Other Related Information

Mother and Father Living Together Yes No

Is the Baby the Mother's First Child Yes No

If Answer is "No" - How Many Other Children

- Ages

If Other Children - Were they Breastfed? Yes No

Any Previous Breastfeeding Problems Yes No

If "Yes" - What

APPENDIX 6 - Questionnaire 2

QUESTIONNAIRE 2

Today's Date Baby's Age

As you have recently had a baby, we would like to know how you are feeling. Please UNDERLINE the answer which comes closest to how you have felt over the last 7 days, not just how you feel today.

Here is an example, already completed. **I have felt happy**

Yes, all the time

Yes, most of the time

No, not very often

No, not at all

This would mean: "I have felt happy most of the time during the last week". Please complete the other questions in the same way.

1. **I have been able to laugh and see the funny side of things**

As much as I always could

Not quite so much now

Definitely not so much now

Not at all

2. **I have looked forward with enjoyment to things**

As much as I ever did

Rather less than I used to

Definitely less than I used to

Hardly at all

3. **I have blamed myself unnecessarily when things went wrong**

Yes, most of the time
Yes, some of the time
Not very often
No, never

4. I have been anxious or worried for no good reason

No, not at all
Hardly ever
Yes, sometimes
Yes, very often

5. I have felt scared or panicky for no good reason

Yes, quite a lot
Yes, sometimes
No, not much
No, not at all

6. Things have been getting on top of me

Yes, most of the time I have not been able to cope at all
Yes, sometimes I haven't been coping as well as usual
No, most of the time I have coped well
No, I have been coping as well as ever

7. I have been so unhappy that I have had difficulty sleeping

Yes, most of the time
Yes, sometimes
Not very often
No, not at all

8. I have felt sad or miserable

Yes, most of the time
Yes, quite often

Not very often

No, not at all

9. I have been so unhappy that I have been crying

Yes, most of the time

Yes, quite often

Only occasionally

No, never

10. The thought of harming myself has occurred to me

Yes, quite often

Sometimes

Hardly ever

Never

APPENDIX 7 - Questionnaire - (In-Depth Interviews)

How long has the breastfeeding difficulty(ies) been going on?

What was the difficulty in breastfeeding? Any physical problems (such as inverted/cracked nipples)?

How did the breastfeeding problem(s) affect you physically?

How did the breastfeeding problem(s) affect you emotionally?

How did the problem affect your relationship with your baby?

How did the problem(s) affect your relationship with your partner?

What help have you received? When and from whom? Professional/family/social.

Was this help adequate?

If not, what would have been helpful?

Anything else you wish to add – other issues you wish to raise regarding the difficulties experienced with breastfeeding?