

**Midwives' Perspectives of Mental Health and
Maternal Mental Health:
An Interpretive Descriptive Study**

Christine Mellor

**A thesis submitted to Auckland University of Technology in partial fulfillment of
the requirements for the degree of Master of Health Science**

2016

School of Health Care Practice

Primary Supervisor: Dr Deborah Payne

Abstract

Using interpretive descriptive methodology, this qualitative research explores midwives' perceptions of mental health and the assessment of maternal mental health during pregnancy. Current literature suggests that maternal mental health problems are associated with an increased risk of morbidity and mortality, and occur more frequently during pregnancy than in the postnatal period.

Purposive and theoretical sampling strategies were used to recruit participants, and five focus groups were carried out, consisting of a total of twenty-five midwives working as lead maternity carers (LMCs), who provide continuity of care to a caseload of women throughout pregnancy, labour and birth, and the postnatal period. The data was analysed using qualitative content analysis. One overarching theme that emerged was 'The disparity between needs and service provision', illuminating the significance of the absence of appropriate services to meet the needs of women with mild or moderate maternal mental health problems such as anxiety and mild/moderate depression.

As a result of this disparity, the midwives carried the weight of maternal mental health problems that did not meet the criteria for referral to the Maternal Mental Health (MMH) service. 'Carrying the weight' is integral to all three sub-themes, which are: 'Not meeting needs', 'The anxious woman needing extra support', and 'Safeguarding women's wellbeing and welfare'. The overarching statement of the research is: 'Holding the problem: plugging the gap between women and the service'. Results revealed that the participant midwives plugged the gap between women and the service in order to safeguard the women's wellbeing and welfare when appropriate services were not available to meet their needs. This caused some difficulties for the midwives

and evidently influenced their antenatal maternal mental health assessment and screening practices.

Table of Contents

| | |
|---------------------------|---|
| Attestation of Authorship | 6 |
| Acknowledgments | 7 |

Chapter One: Guide to the Study

| | |
|-----------------------------------|----|
| Introduction | 8 |
| Research Question | 9 |
| Research Aims | 9 |
| Background to the Research | 9 |
| Professional: New Zealand Context | 13 |
| Orientation to the Research | 14 |
| Key | 15 |

Chapter Two: Literature Review

| | |
|---|----|
| Introduction | 17 |
| Background | 18 |
| Psychosocial Risk | 20 |
| Anxiety | 22 |
| Effects of Maternal Mental Health Problems | 24 |
| Antenatal Maternal Mental Health Assessment and Screening | 36 |
| Barriers to Effective Maternal Mental Health Screening | 43 |
| Summary | 49 |

Chapter Three: Methodology and Methods

| | |
|--------------|----|
| Introduction | 51 |
| Methodology | 51 |

| | |
|------------------------|----|
| Methods | 54 |
| Ethical Considerations | 67 |
| Enhancing Rigour | 71 |
| Summary | 79 |

Chapter Four: The Disparity Between Needs and Service Provision

| | |
|--|----|
| Introduction | 80 |
| Not Meeting Needs | 81 |
| The Anxious Woman Needing Extra Support | 94 |
| Safeguarding Women's Wellbeing and Welfare | 99 |

Chapter Five: Discussion and Summary

| | |
|--|-----|
| Introduction | 108 |
| Not Meeting Needs | 108 |
| The Anxious Woman Needing Extra Support | 113 |
| Safeguarding Women's Wellbeing and Welfare | 117 |
| Recommendations for Practice and Policy | 122 |
| Limitations and Strengths of the Study | 123 |
| Recommendations for Further Research | 124 |
| Conclusion | 125 |
| References | 127 |
| Appendix A: Invitation to participate in the research | 143 |
| Appendix B: Participant Information Sheet | 144 |
| Appendix C: Consent Form | 150 |
| Appendix D: Maternal Mental Health Referral Pathway Taranaki | 152 |

Attestation of Authorship

I hereby declare that this submission is my own work, and that to the best of my knowledge and belief, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for qualification of any other degree or diploma of a university or other institution of higher learning, except where due acknowledgment is made in the acknowledgments.

Signed:

Date:

Acknowledgments

I am so very grateful to the midwives who generously gifted their time to take part in this research. They shared their feelings, experiences, and midwifery practices so openly and honestly. I consider it an enormous privilege to have heard their perspectives and shared their stories.

I was very blessed to have two experienced supervisors travelling this research journey with me. Their time, inspiration, and encouragement have been invaluable. I would like to acknowledge the ongoing support of my primary supervisor, Dr Deborah Payne, whose insight always guided me to clarity just when I needed it. I would also like to thank Dr Judith McAra Couper for bringing her eye for detail and an objective perspective.

I would also like to thank my wonderful family, friends, and colleagues for their unending encouragement and support during this process. To my amazing boys, Logan and Joseph, whose regular supply of cups of tea during the hours of writing while I ‘turned into a geek’ were invaluable: you are both a constant source of inspiration to me. And to my husband Alan, who has had the most incredible patience throughout: thank you for your support, your emergency IT service, and for your unrelenting belief in me.

Ethical approval to undertake this research was granted by the AUT University Ethics Committee AUTECH on 13th May, 2014 (AUTECH approval number 1486).

Chapter One: Guide to the Study

Introduction

This research aims to develop insight into midwives' perceptions of maternal mental health and its assessment during pregnancy. There are currently no New Zealand studies that have investigated this, and gaining a better understanding of these perceptions will improve knowledge about the foundations of the midwives' antenatal screening practices and the supporting rationale. This chapter will briefly outline the background underpinning this study and its context, and will provide an overview of the thesis.

The World Health Organization proposes that there can be 'no health without mental health' (World Health Organization, 2005, p. 11), highlighting the significance that mental health has for a woman's health and wellbeing. Perinatal wellbeing (pregnancy and the year following birth) is a multifactorial concept reliant upon the interrelation of the physical, psychosocial and spiritual dimensions (Carly, Debbie, & Colin, 2013). Maternal Mental Health (MMH) is integral to the health and wellbeing of the mother, baby, and family (Meltzer-Brody, 2011).

Maternal mental health problems have been identified as a major public health issue (Austin, Priest, & Sullivan, 2008). Suicide is a leading cause of perinatal maternal death in New Zealand (Perinatal and Maternal Mortality Review Committee, 2014). This is also shown in the eighth report of the UK Confidential Enquiries into Maternal Deaths, 2011 (Lewis, 2012). Although the actual numbers of suicides during the perinatal period are small, this illuminates the potential serious outcomes associated with maternal mental health problems and the importance of effective assessment and referral to appropriate services throughout the perinatal period.

The National Maternity Monitoring Group (2013) identified a lack of consistency in maternal mental health care provision within New Zealand, and highlighted the need for antenatal identification of maternal mental health risk. Pregnancy, being the point of most intensive contact that maternity practitioners have with a woman, provides a significant opportunity to improve maternal wellbeing (Alderdice, McNeill, & Lynn, 2013; Austin, Reilly, & Sullivan, 2012).

Research Question

How do midwives perceive mental health and the assessment of maternal mental health in pregnancy?

Research Aims

- To explore midwives' views of mental health as a component of health
- To investigate how comfortable midwives feel about dealing with maternal mental health issues
- To identify screening and assessment practices that midwives use during pregnancy to assess maternal mental health

Collectively these aims form the objective of the study, which is to generate a greater understanding of the practice of New Zealand midwives in the assessment of maternal mental health during pregnancy, and midwives' perceptions that may be informing this.

Background to the Research

Personal

During my experience as a midwife I have cared for many women with maternal mental health problems, but the following two experiences stand out as being

particularly meaningful. They were a catalyst for reflection and subsequently increased my understanding of the effects of the stigma that surrounds mental health, and the complexities that this creates for the assessment of maternal mental health. They provide insight into some of the complex situations that midwives face in clinical practice.

Seek and you will find

While working as an LMC (lead maternity carer) midwife I had the pleasure of caring for Milly and Carl (pseudonyms), who were having their second baby. They were both immigrants from the United Kingdom with no extended family in New Zealand, and had a two-year-old daughter. Milly's pregnancy and birth were healthy and uncomplicated. When I asked during her pregnancy about her family and personal history of mental health and maternal mental health she raised no problems or risks, and neither herself nor Carl showed any concerning signs antenatally.

During a routine postnatal visit two weeks after she had given birth, Milly appeared more tired and emotional than she had previously been. We talked about her feelings but she assured me it was a result of sleep deprivation. We discussed postnatal depression and I asked her if she would complete the Edinburgh Postnatal Depression Scale. She did, and scored a reassuring eight. It was evening, and Carl was home. He was very supportive towards Milly, with a positive attitude, and appeared happy and relaxed with the baby and his older daughter. After discussing a plan I left the Edinburgh Postnatal Depression Scale with Milly.

Shortly after returning home I received a call from Carl, who told me that he had 'got it'. He explained that he had answered the questions on the Edinburgh Postnatal

Depression Scale himself and had scored 13, which was suggestive of postnatal depression and required further assessment. Carl visited his GP the following day and commenced medication and counselling for his symptoms of anxiety and depression.

Although Carl wasn't my primary focus, midwives provide family-centered care and I had informally assessed the family at each interaction with them. At no point had Carl revealed any signs or symptoms of depression or anxiety. On the contrary, he had consistently presented as very positive, happy, and relaxed. Milly had not perceived Carl as anxious or depressed either, but he had been trying to protect her from this worry.

The Edinburgh Postnatal Depression Scale represented an opportunity for Carl to self-assess and reflect on his mental wellbeing. It enabled him to confirm the way he really felt both to himself and to Milly, and created the space for discussion. It validated for him his underlying concerns, which had remained undiscovered until this point. Without this assessment Carl's true feelings may not have been comprehended; informal assessment had not been successful in revealing them. This emphasised for me the value of routine screening for mental health problems in the perinatal period, rather than relying purely on informal assessment or selective application of maternal mental health screening, which is reliant upon people revealing their authentic wellbeing.

The pain behind the smile

I was working as an LMC midwife in a semi-rural area, and was approached by Jessica (pseudonym) who had recently arrived in New Zealand and was at 36 weeks gestation with her second pregnancy. As part of the booking process I enquired about her past and present mental health, along with her family history of mental health

problems, and she didn't raise any issues. Jessica appeared happy and confident and seemed well-supported by her husband. I saw her the following week and she expressed that she would like to have her postnatal stay at a local birthing unit, which was arranged. She and her husband appeared very relaxed about the upcoming birth.

By the time Jessica went into labour at 37 weeks' gestation I had met and assessed her twice, and she birthed her baby in hospital. Six hours later she transferred to the birthing unit, where she planned to have a two-night stay. The next morning as I was on my way to see her I received a call from the staff at the unit. They were concerned, saying that Jessica had completely changed and they were unsure if she was safe with the baby in her room. The midwives sat with Jessica and cared for her baby until I arrived. I found Jessica lying on the floor in the fetal position. She did not recognise me and was afraid I would take her baby away. I was unable to rationalise with her; she was terrified, defensive, angry, and confused.

I called the acute mental health team, who respectfully and skillfully managed Jessica's symptoms and arranged alternative care for her and her baby. I spoke to Jessica's husband before she was transferred, who confessed that Jessica had quickly become very depressed following her first birth but had not wanted to tell me. She had feared that it would affect the way that I perceived her, and that she would not be able to attend the birth unit for her postnatal stay. She had been feeling really well and so had hoped for a very different experience.

This really highlighted for me the stigma associated with mental health: women fearing negative reactions from practitioners and feeling judged for having a mental health problem. It showed how they may deny their history and current mental health. I

reflected on this experience and felt that if mental health was understood by women to be simply a normal component of health, Jessica may have felt safe enough to reveal her history to me. At the heart of maternity care woman must feel safe. Jessica's story truly encapsulates this notion.

Professional: New Zealand Context

The New Zealand College of Midwives provides the professional frameworks for midwifery practice in New Zealand from the underlying philosophy, to the standards for practice and practice guidelines (Pairman, Tracy, Thorogood, & Pincombe, 2010). New Zealand Midwifery philosophy is based on a partnership relationship with women at the core, and a model of autonomous caseload practice (Guilliland & Pairman, 2010). Midwives working as LMCs are therefore in a privileged position to assess maternal mental health during the antenatal and postnatal periods.

The Ministry of Health provides midwives with referral guidelines which determine the midwifery scope of practice (Ministry of Health, 2012). These referral guidelines incorporate maternal mental health, and recommend a referral to primary care providers (usually the woman's GP) for women who have mild or moderate maternal mental health problems, such as anxiety or mild/moderate depression. In the case of more serious (but stable) maternal mental health problems such as bipolar disorder or serious depression, the midwife recommends a referral to the Maternal Mental Health (MMH) service, which is a clinical team that assesses and cares for women with more serious maternal mental health problems. A transfer of care and clinical responsibility to a specialist obstetrician is warranted when women have acute unstable psychosis. The Ministry of Health (2011) recommends that women have a psychosocial assessment

during pregnancy, but there is no universal routine maternal mental health assessment or screening programme in New Zealand.

Orientation to the Research

Chapter One aims to provide a background to the research and outlines the aims and objectives underpinning the study. It sets the scene for the research and positions it in its New Zealand context. It has given an insight into midwifery practice situations that have informed the rationale for the research.

Chapter Two, the literature review, explores the significance that maternal mental health has for women's health and wellbeing. It highlights a body of evidence that suggests an association between maternal mental health problems during pregnancy and increased mortality and morbidity, supporting the antenatal assessment of maternal mental health. It explores associated complexities with maternal mental health assessment and illuminates the importance of midwives' perceptions of maternal mental health for effective identification of risk.

Chapter Three discusses the methodology underpinning the research, and the rationale for choosing the interpretive descriptive design is outlined and discussed. Research methods are outlined, along with steps taken throughout to promote the research's credibility and ongoing ethical consideration.

Chapter Four presents the research results, describing and interpreting the midwives' perceptions of women who have mild to moderate maternal mental health problems, and the effects that caring for these women in the absence of appropriate services had on their perceptions of maternal mental health and its antenatal assessment and screening.

In Chapter Five, the discussion and summary, the significance of the research results is discussed in the light of current literature and applied to clinical midwifery practice. This chapter also discusses the strengths and limitations of the research along with recommendations for practice, policy, education, and future research.

Key

The following abbreviations and conventions are used within this thesis:

Abbreviations

| | |
|-------|---|
| GP | General Practitioner |
| EPDS | Edinburgh Postnatal Depression Scale |
| ID | Interpretive Descriptive |
| LMC | Lead Maternity Carer |
| MDD | Major Depressive Disorder |
| MMH | Maternal Mental Health |
| MRI | Magnetic Resonance Imaging |
| NICE | National Institute for Health and Care Excellence |
| NMMG | National Maternity Monitoring Group |
| PMMH | Perinatal Maternal Mental Health |
| PMMRC | Perinatal and Maternal Mortality Review Committee |
| UK | United Kingdom |

Conventions

| | |
|----------------|---|
| <i>Italics</i> | Indicates the speech of the participants |
| (n=) | Indicates the sample size of the study |
| ... | Indicates that words or phrases have been eliminated from the transcripts |

[] Indicates that comments have been added by the researcher to clarify aspects of the transcripts

Chapter Two: Literature Review

Introduction

This chapter explores the current literature in relation to maternal mental health, examining the significance that maternal mental health problems have for a woman's health and wellbeing, with a focus on the antenatal period. It concentrates on maternal mental health problems that are considered to be mild or moderate in nature, as anecdotally midwives are more involved with the assessment and referral of these conditions. The review explores the evidence related to maternal mental health screening and assessment practices, with a focus on their use in the antenatal period.

The databases included in the literature search were: MEDLINE (via EBSCO), CINAHL (via EBSCO), Interim, Pubmed, The Cochrane Library (via Wiley), MIDIRS, PsycINFO (via OVID), and ScienceDirect. A search strategy was used which included key terms and related words, for example: 'maternal mental health', 'assessment of maternal mental health', 'midwives' perceptions of maternal mental health', 'antenatal screening maternal mental health', 'antenatal anxiety'.

In order to be included, articles had to fit the following criteria: they had to have been published from 2007 onwards, they had to be in English language publications, and they had to have originated from professional journals. The initial literature review was conducted in 2014, prior to the development of the research question. According to Thorne (2008) this is important for an interpretive descriptive study. It enables the study to be grounded in existing knowledge, and to critically reflect on the knowledge that already exists and what is not yet substantiated. A further review of the literature was done in 2015 to support the discussion of the research results.

Anecdotally, the focus on maternal mental health has related to the postnatal period, where the negative effects of maternal mental health problems are well-understood and screening is routinely applied.

Background

Perinatal depression is the most common complication of childbirth (Doering & Pizur-Barnekow, 2010). It is defined as depression that occurs during pregnancy or in the year following birth (Schmied, Johnson, Naidoo, Austin et al., 2013). However, the classification of perinatal maternal mental health problems is broad, incorporating anxiety and mood disorders along with depression and more serious mental illness (Rowe, Fisher, & Loh, 2008).

A report on maternal deaths in Australia from psychiatric causes (1994-2002) showed that 65% of the 26 deaths during this period occurred during pregnancy (Austin et al., 2008). The Mater-University of Queensland Study of Pregnancy (MUSP) also highlighted the significance of depression occurring during the antenatal period (measured by the Duke Social Support Index) finding that perinatal depression is at its highest during pregnancy. This study reported that 20.5% of women (n=6703) reported experiencing two or more symptoms of depression during the antenatal period (Najman et al., 2005).

In New Zealand, the 'Growing up in New Zealand Study' examined a sample of 5664 women in their third trimester of pregnancy, and 11.9% of these women had Edinburgh Postnatal Depression Scale scores of 13 or above, indicating antenatal depression/anxiety (Waldie et al., 2015). The importance of the antenatal period was also suggested in a review of longitudinal studies, which found that women were more

likely to report feeling depressed during pregnancy than during the postnatal period (Schmeid et al., 2013).

The differences in reported rates of perinatal depression and anxiety in these studies may have been influenced by the different screening tools used. This highlights the significance of these tools in the classification of maternal mental health problems, emphasising potential complexities in the identification of maternal mental health problems. The evidence collectively shows the prevalence of depression and anxiety symptomology during pregnancy, but the prominence and profile of maternal mental health in antenatal care are evidently not synonymous with risk. Alder, Fink, Urech, Hosli, and Bitzer (2011) and Fahey and Shanessa (2013) emphasise the current focus of antenatal care being the physical wellbeing of the mother and developing baby, and that maternal mental health is not cohesively and routinely assessed.

Maternal mental health has traditionally been viewed from a biomedical stance, perhaps steering understanding and focus away from social and life changes (Emmanuel & John, 2010). Pregnancy and the transition to motherhood is acknowledged as a time of complex physical, psychological, and social change that contributes to women being more vulnerable to stress, anxiety, and depression (Emmanuel & John, 2010). This adds complexity to the assessment of maternal mental health—identifying where these vulnerabilities change from being a normal and expected part of a woman's experience to becoming problematic and impacting on her mental health.

There is now a growing body of evidence illuminating potential detrimental effects as a result of women experiencing stress, anxiety, and depression during the perinatal period (see for example Alderdice et al., 2013; Dunkel-Schetter, 2011; George, Luz, De

Tychey, Thilly, & Spitz, 2013). This highlights the importance of these symptomologies, which may be considered to be ‘mild’ or ‘moderate’ in nature.

This review explores the impact that stress, anxiety, and depression could have on women’s perinatal health and wellbeing, and also the associated complexity that these may have for the antenatal assessment of maternal mental health.

Psychosocial Risk

Evidence suggests that psychosocial factors are important predictors of maternal mental health risk. A review of longitudinal studies investigating the factors that impact on the mental health of women in Australia and New Zealand found that social risk factors and a history of mental health problems were strong predictors of maternal mental health risk (Schmied, Johnson, Naidoo, Austin et al., 2013). Chronic and acute stresses from life events and becoming a parent under the age of 20 (associated with poorer socio-economic outcomes rather than age per se) were identified as social variables that had the most impact on perinatal maternal mental health. Other psychosocial risk factors such as low socio-economic status, low social support, and interpersonal violence were identified as important (Schmeid et al., 2013).

A large prospective Australian study investigating antenatal risk factors for postnatal depression (n=35, 374) assessed symptoms using both the Edinburgh Postnatal Depression Scale and a self-report psychosocial risk questionnaire (PSRFQ). This study found that a previous history of depression, and psychosocial variables such as low practical and emotional support and antenatal anxiety, were major risk factors for perinatal depression (Milogram, Gemmill, Bilszta, Hayes et al., 2008). A more recent

systematic review examining the risk factors for antenatal anxiety and depression mirrored Milogram et al.'s findings (Biaggi, Conroy, Pawlby, & Pariante, 2016).

There are many qualitative research studies that identify the importance of social support for women throughout the perinatal period, and its protective value in reducing perinatal anxiety and depression (see for example Kumar & Oakley Browne, 2008; Medina & Magnuson, 2009; Mendelson, Leis, Perry, Stuart, & Tandon, 2013; Reid, Power, & Cheshire, 2009; Rhian & Simon, 2012; Zlotnick, Capezza, & Parker, 2011). These studies refer to social support as being support from a partner, family, friends, or social groups or networks within the community.

Social support or a woman's perception of her social support evidently represents an important variable for emotional wellbeing, and this is a consideration for its inclusion in antenatal maternal mental health risk assessment. A woman's perception of what constitutes good support is individual, and her feeling that she is loved and respected as a result is salient for her health and wellbeing, along with the actual support that she receives (Meadows, 2011).

Family violence has also been identified as a significant risk factor for women experiencing depression in the perinatal period (Gao, Paterson, Abbott, Carter, & Iusitini, 2010; Miskurka, Zunzunegui, & Goulet, 2012; Postmus, Huang, & Mathisen-Stylianou, 2012). It is recommended by the New Zealand College of Midwives that all women in New Zealand are routinely screened for family violence in the perinatal period (New Zealand College of Midwives, 2015). This is done by the LMC midwife during the perinatal period and also by core midwives working in the hospital if women are admitted to their care. However, data collected by the Perinatal and Maternal

Mortality Review Committee (PMMRC) suggests that not all women routinely receive family violence screening during the perinatal period (PMMRC, 2015).

The study by Gao et al. (2010) was done in New Zealand, examining the association between maternal intimate partner violence and postnatal depression at six weeks postpartum in a cohort of Pacific Island women (n=1376). They assessed postnatal depression using the Edinburgh Postnatal Depression Scale, and intimate partner violence using the Conflict Tactics Scale. After adjusting for many socio-demographic and maternal risk factors, results showed that women who had experienced any physical violence from an intimate partner in the previous 12 months were more than twice as likely to report symptoms of postnatal depression at six weeks postpartum.

Collectively this evidence shows the significance of psychosocial risk factors and their predictive value for maternal mental health risk. It shows that psychosocial risk is multifactorial and highlights the importance of incorporating psychosocial risk factors into maternal mental health assessment and screening.

Anxiety

A degree of anxiety and stress would be considered normal in the perinatal period, but for some women this anxiety can become a serious problem and affect their health and wellbeing (Dunkel Schetter, 2011). This section explores the literature on anxiety and women's wellbeing during pregnancy.

In a large UK study by Henderson & Redshaw (2013) data from a national survey on 5332 women was examined. The survey enquired about perinatal health and wellbeing. The survey found that 14% of women self-reported anxiety during pregnancy, and just

5% during the postnatal period. Antenatal anxiety was found to be associated with younger age, being a single parent, living in a disadvantaged area, being from a minority ethnic group, and having long-term health problems. It also found significant comorbidity between reported anxiety and depression symptomology, with 46% of women who reported anxiety in the perinatal period also reporting symptoms of depression. This study had a large sample size, although the low levels of self-reporting of symptoms by women could potentially have been a limiting factor.

In a prospective Swedish study investigating anxiety symptoms during the first trimester of pregnancy, 916 women were assessed using the Hospital Anxiety Depression Scale (HADS-A). The prevalence of anxiety symptoms was found to be 15.6% (Ruburtsson, Hellstrom, Cross, & Sydsjo, 2014). This study also found correlations between anxiety symptoms in pregnancy and a range of psychosocial risk factors, including having a history of anxiety or depression, being unemployed, being less educated, and not speaking the native language.

Anxiety in pregnancy has been shown to be associated with antenatal depression (Austin et al., 2012; Highet, Gemmill, & Milgrom, 2011; Karaçam & Ançel, 2009; Schmied et al., 2013) and with postnatal depression (Coelho, Murray, Royal-Lawson, & Cooper, 2011; Martin, Vikram, Shekhar, & Mario, 2007). For example, in a large prospective Australian study investigating antenatal risk factors for postnatal depression (n=35,374), it was found that women with antenatal anxiety/depression (measured with the Edinburgh Postnatal Depression Scale) were 5.6 times more likely to experience postnatal depression (Milogram, Gemmill, Bilszta, Hayes et al., 2008).

Identifying women suffering from anxiety symptoms can be problematic. According to Martin et al. (2007), women experiencing anxiety or panic attacks are less likely to seek professional help than those reporting symptoms of depression, yet anxiety symptoms can be debilitating. An English qualitative study captured women's experiences of mild to moderate antenatal anxiety/depression using semi-structured interviews. The impact of this mild to moderate anxiety/depression on the women included changes in eating habits, frequent crying, feelings of panic, agoraphobic-type behaviour, decreased energy, and negative effects on relationships (Furber, Garrod, Maloney, Lovell, & McGowan, 2009).

Furber et al. (2009) conducted a qualitative research study in the UK (n=24) exploring the experiences of women who had self-reported mild to moderate psychological distress to their midwife antenatally, and the impact this had on their lives. They found that anxiety was frequently disclosed by these women, but anxiety symptoms may not be identified by using the National Institute for Health and Care Excellence (NICE) questions which are recommended for use antenatally. According to Furber et al., as these questions focus on the identification of major depression, some women with symptoms of anxiety who do not also feel depressed may not be identified. Furber et al. stressed the importance of the accurate assessment of maternal mental health and identification of 'mild' anxiety and depression in the light of its negative effects.

Effects of Antenatal Maternal Mental Health Problems

The effects of maternal mental health problems are evidently far-reaching and interrelating, evidence illuminating detrimental effects for health and wellbeing beyond perinatal maternal mental health. There is a growing body of evidence which suggests

that antenatal anxiety and depression represent key risk factors in the etiology of preterm birth. The risk was estimated to be 1.5 times higher after adjusting for covariates (Dunkel Schetter, 2011; Smith, Shao, Howell, Lin, & Yonkers, 2011).

Preterm birth

There is a growing body of evidence indicating an association between antenatal anxiety and depression, and an increased risk of preterm birth (birth prior to 37 completed weeks of pregnancy). A large prospective Swedish study (n=2904) found a positive correlation between antenatal depression and preterm birth. Symptoms of depression were measured using the Edinburgh Postnatal Depression Scale (EPDS), with a score of 12 or more indicating depression (Fransson, Ortenstrand, & Hjelmstedt, 2011). As symptoms of anxiety and depression often coexist (Highet et al., 2011) anxiety could also be a significant variable within these results. Symptoms of anxiety and depression might not be differentiated using the Edinburgh Postnatal Depression Scale.

A systematic review of 80 large studies, the majority of which were prospective in nature, showed a positive correlation between chronic antenatal stress and anxiety and an increased incidence of preterm birth, irrespective of ethnicity (Dunkel Schetter, & Glynn, 2010).

A large Danish prospective cohort study by Tegethoff, Greene, Olsen, Meyer, and Meinlschmidt (2010) investigating maternal anxiety and stress during pregnancy (n=78,017) also concluded that antenatal stress and anxiety increased the incidence of preterm birth. This study measured women's anxiety and stress at around 30 weeks' gestation by using questionnaire tools for assessing life stress and emotional symptoms

during pregnancy. The researchers adjusted their analysis for several major potential confounders including maternal age, parity, pre-pregnancy body mass index, socioeconomic status, smoking status, and the presence of hypertension and diabetes during pregnancy, thus adding strength to the results.

Many other studies also highlight a positive correlation between antenatal depression/anxiety and preterm birth, compounding the evidence and strengthening this association (Adam & Katherine, 2009; Chen, Lin, & Lee, 2010; Latendresse, 2009; Misund, Nerdrum, Bråten, Pripp, & Diseth, 2013; C. E. Rogers, Lenze, & Luby, 2013; Saroj & Lex, 2008; Surkan, Gottlieb, McCormick, Hunt, & Peterson, 2012; Vigod, Villegas, Dennis, & Ross, 2010). Different measures of anxiety and depression were used in these studies, and the classification of symptoms is not cohesive (some studies focused on anxiety symptoms and others measured symptoms of depression, or a combination of these symptomologies). The large samples and prospective nature of many of these studies represents a strength, and the results collectively show evidence.

There are many hypotheses as to the mechanisms for this association, ranging from inflammatory processes and neuroendocrine mechanisms to immune-mediating processes and behavioural causes (Dunkel Schetter, 2011). A positive association between antidepressant medication and preterm birth raised the question of a link between perinatal anxiety and depression per se and preterm birth risk (Allen, Cristofalo, & Kim, 2010; Korja, Savonlahti, Ahlqvist, Björkroth et al., 2008). However, the research studies linking a range of antenatal anxiety and depression symptoms with an increased incidence of preterm birth (some research also adjusting for medication as a confounding variable) collectively signify strong evidence.

Idiopathic preterm birth could account for up to half of all preterm births (Goldberg et al., 2008). This has significant implications for perinatal mortality because spontaneous preterm birth is the second leading cause of perinatal mortality in New Zealand, as identified by the Perinatal and Maternal Mortality Review Committee (2014). In its 2013 annual report, the National Maternity Monitoring Group discussed objectives to monitor preterm births as a result of rising rates. Improvements to women's mental health during pregnancy could potentially have positive counterproductive effects on rates of preterm birth, along with its associated mortality and morbidity.

Effects on birthweight

There is some evidence that suggests an association between antenatal anxiety and depression and low birthweight infants (see for example Bansil et al., 2012; Bergman et al., 2012; Diego et al., 2009; Khashan, Everard, McCowan, Dekker, Moss-Morris et al., 2014; Pereira et al., 2011; Steegers et al., 2010).

The strongest evidence for this association is from a large prospective cohort study (n=5606) by Khashan et al. (2014). This study assessed participants for symptoms of stress, anxiety, and depression in six centres in four developed countries at 15 and 20 weeks' gestation, using the Spielberger State-Trait Anxiety Inventory and the Edinburgh Postnatal Depression Scale. An ultrasound scan was performed at 20 weeks gestation and fetal weight was estimated. After adjusting for several potential confounders (for example maternal age, body mass index, socioeconomic status, smoking), a positive correlation was found between maternal stress, anxiety, and depression at 20 weeks' gestation and babies that were small for gestational age (SGA).

The effects of SGA in this study were found to be strongest in males (Khashan et al., 2014).

An Israeli longitudinal study by Kaitz, Mankuta, Rokem and Farone (2015) examining the relationship between antenatal anxiety and infant birthweight (n=212) also found that this association was dependent on the sex of the baby. Anxiety was assessed during the third trimester of pregnancy using the Beck Anxiety Inventory (BAI) and results highlighted pronounced gender differences in birthweight and weight at one month of age in relation to mothers who were anxious: male infants in this study weighed more than those in the control group (i.e. mothers who were not anxious), and female infants weighed less than those in the control group. This study also claimed that even mild anxiety evidently had an effect on infant birthweight.

Research examining women and their offspring participating in the Mater University Study of Pregnancy birth cohort (n=2113) tested for symptoms of anxiety and depression along with comorbid anxiety and depression in relation to lower birthweight. Only when these symptoms coexisted was a relationship seen with lower birthweight infants (Betts, Williams, Najman, Scott, & Alati, 2013).

The relationship between antenatal anxiety/depression and low birthweight infants was challenged by results from a large observational cohort study (n=1719) by Ibanez, Charles, Forhan, Thiebaugeorges, Kaminiski et al., (2012). In this research maternal symptoms of anxiety and depression were assessed between 24 and 28 weeks' gestation using both the Centre for Epidemiological Studies-Depression Scale (CED-D) and the State Trait Inventory Anxiety (STAI). No association was found between maternal anxiety and/or depression symptoms and low (or differences in) birthweight.

Research, therefore, does not show a clear association between antenatal anxiety/depression and low birthweight infants. Although not conclusive, some of this evidence does suggest possible relationships between antenatal stress, anxiety, and depression and resultant effects on fetal growth, further suggesting the possible negative outcomes of antenatal maternal mental health problems. The notion of a psychological/physiological link between antenatal maternal stress, anxiety, and depression and negative fetal outcomes is further evident in research around fetal neurodevelopment and child health.

Effects on fetal neurodevelopment and child health

There is a growing body of evidence that implies that prolonged stress and anxiety during pregnancy could have negative effects on fetal neurodevelopment and child developmental and health outcomes (see for example Buss, Davis, Muftuler, Head & Sandman, 2010; Dunkel Schetter & Tanner, 2012; Glover, Bergman, Sarkar, & O'Connor, 2009; Kingston, Tough, & Whitfield, 2012; Pereira et al., 2012).

For example, in an American prospective longitudinal study a final cohort of 35 women and their children were studied, and maternal antenatal anxiety was measured at 19, 25, and 31 weeks' gestation using a 10-item pregnancy anxiety scale. High pregnancy anxiety at 19 weeks' gestation was found to be related to a reduction in grey matter density on magnetic resonance imaging (MRI) scans when the children were between six and nine years old (Buss, Davis, Muftuler, Head & Sandman, 2010).

This association between antenatal stress and anxiety and a physiological response has been identified by research studies, which have found a measured physiological link between antenatal stress and anxiety and raised maternal and fetal cortisol levels. (See

for example Baibazarova et al., 2010; Bergman et al., 2010; Glover, Bergman, Sarkar, and O'Connor). These findings support the hypothesis that maternal emotions can have a physiological influence on the fetal environment.

An English study by Glover, Bergman, Sarkar, and O'Connor (2009) of women with low-risk pregnancies having an amniocentesis (n=262) found a positive correlation between maternal and amniotic cortisol levels, which were strongly related to measured maternal anxiety. A self-rating Spielberger questionnaire was given to each woman to complete 15 minutes prior to the amniocentesis. A maternal blood sample was then taken just before the procedure and a sample of amniotic fluid was taken during the amniocentesis, both for examination of cortisol levels. Results suggest that a woman's emotional state can have a direct effect on placental function.

A prospective longitudinal study by Baibazarova et al. (2010), examining a sample of 158 women undergoing an amniocentesis in the Netherlands, investigated the influence of antenatal maternal stress on birth outcomes and early infant temperament. In this research, maternal self-reports of stress and anxiety were measured by using the 14-item Perceived Stress Scale (PSS) which measures perceived stress over a four-week period from the two weeks prior to the amniocentesis until the day of the results. Pregnancy anxiety was measured using the Pregnancy Related Anxiety Questionnaire-Revised (PRAQ-R), and fear of birth using the Fear of Birth Scale. Fifteen minutes prior to the amniocentesis (consistent with the above study by Glover et al., 2009) the Spielberger questionnaire was given to women to assess their levels of anxiety. A maternal blood sample was taken just prior to the procedure and a sample of amniotic fluid was taken during the amniocentesis and both were analysed for cortisol levels. Results showed a positive association between maternal plasma and amniotic cortisol levels, but

questionnaire measures of maternal anxiety were found to be unrelated to this physiology. Results did indicate a correlation between blood and amniotic cortisol levels and lower birthweight infants, which suggests a possible physiological response to maternal anxiety.

Research by Bergman et al. (2010a) studied amniotic cortisol levels and child developmental outcomes at 17 months, and while they initially found a positive association between raised amniotic cortisol levels and lower cognitive scores in the offspring, a further study by Bergman et al. (2010b) reported no relationship between the two variables. More research is needed, but this trend in evidence suggests that increased maternal stress and anxiety during pregnancy could have resultant physiological effects. Symptoms of depression were not measured in these studies, but as research has shown that symptoms of anxiety and depression often coexist, antenatal depression could also be a significant variable.

The relationship between antenatal stress and anxiety and negative effects on fetal neurodevelopment was also researched by Van Batenburg-Eddes, Brion, Henrichs, and Jaddoe et al. (2012), who examined antenatal parental stress and anxiety and child attention problems. This research was a cross-cohort consistency study based on data from two large prospective population-based studies which explored this correlation. These studies were the Generation R study (n=2280), conducted in the Netherlands, and the Avon Longitudinal Study of Parents and Children (n=3442), conducted in the UK. A positive association was found in both of these cohorts between antenatal maternal symptoms of anxiety and depression and a higher risk of child attention problems at age three (Generation R) and age four (ALSPAC). Whilst these findings provide support for the notion of an intrauterine effect, this was challenged when confounding variables

(socioeconomic) were considered. Maternal symptoms of anxiety and depression three years following birth were also found to be associated with child attention problems, irrespective of maternal symptoms experienced during the antenatal period. The researchers concluded that some intrauterine effect was likely, but that it was possible that this association could partially be explained by confounding variables (socioeconomic), and also possibly by genetic influences.

An American prospective study challenged the association between antenatal anxiety and depression and negative effects on fetal neurodevelopment. This study started with a cohort of 689 women, and the final cohort was 358. Symptoms of anxiety and depression were measured before 20 weeks' gestation by using the State-Trait Anxiety Inventory and the Centres for Epidemiological Studies Depression Scale. When participants were assessed at four months postpartum the women completed the 10-item Perceived Stress Scale and the Edinburgh Postnatal Depression Scale. Cognitive development was assessed in infants at 12 months using the Mullen Scale. Results of this research showed no significant negative consequences of perinatal anxiety or depression on infant cognitive development (Keim, Daniel, Dole, Herring et al., 2011). This study does, however, have some significant limitations. The final cohort of 358 is relatively small to challenge the developing trends in evidence. The attrition of participants during the study could also be of significance, as it was identified that women with significant perinatal anxiety/depression symptomology were less likely to participate in the postnatal follow-up assessments. This factor could have had a significant effect on the final results.

Some research suggests that negative effects from maternal mental health problems may impact on the child's health and extend into adulthood. For example, a large

Australian research study (n=3099) which used data from the Mater University Study of Pregnancy (MUSP) used latent class growth analysis with parallel processes to investigate the relationship between antenatal stress, anxiety, and depression and adult offspring behavioural and emotional problems. After adjusting for a wide range of confounding variables, results showed a positive correlation between high levels of stress, anxiety, or depression during pregnancy and increased levels of behavioural problems and depression in offspring at age 21 (Betts, Williams, Najman, & Alati, 2014).

A relationship between common psychosocial stress during pregnancy and paediatric disease in the offspring was investigated in a large Danish cohort study based on prospective data from the Danish National Birth Cohort (n=66,203). Levels of maternal emotional and life stress were assessed during a telephone interview conducted at 30 weeks' gestation, with questions derived from the Symptom Check List-90 and the General Health Questionnaire. Information about childhood diseases was accessed from the Danish National Hospital Register. In this research, confounding variables such as socioeconomic status, parity, maternal age, and self-reported general maternal health were adjusted for. The research also controlled for hypertension during pregnancy, gestational diabetes, and maternal smoking. Results showed a positive association between maternal life stress during pregnancy and 11 out of 16 categories of diseases of childhood including infections, diseases of the respiratory system, and mental health and behavioural problems (Tegethoff, Greene, Olsen, Schaffner, & Meinlschmidt, 2011).

Although these two studies conducted by Betts, Williams, Najman, and Alati (2014) and Tegethoff, Greene, Olsen, Schaffner, and Meinlschmidt (2011) adjusted for

confounding variables, there are numerous variables associated with stress, anxiety, and depression during pregnancy that could potentially affect the outcome. However, the large sample size and longitudinal design of these research studies add strength to their results, which suggest that stress, anxiety, and depression during pregnancy could have negative effects on the health and wellbeing of offspring.

This evidence collectively suggests potential resultant effects of antenatal stress, anxiety, and depression on the cognitive development, behavior, and emotional and physical health of the child, impacting on child health and wellbeing. O'Donnell et al. (2009) concluded that 'the evidence for an association between maternal stress, depression or anxiety in pregnancy and an adverse neurodevelopmental outcome for the child is now substantial' (p. 290).

Ongoing risks associated with maternal anxiety and depression

Evidence points to a cascade of risks and complications in association with antenatal maternal anxiety, stress, and depression. Beyond the suggested increase in risk of preterm birth, mothers giving birth to infants preterm have been found in some studies to have an increased risk of postnatal depression (Bener, 2013; Kukreja, Datta, Bhakhri, Singh, & Khan, 2012; Misund et al., 2013; Vigod et al., 2010) .

Other research has shown that maternal-fetal attachment may be impaired as a result of antenatal anxiety/depression (Korja, Savonlahti, Ahlqvist-Bjorkroth et al., 2008; McFarland et al., 2011; Perry, Ettinger, Mendelson, & Le, 2011). For example, McFarland et al. (2011) conducted a longitudinal study (n=61) comparing maternal fetal attachment scores of women diagnosed with major depressive disorder (MDD) and non-depressed women during pregnancy. These were measured antenatally during semi-

structured interviews and using a MFAS (Maternal Fetal Attachment Scale) between six and 28 weeks' gestation, and again between 36 and 38 weeks' gestation. Results showed significantly lower levels of maternal fetal attachment scores in the MDD group. Limitations of the study were the inclusion criteria of women characterised as having a depressive disorder considered to be major, and the lack of assessment of maternal fetal attachment behaviour following birth. The longitudinal nature of the study does however provide insight into the potential barrier to maternal infant attachment that depression may present.

Negative effects of antenatal anxiety/depression may ripple out further to the duration of breastfeeding. Perinatal anxiety and depression has been found in some studies to be synonymous with earlier weaning in spite of the protective value that breastfeeding has for depression (Hahn-Holbrook, Haselton, Dunkel Schetter, & Glynn, 2013).

The research by Hahn-Holbrook, Haselton, Dunkel Schetter and Glynn was a prospective study following a sample of 205 American women from pregnancy to two years following birth, investigating whether breastfeeding reduced symptoms of depression. Symptoms of depression were assessed by using the Centre for Epidemiological Studies Depression Scale (CES-D) four times during both pregnancy and the postnatal period. Results showed a positive association between antenatal depression and lower rates of exclusive breastfeeding at three months. Breastfeeding at three months also predicted a lower risk of ongoing depression.

Maternal mental health morbidity could continue well beyond the perinatal period. The Mater-University of Queensland Study of Pregnancy, a large prospective cohort Australian study that has followed mothers and their children for over 20 years (n=7223), found that women who had antenatal symptoms of depression were more

likely to also have symptoms of depression 14 years later (n=5185, equating to 72% of the initial sample of women). Symptoms of depression were measured throughout the study using the Delusions States Symptoms Inventory, designed to assess for both anxiety and depression symptomology (Najman et al., 2005). The participants for this research were recruited from the public health system and were more likely to be from lower socioeconomic backgrounds. This has been identified as a potential limiting factor as this important variable could have many influencing factors on a woman's risk of depression 14 years after birth (Najman et al., 2005). In spite of these limitations, the results of this large prospective study provide valuable insight into the possible 'ripple effects' from antenatal anxiety and depression.

The body of evidence highlighting the physiological and psychological effects of antenatal stress, anxiety, and depression has some important limitations. There are many confounding variables associated with the relationship between antenatal stress, anxiety, and depression and the professed outcomes. Also, the different measures of anxiety and depression are significant factors in the research results. However, even accounting for this there are clear trends in evidence suggesting the importance of this relationship.

Intergenerational risk and disadvantage is created by a myriad of factors, but poor maternal mental health is evidently a core variable. The growing body of evidence indicates the importance of maternal mental health assessment and screening during pregnancy and the provision of appropriate services to meet women's needs.

Antenatal Maternal Mental Health Assessment and Screening

The terms 'maternal mental health assessment' and 'maternal mental health screening' are used interchangeably in perinatal mental health literature, but according

to Beyond Blue (2011) there is an important difference. Beyond Blue described assessment as being the clinical evaluation of a woman's maternal mental health risk factors and symptoms (for example, the woman's history and family history of mental health problems, symptoms that may be associated with a mental health problem, and current wellbeing) and this process can be enhanced by using screening tools. Maternal mental health screening, on the other hand, is described as using a diagnostic test to detect women who have probable mental health problems, for example the Edinburgh Postnatal Depression Scale.

Optimally, midwives should assess a woman's current emotional wellbeing during pregnancy (NICE, 2014; Reilly et al., 2013) along with asking about her mental health history, as recommended by the Confidential Enquiry into Maternal Deaths (Lewis, 2012; Reilly et al., 2013). The Ministry of Health (Healthy Beginnings, 2011) also recommends that women receive psychosocial assessment during pregnancy.

According to the UK NICE Guidelines (2014) which New Zealand follows, all women should receive maternal mental health screening at their first contact with maternity professionals and during the early postnatal period. These guidelines recommend that clinicians ask four key questions to assess the woman's mental health and wellbeing:

| | |
|---|--|
| 1 | During the past month, have you often been bothered by feeling down, depressed or hopeless? |
| 2 | During the past month, have you been bothered by having little interest or pleasure in doing things? |
| 3 | Over the last two weeks, how often have you been bothered by feeling nervous, anxious, or on edge? |
| 4 | Over the last two weeks, how often have you been bothered by not being able to stop or control worrying? |

(NICE guidelines, 2014, section 1.5.3)

An English study explored the application of the four screening questions recommended by the National Institute for Health and Care Excellence (NICE) Guidelines in the antenatal period by using focus groups (n=50). All of the focus groups reported inconsistent use of the questions antenatally and said that the booking appointment was too short to accommodate these questions (Lees, Brown, Mills, & McCalmont, 2009). This study is small and was conducted in one area only so in isolation has limited strength, but suggests that the screening questions recommended by the NICE Guidelines may not be routinely or cohesively applied.

The New Zealand Perinatal and Maternal Mortality Review Committee seventh annual report (2013) highlights the importance of mental health screening during pregnancy. This report identified that when maternal deaths were considered to have been potentially avoidable, a common contributory factor was a lack of policies, protocols, and guidelines, and this included a lack of guidelines for maternal mental health screening.

There is both a national and an international call for midwives to assess women's mental health during pregnancy. It could be argued that maternity care in the developed world appears to be sitting behind the evidence regarding maternal mental health risk. The focus of antenatal care is the physical wellbeing of the mother and the developing baby, and a woman's mental health is not consistently a part of the routine antenatal assessment (Alder, Fink, Urech, Hosli, & Bitzer, 2011; Fahey & Shanessa, 2013). The body of evidence, however, demonstrates the frequency of maternal mental health problems and also their associated morbidity (and sometimes mortality) questioning the optimal maternal mental health assessment and screening process.

There is some contention around the effectiveness of routine screening for identifying perinatal anxiety and depression (Armstrong & Small, 2010) and there is a significant gap in evidence pertaining to the efficacy of maternal mental health screening. Some research does indicate the worth of using screening tools to identify mental health risk (Austin, Reilly, & Sullivan, 2012; Lusskin, Pundiak, & Habib, 2007; Rilly et al., 2013). However, it has been argued that this evidence is challenged by a lack of auditing of the resultant morbidity outcomes. Austin et al. highlight that the Australian public health reforms on maternal mental health assessment and screening have not been substantiated by any national data providing evidence of resultant improved health outcomes. The consideration of beneficence over maleficence is an important deliberation when thinking about the application of routine maternal mental health screening to clinical practice (Krantz et al., 2008).

In Australia, the National Perinatal Depression Initiative (NPDI 2008-2013) recommends routine early screening and psychosocial assessment to aid detection of perinatal depression (Marnes & Hall, 2013). Beyond Blue (2011) also recommends in its clinical practice guidelines that all women receive routine assessment of their emotional health and wellbeing throughout the perinatal period. This dual assessment should comprise assessment questions related to the woman's psychosocial wellbeing, along with screening using the Edinburgh Postnatal Depression Scale (EPDS).

The introduction of this universal perinatal maternal mental health and psychosocial assessment programme in Australia was critiqued by Laios, Rio and Judd (2013). They argued that there was a dearth of evidence supporting the benefits of universal screening, and raised the issue of beneficence over maleficence. Their rationale for this argument was the potential harm that false positive and false negative screening results

could cause for women; some women as a result could be ‘labelled’ as being at-risk or depressed when they did not consider that they were.

A Cochrane review explored randomised and quasi-randomised controlled trials relating to the antenatal assessment of maternal mental health and its effectiveness in reducing perinatal morbidity. It highlighted that there was not enough strong evidence to be able to conclusively ascertain the effectiveness of antenatal maternal mental health assessment in relation to the reduction of perinatal morbidity, due to the many confounding variables impacting on the research results. This review did however identify trends towards an increased level of clinician awareness of maternal mental health risk factors when women received maternal mental health screening, and concluded that the assessment of both women’s concurrent mental health risk and their symptom profiles would identify more women at risk (Austin, Priest, & Sullivan, 2008).

Anecdotally, the Edinburgh Postnatal Depression Scale (EPDS) is the most commonly used screening tool by midwives in New Zealand during the perinatal period, and this is routinely used postnatally.

Edinburgh Postnatal Depression Scale

The Edinburgh Postnatal Depression Scale was initially constructed by Cox et al. as a one-dimensional measure of postnatal depression. It is well-validated and widely used, but arguably used by default for maternal mental health screening during pregnancy (Ji et al., 2011). Considering its application to the antenatal period, there is a dearth of large trials testing its antenatal efficacy.

Some studies have raised concern about the ability of the Edinburgh Postnatal Depression Scale to identify symptoms of anxiety, or differentiate these symptoms from those of depression. For example, Rowe et al. (2008) used the scale to assess a cohort of 138 Australian women on their admission to a mother and baby unit (a residential, non-psychiatric, early parenting service). They discovered that more than half of the women who scored more than 12 on the Edinburgh Postnatal Depression Scale were mislabelled as having probable major depression, and instead had symptoms of anxiety or minor depression, and probably secondary to severe fatigue.

In contrast, a large prospective Australian study (n=3853) incorporating women during pregnancy and the postnatal period replicated the questions related to anxiety on the Edinburgh Postnatal Depression Scale and compared results to a 'Demographic and Psychosocial Risk Factors Questionnaire' that included anxiety-related questions. The findings showed that the two scales revealed similar results, suggesting that the Edinburgh Postnatal Depression Scale is effective in assessing anxiety levels (Swalm, Brooks, Doherty, Nathan, & Jacques, 2010). Unlike the study by Rowe et al. (2008), the women for this study were not identified as attending a mother and baby unit. This factor could have impacted on the results of the two studies.

According to Berdink et al. (2011), the Edinburgh Postnatal Depression Scale has three statements that are directly related to anxiety. These are:

Item 3 – I have blamed myself unnecessarily when things went wrong.

Item 4 – I have been anxious or worried for no good reason.

Item 5 – I have felt scared or panicky for no good reason.

The validity of the Edinburgh Postnatal Depression Scale during pregnancy was investigated by Berdink et al. (2011) by comparing its screening results with the Symptom Checklist 90 as well as a 10-item anxiety subscale, using a sample of 845 Dutch pregnant women at 12, 24, and 36 weeks' gestation. Results found significantly high correlations between results generated by these screening tools ($P < .001$). This study suggested an earlier cut-off score of 11 using the Edinburgh Postnatal Depression Scale during the first trimester of pregnancy and 10 during the second and third trimesters, rather than the cut-off of 13 that is usually used to indicate anxiety or depression in the postnatal period.

These two large studies by Swalm et al. (2010) and Berdink et al. (2011) suggest the effectiveness of the Edinburgh Postnatal Depression Scale as a tool for screening for antenatal anxiety and depression symptoms. The results, however, are influenced by the tools used in the studies as a comparison to the Edinburgh Postnatal Depression Scale. Another significant variable to consider is that many symptoms of depression such as fatigue, appetite changes, and insomnia commonly occur during pregnancy and may not necessarily be indicative of depression or anxiety, but a screening tool is not able to make this differentiation (Altshuler et al., 2008).

A literature review by Johnson et al. (2012) assessed 25 papers that were related to 10 maternal mental health screening tools. Results showed that none of the tools fulfilled all of the requirements for validity, reliability, sensitivity, and specificity and none were consistently effective. This raises the question of the reliance on screening tools for the assessment of maternal mental health.

A further issue regarding the use of screening tools is that some women may not disclose symptoms of depression even when the Edinburgh Postnatal Depression Scale is used (Miller & LaRusso, 2011; Rahman et al., 2013). Hall (2006) conducted a phenomenological study in England, which looked at the experiences of a purposively selected sample of 10 women who had postnatal depression. A common theme was that these women found it difficult to disclose their true feelings, and as a result failed to respond honestly to the Edinburgh Postnatal Depression Scale.

The research study by Hall (2006) illuminates an important limitation of the use of screening tools to screen for perinatal anxiety/depression. Hall concluded that the professional practitioner's overall clinical judgment is pertinent and should override the screening result if not congruent with it. The Edinburgh Postnatal Depression Scale, while not infallible, may be beneficial in raising awareness of maternal mental health problems, and facilitates the discussion of emotions, which can aid clinical assessment (Giardinelli et al., 2011; Robertson, 2010).

However, the use of screening tools is not the only important consideration in maternal mental health assessment and screening. Literature reveals that the stigma surrounding mental health, the lack of clear referral pathways, and midwives' feeling ill-prepared for their assessment role, could be key barriers to effective maternal mental health assessment and screening.

Barriers to effective maternal mental health assessment and screening

Stigma

The body of literature reveals some critical barriers to maternal mental health care, stigma in relation to mental health being one of them. Stigma is a complex social

construct governed by societal forces (Pinto-Foltz & Logsdon, 2008). It is 'linked with illnesses or conditions that are believed to be under the individual's control or manifested as a consequence of unacceptable social behavior' (Pinto-Folz & Logsdon, 2008, p. 21-22). Associated with mental illness, it negatively influences disclosure of symptoms and adherence to treatment (Flynn, Henshaw, O'Mahen, & Forman, 2010; Jorm & Griffiths, 2006; McCarthy & McMahon, 2008; Pinto-Foltz & Logsdon, 2008; Stickney, Yanosky, Black, & Stickney, 2012).

Stigmatising attitudes towards mental health problems were found in a small qualitative study of 24 mental health workers in Portugal (Marques, Figueiras, & Queiros, 2012). Further studies also suggest that health professionals are not exempt from stigmatising attitudes towards perinatal depression (Stewart, 2007; Ungar & Knaak, 2013). For example, midwives' assessment of maternal mental health was explored in an Australian study (McCauley et al., 2011), (n=160). Results showed that more than 60% of the midwives had seen negative responses to women who had maternal mental health problems, and that midwives often avoided women who were experiencing mental illness. A recent cross-sectional survey investigating midwives' knowledge and attitudes around perinatal mental health in Australia (Hauck, Kelly, Dragovick, Butt et al. 2015), (n=238), indicated pervasive negative stereotyping towards women experiencing mental health problems. These research studies raise an important consideration, indicating that midwives' perceptions of mental health and maternal mental health are central to the maternal mental health assessment and screening process.

An Australian qualitative research study (Bilszta, Ericksen, Buist, & Milogram, 2010) investigated women's experiences of having postnatal depression and their

perceived barriers to care. Using focus groups (n=40) they identified that a supportive and understanding approach and good knowledge about available options for maternal mental health care were key attributes for health professionals. When professionals did not validate the woman's distress this was a significant barrier to the woman disclosing her symptoms and seeking help. Results also highlighted the feelings of shame associated with depression. Women in their sample expressed concerns about presenting a negative image as a mother, or fears about losing their children.

An English qualitative study (Flynn, Henshaw, O'Mahen, & Forman, 2010) also illuminated the feelings of guilt that are sometimes associated with maternal mental health problems. This study used semi-structured interviews to explore women's perspectives on how the maternal mental health referral processes could be improved (n=23). Results highlighted the importance of the language used by professionals and its influence on how women received referral for treatment. For this sample of women the word 'depression' elicited feelings of guilt, signifying personal failure as a mother. Some participants identified that framing the treatment and care more positively and normalising it would make it more acceptable to them.

Although these were all small qualitative studies, none of which were done in New Zealand, they collectively highlight an evidently crucial notion about the importance of women's perceptions of their mental health and the recommended treatment and care. This further illuminates the importance of the stigma that surrounds mental health and it being a barrier to the identification of symptoms and the acceptance of treatment and care. The presence of stigma and its effects also challenges the statistics related to perinatal maternal mental health problems (which exhibit reported levels of mental health problems), as these reported problems may be under-represented.

Midwives' knowledge and skills

Studies have been done internationally which suggest that some midwives do not feel that they have the required knowledge and skills to deal with their role in the assessment of maternal mental health and care of women with perinatal mental health problems. For example, a national survey of Australian midwives' knowledge of antenatal and postpartum depression (n= 815) identified key areas where there were gaps in the midwives' knowledge. These related to the onset, assessment, and treatment of symptoms of depression throughout the perinatal period. Overall the midwives indicated a desire for greater knowledge and increased strategies for the assessment of maternal mental health (Jones, Creedy, & Gamble, 2011).

Studies by McCauley, Elsom, Muir-Cochrane, and Lyneham (2011) and Hauck et al. (2015) found that participant midwives did not feel adequately prepared or equipped with the necessary knowledge and skills to deal with maternal mental health problems. McCauley et al. conducted multi-centre qualitative research with a sample of 161 Australian midwives whose attitudes, skills, knowledge, and experience of caring for women with maternal mental health problems were collected using questionnaires. Results suggested that the midwives did include the assessment of a woman's mental health as part of their antenatal assessment practices, but 93% of the participants indicated that they required additional skills and knowledge regarding the identification of maternal mental health problems. Results also highlighted a lack of knowledge about referral and treatment pathways once maternal mental health problems were identified.

The research study by Hauck et al. (2015) was also done in Australia, and investigated the perceived mental health learning needs of a cross-section of employed midwives in a Perth public hospital (n=238). Data was collected using a survey, and

results indicated that although participants perceived that midwives have a role in the assessment of maternal mental health, the majority felt ill-equipped for this role and showed a strong desire for further knowledge and skills around maternal mental health.

Other research studies internationally have suggested very similar results. For example, a South African qualitative focus group study (n=16) investigating midwives' perceptions of antenatal psychosocial risk assessment discovered that the midwives valued their role in women's antenatal psychosocial assessment, but did not feel that they were adequately equipped to do this (Mathibe-Neke, Rothberg, & Langley, 2014). They identified barriers such as a lack of guidelines for practice or tools for psychosocial assessment, and inadequate resources to refer women on to for psychosocial care.

An English study by Lees, Brown, Mills and McCalmont (2009) used mixed methods to investigate professionals' knowledge of mental health care, and found that 91% of the participant midwives (n=34) felt that their knowledge of perinatal mental health was inadequate, and further training would be of benefit to them.

The results of many of these studies cannot be generalised due to their qualitative nature, and it could be argued that because all the studies were done overseas, their application to the New Zealand midwifery model is limited. However, they yield very similar results, suggesting that midwives could possibly benefit from more preparation and education around the assessment of maternal mental health.

Referral pathways

The Ministry of Health 'Healthy Beginnings' initiative (2011) outlined a lack of consistency and collaboration in the provision of MMH services in New Zealand. The Perinatal and Maternal Mortality Review Committee in its seventh annual report (2013) acknowledged the need for clear maternal mental health referral pathways and collaboration with maternity, child, family, and social services.

It has been identified that many women with maternal mental health problems may have difficulties accessing the appropriate services to support their needs (Makregiorgos, Joubert, & Epstein, 2013). Simply instigating a maternal mental health screening program is not enough to obtain a therapeutic effect (Laios, Rio & Judd, 2013). Laios et al. questioned the effectiveness of universal maternal mental health screening in Australia, and proposed that routine maternal mental health screening alone would not improve wellbeing for women without the integration of mental health into maternity care throughout the perinatal period. They suggested that an effective system would consist of clear and accessible referral pathways connecting multidisciplinary agencies for a holistic approach.

Makregiorgos, Joubert and Epstein (2013) investigated maternal mental health referral practices in Australia. They retrospectively analysed data on all women identified as having a mental health problem who received maternity care at a large hospital over a period of a year (n=319). Psychosocial issues among this group of women were found to be prevalent, and diverse in nature. Results showed that referral to appropriate services was not consistent due to the referral not being offered, the referral being declined by the woman, or the referral not resulting in services being

accessed. Makregiorgos et al. emphasised that a functional maternal mental health referral system is critical for the effective care of women with psychosocial issues.

The importance of interagency collaboration was emphasised by Van der Ham, Berry, Hoehn, and Fraser (2013) who discovered improvements in maternal mental health and responsiveness to infants when maternal, mental health, and child health services became more integrated. The literature in this area was limited, but it does suggest the importance of clear maternal mental health referral pathways along with an integrated, collaborative maternal mental health system.

Summary

Review of the literature reveals the importance that mental health has for maternal health and wellbeing in the antenatal and postnatal periods and beyond, its effects also impacting on child health and development. The evidence indicates that maternal mental health problems considered to be mild or moderate in nature are a relatively common occurrence during pregnancy, and are associated with an increased risk of morbidity (and potentially mortality), highlighting the importance of the identification of risk during pregnancy.

There is evidence suggesting several barriers to the effective assessment of maternal mental health and referral to appropriate services, including the stigma that surrounds mental health, midwives feeling ill-prepared for their role in the assessment of maternal mental health, and the absence of clear referral pathways. This review of the literature highlights that midwives' perceptions of maternal mental health and its assessment antenatally are central to clinical practice in this area, and also shows some of the possible barriers to maternal mental health assessment and referral.

There are currently no New Zealand studies examining how midwives apply maternal mental health assessment and screening to their clinical practice, or how they perceive maternal mental health and their role within it. As the New Zealand model of midwifery differs to that of many other countries, it is important that research captures the practices and perceptions of New Zealand midwives in this area.

Chapter Three: Methodology and Methods

Introduction

This chapter outlines the research process and its application to the study, exploring the methodological underpinnings and rationale for their selection. Ethical concerns/issues are discussed, and the steps taken to address these are described. Recruitment of the participants is examined, summarising the decision making involved in this process and its significance for the study. Data collection methods are described. The salient processes undertaken to promote rigour throughout the research process are described, and the process undertaken to analyse and interpret the data is explained, demonstrating how patterns and themes were revealed and how they lead to making sense of the data. Challenges experienced within the research process are highlighted and examined, showing rationale for decision making.

Methodology

Interpretive descriptive methodology (ID) was selected to facilitate the uncovering of this study's phenomenon. At its foundations interpretive descriptive methodology has a constructionist epistemology, which refers to the nature of knowledge and the way it is understood (Crotty, 1998). Constructionism, or 'the making of meaning', is the belief that knowledge and reality are constructed by the interaction between humans and their social worlds (Crotty, 1998).

Many qualitative research methodologies are steeped in theoretical perspectives or ways of viewing the world (Crotty, 1998). These theoretical perspectives are embodied in the work of philosophers and theorists which historically has had its roots in sociology, psychology, and philosophy. Thorne (2008) describes interpretive description as being 'atheoretical', being driven instead by professional clinical practice

and the interpretation of patterns of experience or understanding. Atheoretical research methodologies are accepted as integral to qualitative research (Sandelowski, 2000). Grant and Giddings (2002) argued that methodological congruence holds greater importance for research than the identification of its philosophical underpinnings.

Interpretive descriptive methodology, while being considered atheoretical, is influenced by both interpretive and post-positivist paradigms. These paradigms influence and drive the methodology, underpinning the research process. According to Guba and Lincoln (1994), post-positivism strives for accuracy. At the same time, post-positivism is open to the belief that there are multiple truths and realities. The post-positivist paradigm recognises that the researcher cannot be value-free (Grant & Giddings, 2002). Interpretive descriptive methodology considers expert clinical knowledge to be a solid grounding for research inquiry (Hunt, 2009).

Interpretive description is considered to have a low inference of interpretation (Thorne, 2008). However, in the words of Sandelowski, 'All inquiry entails description, and all description entails interpretation' (Sandelowski, 2000, p. 335). Researchers using this methodology are concerned with both descriptive validity in accurately describing the events, and interpretive validity, which comes with accurate accounting of participants' meanings that are evident within the event (Sandelowski, 2000), thus reflecting the philosophical underpinnings.

Interpretive description draws from the tenets of naturalistic inquiry, seeing the phenomenon in its natural state (Lincoln & Guba, 1985). Interpretive description was designed for use in the applied health sciences, and is grounded in these professional epistemological foundations (S. Thorne, Kirkham, & MacDonald-Emes, 1997). It

facilitates the generation of knowledge by the identification of themes and patterns within the research data. Findings generated from the identified themes and patterns can then be used to assist in clinical reasoning, and to guide and inform clinical practice (Hunt, 2009; Sandelowski, 2000; S. E. Thorne, 2008).

Interpretive description is particularly useful when researchers strive to know the 'who', 'what', 'where', and 'how' of a phenomenon (Sandelowski, 2000). It facilitates new understanding and clinical knowledge by changing the angle of vision from which the phenomenon is perceived, and generating new insights for clinical application (Thorne, 2008). This relates very well to the research question for this study, and generates a holistic, pragmatic viewpoint from which to see and critically analyse the perceptions and antenatal maternal mental health assessment practices of the midwives.

The value of a paradigm lies in the recognition by practitioners of its capability to address a question or solve a problem with greater success than another (Kuhn, 1970). When analysing the best methodology to facilitate the uncovering of this phenomenon, other qualitative methodologies were considered.

Qualitative descriptive methodology was an option I initially considered using for this study. This would have generated a rich description of the phenomenon, but the focus using this methodology would have been the surface of the words and events (Sandelowski, 2000). The research question concentrates on the participants' perceptions of mental health and its assessment during pregnancy, and interpretive description extends beyond the self-evident, seeking to discover patterns and themes and revealing underlying meaning (Thorne, 2008). It is this meaning that further explains what lies beneath the midwives' perceptions of mental health, and what might

be informing their clinical practices in the antenatal assessment of maternal mental health.

Grounded theory was also considered as a methodology for the research. This is based on symbolic interactionism, which is the derivation of meaning from social interaction. The aim of grounded theory research is the development of theory from social processes (Starks and Trinidad, 2007). For this research it would have been effective in generating theory and understanding regarding the midwives' antenatal maternal mental health assessment practices. However, the aim of this research was not to develop a theory, but to capture the midwives' perceptions of mental health and its antenatal assessment, which are fundamental to the midwives' clinical reasoning and practices.

Interpretive description was a clinically-focused driving force for this research study and facilitated the research question being answered. It stayed close to the voices of the participants while also generating interpretive insight beyond their words. There were challenges with the methodology, the first being that it is relatively new and there was very little literature regarding its practical application. I also found some challenges around the degree of interpretation required. I found, however, that if I remained clinically focused and concentrated on the core question of 'what is happening?' (Thorne, 2008), this guided the degree of interpretation well.

Methods

The research methods used in this study to gather and analyse the data reflect both the research question and the overarching methodology.

Participants

There were 25 participants in total, who formed five focus groups. Participants were all providing lead maternity care to women in the Auckland region. This entailed them providing continuity of care for a caseload of women throughout pregnancy, labour and birth, and the postnatal period. This criterion for recruitment ensured that midwives who were making clinical decisions about the antenatal assessment and screening of maternal mental health, and who would have experience of caring for women with maternal mental health problems, were recruited into the study. (There were no criteria around length of midwifery experience.) Participants also needed to be English-speaking to prevent communication difficulties during data collection.

During the recruitment process I approached group practices of midwives whom I felt would be willing to share their perceptions and practices honestly and openly: those whom I felt were authentic, pragmatic, and for whom self-belief would reign over fear of judgment. The reputation of the group practices and my knowledge of the midwives drove this selection. It was important that participants were recruited who would be willing to be reflective and to explore their feelings and practices around maternal mental health. Thorne (2008) described this as strategically identifying ‘key informants’, the rationale being that some participants will be more able to provide insight into the phenomenon being explored than others.

Sampling

Midwives were recruited from different geographical areas in the Auckland region, incorporating a range of demographics. This included midwives who cared for more Maori and Pacific women, those who performed a greater number of home births, and included both urban and rural practices. The aim of this was not to achieve

representation or for generalisation of the research results, but instead to maximise insight into the perceptions and practices of these midwives regarding maternal mental health.

Sampling was predominantly purposive in nature, ensuring that participants who had experience of the phenomenon being investigated were selected. Sampling after the fourth focus group became theoretical in order to facilitate further investigation and clarification of concepts and themes identified. This was to enable enquiry into possible epidemiological or philosophical influences in antenatal assessment practices and perceptions of maternal mental health. In order to enrich the enquiry with this perspective, a group of midwives who practised in a different demographical setting and assisted many women to birth at home were recruited.

Midwives who worked together in the same practice groups were contacted to participate, with a view to forming focus groups from the same practices. The nature of LMC midwifery practice meant that participants may not have been available for the focus groups due to the unpredictable patterns of their work. I therefore approached all midwives within the practices, knowing that some would not be available. Three recruited midwives in total could not attend the focus groups due to acute work commitments.

Care was taken to ensure that individual midwives did not feel any coercion to take part in the research. Midwives were invited to participate in the study by email and attached was an invitation, information letter, and consent form (Appendix A, B, and C). In cases where I had no response after two weeks, I followed up the email with a phone call to ask if they required any further information about the study. Of the seven

midwifery practices contacted, two did not take part in the research. One of these practices was really interested in participating in the study but found it difficult to arrange for the group of midwives to meet with us together. The other practice declined as its midwives were very busy caring for large caseloads. Recruitment was trouble-free, and there appeared to be plenty of interest in the research.

Being a practising midwife, I knew many of the midwives in this geographical area. It was therefore particularly important that they did not feel compelled to participate in the research. This was discussed with my primary supervisor, and a decision was made that if I had any concerns that midwives might have felt pressured to participate, she herself would approach them for recruitment.

Data collection

Data was collected using focus groups, each comprising between two and six participants. The aim of this method is to collect rich descriptive data in order to reveal the phenomenon as it exists in its natural environment (Sandelowski, 2000). Using focus groups capitalised on group interaction. During their debate and interaction the midwives revealed the differences and similarities in how they perceived maternal mental health and its antenatal assessment, and what underpinned their perceptions. According to Thorne (2008) this group interaction enriches understanding of the beliefs and attitudes that influence behavior.

Wilkinson (2014) highlighted that the interaction within focus groups not only reveals shared experiences, but also gives the researcher insight into what assumptions and concepts are underpinning these notions, describing this as ‘the process of collective sense-making in action’ (Wilkinson, 2014, p.193). Morgan (1998)

emphasised that focus groups excel at uncovering the rationale underlying participants' thought processes. Developing further insight into the participants' rationale was important to gain a deeper understanding about what lay beneath their perceptions, informing their clinical decision-making around the antenatal assessment of maternal mental health.

According to Kreuger (1994, p. 3), the aim of focus groups is 'not to infer but to understand, not to generalise but to determine the range, not to make statements about the population but to provide insights into how people perceived a situation.' Focus groups represented an appropriate data collection tool to maximise comprehension about how participants perceived mental health, how they assessed maternal mental health antenatally, and what was informing these notions for this group of midwives.

Group dynamics are integral to the focus group process, and can potentially act to inhibit or empower individual participants (Kitzinger, 1995). The midwives in this research needed to feel safe to truthfully disclose their perceptions and perspectives about mental health and the antenatal assessment of maternal mental health. Focus groups were set up with midwives who worked together in the same practice groups. The rationale behind this was that these midwives were likely to feel comfortable with each other, making the sharing of their perceptions and practices more comfortable for them. Anecdotally, midwives who work in practices together regularly share clinical experiences with one another for advice and support.

Exploring the literature around the use of focus groups for data collection revealed conflicting opinions, but Kitzinger (1995) recommended that homogeneity should be considered when forming groups due to the benefits that shared experiences and

understanding bring. I noticed that the midwives appeared very relaxed from the start in all five focus groups, and shared their thoughts and practices very readily in conversation with each other. A mutual respect was evident, and this appeared to facilitate conversation and disclosure.

The familiarity and collegiality between the midwives in the focus groups enhanced collective sense-making. When clinical scenarios were shared, it was clear that other members of the group were already aware of and had sometimes also shared in the clinical experiences themselves. These collective experiences facilitated development of the discussion, assisted with recall of events, and also challenged individuals' perspectives. They ultimately highlighted the underpinning construction of participants' practices and perceptions around maternal mental health, and enriched the resultant data.

Complexities with group dynamics in focus groups were still an important consideration. There was potential for team dynamics to have a negative rather than positive impact on how the focus group interacted, and this was watched for and reflected upon throughout the data collection. It is essential for researchers to analyse not only what the participants talk about, but how they are talking, interacting, and responding to the other participants and their perspectives (Wibeck et al., 2007).

During one of the focus groups it was observed that a midwife with less experience seemed quiet during the discussions. As a senior midwife from the practice was part of the group I considered whether this was making her feel intimidated, or if this represented for her a conflict of interest. Her responses, involvement, and body language were observed. As she remained quiet I made an additional effort to draw her

into the conversation, asking her how she was feeling about issues as they were raised, and observing the responses to her contributions. Her responses were clearly valued within the group, but her interaction remained minimal. The power dynamics within the group, possible intimidation, and coercion were questioned, and the recruitment process reflected upon. Speaking to this midwife at the end of the discussion provided reassurance that she had felt comfortable throughout the process, but had simply felt that she didn't have as many clinical experiences to share. She had brought a valuable perspective around midwifery training and preparation for dealing with maternal mental health issues, which further developed the discussion.

Focus groups were conducted at a location to suit the midwives, and in all cases their shared practice rooms were chosen. Chairs were arranged in a circle so that all participants were equally included, heard, and valued. This also ensured that eye contact was possible when listening to others and engaging in conversation. Food was placed in the centre of the circle for sharing during the discussions. This created a relaxed atmosphere, but the process of sharing also seemed to create connectedness within the group and encouraged conversation.

Two researchers were present at three out of the five focus groups; my primary supervisor worked alongside me taking notes throughout the data collection. These aided clarity during the transcription and analysis, capturing non-verbal data and intensifying meaning. This also gave my supervisor an enhanced insight into the midwives' perceptions, which enriched supervisory conversations during the data analysis.

At the start of the focus groups introductions were made and background information regarding the research study was discussed prior to commencement of the discussions, and an opportunity was given for participants to ask questions. A further copy of the information sheet and a consent form were given to all participants, who signed the form prior to commencement of the data collection.

Discussion took place around safety, and all midwives were informed that they were under no obligation to answer questions they didn't feel happy answering, nor to remain in the group if they felt uncomfortable. Counselling at AUT was offered should anyone have felt that the interview process had caused trauma. The importance of confidentiality was emphasised, and this is discussed within the ethical considerations.

Throughout the focus group discussions questions were open-ended in order to gain a deeper understanding of the midwives' experiences and perceptions, and the approach was relaxed and conversational. This allowed for greater exploration of the participants' narratives within the group, facilitating rich description. The freedom of the participants to express issues and notions spontaneously provided further insight into the phenomenon, thus shaping the enquiry, and this ultimately enhanced insight.

My position as a practising midwife and researcher required reflexivity throughout the focus group discussions. Parker and Tritter (2006) highlighted the importance of the researcher being on the periphery of the focus group, the aim being to capture the interaction of participants rather than that of the researcher. It was therefore imperative for me not to become too involved in the discussions while effectively facilitating a rich, engaging, and relevant conversation.

There were purposeful gaps of up to three weeks between focus groups. This allowed for iteration, providing an opportunity for me to refine the questions and extend the enquiry according to new insights that were revealed. Concurrent data collection and analysis therefore drove the exploration (Thorne, 2008) and assisted in gaining a deeper understanding of the midwives' reality and experiences. Focus group data was recorded and transcribed by myself.

Transcription of data

A verbatim account of each focus group discussion was transcribed. Along with verbal data, non-verbal data was also captured in the recordings, such as salient pauses and tone of voice, which complemented the data and further facilitated insight into the meaning within the participants' accounts. Although transcribing the focus group data myself was a time-consuming process, it helped me to immerse myself in the data and begin to think about how maternal mental health and the midwives' practices were being spoken about. The simple act of listening, then stopping and transcribing line by line, assisted in the analytical process. Thorne (2008) advocates engagement in the transcription process to enhance understanding of, and reflection on, the inherent meaning within the data. I entered into a process of listening, thinking and transcribing, followed by more listening in conjunction with the notes which were taken during the focus groups.

Data analysis

When you emphasise description, you want your reader to see what you saw.
When you emphasise analysis, you want your reader to know what you know.
When you emphasise interpretation, you want your reader to understand what you think you yourself have understood. In different ratios, for different purposes, we try to accomplish all three.

(Wolcott, 1994, p. 412)

Congruent with most qualitative research, an inductive approach to data analysis is taken when applying interpretive descriptive methodology. This is where the research findings are generated from the data rather than analytical structures being predetermined (Thorne et al., 1997). Data analysis in this research study was concurrent with data collection, so the analytical process commenced with the focus group interviews and influenced ongoing collection of data.

My approach to data analysis was considered, and perceived in 'layers'. I purposefully planned to take a slow pathway to the formation of themes and patterns within the data, to give time for the inherent meaning within the accounts of the participants to be recognised and understood. I regularly took time out and reflected on the phenomenon, the data, and the analytical process in order to challenge my processes at every stage. Regular supervisory meetings further challenged my interpretation and construction of meaning from the data.

Morse and Field (1995) described a four-stage cognitive process for qualitative data analysis on which I based the analytical process, these stages being precursors to conceptualisation of the phenomenon. The first stage was described as 'comprehension', which is about making sense of the data and asking 'what is going on?' It was important to reflect on and record why certain notions attracted my attention. Thorne (2008) proposes that researchers carry presuppositions, and it is important not to become sensitised to patterns that fit these concepts. Being aware and reflective of these presuppositions and allowing myself to become immersed in the data was a first step to data analysis beyond data collection, and was central throughout the research process. I am an experienced midwife, and have worked as an LMC midwife.

This therefore gave me insight into the phenomenon, but ongoing reflection was needed to ensure that my own presuppositions were not influencing the research process.

Comprehension commenced with repeatedly listening to the narratives in order to explore the meaning within, search for insights, and become familiar with the data. During this process I made notes to capture non-verbal communication such as salient pauses, tone of voice, and expressions of emotion; these were important in the communication of meaning.

Transcribing the focus group interviews myself further developed comprehension and formed the next stage of the analysis. This allowed me to develop an increased familiarity with the data, along with a greater holistic understanding beyond the obvious. It facilitated reflection on the data throughout the process, allowing me to 'hear' the participants' perceptions and practices more clearly.

The next step in the analysis as referred to by Morse and Field (1995) is 'synthesising'. During this process data was systematically sorted and synthesised, and as this process progressed I began to look for patterns. I analysed the transcripts from the focus groups in detail and made notes beside them. Thorne (2008) cautions researchers not to be too precise in the early stages of searching for patterns within the data, and that this stage is simply for distinguishing the significant patterns within the data from those less significant. Memo notes focused on what was happening within the data and they remained broad. Potential meaning was teased out, and explanations were noted.

The early memo notes were not identifying themes, but instead capturing possible explanations related to the midwives' perceptions of mental health and its antenatal assessment. The notes were analytical and at times questioning. This was a reflective process, constantly challenging the interpretive angle until patterns within the data occurred and a set of ideas became more refined. Morse and Field (1995) referred to this stage as 'theorising'. These notes became more definite and polished as the analysis developed and the emerging underlying meaning became more evident. A major challenge here was identifying the areas that were core to the understanding of the phenomenon and salient for the development of clinical reasoning.

Theorising continued until significant explanations begin to cluster into groups, revealing the most consistent explanations, or patterns. These have been described as meaning units (Graneheim, Lundman, Omvårdnad, Medicinsk, & Umeå, 2004). This represented an early coding process, but this was considered to be preliminary and fluid, and required ongoing critical analysis. Contradictory notions were carefully examined at each stage, and were compared and contrasted against the data that was forming patterns to analyse their significance, and look for relationships. My memo notes became increasingly analytical, asking increasingly complex questions of the data and the meaning within it.

Analysis ('theorising') progressed to the creation of categories that shared the same commonality, and formation of themes. Formation of themes from meaning units linked together the underlying meaning from within the data. Themes answer the question 'how?' (Graneheim et al., 2004). At this stage the memo notes that had begun to form categories together were collated. The meaning units that were forming categories were placed in the left column of a series of Word documents. This began to build a picture,

further revealing patterns, relationships, and inherent meaning. On the right side of the page the analysis was developed by documenting associated meaning, teasing out further what was happening within the midwives' accounts. This process created the collaboration of patterns and meaning units and increased clarity to enable themes to be identified.

Themes within the data had now been identified, and an overarching statement in relation to the research question was being constructed. The analysis, however, was still in progress, and there was considerable reflection on these identified themes to ensure that they echoed the midwives' perceptions of maternal mental health and its assessment during pregnancy. Morse and Field (1995) referred to this final analytical stage as 'recontextualising'.

According to Thorne (2008) this stage pulls the phenomenon back from the theoretical and firmly connects it to clinical application and reasoning. This required reflection on a more holistic level, understanding the implications of the knowledge that had been created. The themes were analysed in order to optimally present and explain the midwives' perceptions so that readers of the research could have a more informed understanding and insight into its clinical significance. Effective data analysis in qualitative research captures the essence of the phenomenon (Sandelowski, 1993) and these themes outlined this. Initially three main themes were identified, but further reflection when the 'Findings' chapter was constructed revealed that in fact there was just one main theme to which three sub-themes were closely related.

Ethical Considerations

Research is fundamental to the epistemological foundations of health care professions including midwifery, but raises a myriad of ethical questions. Ethics are integral to the research process as a whole, from the choice of methodology right through to the publication of results (Aita & Richer, 2005). Ethics interrelate with rigour throughout the research process, so therefore coexist rather than being separate entities (Aita & Richer, 2005).

Since the Declaration of Helsinki in 1964, all health care research has had to meet ethics committee approval, demonstrating an awareness of the ethical dilemmas within the research (W. Rogers & Lange, 2013). As this study was conducted through AUT University, an application for ethics approval was submitted to and approved by AUTEK, the AUT Ethics Committee.

This research study took place in New Zealand, so the principles of the Treaty of Waitangi, being participation, protection, and partnership, remained central throughout. These principles encapsulate ethical consideration, and were holistically applied to the study. The principles interlink with the ethical considerations of beneficence/non-maleficence, autonomy, and justice, which underpin the research process.

Participation

Participants were selected purposively and their informed consent and signed consent was an essential prerequisite. Information about the study was given to the midwives on an information sheet to facilitate informed choice, and opportunity was given to ask questions at every stage of the process. Participants needed to understand that their involvement was completely voluntary, and that they could choose to withdraw from

the study at any point without judgment (McNeill & Nolan, 2011; Wiles & Ebooks, 2012).

Many of the midwives were known to me professionally so it was essential that they did not feel coerced in any way to either participate or remain in the study. If these concerns arose, a plan was made for my primary supervisor to approach participants regarding recruitment. Vigilance around participants' unspoken reluctance or unhappiness was pivotal throughout (Wiles & Ebooks, 2012).

Protection

Ensuring the safety and wellbeing of participants is central to all research (Wiles & Ebooks, 2012). The ethical principles of beneficence/non-maleficence must remain at the heart of the research process (Polit & Hungler, 1999), as well as the right of participants to be protected from harm and discomfort. Risk must be minimised, particularly when topics are sensitive (Wiles & Ebooks, 2012).

This research was not expected to cause any harm to the midwives, but researched a sensitive phenomenon. Midwives themselves may have been suffering from mental health problems, could have had distressing family experiences, or traumatic professional experiences while caring for women with maternal mental health problems. Researchers are ethically bound to deal sensitively with any resultant emotional distress, this taking priority over retrieving data, even if it means much-wanted evidence is lost. If any of the midwives had experienced discomfort in the process of sharing their thoughts, the discussions would have been stopped and the participant asked whether or not she was happy to continue. Counselling, if it had been required, would have been offered through the Health and Counselling Services at AUT University.

Participants were midwives: professionals who were being asked about their perception of maternal mental health and their individual practices around screening and assessing women for maternal mental health risk. Notions of risk and safety were pertinent here. Participants may have felt that this enquiry could have been attempting to highlight suboptimal practice, possibly leading to defensiveness (McNeill & Nolan, 2011). The midwives may have been reluctant to reveal practices or opinions that they perceived to be suboptimal in front of their colleagues within the focus group. It was essential to reassure participants that the purpose of the study was not about finding fault with their practices, but rather to build a deeper understanding of the phenomenon (McNeill & Nolan, 2011). Participants feeling safe was salient in order to facilitate the disclosure of their perceptions and practices and to ensure their wellbeing in the process.

Researchers who hold a professional qualification could find that this creates greater ethical complexity, as unsafe practice may be unveiled (W. Rogers & Lange, 2013). As a midwife and researcher I considered this at the beginning of the study. The Midwifery Council requires midwives to report lack of competence, which would directly conflict with confidentiality. Rogers (2008) suggested that a solution to this complexity should it arise during focus groups would be to discuss the practice with the participant when it was revealed, and encourage them to plan to deal with the issue.

The importance of confidentiality was emphasised at the start of all focus groups, and a guarantee was given to the midwives by myself and my supervisor that we would keep their identity and practice anonymous to others. The midwives participating in this research were practicing professionals, so it was essential to assure them of confidentiality and anonymity (both personal identity and practice). The midwives were

identified with a pseudonym to protect their identity (Wiles & Ebooks, 2012) and all data collected was stored in a locked filing cabinet. The data would be either returned to the participants or destroyed after six years.

Confidentiality within focus groups is a potential inherent problem, relying in part upon the individual participants. It was therefore impossible for this to be guaranteed by the researchers alone (Wilkinson, 2014). The midwives were asked to agree to confidentiality within the group so that the identity of the midwives, and what was discussed during the focus group, remained within the group. As focus groups consisted of LMCs who worked together, maintaining confidentiality within the group would have been an existing practice. Anecdotal evidence suggests that midwives discuss cases regularly with their colleagues, providing support and sharing knowledge, and this was evident during the focus group discussions.

Partnership

The concepts of power and relationship between researcher and participants were considered. My second supervisor, Judith McAra Couper, held a senior role within the Midwifery Council. The inherent dilemmas of this were discussed with my primary supervisor, and it was decided that the presence of Judith at the focus groups could have potentially inhibited participants from revealing their perceptions and maternal mental health assessment practices.

Before the focus groups commenced I talked to the midwives about the importance of mutual respect, and emphasised that all contributions were of value. I asked that one person speak at a time, showing respect for all participants' contributions. Group dynamics are an important consideration for focus groups and these were observed

throughout the data collection. In the role of researcher it would be impossible for me to be aware of all existing group dynamics, but I had a heightened awareness during focus groups for any interaction that could threaten or inhibit participants.

The principles of participation, protection, and partnership were applied and honoured throughout, sitting firmly at the core of the research. It was important that recruitment for the study and data collection methods considered the needs of Māori, and were appropriate and inclusive. Purposive sampling ensured the participation of midwives who cared for a greater number of Māori women. This research is pertinent to the health of Māori women and families as results might influence midwifery practice, so their inclusion in the process was imperative. A midwifery group which had midwives of Māori ethnicity was invited to participate, but decided not to accept. The midwives were interested in the research, but could not commit to participating due to heavy work obligations.

Enhancing Rigour

Qualitative research must be creative and possess analytical rigour (Patton, 1990). These two core elements must therefore be united in all processes to facilitate rigour so that reasonable claims can be made from the research. In the health care field, with its strong scientific underpinnings, qualitative research has often been criticised for a lack of scientific rigour (Mays & Pope, 1995). Smith (2000) argued that the truthfulness of research results should not be judged by the paradigmatic underpinnings, but rather in relation to the steps taken by the researcher to ensure credibility throughout the research process.

Trustworthiness needed to be considered right from the embryonic stages of this research study (Thomas & Magilvy, 2011). It started with the review of the literature and subsequent formation of the research question. Lincoln and Guba constructed a framework for trustworthiness in qualitative research. The concepts within this framework were referred to as credibility, transferability, dependability, and confirmability (Tuckett, 2005). They collectively represent the research process, as every step taken should embody and exemplify rigour.

Sandelowski (1993) and Whiltmore, Chase, and Mandle (2001) identified the integral tensions that exist between rigour and creativity in qualitative research. Processes to guard against the researcher creating findings that do not authentically reflect the phenomenon are essential. At the same time, however, these could potentially threaten the art of interpretation, and thus the quality of the research. This complexity required constant reflection throughout the research process.

Credibility and dependability

Credibility refers to how believable and valuable the research findings are (Lincoln & Guba, 1985). Dependability is the degree of reliability within the data, and these two notions are interlinked. Credibility in this interpretive descriptive research commenced with the focus of the study, its roots originating from the review of the literature on maternal mental health where this phenomenon was identified as a gap in the body of knowledge. It also related to accurately discovering and describing the perceptions and practices of the midwives around maternal mental health and its assessment during pregnancy.

‘The truth value of a qualitative investigation generally resides in the discovery of human phenomena or experiences as they are lived and perceived by subjects’ (Sandelowski, 1986, p. 30). Credibility in this study was enhanced by purposive sampling of participants who had experiences of the phenomenon which held validity for the study (Powers, 1990). Focus groups were facilitated, ensuring that participants felt able to articulate their beliefs, feelings, and practices. This provided an essential foundation for the required thick description, and intensified insight into the underlying meaning.

Keeping a record of the research’s decision trail is believed to enhance research credibility and dependability (Koch, 1994; Thomas & Magilvy, 2011). Within the decision trail the research process for this study was clearly articulated and transparent throughout, incorporating my rationale for decisions. Internal consistency could then be monitored and ensured, from the reason for undertaking the study, through to the analytical process and findings. Such visibility and clarity enables research to be more readily audited, therefore enhancing trustworthiness (Sandelowski, 1993). This continuous decision trail also constituted constant reflection and analysis on my part throughout the research process.

Triangulation of data was considered, and I reflected on the use of individual interviews along with focus groups for data collection. Lincoln (1995) highlighted that the rationale behind triangulation was to enhance the credibility and dependability of the research with the production of convergent findings. According to Thurmond (2001), however, triangulation should only be used if it is thought to enhance the understanding of the phenomenon.

Individual interviews as a method of data collection would have collected information about the midwives' perceptions and their individual clinical practices but would not have captured the collective construction of meaning. The 'collective sense-making' by the participants, facilitated by the focus group discussions, really assisted the revelation of the midwives' perceptions. There was convergent evidence relating to many elements of the phenomenon across the five focus groups during data collection. The use of individual interviews was not therefore considered to enhance the understanding of the midwives' perceptions and practices around maternal mental health and its antenatal assessment.

Member checking (or member validation) is a process by which the researcher consults the participants with the research findings to check the accuracy of the data analysis. It is considered by some researchers to enrich the credibility and dependability of the research findings. Guba and Lincoln (1989) perceived member checking as being integral to establishing credibility, whereas Sandelowski (1993) argued that it represented a potential threat to credibility. The optimal application of this concept to the research was carefully considered.

Thorne (2008) cautioned researchers that although returning to the participants for confirmation of meaning following data analysis could potentially enhance qualitative research, it could also inhibit good interpretation of the data. Following analysis of the data collected using focus groups, this process of member checking would have been complex, as the analysis did not purely reflect the perceptions and practices of individual midwives. Sandelowski (1993) described member validation as an ongoing process throughout the research, which ultimately enhances the trustworthiness of the findings. According to Sandelowski, each time a researcher seeks clarification of

meaning from participants during the interview process, or reflects on their evolving interpretations of the data, this represents member validation.

I applied member validation to the research study in several ways. During focus group discussions, I often reflected concepts that were raised during discussions back to the midwives (taking great care not to influence the discussion) in order to clarify meaning. Ongoing discussion throughout the research process with my supervisors also represented member validation, as my analysis of the underlying meaning was carefully examined and critiqued. The findings were also shared with other midwife colleagues to ascertain if they related to the meaning that was uncovered and synthesised. This is referred to by Guba and Lincoln (1981) as ‘phenomenon recognition’.

Transferability

Transferability is the notion of being able to transfer research findings to a similar context or situation. To facilitate transferability of results from this research, the findings needed to be rich, descriptive, and the underlying meaning insightfully encapsulated in a way that readers would recognise and relate to. This would enable readers of the research to assess how useful the results were for their own practice (Lincoln & Guba, 1985). If readers could recognise truth or meanings within the description and interpretation, they would be more able to analyse and apply the findings to their own clinical practice (Guba & Lincoln, 1989). It is therefore the readers of the research who decide the transferability of the results.

The research findings were presented to midwives on three occasions, during symposiums. The feedback I received was very positive, and practitioners articulated that the findings resonated very well with them. Midwives recognised the practice

issues that were illuminated, and expressed that the words of the participants and my analysis echoed their own perceptions, complexities, and clinical practices around the antenatal assessment of maternal mental health. This indicated to me that the analytical process had encapsulated meaning in an authentic way, and that the findings were transferable.

Confirmability

Confirmability refers to the neutrality and accuracy of the data. Thomas and Magilry (2011) claim that essential to the element of trustworthiness is the objectivity of the researcher and their degree of reflexivity. In qualitative research the researcher cannot be considered to be completely objective, so instead the neutrality of the data is key (Grant & Giddings, 2002). According to Lincoln and Guba (1985) confirmability occurs once credibility, transferability, and dependability are accomplished.

Reflexivity

Reflexivity is an important component of the trustworthiness of a qualitative research study. It refers to the degree of influence exerted by the researcher on the findings, whether consciously or unconsciously. It requires continuous awareness by the researcher on their own values, preconceptions, and personal beliefs (Jootun, McGhee, & Marland, 2009).

Berger (2015) described reflexivity as the ‘turning of the researchers’ lens back onto oneself to recognise and take responsibility for one’s own situatedness within the research and the effect that it may have on the setting and people being studied, questions being asked, data being collected and its interpretation’ (p. 220). Berger emphasised that the researchers’ epistemological underpinnings affect all that they are,

believe, and see, thus are integral to the research, shaping the findings and the conclusion of the study.

Interpretive descriptive methodology acknowledges the theoretical and clinical expertise that the clinician researcher brings to a research study, considering it to be a platform on which to build the research (Hunt, 2009). Ongoing reflexivity was essential throughout the research process, however, to ensure that my pre-existing knowledge, experience, and perceptions did not construct the research findings.

My position as a clinician and a researcher had inherent benefits which coexisted with these risks. As a clinician I knew the midwives professionally, and had both clinical and theoretical knowledge of the phenomenon. A raised awareness of the associated potential complexities was essential to enhance credibility throughout this research.

The existing knowledge that as a midwife I brought to the research could have potentially influenced the findings. This knowledge, however, gave me invaluable insight into the midwives' perceptions and practices around maternal mental health, increasing my understanding of the perceptions that underpinned the practices that they disclosed. It gave me the ability to 'read between the lines' during focus group conversations, and this was often salient for the understanding of the underlying meaning.

The potential reflexive complexity during data collection was based on my familiarity with most of the midwives, and my clinical knowledge. I was aware of the potential to become too involved with the conversation to objectively see the perceptions and

perspectives of the midwives. Bonner and Tolhurst (2002) identified an essential balance between the clinician researcher 'fitting in' and making participants feel at ease, and having sufficient objectivity in order to make sense of what is happening.

According to Parker and Tritter (2006) the researcher should be on the periphery of the focus group conversation, the aim being to capture the inter-relational dynamics of the participants (not the researcher and participants). Care had to be taken during focus groups not to participate in the conversation, which occasionally the midwives appeared to be looking for. At times I needed to respond to the midwives with further questions in order to keep the focus on their communication. Spradley (1980) referred to this heightened awareness and objectivity as 'introspection', suggesting that researchers use themselves as a research instrument rather than focusing too much on the 'self.'

Self-reflection and awareness were essential throughout the research process. During the data collection I found myself recognising concepts within the conversations and beginning to interpret the meaning within them. I therefore was very considered when it came to the analysis, and took time to 'sit' with the data before I started to look for themes within it. This prolonged engagement with the data represents a strategy for enhancing reflexivity (Berger, 2015).

I was fortunate enough to have two experienced supervisors challenging me during the research process, further ensuring that self-reflection was integral and central throughout. A reflexive diary was kept, where I recorded my rationale for decisions, personal challenges, thought processes, and instincts. I found myself having to consciously put aside my existing knowledge and perceptions, and remain open to listen and really hear the words and inherent meaning within the midwives' conversations. I

had to remain open to new concepts, notions that were not expected, and those not initially visible. In the words of Dowling (2006), I had to be ‘aware in the moment’ of what was influencing my responses while at the same time understanding my relationship to the participants and the subject. Reflexivity therefore played an essential and central role in uncovering the phenomenon.

Summary

This chapter has provided a description of the research process used for this study. It has presented an explanation for the choice of methodology, and the processes undertaken to ensure that the research findings were trustworthy. Research methods that were used to collect and analyse the research data have been discussed, and ethical considerations outlined.

The research process, driven by interpretive descriptive methodology and manoeuvred by processes to enhance rigour, subsequently produced a set of findings that revealed more about the midwives’ perceptions of mental health and its antenatal assessment, providing answers to the research question. These findings reflected the foundations that underpin the methodology; they encompassed a rich description of the phenomenon which echoed the words of the participants combined with a new interpretive perspective, capturing the underlying meaning within the data. These findings will be presented in Chapter Four.

Chapter Four:

The Disparity Between Needs and Service Provision

Overarching statement: ‘Holding the problem: plugging the gap between women and the service’.

Introduction

This chapter will explain the research results regarding the midwives’ perceptions of mental health and the assessment of maternal mental health during pregnancy. From the analysis of the data there was one main theme: the disparity between needs and service provision. The findings indicate that the midwives experienced a lack of availability of appropriate services to meet the needs of women who manifested behaviours that the midwives considered ‘unhealthy’ or symptomatic of mental health problems, such as anxiety and mild/moderate depression, but who did not meet the criteria for referral to the Maternal Mental Health (MMH) service (a clinical team that assesses and cares for women with more serious maternal mental health problems). This left the midwives carrying the weight of these maternal mental health problems.

‘Carrying the weight’, a consequence of the disparity between needs and service provision, is central to the research results and integral to all the sub-themes. These disparities were evidently core to the midwives’ perceptions and to their antenatal maternal mental health assessment practices, and the pivotal point from which three sub-themes developed: ‘Not meeting needs’, ‘The anxious woman needing extra support’, and ‘Safeguarding women’s wellbeing and welfare’. These themes all very closely interrelate.

Not Meeting Needs

This first sub-theme reflects how the disparity between needs and service provision, and consequently the midwives carrying the weight of maternal mental health problems that did not meet the referral criteria for the MMH service, evidently impacted on the continuum of care, from the antenatal assessment and screening of maternal mental health to accessing appropriate services. This created some difficulties for the participant midwives.

Participants' stories about caring for women with mild/moderate maternal mental health problems (such as anxiety or mild/moderate depression) in the absence of appropriate services were infused with feelings of being overloaded and overwhelmed. The midwives articulated that they were carrying an extra weight once maternal mental health problems were revealed to them:

I had a new booking recently, I picked up all sorts of things with this woman [maternal mental health problems]. She was in tears and she had only been here for about 20 minutes. I wanted to know: So you are living rurally? Who are your support networks? And she has no one locally but her mother lived up north and she's really close to her mother and I said: Do you talk to your mother about what you're going through? Her mother wasn't aware. So then I'm thinking, oh crikey, am I the only one that knows? I said: Do that, go and talk to your mother. She didn't want her mother worrying. It's a big issue, and where do I go with that? Do I refer her on? It really is difficult. Those times I feel like I'm in a corner.

Debbie

The midwives often felt an increased responsibility when they identified maternal mental health problems, particularly when they were the only person who knew about them. Debbie described her assessment that uncovered some maternal mental health problems and a lack of social support. Once these symptoms were revealed by the woman and identified as possibly being indicative of a maternal mental health problem, this equated to an increased sense of responsibility for Debbie. She described feeling

overwhelmed as the only recipient of this information. She was left carrying the weight of the problem; holding the information that had caused her concern, wanting to ensure the welfare and wellbeing of the woman, and not sure of the best course of action.

Focus group discussions highlighted the importance of the midwives being able to access appropriate mental health services for women once a maternal mental health problem was identified.

Difficulties accessing appropriate services

The referral guidelines for midwives (Ministry of Health, 2012) recommend a clear course of action once maternal mental health problems are identified by the midwife. These guidelines require midwives to refer the woman to her GP in the event of mild or moderate maternal mental health problems (for example anxiety and mild or moderate depression) and refer to the MMH service for more serious (but stable) problems such as bipolar disorder or serious depression, and/or when the woman is taking medication. In the event of acute unstable psychosis the referral guidelines recommend that the midwife transfer the care of the woman, and clinical responsibility, to a specialist obstetrician (Ministry of Health, 2012).

These clear guidelines, however, did not always result in the participant midwives being able to access appropriate care to meet women's needs. The midwives reported that they cared for few women who met the referral criteria for the MMH service. For women with conditions that did not meet the criteria for referral to the MMH service, such as anxiety or mild/moderate depression, services such as support groups, counselling, or strategies for resilience may have been able to effectively meet their needs. The participants found that some of these services were accessible through a GP,

but that not all women wanted to be referred to their GP, and not all women were able to access services to meet their needs via this route. The midwives articulated that it was women with these symptoms of anxiety and depression (that could possibly be consistent with a mild or moderate maternal mental health problem) whom they most frequently cared for in practice.

Conversations within all focus groups revealed that the midwives found the current referral processes to the MMH service frustrating at times. Lisa described her experience with the referral process:

I've had a couple where they're just no, she doesn't need it, or she doesn't qualify, you need to ring this person, you need to ring this person, you get a bit of a runaround. Who am I supposed to be calling about this lady?

Lisa

The midwives felt dissatisfied regarding the referral process and pathways to access maternal mental health care for women. These pathways were sometimes unclear and the process could be difficult and time-consuming for the midwives, and not always effective. When the referral was not accepted by the MMH service, as Lisa described, the midwives were left not knowing the optimal way forward to get appropriate help for the woman.

The frustration created by being unable to get their concerns validated when the referral criteria for the MMH service was not met was consistent throughout all five focus groups. Participants spoke of then being placed in the difficult situation of knowing about the symptoms (that could be indicative of a mental health issue) and consequently feeling an increased sense of responsibility. Emily shared an example of

when she felt that a woman had significant anxiety problems, yet her symptoms did not fit the criteria for referral to the MMH service:

I had one (woman) that had a previous pregnancy loss and she was incredibly anxious with her subsequent pregnancy. I referred her to MMH service and they didn't pick up the ball at all. I think they gave her one phone . . . and I was seeing her weekly from the beginning of the pregnancy, and my scheduled appointments never ended up the time I booked for her. It was counselling for the whole pregnancy...

Emily

As shown by Emily, there was a heightened midwifery responsibility and increased workload when appropriate care for the woman could not be accessed. In the example above, Emily felt that the woman needed care from the MMH service, but as this could not be accessed, Emily 'plugged the gap' between the woman and the service. She carried the additional weight resulting from the anxiety symptoms as she safeguarded the woman's wellbeing and welfare.

The midwives spoke of feeling unsupported when they were unable to access maternal mental health care appropriate to the woman's needs when her symptoms did not fit the referral criteria for the MMH service. Lisa talked about an experience when she was not able to access services to meet the needs of a woman who was anxious:

You often feel very unsupported, don't you? And even if you do identify there's a problem there's often nowhere you can go with it. Or they [the MMH service] ring up and say no [indicating that the woman doesn't fit the referral criteria]. The woman I'm talking about has been to post-traumatic, changed her doctor, been to Plunket three times, maternal mental health, you know? She went everywhere that we could refer her, and nobody, nobody could give her a hand.

Lisa

In this example Lisa exemplified the difficult situation described by many of the midwives when they were unable to access appropriate care for women whose symptoms did not meet the referral criteria for the MMH service. Lisa described her

attempts to access appropriate care for the woman, but none of the services were able to help her. This left the woman without the care she needed, and left Lisa feeling unsupported and without a safety net in the form of alternative, appropriate services. In this example, Lisa had followed the referral guidelines appropriately, and yet this process had not been effective in gaining access to the care that the woman needed.

The midwives, however, described how women who had accessed the MMH service had largely received timely and appropriate care and support. This care had a positive effect on both the women's symptoms and her requirements of support and reassurance from the midwife. Participants recognised the value of this service, and of identifying women's mental health problems when appropriate services were available and accessible.

The midwives described their relief when women with more serious maternal mental health problems were able to access the MMH service and had appropriate maternal mental health treatment and support in place:

Where you've got somebody who has got full-blown depression who knows about it, who has had support before or may be on antidepressants, they've got all systems in place.

Nina

If someone says: It's all right, it's stabilised, I'm on treatment, I go, phew! Thank goodness, because really I wouldn't know what to do next!

Rosie

These examples reflect the recognition by participants of the benefits of appropriate maternal mental health treatment and support for women, and also for midwives. Nina talks about a woman who has accessed a mental health service and has had her problem recognised and treated, describing 'all systems' as being 'in place'. This indicated that

the service was supporting the woman well. The example from Rosie shows her relief when the woman describes herself as stabilised and on treatment, with Rosie articulating that the alternative would be difficult as she wouldn't be sure what to do to help the woman.

The midwives described their relief when they felt that the woman and they themselves were supported. When discussing a multidisciplinary service that offered advice to LMCs caring for women with psychosocial problems, Jenny discussed what it meant to her to no longer feel totally responsible for the woman's psychosocial wellbeing:

It meant that on a Friday afternoon when I was really worried about her I could ring the social worker and say, what do I do? Half of the time that I was spending with this woman was social work, it's not midwifery. I can't carry this burden, I can't pass it on to my colleague for the weekend and leave it with her. She (the social worker) said: That's fine, I'll ring so-and-so, I want you to give her this number if she's worried about anything, I want her to call this person over the weekend, which was the social work crisis support person. That lifted the burden, you know . . . it's not my role. I'm a midwife, I'm not a social worker, I'm not a mental health worker, I'm not a CADS worker and I can't do all of that by myself.

Jenny

A need to share the burden of care, and the desire for less breaching of their professional boundaries, was evident among all participants. The midwives stressed the importance of being able to access advice and help from maternal mental health professionals when they were concerned about a woman's mental health, and for those professionals to appropriately take the weight of the woman's mental health problems. The midwives described that being left carrying the weight made them feel vulnerable, because this was not the role they were prepared for.

Being unable to access appropriate maternal mental health care for women once mental health problems had been identified was a precursor for breaching of the midwives' professional boundaries. Nina described being left carrying the weight of a woman's depression when appropriate services were not accessible:

One lady that I cared for had quite bad postnatal depression and she had negative feelings towards herself, but not towards her baby. It was Friday afternoon, nobody would listen to me, and her whole whānau had gone away for the weekend so she was in the house by herself, and I thought: Oh my god, I really don't feel comfortable. I had to ring so many different people, then go to her GP, she doesn't have a car, has just had a caesarean so can't walk up the hill to the bus stop, and nobody listens to you. It's really difficult. You feel like if anything happens to her it's you, your fault, because nobody will listen to you. That was really difficult.

Nina

The midwives were sometimes left in difficult positions, feeling responsible and accountable for safeguarding the wellbeing and welfare of women and their babies, and yet unsupported by the services. Nina described her feelings of isolation when she was unable to access the required care for the woman, unable to achieve validation of her concerns, and was left carrying the weight of the problem. Her assessment and subsequent fears were voiced but not truly heard, leaving her feeling vulnerable. Nina feared being held to professional account should a poor outcome ensue.

Although it was consistently evident within the many stories shared by the midwives that caring for women with mental health problems that did not meet the referral criteria for the MMH service represented an additional weight for them, the midwives expressed understanding and empathy towards the women:

I normally feel more bonded to them (women) if they've got issues (mental health), although sometimes you do kind of . . . Some of them, you sit outside and think phhhewww . . . before you walk in. Give me the strength to get through this, to be able to help her, but to get through this.

Emily

A caring and professional attitude reflecting respect for women was evident among all participants, combined with a recognition that carrying the weight of maternal mental health problems that did not meet the MMH service referral criteria represented a stressor for them. A desire to safeguard women's wellbeing and welfare was evident in spite of the known associated challenges.

The effects of the disparity between needs and service provision, and consequently the need for the midwives to carry the weight of maternal mental health problems that did not meet the MMH service referral criteria, evidently rippled out into the participant midwives antenatal maternal mental health assessment and screening practices.

Identifying the maternal mental health problem

LMC midwives are in a pivotal position during a woman's pregnancy to evaluate maternal mental health as a component of holistic health and wellbeing. Focus group discussions revealed participants' practices and perceptions around this process, and revealed some inherent difficulties.

In order to develop further understanding about how the midwives perceived the antenatal assessment of maternal mental health, it was discussed if they saw the assessment of maternal mental health as a component of the LMC role:

Yes, I think it is. I think it is, to recognise that they have mental health problems, not necessarily to treat or do something about it apart from to send them to their GP, but I think that it is to notice that they have a problem.

Frances

The majority of participants acknowledged that LMC midwives had a role in the antenatal assessment of maternal mental health, but most participants, like Frances, did

not feel that LMC midwives had a significant role in maternal mental health care beyond assessment and referral.

The participant midwives could only see the worth in an antenatal maternal mental health screening programme if it was instrumental in improving women's health and wellbeing. Emily discussed the importance of screening being purposeful:

If we have to do mandatory or routine screening we need to have somebody to refer them to when we get the result. There's no point screening and saying, you're on your own. Oh, I've got depression? Oh, thanks for telling me! Then they're lost in this great pool of: Am I wrong, am I not coping, am I a failure? And they actually need that support if we find an abnormal . . . not abnormal, a concerning result, and we can't be that support. We try, we try really hard but we're not the answer.

Emily

The lack of appropriate services for maternal mental health care evidently influenced the midwives' perceptions of introducing routine antenatal screening, leaving many participants questioning the rationale behind this. Emily above described how identifying a maternal mental health problem in the absence of appropriate services was not constructive, and not in the best interests of the woman or the midwife. She expressed that the midwife was not able to provide the additional care and support that the woman needed, which reflected the perspective of the majority of the midwives.

Despite the inherent frustrations, all of the participant midwives incorporated some form of assessment of a woman's maternal mental health into their antenatal midwifery care. The construction and application of this assessment process appeared to be specific to the midwife, and not all assessment was formal in nature. Participants' approaches were partly routine and partly individualised to the woman. There were many differences in the ongoing assessment of maternal mental health, signifying that

women received variation in care, but there were some common strategies and catalysts among the majority of the midwives.

The principal catalyst for antenatal assessment and screening was identified as being the questions about the woman and her family's mental health required for the hospital booking form. These routine questions coexisted with enquiries about medical, surgical, and family history, and were generally asked in one of the initial antenatal appointments when a woman booked for care with a midwife:

I think that the booking forms that we use for the hospital are useful because it specifically says mental health history on there that is a good opportunity to talk about that and in my experience most people who believe they have mental health problems are happy to talk about it at that point.

Lucy

The midwives considered the requirements of the hospital booking form regarding women's mental health history to be a precursor for enquiry. This indicated that these routine questions assisted with maternal mental health assessment, providing a good opportunity for discussion. They provided a space for conversation about mental health and validation of its importance for wellbeing. This reflected the sentiments of the majority of the participants, who saw this requisite as an opportunity for risk assessment.

Beyond this baseline antenatal assessment, greater diversity in practice was evident. For example, Nina and Grace described how they assessed women's mental health antenatally:

First question: How are you feeling? What's going on? How are things going? So you put those open questions out there every time you see them, so if they do get to trust you they will open up if there's a problem, so it's like an ongoing thing really, isn't it?

Nina

A bit of both, I think [maternal mental health assessment and screening at booking and later in pregnancy]. Yes, I do a bit of both. There are definitely screening questions that you do at the beginning, often at booking, and then maybe as you are getting a bit of an inkling something's not right, or just a couple of times in the pregnancy if you're not quite sure.

Grace

The midwives described that they did some form of ongoing enquiry, continually assessing women's mental health throughout the pregnancy. In the example above Grace mentioned that when she got 'an inkling' that something was not right, this was a catalyst for further assessment or screening. This highlighted that she was drawing on different cues, and subtly assessing the woman's mental health. Nina described how she asked broad questions about women's wellbeing each time she saw them in order to assess their emotional state and elicit clues about their mental health. These two examples show different assessment techniques, but they both suggest that the midwives are continually assessing women's mental health antenatally.

Antenatal maternal mental health assessment and screening was sometimes individually applied based on the midwives' perception of the woman's risk, or if signs and symptoms of mental health problems were evident. When asked about whether they routinely assessed and screened all women for maternal mental health problems, Jane said:

I don't know that I ask [a woman about her current mental health] unless I feel that I'm getting signs, after then I don't randomly say in the middle of a visit, so, are you depressed? I don't know whether that's good enough, maybe not. People do sometimes say in their pregnancy, I am feeling very anxious and I'm crying a lot.

Jane

Diversity of the midwives' perspectives and antenatal maternal mental health assessment and screening practices was evident. For example, Jane indicated that

although she was not routinely formally assessing and screening women for mental health problems, she was continually risk assessing. Jane explained that she didn't ask a woman about her mental health unless she was 'getting signs', indicating that she was observing for signs. Although there were differences in the midwives' assessment and screening practices, some form of ongoing assessment or enquiry was evident among all of the midwives.

The majority of the midwives described their enquiry as being an ongoing informal process based on their close observations of the woman at every antenatal visit. Isabelle described how she incorporated this assessment of a woman's mental health into her practice:

It might seem like you're just sitting down having a chat, but actually you're taking in all the little facial nuances, you've taken in the home situation without looking like that's what you've done, you've taken in what does the relationship seem like, you take in so much more than what you actually let on, eh?

Isabelle

Isabelle's words really highlight that although her assessment of a woman's mental health may not be explicit, it is a thread that is woven through the overall assessment. She is looking for signs and cues that may indicate a mental health problem, subtly risk assessing. The midwives in all of the focus groups described various strategies that they used for the informal assessment of maternal mental health antenatally.

When the midwives were asked about their use of screening tools, the Edinburgh Postnatal Depression Scale (EPDS) was the only one that the midwives referred to. Anecdotal evidence suggests that the EPDS is commonly used by midwives in the postnatal period to screen for depression and anxiety following birth. The tool can also be used during pregnancy, although there are currently no professional guidelines in

New Zealand recommending that midwives screen women for maternal mental health problems. Participants' perspectives and use of the EPDS varied, but some trends were apparent.

For the majority of the participants the EPDS was not routinely used antenatally, but was utilised selectively to screen for maternal mental health problems once they were anticipated, and to validate their concerns:

Well yes, I have used that Edinburgh Postnatal Depression Scale if I've been worried about a woman or if a woman has rung me and said that's she's not coping or feeling anxious, or down or whatever, then I use that. I kind of use it so there's an extra thing when I send that referral off so they've got something to look at, because whatever you write in the referral can be quite vague sometimes.

Rosie

The Edinburgh Postnatal Depression Scale took notice of my concerns which meant that someone took notice straightaway, otherwise I think they might not have acted so fast.

Grace

Many of the midwives selectively used this tool; it evidently represented a vehicle for validation of their existing concerns about a woman's mental health. Rosie described above how she used the Edinburgh Postnatal Depression Scale when she suspected there could be a maternal mental health problem (indicating that this was used secondary to maternal mental health assessment). This helped Rosie to communicate the woman's symptoms more explicitly to the MMH service. Grace found that the tool was instrumental in validating her concerns about the woman's mental health, and accelerated the referral process to the MMH service.

This section has explored why the disparity between needs and service provision is leaving midwives carrying the weight of maternal anxiety and mild to moderate depression, and how this influenced the participant midwives assessment, screening

and referral practices. The next sub-theme, ‘The anxious women needing extra support’, further highlights the significance of the disparity between needs and service provision for the participant midwives.

The Anxious Woman Needing Extra Support

Within this sub-theme the influence that caring for the anxious woman needing extra support had on the midwives’ perceptions of maternal mental health, and the difficulties this had for their clinical practice, will be explored.

Anxiety among women antenatally, although not specifically asked about in the questions asked during focus groups, was prevalent throughout all discussions. This was indicative of the frequency with which the midwives cared for anxious women, and the significance that caring for anxious women in the absence of appropriate services to meet their needs had for the midwives’ clinical practice. The midwives described the additional psychological support and reassurance required by women who were anxious, and what this meant for them as the midwife.

Participants shared many stories about women they had cared for who had mental health problems, and the anxious woman needing extra support featured in the majority of them. Fleur, Frances and Lucy discussed how they regularly cared for women who exhibited anxiety symptoms during pregnancy:

Fleur: Mental health isn’t always depression. A lot of time I find in pregnancy it is extreme anxiety, and they [women who are anxious] are therefore expecting quite a lot of extra care, or extra reassurance throughout pregnancy which isn’t normal I think, especially not from a midwifery perspective. You know, pregnancy and childbirth being a normal life event.

Frances: *I think though now, how women are today, they have never seen a baby born until they have that first baby, they feel so anxious and I think that sort of has become normal . . .*

Lucy: *Yes I think that super-anxiousness in a primiparae [a women having her first baby] seems to be more the rule than the exception.*

Frances: *I think we probably do normalise it because you see it in most people.*

Participants felt that antenatal anxiety, particularly among primiparae, was relatively common. In the examples above, Fleur, Frances, and Lucy showed that they had a shared understanding about how women experiencing anxiety during pregnancy were seen so frequently by midwives that the anxiety was normalised, affecting the midwives' perspectives. This additional need for reassurance and support was not considered by participants to be consistent with the philosophy that pregnancy and birth are normal life events.

Stories about the anxious woman needing extra support were strikingly similar throughout all focus groups, describing the same compendium of behavior associated with women who were anxious during pregnancy, for example, sending many texts to the midwife, and requesting additional tests and investigations, in the pursuit of reassurance about their pregnancy.

The midwives all described how this behaviour equated to a greater workload and stress for them; they were carrying the weight of the anxiety as a result of the disparity between needs and service provision. Jenny gave an example of the behaviour often associated with women who were anxious during pregnancy:

I've got a couple of women at the moment that have been texting me a lot, and one of them, I think I counted 18 texts in a three-week period . . . they're just 'I did this and it made me worried' and 'did I hurt the baby' and 'do you think if I did this and did that, and ate this and it wasn't hot enough then', you know?

Jenny

Jenny's example is representative of many of the midwives' discussions about the additional needs for reassurance that women who were anxious during pregnancy would present with. It also suggests how frequently this occurred, as Jenny at this time was caring for two women with increased emotional needs who were sending her lots of texts in the pursuit of reassurance. Jenny's words really highlight the extent of the women's increased emotional needs as a result of their anxiety symptoms, and indicate the additional workload and stress this created for Jenny.

The normalisation of anxiety observed among pregnant women made antenatal assessment, screening, and referral to services more challenging for the participant midwives, as the 'normal' range of antenatal anxiety was not well defined or understood:

I think depression is easier to talk about and pick up but it's the anxiety that is the hard part to differentiate, the levels of normal anxiety and the levels of obviously unhealthy anxiety, where she's making phone calls numerous times a day to PlunketLine, plus us visiting, plus seeing the GP.

Caroline

The midwives described difficulties in differentiating between what could be considered a 'normal' level of anxiety in pregnancy from one that could be pathological. Caroline above connected this pathological anxiety to the same types of behavior that were described by participants collectively. This was no longer 'normal' pregnancy anxiety that a midwife could deal with by reassuring the woman about her concerns and providing further explanations where she needed them. It was unclear just where the 'line' was beyond which this anxiety could be indicative of a mental health problem.

A shared understanding about the impact this had for the midwives' clinical practice was evident. Caroline talked about how a woman's lack of awareness that her anxiety symptoms could constitute a mental health problem could compromise the assessment process:

You see I think most people are aware of depression . . . so that's easier to talk about and say: Ok, I think you need to go and see your GP. I've given them cards for the counsellor, or advised them to go and see the GP, but that's just a discussion. Whether they feel that they're depressed, with the hormone changes, whether you feel that's a problem for you, but again it's the anxiety. (pause) At what level, and how do you assess that? That's a harder one to pick, and that's the one that they don't have prior knowledge of. For them that's not something they're aware of as being an issue.

Caroline

The midwives felt that depression was more widely understood and acknowledged than anxiety, making it easier to discuss and identify. Caroline above found that women were not as aware of anxiety as being potentially pathological or problematic. Also, the lack of understanding of what constitutes 'normal' pregnancy anxiety made assessment of anxiety more difficult for this group of midwives.

While anxiety during pregnancy was commonly seen by the midwives, there was no clear antenatal pathway for its assessment, and appropriate services were often not available to meet women's needs. The participants' frustrations at not being able to access appropriate maternal mental health services for women who were anxious was exemplified in 'not meeting needs'. Not all women who were anxious during pregnancy would have a maternal mental health problem. For some women, however, their anxiety would have a greater impact on their emotional and physical health and wellbeing, and they would benefit from additional support or treatment.

The midwives acknowledged that the woman's anxiety was sometimes considered as a variable for midwifery decision-making, and discussed how this influenced their clinical practice. Charlotte talked about some of the dilemmas inherent in doing this in the pursuit of reassuring the woman:

And I find that getting the balance right, of doing testing just to reassure them, then often the testing (of fetal wellbeing) itself brings up more anxiety. It's on the tenth percentile but everything's fine, but they're, you know. One of them, the baby was meant to be 2.8 kg and it came out at 3.2, that's 15%, and so did I cause more anxiety by doing that scanning which I didn't really need or want to do? But I did it thinking that I would set her mind at rest, and it didn't. You know, those kind of things, juggling that discretionary part of it too . . . You think you're reassuring them, and then it backfires on you, and suddenly they're more anxious.

Charlotte

Difficulties were inherent when the midwives considered the woman's anxiety and increased need for reassurance as a variable for midwifery decision-making. Charlotte above described how she sometimes offered additional assessment and screening purely to satisfy the woman's need for reassurance about her pregnancy, although Charlotte herself did not feel this additional testing was clinically necessary. She described the importance of getting the balance right, as the midwife doing additional assessment and screening tests may not actually result in the woman feeling more reassured. It also represented increased work, stress, and uncertainty for this group of midwives.

Carrying the weight of women's anxiety symptoms sometimes left the midwives themselves seeking support. Several of the midwives talked about occasions when they had referred women with anxiety symptoms to an obstetrician for assessment, as some women needed this for reassurance around their pregnancy concerns. Sometimes the midwife herself needed it for support, and also for reassurance of the mother and baby's wellbeing:

There's times where I've used antenatal clinic in the end as a last resort. You know, everything is fine, but they've bugged you so much that you have to offload it to someone else; so they feel heard, and you feel that you are sharing the load [of the woman's anxiety symptoms] and that somebody else has got their eyes on them.

Frances

At times the midwife referred a woman for an obstetric review to share the weight of the woman's anxiety symptoms, or because the woman's requests had influenced their decision to refer. In the example above, Frances mentions that referring the woman to the antenatal clinic was a 'last resort', indicating that other strategies to help the woman with her anxiety may have proceeded this, and that this option was not optimal. A vulnerability within her words is evident, caused by the weight of the anxiety that was not lifted by appropriate mental health care.

This leads to the third sub-theme, 'Safeguarding women's wellbeing and welfare', which further explores the main issues creating difficulties for this group of midwives as they 'plugged the gap' between women and the service, while ensuring the women's health and safety.

Safeguarding Women's Wellbeing and Welfare

This sub-theme shows key concerns that the midwives revealed in relation to their experiences of safeguarding women's wellbeing and welfare. It further reveals how the midwives were left carrying the weight of women's maternal mental health problems that did not meet the criteria for referral to the MMH service. As identified in Chapter Two, maternal mental health problems that are mild or moderate in nature, such as anxiety or mild/moderate depression, can have a negative impact on maternal wellbeing. When the participants were unable to access appropriate services while knowing the impact that anxiety and depression could have on maternal and fetal wellbeing, this left them holding the problem, leading to increased stress, responsibility, and workload.

Focus group discussions highlighted the trusting relationship that midwives had with women, and how this relationship both had advantages and created complications regarding safeguarding the women's wellbeing and welfare when they had increased needs for support and reassurance.

Trusting relationship with women

The word midwife means 'with woman', and this underpins the woman-centered approach to care and midwifery professional frameworks in New Zealand. The New Zealand model of midwifery is based on midwives and women having a partnership relationship (Pairman, Tracy, Thorogood, & Pincombe, 2010). Participants acknowledged that this trusting relationship facilitated disclosure of maternal mental health symptoms. Women evidently felt safer to disclose to someone with whom they had a trusting relationship.

A central theme of the midwives' practice was the importance of making women feel safe in order for them to reveal their true mental health. The trusting relationship that midwives had with women was acknowledged as being salient, along with the acknowledgment of the stigma associated with mental health:

Showing them that it's OK for them to talk about it, it's OK to have a mental health issue, it's not the end of the world, and just making them feel safe about talking about it, because I've had some women when I've said about mental health services they've said, I'm not mental! It's got so much stigma attached.

Lisa

I think she thought that I would have treated her differently [when the mental health problem was revealed] everybody would treat her differently, something would happen and we would try to take the baby away. Her mum obviously had mental health problems which were undiagnosed until later and she just didn't feel safe.

Kelly

Lisa and Kelly highlighted the vulnerability that women may have felt about revealing their mental health problems. They may have feared being judged as a result, and subsequently perceived differently. Lisa felt it was important for women to feel that it was acceptable to have a mental health problem, and this was reflected in the focus group discussions. Some research suggests that there is an element of shame associated with antenatal and postnatal depression, and that women may ultimately have fears about having their children taken away as a result of being perceived as not being capable (Bilszta et al., 2010; Steen & Jones, 2013).

The stigma associated with mental health sometimes influenced the midwives' feelings about discussing maternal mental health with women during pregnancy. This was evidently due to the perception that the woman herself was uncomfortable, or as a result of concerns about not being able to access appropriate services, and what this would mean for them as the midwife. Fleur talked about how discussing mental health with women could sometimes be a sensitive issue:

It can be quite sensitive if they [women] don't believe that they have mental health issues, and then you are from the outside thinking: clearly you have some problems. That's where the problem lies quite a lot. We can't refer without them, some acknowledgment, but no woman wants you to tell them that perhaps they've, you know. If they're coming in every moment to have their baby's heartbeat checked, you have to think perhaps there's a problem there, but that's a very difficult conversation to have.
Fleur

The midwives anticipated that a woman's admission of experiencing a mental health issue was affected by the societal stigma. The midwives' assumption that women had internalised this stigma sometimes caused sensitivity for the midwives in how to raise the subject of maternal mental health, as shown by Fleur in her concerns that being seen as having a mental health issue would not be well received by the woman herself. At times this ultimately influenced the midwives' perception of maternal mental health

assessment and their clinical decision-making. For example, Fleur above highlighted that women sometimes denied their mental health problems. This made referral to services difficult as the woman's consent is needed.

Focus group discussions also highlighted that the trusting relationship that midwives had with women could be a precursor to breaching the boundaries of the LMC role as the midwives safeguarded women's wellbeing and welfare.

Breaching of boundaries

Participants described how sometimes their professional boundaries were breached, and while the major catalyst for this was evidently the disparity between needs and service provision, this was influenced by the trusting relationship between the midwife and the woman:

I wasn't meant to be going to see her but how could I not have gone to see her? She didn't have anyone else that she talked to. She had a mental health worker involved, a doctor, and this team that was meant to be monitoring and helping her, but I just didn't feel like the support was there for her. I really do feel that the system let her down. When she was out in the community it didn't seem that there was regular contact after that. Kind of like, we've fixed you, here's your tablets, on your way. She should have had a wrap-around service, which leaves you carrying a really big burden when you feel someone's been lost because there weren't proper safety nets.

Rosie

Participants described feeling a huge sense of responsibility and accountability for women in their care. When a maternal mental health problem was identified and the appropriate services were either not available, not accessible, or not meeting the woman's needs, the midwives, as exemplified by Rosie above, described feeling responsible beyond their midwifery responsibilities, and without a 'safety net'. This at times breached their professional boundaries, as they endeavoured to safeguard the woman's wellbeing and welfare.

It was evident that the trusting relationship that midwives have with women at times facilitated an increased reliance for support on the participant midwives. Lisa talked about an experience when her professional boundaries had been breached, and how the trusting relationship that she had with the woman had represented a precursor to this:

And then I had another woman . . . who developed a puerperal psychosis and she had developed a really trusting relationship with me and she wouldn't let the maternal mental health workers into the picture, and they said something to me which I've always remembered, which was basically: You've got yourself into this situation where you have got this dependency going with her, now you have to get yourself out of it . . . I had to gradually retreat, and they came in, so we kind of passed each other until she had transferred that trust over to them.

Lisa

The participant midwives expressed that there was potential for their trusting relationship with women to precipitate an increased dependency on them when additional emotional support was required by the woman. This increased their workload and responsibility in order to meet the woman's needs. For Lisa in the example above, this ultimately led to her professional boundaries being breached by the responsibility she felt for the wellbeing and welfare of the woman.

A further problem inherent within the trusting relationship, and a common thread among all focus groups, was the possible misinterpretation by women of the boundaries of the relationship, particularly when they needed extra reassurance and support from the midwife:

I think they're so used to us being lovely to them . . . so they feel very comfortable and expect that they can offload on us a lot. And the other thing that I also find is that they forget that we are caring for 60 other women . . . They may not have another significant female in their life giving them love and support, they are then really draining if they are really needy for that, and they have high expectations of us providing that all the time.

Lucy

Many of the midwives felt that women may have misinterpreted their compassionate approach and facilitation of a trusting relationship, perceiving this relationship to be closer than their professional boundaries extended. Lucy above questioned whether the messages sent to women by midwives influenced the way in which women perceived this partnership, raising their expectations and potentially leading to breaching of the boundaries, particularly when women had increased emotional needs.

Many of the midwives expressed concerns regarding the boundaries of their role in safeguarding women's psychosocial health and wellbeing. Frances and Fleur described how they defined their midwifery boundaries in order to eliminate some of the situations that could cause these boundaries to be breached:

Frances: I'm happy to say that I'm a midwife and that's my degree, I'm not a counsellor. It's taken me years to get there. I used to stress myself with women's mental health problems . . . I think it's really hard because people want you to be their social worker and their aunty, friend, as well as a midwife, and I think that's such a burden to carry. It is quite hard.

Fleur: It is, but I tell them I have my degree in Midwifery and, you know, counselling and social work, it's very specialised and those people have wonderful skills and they're the people that can really help you through this, you know. Let me do your blood pressure and palpate your abdomen . . . I have had to learn and differentiate, and tell them in the nicest possible way that I'm sympathetic but I'm not the right person to listen to it [their psychosocial problems] all the time.

It was highlighted by the majority of the participants that women sometimes had elevated and diverse expectations of the midwife. Frances and Fleur, in the examples above, explained how they articulated the definition of their role around maternal mental health care in order to protect themselves from what they identified as an additional workload, which was not part of their midwifery role. They indicated that their role lay primarily within the physical realm, describing themselves guiding the women's expectations back to midwifery assessments.

The breaching of professional boundaries as identified by participants had a significant impact on the midwives' workload, levels of stress, and ultimately sometimes affected their own mental health and wellbeing:

Their mental health actually affects our mental health, and how we deal with that, like you talked about how you deal with it just not getting involved in it, makes me think I really need to do that more, seriously, because it affects my own mental health having women [women who are anxious/depressed] text me all the time and I'm constantly having to reassure them about things, you know? It puts a lot of strain on the care, when really part of me thinks that this should sit with the GP.

Jane

Sometimes the midwives' own health and wellbeing was affected as a result of their boundaries being breached by the strain of providing additional reassurance and support to women who were anxious or depressed. This left many of the midwives feeling overwhelmed. In the example above, Jane reflected the sentiment expressed by many of the midwives when she described how better boundary definition could protect from this added stress.

Focus group discussions also highlighted that a further complication inherent in the midwives safeguarding women's wellbeing and welfare was that many of them felt ill-prepared for their role in the antenatal assessment and screening of women's maternal mental health.

Feeling ill-prepared

It was evident that many of the midwives felt ill-prepared for their role in maternal mental health assessment and screening. Kelly and Isobelle talked about how this made them feel before they developed experience in this area:

Kelly: *I think a lot of my stuff has come from experience, being a midwife for as long as I have been, not necessarily coming out of my training. When I came out of my training I probably was a bit scared to (pause) I probably wouldn't have asked the questions I ask now. I would have shied away from some of it as I would have thought I'm actually not sure what to do with that information.*

Isabelle: *How's your baby today?!*

Kelly: *Yes, I know how to help there! I think it comes with time and experience, you know, talking with women for certain lengths of time.*

The midwives' skills for assessing maternal mental health were predominantly developed through professional experience, which suggests a range of skills among midwives. In the example above, Kelly and Isabelle highlighted the vulnerability that they felt when assessing women's mental health before gaining clinical experience in this field. They indicated their comfort in dealing with women's physical rather than psychological health and wellbeing.

Many participants identified that they felt ill-prepared as a result of a lack of professional guidance for how and when to assess women's mental health, and the lack of effective referral pathways:

Yes, I find it difficult, sometimes. We have a postnatal woman at the moment, we didn't get a lot of help with her [were not able to access appropriate services] . . . So I feel tricky because I don't know enough about it and I don't know when and how to ask. If something crops up it's very difficult to say (pause) well what do you say to somebody who you think is not coping, apart from: You're not coping? Do you need to see these people? And she's refusing everybody. Maternal mental health spoke to her on the phone, and she was fine, so yes it's a bit like that.

Caroline

In the example above, Caroline felt that she did not feel prepared, either educationally or with professional recommendations or guidance, to talk to women about their mental health, or for the complex situations she was facing in practice. She also felt unsupported when she was not able to access the MMH service when they were needed.

This made it more stressful for Caroline to safeguard the woman's wellbeing and welfare.

Many of the midwives expressed that they needed additional preparation and support for the kinds of situations that they would routinely see in clinical practice:

Yes, I think we need some more training (maternal mental health) that would prepare midwives for what it's like (in clinical practice). And around managing those really difficult women who are really anxious, that's very hard to deal with.

Nina

Many of the midwives discussed a need for a clinically focused approach to maternal mental health education to prepare midwives for the realities they face in practice. Nina above expressed that dealing with women who were really anxious was challenging, and that being armed with strategies to help would be beneficial. Nina, in describing the 'difficult' women in this example as being 'really anxious', suggests that their symptoms and behaviour could be indicative of a maternal mental health problem for which they needed appropriate care. Accessing appropriate care would be likely to improve the women's symptoms, as it is not the women themselves who are difficult, but the anxiety symptoms they are experiencing.

Chapter Five: Discussion and Summary

Introduction

This chapter will discuss the significance of the results in conjunction with related research. It will also consider the strengths, weaknesses, and limitations of this research study, and will conclude with some tentative recommendations for practice and policy, and for future research.

Not Meeting Needs

The findings of this research suggest that when women who had symptoms that could indicate a maternal mental health problem that did not meet the criteria for referral to the MMH service (such as anxiety or mild/moderate depression), appropriate services were often not available to meet their needs, leaving the midwives carrying the weight of the anxiety/depression. As a result, the disparity between needs and service provision evidently influenced the midwives' antenatal maternal mental health assessment and screening practices.

Identifying the maternal mental health problem

The evidence from this research suggests that the disparity between needs and service provision left the midwives sometimes questioning the rationale for the introduction of routine maternal mental health assessment and screening. The midwives felt that identifying the maternal mental health problem in the absence of appropriate services was not in the best interests of the woman, and also had implications for the midwives' workload and stress as they safeguarded the woman's wellbeing and welfare. This suggests that available, accessible, and appropriate services to meet the mental health needs of all women would represent a rationale for midwives undertaking routine assessment and screening.

In spite of the disparity between needs and service provision, the majority of the participant midwives incorporated some form of ongoing enquiry and assessment of women's mental health into their antenatal midwifery care. This was not always visible, but was evidently a thread that was woven into routine antenatal care. This suggests that the participants perceived mental health as integral to a woman's health and wellbeing, and tried to assimilate its assessment into routine midwifery care in spite of the difficulties this represented for them.

This research supports the view that a catalyst for routine maternal mental health assessment and screening can be effective. Results highlighted that the participant midwives routinely asked all women the questions about maternal mental health that were required for the hospital booking form, which suggests that implementing recommendations for required routine antenatal screening would help to ensure its universal application.

The evidence from this research suggests that routine antenatal maternal mental health screening using a screening tool was not the norm among this group of midwives, and neither was it a professional recommendation. Analysis of the literature (Chapter Two) does provide a good argument for universal, routine maternal mental health screening and psychosocial assessment during pregnancy in light of the detrimental effects of maternal mental health problems. This is also a recommendation from the Perinatal and Maternal Mortality Review Committee (2016). In its review of the 22 maternal deaths that occurred as a result of suicide from 2006 to 2013, the PMMRC (2016) found that many of these women had two or more risk factors for major depression, and identified that there was a lack of recognition of these risk factors. Two-thirds of these women had a history of mental health problems. Social risk

factors were also identified as being significant for a woman's risk, as a third of the women had previously been exposed to family violence, and almost all of the women had relationship stress. Of these maternal deaths, 32 percent were considered to have been potentially avoidable (PMMRC, 2016). This provides a strong rationale for the introduction of a universal, routine, antenatal maternal mental health screening programme in New Zealand.

Some literature suggests, however, that universal antenatal maternal mental health screening by itself may not represent a complete solution. Laios, Rio and Judd (2013) argue that there is not enough evidence to support the effectiveness of a universal routine maternal mental health screening programme alone, and contend that a 'one size fits all' approach is not optimal. They emphasize the importance of mental health being integral to maternity care, and its assessment being ongoing and comprehensive rather than relying purely on transient screening. Evidence from this research supports the notion of ongoing enquiry about women's mental health, and this ongoing assessment could partner well with a universal, routine antenatal maternal mental health screening programme.

The importance of maternal mental health being integrated into maternity care, as stated by Laios et al. (2013) above, suggests a holistic approach. Holistic midwifery care is embedded within the New Zealand midwifery model (New Zealand College of Midwives, 2008). This provides the foundations to further integrate maternal mental health assessment, screening, and services into routine maternity care in New Zealand.

Assessing a woman's physical and psychological symptoms simultaneously would help to further integrate maternal mental health into routine midwifery care. There are

many correlations between physical and psychological symptoms. For example, anxiety may present as palpitations, dyspnea, and tachycardia, or be synonymous with symptoms of anaemia, and some research studies suggest that women with antenatal anxiety and depression are more likely to report somatic symptoms (Alder, Fink, Urech, Hosli, & Bitzer, 2011; Karacam & Ancel, 2009).

Maternal mental health should not be regarded as a separate entity, but should be normalised and embedded into routine maternity care.

Addressing maternal mental health as a separate entity erroneously propagates the defunct theory of ‘mind-body dualism’. Most current theories demonstrate inter-connectedness of physical and mental health suggesting integrated interventions can achieve synergistic results.

(Prince; Patel; Saxena; Maj et al., 2007, p. 1)

To facilitate this and meet the needs of all women, maternal mental health services would need to work in partnership with midwives, lifting the weight of women’s symptoms of anxiety and depression from midwives so that they no longer needed to ‘plug the gap’ between women and the service in order to safeguard women’s wellbeing and welfare. However, the results of this research suggest that the midwives frequently had difficulties accessing mental health services for women with symptoms of anxiety and depression.

Difficulties accessing appropriate services

This research supports the evidence discussed in the literature review (Chapter Two) regarding the importance of clear referral pathways to a range of maternal mental health services in order to meet women’s needs. Literature suggests that a therapeutic effect cannot be achieved by maternal mental health assessment and screening alone, but must

be supported by integrated referral pathways to MMH services (Freed et al., 2012; Sword et al., 2008; Yardley et al., 2012).

The midwives during this study overwhelmingly highlighted the difficulties and frustrations that they experienced around trying to access, or being unable to access, services for women with problems that did not meet the referral criteria for the MMH service. Once the midwives identified that a woman had a maternal mental health problem (or had symptoms and behaviour that may not have been considered to be a mental health problem but that caused concern, such as symptoms of anxiety), this evidently represented an additional concern for them. When they then could not access appropriate services for the woman, carrying the weight of this concern equated to an additional responsibility and workload for the midwife, which evidently influenced the midwives' antenatal maternal mental health assessment, screening, and referral practices.

The Perinatal and Maternal Mortality Review Committee in its tenth annual report (2016) acknowledges the importance of the integration of maternal mental health services into maternity services. District Health Boards throughout New Zealand are required to be working towards the development of a referral pathway to better integrate maternal mental health services into maternity care (NMMG, 2014). An example is the referral pathway that has been implemented by Taranaki District Health Board (Appendix D). This pathway is comprehensive, integrating the physical, social, and psychological elements of wellbeing. Application of the pathway has had a positive start. This tool has been well accepted and integrated by midwives, but has not yet been evaluated (P. Morris, personal communication, February 2015).

Clear referral pathways have been found to be effective in improving collaboration in MMH services. An innovation implemented in Australia established a partnership connecting midwives, maternal child health nurses, and mental health nurses to address identified gaps in referral to services for women experiencing maternal mental health problems. The programme introduced routine maternal mental health screening using the Edinburgh Postnatal Depression Scale throughout the antenatal and postnatal periods, in conjunction with clear referral pathways. This resulted in professionals feeling more confident with maternal mental health assessment and referral, and also improved access to appropriate services for women (Yardley, Rule & Gill, 2012).

In the next sub-theme, ‘The anxious woman needing extra support’, the significance that carrying the weight of the anxiety symptoms in the absence of appropriate services had for the midwives’ perspectives and practices around maternal mental health will be discussed.

The Anxious Woman Needing Extra Support

When asked about their experiences of caring for women with maternal mental health problems, the midwives overwhelmingly described ‘the anxious women’: the additional support and reassurance that they needed, and the significant impact this additional work and stress had for their clinical practice. There is a gap in the literature on antenatal anxiety and depression. The available literature focuses on its causalities and resultant comorbidities, with little evidence related to the impact on midwifery practice and perceptions.

Results of this research indicate that the midwives were experiencing significant numbers of women being affected antenatally by stress and anxiety. International

studies suggest that antenatal anxiety could affect 25-45% of women (Rallis et al., 2014). Pregnancy is a major life event which can induce stress and anxiety in women (Dunkel Schetter, 2011), so an element of anxiety could be considered normal. However, lack of recognition of stress, anxiety, and depression during pregnancy that is beyond what would be considered 'normal' could have serious implications; the negative effects on both the mother and baby are now widely recognised (Dunkel Schetter & Tanner, 2012; Glover, 2015).

The evidence from this research suggests that the participant midwives found that caring for women with anxiety problems during pregnancy had a multi-layered effect on their perceptions of maternal mental health and their antenatal assessment practices. This was influenced by difficulties with the assessment of anxiety, the lack of appropriate services to meet the woman's needs, and the resultant effect on the midwives' workload and stress.

This research supports the view that antenatal anxiety and stress are more difficult to assess, which is consistent with the literature as discussed in Chapter Two. The results show that for these midwives the line between what could be considered as 'normal anxiety' during pregnancy and that which signified a mental health problem was often blurred. Identifying the anxiety symptoms often did not lead to appropriate care to meet the woman's needs, and as a result requirements for the midwives' time were increased due to the woman's need for additional support and reassurance. These difficulties signified an additional weight to carry as the midwives 'plugged the gap' between the woman and the service in order to safeguard the woman's wellbeing and welfare.

In a Scottish study investigating factors influencing antenatal anxiety and depression, it was identified that the majority of women would utilise their midwife as a source of support for emotional issues (Reid, Power, & Cheshire, 2009). This highlights the special relationship between a woman and her midwife, and the optimal position midwives are in to make a difference to women's health and wellbeing. It also emphasises the potential tensions and vulnerabilities for midwives, and conceivable breaching of boundaries of the LMC midwife role.

Anxiety and perception of risk

The evidence from this research suggests that anxiety during pregnancy represented a variable for the midwives' clinical decision-making, at times influencing the midwives' practice to accommodate the woman's additional needs for reassurance. This was evidently around the woman's perception of risk, for example, the woman requesting additional tests and investigations such as an ultrasound scan for reassurance due to fears about her pregnancy.

A positive correlation has been suggested between pregnancy-related anxiety and a woman's perception of pregnancy as risky, particularly for women aged over 35 years (Bayrampour, Heaman, Duncan, & Tough, 2012). The demographics of the area where the research was conducted are important to consider. Waitemata District has more women giving birth aged over 35 years than anywhere else in New Zealand (Waitemata DHB Maternity Quality and Safety Programme annual report, 2014).

Scamell (2014) proposed that childbirth in modern society is conceptualised around perception of risk. Women's construction and perception of risk could possibly be a variable for antenatal anxiety. Postmodern society could be argued to be risk-averse

(Mackenzie Bryers, 2010). Possamai-Inesedy (2006) claims that society's construction of risk influences the perception of childbirth as risky, even though statistics demonstrate low rates of mortality and morbidity in developed countries.

The consequences of managing risk in childbirth are arguably our increased rates of intervention (Lothian, 2012).

Fear of childbirth can have negative effects on birth outcomes, and can be a catalyst for maternal request caesarean section (Haines, Rubertsson, Pallant, & Hildingsson, 2012). A recent study found that women with high levels of fear around birth perceived childbirth as inherently risky, and were more likely to express a preference for a caesarean section (Stroll & Hall, 2013). The belief that birth is risky influences and limits maternal choice (McAra-Couper et al., 2010; Walsh, 2009).

This literature suggests that antenatal anxiety could represent a catalyst for increased medical intervention during pregnancy and birth as a result of the woman's perception of risk. The availability of appropriate services to meet the needs of women with anxiety and depression would relieve midwives from carrying the weight, and also could potentially have counterproductive effects on intervention rates during pregnancy and birth.

In the third sub-theme, 'Safeguarding women's wellbeing and welfare', the complications for the participant midwives as a result of the trusting relationship that midwives have with women, and the significance of the participants feeling ill-prepared for their role in the assessment and screening of maternal mental health will be discussed.

Safeguarding Women's Wellbeing and Welfare

The results of this research identified that there were two core problems which created difficulties for the midwives regarding safeguarding women's wellbeing and welfare in the light of the disparity between needs and service provision: the trusting relationship that they had with women, and the midwives feeling ill-prepared.

The New Zealand midwifery model is based on partnership with women. The evidence from this research suggests that this partnership relationship can have both benefits and complications regarding caring for women with maternal mental health problems.

Trusting relationship with women

The New Zealand College of Midwives (2008) in its code of ethics states that midwives must 'respond to the social, psychological, physical, emotional, spiritual, and cultural needs of women seeking midwifery care, whatever their circumstances' (p. 5). This model of care holistically encompasses the needs of the woman, and demonstrates the broad parameters of this role for the midwife. 'Responding to the woman's psychosocial needs' evidently becomes more complex as a result of the disparity between needs and service provision, creating the increased responsibility for the midwife.

The results from this research strongly suggest that the midwives cared very deeply for the women in their care. This was core to them feeling an increased responsibility as they 'plugged the gap' between the women and the service to ensure women's wellbeing and welfare, often resulting in additional workload and stress for the midwives.

A study of professional fatigue found that a common variable for professional burnout was the empathy felt by the practitioner for the client, and that a build-up of empathy could result in ‘empathy fatigue’ (Stebnicki, 2008). Further research found that midwives experienced ‘compassion fatigue’ when they regularly encountered women with social and emotional problems (Mollart, Newing, & Foureur, 2009).

A New Zealand study of midwife burnout by Young (2011) highlighted the difficulties inherent in ensuring that professional boundaries in LMC practice are not breached whilst endeavoring to meet the women’s needs and expectations of care, and identified this as a salient issue for sustainability within LMC midwifery practice. This evidence collectively illustrates how the additional burden of carrying the weight of maternal mental health problems in the absence of appropriate services may be detrimental for midwives, and is aggravated by the trusting relationship between the woman and the midwife.

This supportive, trusting relationship between the woman and the midwife, however, has many significant benefits. One of these is exemplified in research studies by Freed, Chan, Boger, and Thompson (2012) and Armstrong and Small (2010) who suggested that the mediating factor in identifying symptoms of maternal depression and anxiety was the woman’s relationship to, and the supportive attitude of, the health care professional present, rather than the screening tool being used. An empathetic attitude and approach by midwives towards maternal mental health was also identified by Rollans (2013) as being fundamental to women’s experiences and disclosure of symptoms. At the very heart of midwifery care is the premise that women need to feel safe (Smythe 2010) and women’s comfort is salient for disclosure of distress symptoms.

The Mental Health Council of Australia (2011) discovered that 51% of health care consumers were worried that professionals' perception of them would become unfavourable once a mental health problem was disclosed, representing a substantial barrier to care. Evidence from this research study supports the view that the stigma associated with mental health problems represents a barrier to women disclosing their symptoms (as also shown by the literature in Chapter Two). Midwives' perceptions of maternal mental health are therefore integral to a successful maternal mental health assessment and screening programme, as a result of the influence that this has on women disclosing symptoms, and also on the clinical application of the assessment and screening itself.

As discussed in Chapter Two, some studies have indicated that health professionals themselves are not exempt from negative attitudes towards mental health problems. For example, a recent Australian study (n=238) revealed negative stereotyping of maternal mental health disorders among its sample of midwives (Hauck et al., 2015).

The results of this study did not signify negativity from this group of midwives towards either the women, or the maternal mental health problems themselves. Respect and compassion towards the women in their care were obvious, but there was a 'knowing' among the midwives: they shared an understanding about how safeguarding women's wellbeing and welfare in the absence of appropriate mental health services impacted on their clinical practice.

Along with the complications for the participant midwives that were associated with the partnership relationship that midwives have with women, the research results also

suggest that many of the midwives felt ill-prepared for their role in the antenatal assessment and screening of maternal mental health.

Feeling ill-prepared

Evidence from this research suggests that the midwives felt that they were ill-prepared to identify and refer women with maternal mental health problems (along with dealing with the associated difficulties when appropriate care could not be accessed) which represented a problem for them as they safeguarded women's wellbeing and welfare. This perceived lack of preparation was something that appeared to influence the midwives' perceptions of maternal mental health and its antenatal assessment.

There is a dearth of New Zealand studies about midwives' perceptions around their preparation for maternal mental health screening, but studies in Australia and the United Kingdom have highlighted that many midwives did not feel adequately equipped with the required knowledge and skills for maternal mental health assessment and care, and subsequently felt ill-prepared (Hauck et al., 2015; McCauley et al., 2011; Rothera & Oates, 2011). These studies were relatively small, but collectively produced very similar findings. New Zealand's model of midwifery differs from that in Australia and the UK (where these studies were performed), so while this evidence holds some significance and appears to reflect the findings of this study, its application has some limitations.

A study of a sample of Australian midwives (n=25) highlighted that they found dealing with perinatal psychosocial issues challenging, and questioned how well midwives are prepared for their maternal mental health assessment role (McLachlan, Forster, Collins, & Hegarty, (2011). A further Australian study examining midwives attitudes around maternal mental health found that their perceived lack of competency,

rather than a lack of motivation, impeded the emotional care that the midwives were able to give to women (Hauck et al., 2015).

Based on this research, some additional postgraduate education for midwives could help to achieve cohesion in maternal mental health assessment, screening and referral practices. Maternal mental health is a component of undergraduate midwifery education, and also postgraduate education. Equipping midwives strategically with practical skills to help them to cope with the types of symptoms and behaviours that they will commonly see in clinical practice would be of benefit, regarding not only maternal mental health problems, but also the types of behaviours that are concerning but that may not be considered serious enough to be treated as mental health problems, such as anxiety symptoms.

The importance of professional training in maternal mental health issues and the use of screening tools is evident within the literature, and considered to be essential for cohesive practice (Gawley, Einarson, & Bowen, 2011; Julie, Lesley, Catriona, Deepak, & Clare, 2013; Segre, Brock, O'Hara, Gorman, & Engeldinger, 2011; Yardley, Rule, & Gill, 2012). A small Australian ethnographic study (n=18) discovered that when midwives were provided with additional training and support for maternal mental health assessment, they became more competent and empathetic in this role (Rollans et al., 2013).

However, as discussed in Chapter Four, the lack of appropriate services to meet the needs of women with mild or moderate maternal mental health problems is evidently causing the boundaries of the LMC role to be breached. This could be the precursor to midwives feeling unprepared, rather than a lack of educational preparation and support.

The referral guidelines for midwives (Ministry of Health, 2012) recommend a clear course of action once maternal mental health problems are identified by the midwife (as outlined in Chapter Four). These referral guidelines clearly define the midwifery scope of practice: to identify the maternal mental health problems and refer to the appropriate service. This illuminates the additional tensions for the midwife when the appropriate services are not available, cannot be accessed due to the woman's mental health problem not meeting the referral criteria, or are not meeting the woman's needs.

For example, according to the referral guidelines (Ministry of Health, 2012) midwives should refer women with mild or moderate maternal mental health problems, such as anxiety and mild/moderate depression, to their GP. The midwives in this study highlighted that many women when referred to their GP did not receive the care, or the access to the services, that they needed. This caused the midwives' professional boundaries to be breached, and left them carrying the weight of the maternal mental health problems. This reality could conceivably leave midwives feeling ill-prepared, but the catalyst for this is the disparity between needs and service provision rather than a lack of educational preparation.

Recommendations for Practice and Policy

Secondary to the findings from this research, there are some tentative recommendations for practice and policy:

- Maternal mental health assessment, screening, and health promotion should be normalised and embedded into routine midwifery care, creating a holistic approach.

- There should be routine maternal mental health screening using a screening tool in the antenatal period (in conjunction with a maternal mental health pathway for referral). This should optimally be done twice, and be routinely applied to practice, for example alongside the booking blood tests and blood tests done at 28 weeks' gestation, so that it becomes embedded in routine practice.

- There should be a pathway for referral to the MMH service that is universally applied across the multidisciplinary team. This pathway should:
 - be universally applied across New Zealand;
 - be visible to professionals, women, and their families;
 - be woman-centered;
 - be complemented with a range of services to meet the multifaceted maternal mental health needs of women;
 - ensure that the MMH service accepts direct referrals from midwives.

- Midwives need to be better prepared for their role in maternal mental health care:
 - Maternal mental health needs to be a thread running through undergraduate midwifery education, preparing student midwives not only with the knowledge of maternal mental health problems, but also for the complexities they will face in clinical practice.
 - Maternal mental health should be incorporated into elective post-registration midwifery education.
 - Maternal mental health should be incorporated into education for nursing, medicine, and child health services.

Limitations and Strengths of the Study

The resultant evidence from this study could not be generalised to the New Zealand midwifery population at large. This is a qualitative research study with a small, non-randomised, non-representative sample, and generalisation was not the aim. I attempted to invite midwives from a range of geographical areas and practice groups across the Auckland region, but this was limited to a degree by the availability of the midwives themselves. While the demography could potentially have been more culturally diverse, urban, rural, and semi-rural practices were involved, and a range of demographics were represented. Midwifery practices offering hospital and home births were included in the study in an attempt to explore possible diversities in the midwives' perceptions or assessment practices.

As existing midwifery practices formed the focus groups, there was potential for the group dynamics to be a limiting factor. I had a raised awareness of this throughout the focus group discussions, and attempted to ensure that all midwives felt comfortable and valued. There appeared to be no obvious group or power dynamics that inhibited participants' contributions to the discussions. This composition of the focus groups proved to be a strength, and their connectedness and shared experiences assisted with conversations and collective sense-making.

While findings are not representative of all New Zealand midwives, this research provides a rich description of the participant midwives' perceptions of maternal mental health and its antenatal assessment. This could facilitate practitioner self-reflection regarding their antenatal assessment practices and perceptions of mental health, and raise awareness of the phenomenon among professionals working in maternity and maternal mental health. The research could also be a precursor to further research in this

area, which could ultimately lead to the development of practice guidelines in New Zealand for antenatal maternal mental health assessment and screening.

Recommendations for Future Research

There is a dearth of studies around maternal mental health practices and processes in relation to the model of midwifery care in New Zealand. Ideas for future research could include:

- Research to investigate women's perceptions of maternal mental health and their experiences of the MMH service, and their experiences of accessing appropriate services to meet their needs.
- A national survey regarding midwives' assessment and screening of mental health during the antenatal period.

Conclusion

This study aspired to answer the research question, 'How do midwives perceive mental health and the assessment of maternal mental health in pregnancy?' The overarching statement captures the essence of this: 'Holding the problem—plugging the gap between women and the service'. Results revealed that the midwives' perceptions of mental health and its antenatal assessment were influenced by their practice reality of carrying the weight of maternal mental health problems that did not meet the referral criteria for the MMH service.

The act of carrying the weight of maternal mental health problems that did not meet the MMH service referral criteria caused breaching of the midwives' professional boundaries in order to meet the women's needs and ensure their wellbeing and welfare. This represented a precursor to the participant midwives feeling ill-prepared and

overwhelmed. This research highlighted that appropriate services to meet the needs of women with mild or moderate maternal mental health problems are evidently core to the midwives' antenatal maternal mental health assessment and screening practices.

References

- Adam, C. U., & Katherine, L. W. (2009). Antidepressant use and preterm birth/Dr. Wisner replies. *The American journal of psychiatry*, 166(10), 1189. doi: 10.1371/journal.pone.0092778
- Aita, M., & Richer, M. C. (2005). Essentials of research ethics for health care professionals. *Nursing & health sciences*, 7(2), 119-125. doi:10.1111/j.1442-2018.2005.00216.x
- Alder, J., Fink, N., Bitzer, J., Hösli, I., & Holzgreve, W. (2007). Depression and anxiety during pregnancy: A risk factor for obstetric, fetal and neonatal outcome? A critical review of the literature. *The journal of maternal-fetal & neonatal medicine*, 20(3), 189-189. doi:10.1080/14767050701209560
- Alder, J., Fink, N., Urech, C., Hösli, I., & Bitzer, J. (2011). Identification of antenatal depression in obstetric care. *Archives of gynecology and obstetrics*, 284(6), 1403-1409. doi:10.1007/s00404-011-1872-3
- Alderdice, F., McNeill, J., & Lynn, F. (2013). A systematic review of systematic reviews of interventions to improve maternal mental health and well-being. *Midwifery*, 29(4), 389. doi:10.1016/j.midw.2012.05.010
- Allen, M. C., Cristofalo, E., & Kim, C. (2010). Preterm birth: Transition to adulthood. *Developmental disabilities research reviews*, 16(4), 323-335. doi:10.1002/ddrr.128
- Altshuler, L. L., Cohen, L. S., Vitonis, A. F., Faraone, S. V., Harlow, B. L., Suri, R., & Stowe, Z. N. (2008). The Pregnancy Depression Scale (PDS): A screening tool for depression in pregnancy. *Archives of women's mental health*, 11(4), 277-285. doi:10.1007/s00737-008-0020-y
- Armstrong, S. J., & Small, R. E. (2010). The paradox of screening: Rural women's views on screening for postnatal depression. *BMC public health*, 10(1), 744-744. doi:10.1186/1471-2458-10-744
- Austin, M. P., Priest, S. R., & Sullivan, E. A. (2008). Antenatal psychosocial assessment for reducing perinatal mental health morbidity. *The Cochrane database of systematic reviews*, 7361(4), CD005124. doi: 10.1002/14651858.CD005124.pub2
- Austin, M. P., Reilly, N., & Sullivan, E. (2012). The need to evaluate public health reforms: Australian perinatal mental health initiatives. *Australian and New Zealand journal of public health*, 36(3), 208-211. doi:10.1111/j.1753-6405.2012.00851.x
- Baibazarova, E., van de Beek, C., Cohen-Kettenis, P. T., Buitelaar, J., Shelton, K. H., & van Goozen, S. H. M. (2013). Influence of prenatal maternal stress, maternal plasma cortisol and cortisol in the amniotic fluid on birth outcomes and child temperament at 3 months. *Psychoneuroendocrinology*, 38(6), 907. doi:10.1016/j.psyneuen.2012.09.015
- Bansil, P., Kuklina, E. V., Meikle, S. F., Posner, S. F., Kourtis, A. P., Ellington, S. R., & Jamieson, D. J. (2010). Maternal and fetal outcomes among women with depression. *Journal of women's health* (2002), 19(2), 329-334. doi:10.1089/jwh.2009.1387

- Bayrampour, H., Heaman, M., Duncan, K. A., & Tough, S. (2012). Comparison of perception of pregnancy risk of nulliparous women of advanced maternal age and younger age. *Journal of midwifery & women's health*, 57(5), 445. doi: 10.1111/j.1542-2011.2012.00188.x
- Bener, A. (2013). Psychological distress among postpartum mothers of preterm infants and associated factors: A neglected public health problem. *Revista brasileira de psiquiatria (São Paulo, Brazil: 1999)* 8235(3), 231. doi: 10.1590/1516-4446-2012-0821
- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative research*, 15(2), 219-234. doi:10.1177/1468794112468475
- Bergink, V., Kooistra, L., Lambregtse-van den Berg, M. P., Wijnen, H., Bunevicius, R., van Baar, A., & Pop, V. (2011). Validation of the Edinburgh depression scale during pregnancy. *Journal of psychosomatic research*, 70(4), 385-389. doi:10.1016/j.jpsychores.2010.07.008
- Bergman, K., Glover, V., Sarkar, P., Abbott, D.H; & O'Connor, T.G. (2010). In utero cortisol and testosterone exposure and fear reactivity in infancy. *Hormonal behaviour*, 57, 36-312. doi: 10.1016/j.yhbeh.2009.12.012
- Bergman, K., Sarkar, P., Glover, V., & O'Connor, T.G. (2010). Maternal prenatal cortisol and infant cognitive development: Moderation by infant-mother attachment. *Biological psychiatry*, 67, 1026-1032. doi: 10.1016/j.biopsych.2010.01.002
- Berman, D., Campbell, E., Lopez, J., Vasquez, D., Marcus, S., & Treadwell, M. (2012). 818: Maternal depression and impaired fetal growth. *American journal of obstetrics and gynecology*, 206(1), S359. doi:10.1016/j.ajog.2011.10.836
- Betts, K.S., Williams, G.M., Najman, J.M., Scott, J; Alati, R. (2013). Research report: The association between lower birthweight and comorbid generalised anxiety and major depressive disorder. *International journal of affective disorders*, 146(6), 231-237. doi: 10.1016/j.ad.2012.09.010
- Beyond Blue. (2011). *Clinical practice guidelines for depression and related disorders— anxiety, bipolar disorder and puerperal psychoses—in the perinatal period. A guideline for primary care professionals*. Melbourne, Beyondblue: The national depression initiative.
- Biaggi, A., Conroy, S., Pawlby, S., Pariante, C.M. (2016). Identifying the women at risk of antenatal anxiety and depression: A systematic review. *Journal of affective disorders*, 191, 62-77. doi: 10.1016/j.ad.2015.11.014
- Bilszta, J., Ericksen, J., Buist, A., & Milgrom, J. (2010). Women's experience of postnatal depression - Beliefs and attitudes as barriers to care. *Australian journal of advanced nursing*, The, 27(3), 44-54.
- Bonner, A., & Tolhurst, G. (2002). Insider-outsider perspectives of participant observation. *Nurse Researcher*, 9(4), 7.

- Buss, C., Davis, E. P., Muftuler, L. T., Head, K., & Sandman, C. A. (2010). High pregnancy anxiety during mid-gestation is associated with decreased gray matter density in 6–9-year-old children. *Psychoneuroendocrinology*, 35(1), 141-153. doi:10.1016/j.psyneuen.2009.07.010
- Carly, A., Debbie, C. S., & Colin, R. M. (2013). What is perinatal well-being? A concept analysis and review of the literature. *Journal of reproductive and infant psychology*, 31(4), 381-398. doi:10.1080/02646838.2013.791920
- Cerulli, C., Talbot, N. L., Tang, W., & Chaudron, L. H. (2011). Co-occurring intimate partner violence and mental health diagnoses in perinatal women. *Journal of women's health (2002)*, 20(12), 1797-1803. doi:10.1089/jwh.2010.2201
- Chen, Y. H., Lin, H. C., & Lee, H. C. (2010). Pregnancy outcomes among women with panic disorder — Do panic attacks during pregnancy matter? *Journal of affective disorders*, 120(1), 258-262. doi:10.1016/j.jad.2009.04.025
- Coelho, H. F., Murray, L., Royal-Lawson, M., & Cooper, P. J. (2011). Antenatal anxiety disorder as a predictor of postnatal depression: A longitudinal study. *Journal of affective disorders*, 129(1), 348-353. doi:10.1016/j.jad.2010.08.002
- Crotty, M. (1998). *The foundations of social research, meaning and perspective in the research process*. NSW, Australia: Allen and Unwin.
- Davis, D. L., & Walker, K. (2010). Case-loading midwifery in New Zealand: Making space for childbirth. *Midwifery*, 26(6), 603-608. doi:10.1016/j.midw.2009.01.004
- Diego, M. A., Field, T., Hernandez-Reif, M., Schanberg, S., Kuhn, C., & Gonzalez-Quintero, V. H. (2009). Prenatal depression restricts fetal growth. *Early human development*, 85(1), 65-70. doi:10.1016/j.earlhumdev.2008.07.002
- Doering, J., & Pizur-Barnekow, K. (2010). Community-based maternal mental health screening. *Nursing outlook*, 58(2), e9-e9. doi:10.1016/j.outlook.2010.02.094
- Dowling, M. (2006). Approaches to reflexivity in qualitative research. *Nurse Researcher*, 13(3), 7.
- Dunkel Schetter, C. (2011). Psychological science on pregnancy: Stress processes, biopsychosocial models, and emerging research issues. *Annual review of psychology*, 62(1), 531-558. doi:10.1146/annurev.psych.031809.130727
- Dunkel-Schetter C., & Glynn, L. (2010). Stress in pregnancy: Empirical evidence and theoretical issues to guide interdisciplinary researchers. In R. Contrada, & A. Baum (Eds.), *The handbook of stress science*, New York: Springer.
- Dunkel Schetter, C., & Tanner, L. (2012). Anxiety, depression and stress in pregnancy: Implications for mothers, children, research, and practice. *Current opinion in psychiatry*, 25(2), 141-148. doi:10.1097/YCO.0b013e3283503680
- Emmanuel, E., & John, W. S. (2010). Maternal distress: A concept analysis. *Journal of advanced nursing*, 66(9), 2104-no. doi:10.1111/j.1365-2648.2010.05371.x

- Evans, E. C., & Bullock, L. F. C. (2012). Optimism and other psychosocial influences on antenatal depression: A systematic review. *Nursing & health sciences*, 14(3), 352-361. doi:10.1111/j.1442-2018.2012.00700.x
- Fahey, J. O., & Shenassa, E. (2013). Understanding and meeting the needs of women in the postpartum period: The perinatal maternal health promotion model. *Journal of midwifery & women's health*, 58(6), 613-621. doi:10.1111/jmwh.12139
- Flynn, H. A., Henshaw, E., O'Mahen, H., & Forman, J. (2010). Patient perspectives on improving the depression referral processes in obstetrics settings: A qualitative study. *General hospital psychiatry*, 32(1), 9-16. doi:10.1016/j.genhosppsych.2009.07.005
- Fransson, E., Ortenstrand, A., & Hjelmstedt, A. (2011). Antenatal depressive symptoms and preterm birth: A prospective study of a Swedish national sample. *Birth (Berkeley, California)*, 38(1), 10-16. doi:10.1111/j.1523-536X.2010.00441.x
- Freed, R. D., Chan, P. T., Boger, K. D., & Tompson, M. C. (2012). Enhancing maternal depression recognition in health care settings: A review of strategies to improve detection, reduce barriers, and reach mothers in need. *Families, systems, & health*, 30(1), 1-18. doi:10.1037/a0027602
- Furber, C. M., Garrod, D., Maloney, E., Lovell, K., & McGowan, L. (2009). A qualitative study of mild to moderate psychological distress during pregnancy. *International journal of nursing studies*, 46(5), 669-677. doi: 10.1016/j.ijnurstu.2008.12.003
- Gao, W., Paterson, J., Abbott, M., Carter, S., & Iusitini, L. (2010). Pacific Islands families study: Intimate partner violence and postnatal depression. *Journal of immigrant and minority health / Center for Minority Public Health*, 12(2), 242-248. doi:10.1007/s10903-008-9190-y
- Gawley, L., Einarson, A., & Bowen, A. (2011). Stigma and attitudes towards antenatal depression and antidepressant use during pregnancy in healthcare students. *Advances in health sciences education: theory and practice*, 16(5), 669-679. doi:10.1007/s10459-011-9289-0
- George, A., Luz, R. F., De Tyche, C., Thilly, N., & Spitz, E. (2013). Anxiety symptoms and coping strategies in the perinatal period. *BMC pregnancy and childbirth*, 13(1), 233-233. doi:10.1186/1471-2393-13-233
- Giardinelli, L., Castellini, G., Faravelli, C., Innocenti, A., Benni, L., Stefanini, M. C.; & Bovani, R. (2011). Depression and anxiety in perinatal period: prevalence and risk factors in an Italian sample. *Archives of women's mental health*, 15(1), 21. doi:10.1007/s00737-011-0249-8
- Glover, V., Bergman, K., Sarkar, P., & O'Connor, T. G. (2009). Association between maternal and amniotic fluid cortisol is moderated by maternal anxiety. *Psychoneuroendocrinology*, 34(3), 430-435. doi:10.1016/j.psyneuen.2008.10.005
- Glover, V. (2015). Prenatal stress and its effects on the fetus and the child: Possible underlying biological mechanisms. *Advanced neurobiology*, 10, 269-283. doi: 10.1007/978-1-4939-1372-5_13

- Goldberg, R. L., Culhane, J. F., Iams, J. D., & Romero, R. (2008). Epidemiology and causes of preterm birth. *Lancet*, 371, 75-84. doi: 10.1016/S0140-6736(08)60074-4
- Graneheim, U. H., Lundman, B., Omvårdnad, Medicinsk, F., & Umeå, U. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse education today*, 24(2), 105-112. doi:10.1016/j.nedt.2003.10.001
- Grant, B. M., & Giddings, L. S. (2002). Making sense of methodologies: A paradigm framework for the novice researcher. *Contemporary nurse*, 13(1), 10-28. doi:10.5172/conu.13.1.10
- Guba, E. G., & Lincoln, Y.S. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational communication and technology journal*, 29(2), 75-92.
- Guba, E. G.; & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Newbury Park: Sage Publications.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin, & Y. S. Lincoln, (Eds.), *Handbook of qualitative research*, 105-117. Thousand Oaks: Sage Publications.
- Guilliland, K., & Pairman, S. (2010). *Women's business: The story of the New Zealand College of Midwives from 1989 to 2010*. Christchurch: New Zealand College of Midwives.
- Hahn-Holbrook, J., Haselton, M. G., Dunkel Schetter, C., & Glynn, L. M. (2013). Does breastfeeding offer protection against maternal depressive symptomatology?: A prospective study from pregnancy to 2 years after birth. *Archives of women's mental health*, 16(5), 411-422. doi:10.1007/s00737-013-0348-9
- Haines, H. M., Rubertsson, C., Pallant, J. F., & Hildingsson, I. (2012). The influence of women's fear, attitudes and beliefs of childbirth on mode and experience of birth. *BMC pregnancy and childbirth*, 12(1), 55-55. doi:10.1186/1471-2393-12-55
- Hall, P. (2006). Mothers' experiences of postnatal depression: An interpretative phenomenological analysis. *Community practitioners and health visitors association*, 79(8): 256.
- Hauck, Y. L., Kelly, G., Dragovic, M., Butt, J., Whittaker, P., & Badcock, J. C. (2015). Australian midwives' knowledge, attitude and perceived learning needs around perinatal mental health. *Midwifery*, 31(1), 247-255. doi:10.1016/j.midw.2014.09.002
- Hight, N. J., Gemmill, A. W., & Milgrom, J. (2011). Depression in the perinatal period: Awareness, attitudes and knowledge in the Australian population. *The Australian and New Zealand journal of psychiatry*, 45(3), 223. doi:10.3109/00048674.2010.547842
- Hunt, M. R. (2009). Strengths and challenges in the use of interpretive description: Reflections arising from a study of the moral experience of health professionals in humanitarian work. *Qualitative health research*, 19(9), 1284-1292. doi:10.1177/1049732309344612

- Henderson, J., & Redshaw, M. (2013). Anxiety in the perinatal period: Antenatal and postnatal influences and women's experience of care. *Journal of reproductive and infant psychology*, 31(5), 465. doi:10.1080/02646838.2013.835037
- Inanez, G., Charles, M. A., Forhan, A., Magnin, G., Thiebaugeorges, O., Kaminski, M., & Saurel-Cubizolles, M. J. (2012). Depression and anxiety in women during pregnancy and neonatal outcome: Data from the EDEN mother-child cohort. *Early human development*, 88(8), 643-649. doi: 10.1371/journal.pone.0135849
- Ji, S., Long, Q., Newport, D. J., Na, H., Knight, B., Zach, E. B., & Stowe, Z. N. (2011). Validity of depression rating scales during pregnancy and the postpartum period: Impact of trimester and parity. *Journal of psychiatric research*, 45(2), 213-219. doi:10.1016/j.jpsychires.2010.05.017
- Johnson, M., Schmeid, V., Lupton, S. J., Austin, M. P., Matthey, S. M., Kemp, L., & Yeo, A. E. (2012). Measuring perinatal mental health risk. *Archives of women's mental health*, 15(5), 375-386. doi:10.1007/s00737-012-0297-8
- Jones, C. J., Creedy, D. K., & Gamble, J. A. (2011). Australian midwives' knowledge of antenatal and postpartum depression: A national survey. *Journal of midwifery & women's health*, 56(4), 353. doi: 10.1111/j.1542-2011.2011.00039.x
- Jootun, D., McGhee, G., & Marland, G. R. (2009). Reflexivity: Promoting rigour in qualitative research. *Nursing standard (Royal College of Nursing (Great Britain): 1987)*, 23(23), 42. doi: 10.7748/ns2009.02.23.23.42.c6800.
- Jorm, A. F., & Griffiths, K. M. (2006). Population promotion of informal self-help strategies for early intervention against depression and anxiety. *Psychological medicine*, 36(1), 3-6. doi:10.1017/S0033291705005659
- Julie, J., Lesley, G., Catriona, J., Deepak, G., & Clare, M. (2013). Assessing women's perinatal psychological health: Exploring the experiences of health visitors. *Journal of reproductive and infant psychology*, 31(5), 479. doi: 10.1080/02646838.2013.835038
- Kaitz, M., Mankuta, D., Rokem, A. M., & Faraone, S. V. (2015). Relation between maternal anxiety and infant's weight depends on infant's sex: A longitudinal study from late gestation to 1-month post birth. *Journal of psychosomatic research*, 79(6), 620-627. doi:10.1016/j.jpsychores.2015.07.006
- Karaçam, Z., & Ançel, G. (2009). Depression, anxiety and influencing factors in pregnancy: A study in a Turkish population. *Midwifery*, 25(4), 344-356. doi:10.1016/j.midw.2007.03.006
- Kendall-Tackett, K. (2010). Four research findings that will change what we think about perinatal depression. *The journal of perinatal education*, 19(4), 7-9. doi:10.1624/105812410X530875
- Keim, S., Daniel, J. L., Dole, N., Herring, A. H., Siega-Riz, A. H., & Scheidt, P.C. (2011). A prospective study of maternal anxiety, perceived stress and depressive symptoms in relation to infant cognitive development. *Early human development*, 87(5), 273-380. doi: 10.1016/j.earlhumdev.2011.02.004

- Khashan, A. S., Everard, C., McCowan, L. M. E., Dekker, G., Moss-Morris, R. et al. (2014). Second-trimester maternal distress increases the risk of small for gestational age. *Psychological medicine*, 44, 2799-810. doi: 10.1017/S0033291714000300
- Kingston, D., Tough, S., & Whitfield, H. (2012). Prenatal and postpartum maternal psychological distress and infant development: A systematic review. *Child psychiatry and human development*, 43(5), 683-714. doi:10.1007/s10578-012-0291-4
- Kitzinger, J. (1995). Qualitative research. Introducing focus groups. *BMJ (Clinical research ed.)*, 311(7000), 299-302.
- Koch, T. (1994). Establishing rigour in qualitative research: The decision trail. *Journal of advanced nursing*, 19(5), 976-986. doi:10.1111/j.1365-2648.1994.tb01177.x
- Korja, R., Savonlahti, E., Ahlqvist-Bjorkroth, S., Stolt, S., Haataja, L., Lapinleimu, H., & Lehtonen, L. (2008). Maternal depression is associated with mother-infant interaction in preterm infants. *Acta paediatrica*, 97(6), 724-724. doi:10.1111/j.1651-2227.2008.00733.x
- Krantz, I., Eriksson, B., Lundquist-Persson, C., Ahlberg, B. M., & Nilstun, T. Institutionen för kvinnors och barns, h., Medicinska, f. (2008). Screening for postpartum depression with the Edinburgh Postnatal Depression Scale (EPDS): An ethical analysis. *Scandinavian journal of public health*, 36(2), 211-216. doi:10.1177/1403494807085392
- Krueger, R.A. (1994). *Focus groups: A practical guide for applied research*. London: Sage Publications.
- Kuhn, T. (1970). *The structure of scientific revolutions*. Chicago: The University of Chicago Press.
- Kukreja, B., Datta, V., Bhakhri, B. K., Singh, P., & Khan, S. (2012). Persistent postnatal depression after preterm delivery. *Archives of women's mental health*, 15(1), 73-74. doi:10.1007/s00737-011-0253-z
- Kumar, S., & Oakley Browne, M. A. (2008). Usefulness of the construct of social network to explain mental health service utilization by the Maori population in New Zealand. *Transcultural psychiatry*, 45(3), 439-454. doi:10.1177/1363461508094675
- Laios, L., Rio, I., & Judd, F. (2013). Improving maternal perinatal mental health: Integrated care for all women versus screening for depression. *Australasian psychiatry*, 21(2), 171-175. doi: 10.1177/1039856212466432
- Latendresse, G. (2009). The interaction between chronic stress and pregnancy: Preterm birth from a biobehavioral perspective. *Journal of midwifery and women's health*, 54(1), 8-17. doi:10.1016/j.jmwh.2008.08.001
- Lees, S., Brown, M., Mills, N., & McCalmont, C. (2009). Professionals' knowledge of perinatal mental health care: Susan Lees and colleagues report the findings of a survey to evaluate practitioners' knowledge of women's needs and available services, and make recommendations on improving referral pathways and staff training. *Mental health practice*, 13(4), 24. doi:10.7748/mhp2009.12.13.4.24.c7409

- Lewis, G. (2012). Saving mothers' lives: The continuing benefits for maternal health from the United Kingdom (UK) confidential enquires into maternal deaths. *Seminars in perinatology*, 36(1), 19-26. doi:10.1053/j.semperi.2011.09.005
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, California: Sage Publications.
- Lincoln, Y. (1995). Emerging criteria for quality in qualitative interpretive research. *Qualitative inquiry*, 1(3), 275-289. doi: 10.1177/107780049500100301
- Lothian, J. A. (2012). Risk, safety, and choice in childbirth. *The journal of perinatal education*, 21(1), 45-47. doi:10.1891/1058-1243.21.1.45
- Lusskin, S. I., Pundiak, T. M., & Habib, S. M. (2007). Perinatal depression: Hiding in plain sight. *Canadian journal of psychiatry. Revue Canadienne de psychiatrie*, 52(8), 479-488. doi: 10.1177/070674370705200802
- MacKenzie Bryers, H., & van Teijlingen, E. (2010). Risk, theory, social and medical models: A critical analysis of the concept of risk in maternity care. *Midwifery*, 26(5), 488-496. doi:10.1016/j.midw.2010.07.003.
- Makregiorgos, H., Joubert, L., & Epstein, I. (2013). Maternal mental health: Pathways of care for women experiencing mental health issues during pregnancy. *Social work in health care*, 52 (2-3), 258-279. doi: 10.1080/0098/389.2012.737899
- Marnes, J., & Hall, P. (2013). Midwifery care: A perinatal mental health case scenario. *Women and birth: Journal of the Australian College of Midwives*, 26(4), e112. doi:10.1016/j.wombi.2013.07.002
- Martin, P., Vikram, P., Shekhar, S., & Mario, M. (2007). Global mental health 1: No health without mental health. *Lancet*, 370(9590), 859.
- Mathibe-Neke, J. M., Rothberg, A., & Langley, G. (2014). The perception of midwives regarding psychosocial risk assessment during antenatal care. *Health SA Gesondheid*, 19(1), 1C-9. doi:10.4102/hsag.v19i1.742
- Marques, A. J., Figueiras, J., & Queiros, C. (2012). P-1185 - Mental illness stigma in mental health professionals. *European psychiatry*, 27, 1. doi:10.1016/S0924-9338(12)75352-X
- Mays, N., & Pope, C. (1995). Rigour And qualitative research. *BMJ: British medical journal*, 311(6997), 10. doi: http://dx.doi.org/10.1136/bmj.311.6997.109
- McAra-Couper, J., Jones, M., & Smythe, E. (2010). Rising rates of intervention in childbirth. *British journal of midwifery*, 18(3), 160-169. doi: http://dx.doi.org/10.12968/bjom.2010.18.3.46917.
- McCarthy, M., & McMahon, C. (2008). Acceptance and experience of treatment for postnatal depression in a community mental health setting. *Health care for women international*, 29(6), 618-637. doi:10.1080/07399330802089172

- McCauley, K., Elsom, S., Muir-Cochrane, E., & Lyneham, J. (2011). Midwives and assessment of perinatal mental health. *Journal of psychiatric and mental health nursing*, 18(9), 786-795. doi:10.1111/j.1365-2850.2011.01727.x
- McFarland, J., Salisbury, A. L., Battle, C. L., Hawes, K., Halloran, K., & Lester, B. M. (2011). Major depressive disorder during pregnancy and emotional attachment to the fetus. *Archives of women's mental health*, 14(5), 425-434. doi:10.1007/s00737-011-0237-z
- McLachlan, H. L., Forster, D. A., Collins, R., Gunn, J., & Hegarty, K. (2011). Identifying and supporting women with psychosocial issues during the postnatal period: Evaluating an educational intervention for midwives using a before-and-after survey. *Midwifery*, 27(5), 723-730. doi:10.1016/j.midw.2010.01.008
- McNeill, J., & Nolan, A. (2011). Midwifery research by midwifery researchers: Challenges and considerations. *Evidence-based midwifery (Royal College of Midwives)*, 9(2), 61.
- Meadows, S.O. (2011). The associations between perceptions of social support and maternal health: A cumulative perspective. *Journal of family issues*, 32(2), 181-208. doi:10.1177/0192513x10375064
- Medina, S., & Magnuson, S. (2009). Motherhood in the 21st Century: Implications for counselors. *Journal of counseling & development*, 87(1), 90-96. doi:10.1002/j.1556-6678.2009.tb00553.x
- Meltzer-Brody, S. (2011). New insights into perinatal depression: Pathogenesis and treatment during pregnancy and postpartum. *Dialogues in clinical neuroscience*, 13(1), 89-100.
- Mendelson, T., Leis, J. A., Perry, D. F., Stuart, E. A., & Tandon, S. D. (2013). Impact of a preventive intervention for perinatal depression on mood regulation, social support, and coping. *Archives of women's mental health*, 16(3), 211-218. doi:10.1007/s00737-013-0332-4
- Mental Health Council of Australia. (2011). *Consumer and carer experiences of stigma from mental health and other professionals*. Canberra, ACT: MHCA.
- Miles, S. (2011). Winning the battle: A review of postnatal depression. *British journal of midwifery*, 19(4), 221-227.
- Miller, L., Shade, M., & Vasireddy, V. (2009). Beyond screening: Assessment of perinatal depression in a perinatal care setting. *Archives of women's mental health*, 12(5), 329-334. doi:10.1007/s00737-009-0082-5
- Miller, L. J., & LaRusso, E. M. (2011). Preventing postpartum depression. *The psychiatric clinics of North America*, 34(1), 53-65. doi:10.1016/j.psc.2010.11.010
- Milgrom, J., Gemmill, A. W., Bilszta, J. L., Hayes, B., Barnett, B., Brooks, J., & Buist, A. (2008). Antenatal risk factors for postnatal depression: A large prospective study. *Journal of affective disorders*, 108(1), 147-157. doi:10.1016/j.jad.2007.10.014

- Ministry of Health. (2012). *Guidelines for consultation with obstetric and related medical services (referral guidelines)*. Wellington: Ministry of Health. ISBN 978-0-478-37340-0 (online)
- Ministry of Health. (2011). *Healthy beginnings: Developing perinatal and infant mental health services in New Zealand*. Wellington: Ministry of Health. ISBN 978-478-0-37374-5
- Misund, A. R., Nerdrum, P., Bråten, S., Pripp, A. H., & Diseth, T. H. (2013). Long-term risk of mental health problems in women experiencing preterm birth: A longitudinal study of 29 mothers. *Annals of general psychiatry* 33, 12(1), 33. doi: 10.1186/1744-859X-12-33
- Miszkurka, M., Zunzunegui, M. V., & Goulet, L. (2012). Immigrant status, antenatal depressive symptoms, and frequency and source of violence: What's the relationship? *Archives of women's mental health*, 15(5), 387-396. doi:10.1007/s00737-012-0298-7
- Mollart, L., Newing, C., & Foureur, M. (2009). Emotional wellbeing: Impact of conducting a structured antenatal psychosocial assessment (SAPSA). *Women and birth*, 22(13), 82-88. doi: 10.1016/j.wombi.2009.02.00.
- Morgan, D. L. (1996). Focus Groups. *Annual Review of Sociology*, 22(1), 129-152. doi:10.1146/annurev.soc.22.1.129
- Morse, J. M., & Field, P. A. (1995). *Qualitative research methods for health professionals* (2nd ed.). Thousand Oaks, California: Sage Publications.
- Najman, J. M., Bor, W., O'Callaghan, M., Williams, G. M., Aird, R., & Shuttlewood, G. (2005). Cohort profile: The Mater-University of Queensland study of pregnancy (MUSP). *International journal of epidemiology*, 34(5), 992-997. doi:10.1093/ije/dyi119
- National Maternity Monitoring Group. (2013.) *National Maternity Monitoring Group annual report 2013*. Wellington: Ministry of Health. ISBN 978-0-478-41536-0 (online)
- National Maternity Monitoring Group. (2014). *National Maternity Monitoring Group annual report 2014*. Wellington: Ministry of Health. ISBN 978-0-478-44461-2 (online)
- New Zealand College Of Midwives. (2008). *Midwives' handbook for practice*. 4th edition. 2008. Christchurch: New Zealand College Of Midwives.
- New Zealand College Of Midwives. (2015). *Midwives' handbook for practice*. 5th edition. 2015. Christchurch: New Zealand College Of Midwives.
- NICE Clinical Guidelines. (2007). *Antenatal and postnatal mental health: Clinical management and service guidance*. London, UK.
- NICE Clinical Guidelines. (2008). *Antenatal and postnatal mental health: Clinical management and service guidance*. London, UK.
- NICE Clinical Guidelines. (2014). *Antenatal and postnatal mental health: Clinical management and service guidance*: London, UK.

- O'Donnell, K., O'Connor, T. G., & Glover, V. (2009). Prenatal stress and neurodevelopment of the child: Focus on the HPA axis and role of the placenta. *Developmental neuroscience*, 31, 285-292. doi:10.1159/000216539
- Pairman, S., Tracy, S., Thorogood, C., & Pincombe, J. (2010). *Midwifery: Preparation for practice*, 2nd edition. Chatswood: Elsevier.
- Parker, A., & Tritter, J. (2006). Focus group method and methodology: Current practice and recent debate. *International journal of research and method in education*, 29(1), 23-37. doi:10.1080/01406720500537304
- Patton, M. Q. (1990). *Qualitative research and evaluation methods*, 3rd edition. Thousand Oaks, California: Sage Publications.
- Pereira, A. T., Bos, S. C., Marques, M., Maia, B. R., Soares, M. J., Valente, J., & De Azevedo, M. H. P. (2011). The postpartum depression screening scale: Is it valid to screen for antenatal depression? *Archives of women's mental health*, 14(3), 227-238. doi:10.1007/s00737-010-0178-y
- Perry, D. F., Ettinger, A. K., Mendelson, T., & Le, H.-N. (2011). Prenatal depression predicts postpartum maternal attachment in low-income Latina mothers with infants. *Infant behavior and development*, 34(2), 339-350. doi:10.1016/j.infbeh.2011.02.005
- Pinto-Foltz, M. D., & Logsdon, M. C. (2008). Stigma towards mental illness: A concept analysis using postpartum depression as an exemplar. *Issues in mental health nursing*, 29(1), 21-36. doi:10.1080/01612840701748698
- PMMRC. (2013). *Seventh annual report of the perinatal and maternal review committee: Reporting mortality 2011*. Wellington, New Zealand: Health Quality and Safety Commission. ISBN 978-0-478-38550-2 (online)
- PMMRC. (2014). *Eighth annual report of the perinatal and maternal review committee: Reporting mortality 2012*. Wellington, New Zealand: Health Quality and Safety Commission. ISBN 978-0-478-38579-3 (online)
- PMMRC. (2015). *Ninth annual report of the perinatal and maternal review committee: Reporting mortality 2013*. Wellington, New Zealand: Health Quality and Safety Commission. ISBN 978-0-478-38597-4 (online)
- PMMRC. (2016). *Tenth annual report of the perinatal and maternal review committee: Reporting mortality 2014*. Wellington, New Zealand: Health Quality and Safety Commission. ISBN 978-0-908345-30-4 (online)
- Polit, D. F., & Hungler, B. P. (1999). *Nursing research: Principles and methods*. Philadelphia: Lippincott.
- Possamai-Inesedy, A. (2006). Confining risk: Choice and responsibility in childbirth in a risk society. *Health sociology review*, 15(4), 406-414. doi:10.5172/hesr.2006.15.4.406

- Postmus, J. L., Huang, C.-C., & Mathisen-Stylianou, A. (2012). The impact of physical and economic abuse on maternal mental health and parenting. *Children and youth services review*, 34(9), 1922-1928. doi:10.1016/j.childyouth.2012.06.005
- Powers, B. A. (1990). Nursing research: A quantitative and qualitative approach. *Research in nursing & health*, 13(5), 351-352. doi:10.1002/nur.4770130512
- Prince, M., Patel, V., Saxena, S., Maj, M., Masello, J., Phillips, M. R., & Rahman, A. (2007). No health without mental health. *Lancet*, 370(9590), 859-877. doi: 10.1016/S0140-6736(07) 61238-0
- Rahman, A., Surkan, P. J., Cayetano, C. E., Rwagatare, P., & Dickson, K. E. (2013). Grand challenges: Integrating maternal mental health into maternal and child health programmes. *PLoS medicine*, 10(5), e1001442.
- Rallis, S., Skouteris, H., McCabe, M., & Milgrom, J. (2014). A prospective examination of depression, anxiety and stress throughout pregnancy. *Women and birth: journal of the Australian College of Midwives*, 27(4), e36-e42. doi:10.1016/j.wombi.2014.08.002
- Reid, H., Power, M., & Cheshire, K. (2009). Factors influencing antenatal depression, anxiety and stress. *British journal of midwifery*, 17(8), 501-508. doi:10.12968/bjom.2009.17.8.43643
- Reilly, N., Harris, S., Loxton, D., Chojenta, C., Forder, P., Milgrom, J., & Austin, M. P. (2013). Referral for management of emotional health issues during the perinatal period: Does mental health assessment make a difference? *Birth*, 40(4), 297-306. doi:10.1111/birt.12067
- Rhian, B., & Simon, W. (2012). *One charity's approach to perinatal depression and social inclusion* (2042-8308). Brighton: Emerald Group Publishing Limited. Retrieved from <http://aut.summon.serialssolutions.com> doi:10.1108/20428301211281078
- Robertson, K. (2010). Understanding the needs of women with postnatal depression. *Nursing standard (Royal College of Nursing (Great Britain): 1987)*, 24(46), 47.
- Rogers, K. (2008). Ethics and qualitative research: Issues for midwifery researchers. *British journal of midwifery*, 16(3), 179-182.
- Rogers, C. E., Lenze, S. N., & Luby, J. L. (2013). Late preterm birth, maternal depression, and risk of preschool psychiatric disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52(3), 309-318. doi: 10.1016/j.jaac.2012.12.005
- Rollans, M., Schmied, V., Kemp, L., & Meade, T. (2013). Digging over that old ground: An Australian perspective of women's experience of psychosocial assessment and depression screening in pregnancy and following birth. *BMC women's health*, 13(1), 18-18. doi:10.1186/1472-6874-13-18
- Rothera, I., & Oates, M. (2011). Managing perinatal mental health: A survey of practitioners' views. *British journal of midwifery*, 19(5), 304-313.

- Rowe, H. J., Fisher, J. R. W., & Loh, W. M. (2008). The Edinburgh Postnatal Depression Scale detects but does not distinguish anxiety disorders from depression in mothers of infants. *Archives of women's mental health*, 11(2), 103-108. doi:10.1007/s00737-008-0003-z
- Rubertsson, C., Hellström, J., Cross, M., Sydsjö, G., Barn- och, K., Avdelningen för kliniska, V., & Linköpings, U. (2014). Anxiety in early pregnancy: Prevalence and contributing factors. *Archives of women's mental health*, 17(3), 221-228. doi:10.1007/s00737-013-0409-0
- Sandelowski, M. (1993). Rigor or rigor mortis: The problem of rigor in qualitative research revisited. *ANS. Advances in nursing science*, 16(2), 1.
- Sandelowski, M. (1986). The problem of rigor in qualitative research. *Advances in nursing science*, 8(3), 27-37.
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in nursing & health*, 23(4), 334-340. doi:10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G
- Saroj, S., & Lex, W. D. (2008). Preterm birth 3: An overview of mortality and sequelae of preterm birth from infancy to adulthood. *Lancet*, 371(9608), 261. doi: 10.1016/S0140-6736(08)60136-1
- Scamell, M. (2014). Childbirth within the risk society. *Sociology Compass*, 8(7), 917-928. doi:10.1111/soc4.12077
- Schmied, V., Johnson, M., Naidoo, N., Austin, M.-P., Matthey, S., Kemp, L., & Yeo, A. (2013). Maternal mental health in Australia and New Zealand: A review of longitudinal studies. *Women and birth : Journal of the Australian College of Midwives*, 26(3), 167. doi:10.1016/j.wombi.2013.02.006
- Segre, L. S., Brock, R. L., O'Hara, M. W., Gorman, L. L., & Engeldinger, J. (2011). Disseminating perinatal depression screening as a public health initiative: A train-the-trainer approach. *Maternal and child health journal*, 15(6), 814-821. doi:10.1007/s10995-010-0644-1
- Smith, M. V., Shao, L., Howell, H., Lin, H., & Yonkers, K. A. (2011). Perinatal depression and birth outcomes in a healthy start project. *Maternal and child health journal*, 15(3), 401-409. doi:10.1007/s10995-010-0595-6
- Smythe, E. (2010). Safety is an interpretive act: A hermeneutic analysis of care in childbirth. *International journal of nursing studies*, 47(12): 1474-82. doi: 10.1016/j.ijnurstu.2010.05.003
- Spradley, J.P. (1980). *Participant observation*. Orlando: Harcourt Brace Jovanovich Incorporated.
- Starks, H., & Trinidad, S. B. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative health research*, 17(10), 1372-1380. doi:10.1177/1049732307307031

- Stebnicki, M. (2008). *Empathy fatigue*. New York: Springer Journal Publishing Company LLC.
- Steeegers, E. A. P., Tiemeier, H., Verhulst, F. C., Roza, S. J., Henrichs, J., Hofman, A., & Schmidt, H. G. (2010). Maternal psychological distress and fetal growth trajectories: The Generation R study. *Psychological medicine*, 40(4), 633-643.
doi:10.1017/S0033291709990894
- Steen, M., & Jones, A. (2013). Maternal mental health: stigma and shame. *The practising midwife*, 16(6), 5.
- Stewart, R. C. (2007). Maternal depression and infant growth – a review of recent evidence. *Maternal & child nutrition*, 3(2), 94-107.
doi:10.1111/j.1740-8709.2007.00088.x
- Stickney, S., Yanosky, D., Black, D. R., & Stickney, N. L. (2012). Socio-demographic variables and perceptual moderators related to mental health stigma. *Journal of mental health (Abingdon, England)*, 21(3), 244-256. doi:10.3109/09638237.2012.670878
- Stoll, K., & Hall, W. A. (2013). Attitudes and preferences of young women with low and high fear of childbirth. *Qualitative health research*, 23(11), 1495-1505.
doi: 10.1177/1049732313507501
- Surkan, P. J., Gottlieb, B. R., McCormick, M. C., Hunt, A., & Peterson, K. E. (2012). Impact of a health promotion intervention on maternal depressive symptoms at 15 months postpartum. *Maternal and child health journal*, 16(1), 139-148.
doi:10.1007/s10995-010-0729-x
- Swalm, D., Brooks, J., Doherty, D., Nathan, E., & Jacques, A. (2010). Using the Edinburgh Postnatal Depression Scale to screen for perinatal anxiety. *Archives of women's mental health*, 13(6), 515-522. doi:10.1007/s00737-010-0170-6
- Sword, W., Busser, D., Ganann, R., McMillan, T., & Swinton, M. (2008). Women's care-seeking experiences after referral for postpartum depression. *Qualitative health research*, 18(9), 1161-1173. doi:10.1177/1049732308321736
- Tegethoff, M., Greene, N., Olsen, J., Meyer, A. H., & Meinlschmidt, G. (2010). Maternal psychosocial adversity during pregnancy is associated with length of gestation and offspring size at birth: Evidence from a population-based cohort study. *Psychosomatic medicine*, 72(4), 419-426. doi:10.1097/PSY.0b013e3181d2f0b0
- Thomas, E., & Magilvy, J. K. (2011). Qualitative rigor or research validity in qualitative research. *Journal for specialists in pediatric nursing*, 16(2), 151-155.
doi:10.1111/j.1744-6155.2011.00283.x
- Thorne, S. (2008). *Interpretive description*. Walnut Creek, California: Left Coast Press.
- Thorne, S., Jensen, L., Kearney, M. H., Noblit, G., & Sandelowski, M. (2004). Qualitative metasynthesis: reflections on methodological orientation and ideological agenda. *Qualitative health research*, 14(10), 1342-1365.
doi:10.1177/1049732304269888

- Thorne, S., Kirkham, S. R., & MacDonald-Emes, J. (1997). Interpretive description: A noncategorical qualitative alternative for developing nursing knowledge. *Research in nursing & health*, 20(2), 169-177. doi:10.1002/(SICI)1098-240x
- Thurmond, V. A. (2001). The point of triangulation. *Journal of nursing scholarship*, 33(3), 253-258. doi:10.1111/j.1547-5069.2001.00253.x
- Tuckett, A. G. (2005). Part II. Rigour in qualitative research: Complexities and solutions. *Nurse researcher*, 13(1), 29. doi: 10.7748/nr2005.07.13.1.29.c5998
- Ungar, T., & Knaak, S. (2013). The hidden medical logic of mental health stigma. *The Australian and New Zealand journal of psychiatry*, 47(7), 611-612. doi:10.1177/0004867413476758
- Van Batenberg-Eddes, T., Brion, M. J., Henrichs, J., Jaddoe, V. W., Hofman, A., Verhulst, F. C., Lawlor, D. A., Davey Smith, G., & Tiemeier, H. (2013). *The journal of child psychology and psychiatry*, 54 (5), 591-600. doi: 10.1111/jcpp.12023
- Van der Ham, J., Berry, K., Hoehn, E., & Fraser, J. (2013). A collaborative approach to perinatal and infant mental health service delivery in Australia. *Australasian psychiatry: bulletin of Royal Australian and New Zealand College of Psychiatrists* 263, 21(4), 371. doi: 10.1177/1039856213486302
- Vigod, S. N., Villegas, L., Dennis, C. L., & Ross, L. E. (2010). Prevalence and risk factors for postpartum depression among women with preterm and low birthweight infants: A systematic review. *BJOG: An international journal of obstetrics & gynaecology*, 117(5), 540-540. doi:10.1111/j.1471-0528.2009.02493.x
- Vythilingum, B., Geerts, L., Fincham, D., Roos, A., Faure, S., Jonkers, J., & Stein, D. J. (2010). Association between antenatal distress and uterine artery pulsatility index. *Archives of women's mental health*, 13(4), 359-364. doi:10.1007/s00737-010-0144-8
- Waitemata District Health Board (2014). *Waitemata DHB maternity quality and safety programme annual report 2014*. Auckland, New Zealand: Waitemata District Health Board.
- Waldie, K. E., Peterson, E. R., D'Souza, S., Underwood, L., Pryor, J. E., Atatora Carr, P. E., Grant, C., & Morton, S. M. B. (2015). Depression symptoms during pregnancy: Evidence from *Growing up in New Zealand*. *Journal of affective disorders*, 186, 66-73.
- Walsh, T. C. (2009). Exploring the effect of hospital admission on contraction patterns and labour outcomes using women's perceptions of events. *Midwifery*, 25(3), 242-252. doi:10.1016/j.midw.2007.03.009
- Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in qualitative research. *Qualitative health research*, 11(4), 522-537. doi:10.1177/104973201129119299
- Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Thousand Oaks, California: Sage Publications.

World Health Organization. (2005). *Promoting mental health: Concepts, emerging evidence, practice: Report of the World Health Organization*. Melbourne, Australia: Department of Mental Health and Substance Abuse. ISBN 92-4-159159-5 (online)

Wibeck, V., Dahlgren, M. A., Öberg, G., Centrum för klimatpolitisk, f., Avdelningen för studier av vuxenutbildning, f. o. h. u., Institutionen för beteendevetenskap och, l., Linköpings, u. (2007). Learning in focus groups: An analytical dimension for enhancing focus group research. *Qualitative research*, 7(2), 249-267.
doi:10.1177/1468794107076023

Wiles, R., & Ebooks, C. (2012). *What are qualitative research ethics?* New York: Bloomsbury Academic.

Wilkinson, S. (2014). Focus group methodology: A review. *International journal of social research methodology*, 1(3), 181-203. doi:10.1080/13645579.1998.10846874

Yardley, P., Rule, C., & Gill, J.-A. (2012). Teamwork reduces mental health risk for mothers. *Australian nursing journal: ANJ, The*, 20(2), 39.

Young, C. M. (2011). *The experience of burnout in case loading midwives* (Doctoral dissertation, Auckland University of Technology). Retrieved from <http://hdl.handle.net/10292/2447>.

Zlotnick, C., Capezza, N. M., & Parker, D. (2011). An interpersonally based intervention for low-income pregnant women with intimate partner violence: A pilot study. *Archives of women's mental health*, 14(1), 55-65.
doi:10.1007/s00737-010-0195-x



Invitation to participate in research entitled

Midwives' Perspectives of Mental Health and Maternal Mental Health

We want to invite practising midwives to take part in one of up to five focus groups to talk about midwives' views of mental health, their comfortableness in dealing with mental health issues, and screening practices.

If you are a practising midwife and are willing to share your insights in a focus group interview lasting around 90-120 minutes, we would like you to consider taking part.

If you are interested in participating in this research please contact Deborah Payne on dpayne@aut.ac.nz or (09) 921 9999 ext. 7112, or phone Christine Mellor on 021 557 502.

Thank you.

Deborah Payne

Director, Centre for Midwifery & Women's Health Research, AUT University

Participant Information Sheet



Date Information Sheet Produced:

20/04/2014

Project Title

Midwives' Perspectives of Mental Health and Maternal Mental Health

An Invitation

We (Deborah Payne, Andrea Gilkison, Christine Mellor, Judith McAra Couper, Margaret Roberts, and Mavis Kirkham) are a group of midwifery and women's health researchers based in AUT's Centre for Midwifery and Women's Health Research. We would like to invite midwives practising in the Auckland area to take part in one of several focus groups talking about mental health and maternal mental health. In particular we will focus on midwives' views of mental health, their comfortableness in dealing with mental health issues, and screening practices. The information from the focus groups will be used firstly to guide us in future research, and secondly, with your permission, to inform Christine Mellor's Masters in Health Science thesis. Your decision to take part in this study is voluntary. You may withdraw from the study at any time up until we complete our focus group interviews. Whether you choose to take part or not will neither advantage nor disadvantage you.

What is the purpose of this research?

The purpose of this study is to deepen our understanding of Aotearoa New Zealand midwives' practice and perceptions in relation to mental health and maternal mental health. This topic has not been widely researched in New Zealand and it is our intention to allow midwives to share their thoughts and views. Our overall aim is to contribute to improving perinatal mental health and wellbeing.

We will present our findings at New Zealand and international midwifery conferences, and submit them to journals. The interview transcripts will also be used by Christine Mellor as data for her Masters in Health Science thesis.

How was I identified and why am I being invited to participate in this research?

You are being invited to participate as you are a registered midwife practising in the Auckland area and have responded to an advertisement about the study requesting further information.

What will happen in this research?

If you decide to take part in the study, this will involve you participating in one of the focus groups being held in the Auckland area. The focus groups will be held at the North Shore and Manukau campuses. The dates and times will be negotiated with you. **We would also like to offer any midwives who identify as Māori, Pasifika, Asian or another ethnicity the opportunity to be part of their own rōpū (focus group). Please let us know if you would prefer that option.**

The focus group should take up to two hours of your time (this does not include travel). Before the focus group begins you will be asked to sign a consent form, and then we will work out the group's ground rules so that everyone feels safe taking part. The group will be asked to discuss their views of mental health, their

comfortableness in dealing with mental health issues, and screening practices. The focus group will be digitally audio-recorded and then transcribed either by one of the team members or a transcriber who has signed a confidentiality agreement. You will be sent a summary of the focus group and a copy of the final report.

What are the discomforts and risks?

We do not anticipate any risks to you from this study. However, occasionally such interviews in which you share your thoughts, ideas, and knowing can make a person feel unsafe.

How will these discomforts and risks be alleviated?

One of the ground rules that we will ask each of the focus group members to observe is that they will not disclose the identity of any of the other members, nor what was discussed, to other people.

One of the following three researchers will be the facilitator, and one will take notes during the focus group: Deborah, Andrea and Christine. Each of the researchers are skilled in group facilitation. Judith and Mavis will only be involved in analysis of the de-identified transcripts.

You do not have to take part in all of the discussion and can refuse to discuss some of the questions. You may also stop the focus group interview at any time. If you feel on reflection after the focus group interview that you have said too much or exposed things that you wish you had not, we should be able to delete any statements that you have made that you do not want to be included in the transcript.

In the unlikely event that you were harmed in any way while taking part in this study, we can support you in seeking counselling through the AUT staff counselling services.

What are the benefits?

The main benefit is that your participation in this research will identify issues for midwives in maintaining the wellbeing of the women and their families in their care, particularly the women's mental health and wellbeing. This will inform the midwifery profession because midwives play an important role in caring for women throughout women's maternity experience. Your participation will enable midwives' voices on the issue of maternal health and wellbeing to be heard.

In being able to use the focus transcripts for her Masters thesis Christine Mellor will be able to complete her Masters in Health Science (Midwifery).

How will my privacy be protected?

As above, all members of your focus group will agree to maintain the privacy of the focus group. All care will be taken to remove any names or details that may identify you and other members of the focus group and to ensure that anonymity is maintained where possible. However, your identity will be known to the other members of your focus group. The midwifery community in New Zealand is small and while we will take all care to ensure confidentiality and privacy, it is important participants are aware of potential identification.

Your contact details will be stored in a secured location and only Deborah, Andrea, and Christine will have access to these.

What are the costs of participating in this research?

The only cost is your time: approximately two hours for the focus group interview and travelling time. We appreciate that your time is given voluntarily. If necessary we may be able to reimburse your AUT parking fees.

What opportunity do I have to consider this invitation?

If two weeks after sending you this participant information sheet we have not heard from you, Deborah, Andrea or Christine will make contact with you to find out if you would like to take part or not.

How do I agree to participate in this research?

You can contact Deborah or wait for her, Andrea or Christine to contact you in two weeks' time. Also, at the beginning of the focus group we will ask you to sign a consent form.

Will I receive feedback on the results of this research?

Yes, if you tick the box on the consent form which asks if you'd like a copy of the results, we will email you a copy of the report. If you agree to Christine's use of the focus group transcript for her thesis, you can also obtain a copy of her findings' summary by ticking that box on the consent form

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Deborah Payne, email: dpayne@aut.ac.nz, ph: (09) 921 9999 ext. 7112.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTECH, Kate O'Connor, email: ethics@aut.ac.nz, ph: (09) 921 9999 ext. 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

Deborah Payne: dpayne@aut.ac.nz; ph. 09 921 9999 ext. 7112

Andrea Gilkison: agilkiso@aut.ac.nz, ph. 09 921 9999 ext. 7720

Christine Mellor: cmellor@aut.ac.nz, ph. 09 921 9999

Judith McAra Couper: Jmcaro@aut.ac.nz, ph. 09 921 9999 ext. 7193

Margaret Roberts: mroberts@aut.ac.nz, ph. 09 921 9999, ext. 7711

Approved by the Auckland University of Technology Ethics Committee on [type the date on which the final approval was granted], AUTECH reference number [type the AUTECH reference number].

Please send one (1) copy



Consent Form

For use when focus groups are involved

Project title: Midwives' Perspectives of Mental Health and Maternal
Mental Health: An Interpretive Descriptive Study

Project Supervisor: Deborah Payne

Researchers: Andrea Gilkison, Christine Mellor, Judith McAra Couper,
Mavis Kirkham

- ☐ I have read and understood the information provided about this research project in the information sheet dated *dd mmmm yyyy*.
- ☐ I have had an opportunity to ask questions and to have them answered.
- ☐ I understand that the identity of my fellow participants and our discussions in the focus group are confidential to the group, and I agree to keep this information confidential.
- ☐ I understand that notes will be taken during the focus group and that it will also be audio-taped and transcribed.
- ☐ I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection without being disadvantaged in any way.
- ☐ If I withdraw, I understand that while it may not be possible to destroy all records of the focus group discussion of which I was part, the relevant

information about me, including tapes and transcripts, or parts thereof, will not be used.

☐ I agree to take part in this research.

☐ I wish to receive a copy of the report from the research (please tick one):

Yes ☐ No ☐

☐ I agree to Christine Mellor using the focus group and my statements made during the focus group for her Masters thesis.

☐ I wish to receive a copy of Christine's report from her thesis (please tick one):

Yes ☐ No ☐

Participant's signature:

.....

Participant's name:

.....

Participant's contact details (if appropriate):

.....

.....

.....

.....

Date:

Approved by the Auckland University of Technology Ethics Committee on [type the date on which the final approval was granted], AUTECH reference number [type the AUTECH reference number].

Note: The participant should retain a copy of this form.

Taranaki District Health Board Perinatal Mental Health Local Referral Pathway

