Health services and music: Perspectives among women with postnatal depression and their health care providers

by

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Declaration

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Abstract

Postnatal depression (PND) is a depressive disorder that may impact up to a third of all postpartum women worldwide, with rural Australian women being more than one-and-a-half times more likely to develop PND than their urban counterparts. The factors affecting the development of PND are broadly biological, psychological and social. The social determinants of health, in addition to lower levels of access to appropriate health care and support services, are the underlying risk factors for PND among rural women.

The treatments used for those experiencing PND include pharmacological, psychological, psychosocial, complementary and alternative therapies. However, some women prefer non-pharmacological treatments largely because of their desire to continue breastfeeding, and the stigma associated with mental ill health and medication use. In addition, women in rural and remote areas encounter various difficulties accessing specialist health care and PND-specific health services.

Complementary and alternative therapies have come to take a more prominent role in health care. It has been reported that music, yoga, massage, and meditation have been effective in relieving stress, anxiety and reducing pain. Music therapy, in particular, has taken on a more prominent role in health care, including mental health, and has been utilised among those experiencing depression, stress and anxiety. However, very few studies have explored music as therapy for PND. Thus, this research explores the effectiveness of music as a therapy option for women with PND, particularly for those women living in rural and remote areas.

This study aims to examine the perspectives of, and issues concerning rural Tasmanian women with PND where access to services is limited or non-existent and particularly, to explore what role music plays in alleviating PND. In relation to the research aim, the study responds to the following research questions: 1) What are health care providers’ perspectives regarding current PND health care services, what improvements are required, and what impact does music have on PND? 2)
What are the current services available to and accessed by women with PND? 3) What are the lived experiences and perceptions of rural women concerning PND? 4) What impact has music had in reducing the effects of PND among rural Tasmanian women? and 5) What are the implications and recommendations for health services and policy makers to address PND using music therapy? Two theoretical frameworks underpin this study: phenomenology and feminism. Phenomenology helps to examine the everyday subjective experiences of an individual’s lived world, whereas feminism is used to understand the lived experience of what it means to be a woman experiencing PND and seeking care. This approach provided a perspective of PND that is juxtaposed to gender and the powerful medical model of health and disease.

Utilising an explorative research approach, qualitative methods were used to address the study’s aims and questions. Semi-structured interviews were used to gather data from 23 key health care providers (HCPs), including general practitioners (GPs), child and family health nurses (CHN), psychologists and psychiatrists, perinatal mental health co-ordinators and music therapists. In-depth interviews were conducted with 20 women who had been clinically diagnosed with PND, who were identified through media campaigns, advertisements, or purposive snowball sampling. All interviews were analysed using thematic analysis via NVivo v10.0 software.

The study provides insights into the everyday experiences of women with PND, the perspectives of HCPs within rural settings, and how these factors impact service access, acceptance, and utilisation. It was shown that there is an augmentation in current health care services due to reduced funding across the health care sector. In addition, there is poor recognition and diagnosis of PND among HCPs; and, due to the stigma of mental illness, and specifically, PND, women have a tendency to fabricate the truth about coping in order to reduce further intrusion from HCPs. While current treatments for PND emphasise the use of medication; women in the study seek to avoid medication in favour of psychological and complementary therapies, such as music, to cope. However, there are various barriers to accessing these complementary treatments.
The research discusses the complexities of obtaining a diagnosis and receiving subsequent treatment for PND in rural and remote Tasmania. The study delivers insight into various service provision issues, while offering an understanding of the needs, desires and challenges encountered by women with PND as well as the HCPs who strive to care for these women. Improvements to current PND health care processes and treatments are also suggested from both the women as well as the HCPs. Although music was recognised as a complementary treatment, current services require further training and development centred on improved education, screening, and diagnosis of PND to make music therapy a viable option.
I began this research journey with hopes of assisting to change views of postnatal depression and perhaps inform its management in the process. However, this has not been the case. What I discovered is that research, particularly for a graduate student, is about learning how to conduct ‘good’ research. Several great masters have instructed me and it is here that I have the opportunity to acknowledge their contribution to my research as well as to my journey as a researcher.

Much of this work has been achieved through the support and encouragement of my primary supervisor, Dr Quynh Lê, who unbiasedly looked beyond my many limitations. I proposed this research to several other departments at the University of Tasmania; each was unwilling or unprepared to take on the challenge. However, each suggested I talk to Quynh. Her courage to take on a project, for which she personally had no background, illustrates her flexibility in the research sphere. Her willingness has led me to complete this research journey in ways which may have not been achieved elsewhere. Thank you for your patience, your example as a supervisor and as a woman and mother. Thank you for putting your trust in me and observing in me, and my research, the potential that others have not. Thank you for supporting me on my quest for greater understanding and knowledge.

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Abbreviations

ARIA  Accessibility/Remoteness Index of Australia

ASGC – RA  Australian Standard Geographical Classification - Remoteness Areas

CHN  Child and Family Health Nurse

DHHS  Department of Health and Human Services

DoHA  Department of Health and Ageing

ECT  Electroconvulsive therapy

EPDS  Edinburgh Postnatal Depression Scale

GP  General Practitioner

HCP  Health care provider

IVF  In vitro fertilisation

LGH  Launceston General Hospital

NWRH  North-West Regional Hospital

PND  Postnatal depression

RHH  Royal Hobart Hospital

SIDS  Sudden infant death syndrome
Definitions

Edinburgh Postnatal Depression Scale

The Edinburgh Postnatal Depression Scale (EPDS) is a short 10 item questionnaire developed to assist in the early detection of PND.

General Practitioner

A term used in Australia to denote a medical practitioner who has specialised training in General Practice and is often referred to as a GP. Terms used in other countries to describe a General Practitioner (GP) include family physician, physician or family doctor.

Health care provider

A health care provider (HCP) is a medical professional who assists in preventing, identifying and/or treating an illness or disability. In the context of this study, a HCP is a GP, child and family health nurse (CHN), psychologist, psychiatrist, social worker, or music therapist.

Medical practitioner

A term used to denote an individual who is a member of the medical fraternity and is synonymous with the term ‘doctor.’ Under Australian federal law, a medical practitioner is a person who holds registration with the Medical Board of Australia. In this thesis, the term medical practitioner or doctor will represent all medical practitioners regardless of their specific specialised training. However, when speaking of specific specialties or to indicate different types of medical practitioners, their respective terms will be used.
Postnatal depression

Postnatal Depression (PND) is a depressive disorder with onset occurring in the early postpartum period. Postnatal depression is not distinguished from major depression except in terms of timing. There is no single known cause of PND and no single treatment. The factors observed to be influential in the development of PND are broadly biological, psychological and social.
Chapter 1: Introduction

1.1 Introduction

The Australian health care system is a complex inter-relationship between publically and privately funded hospital systems, encompassed by private primary and specialist HCPs. Private HCPs gain income through a fee-for-service model that is funded through the national Medicare system. Within this model, health care professionals including GPs, psychologists and other allied health practitioners require a Medicare provider number that uniquely identifies each practitioner. This system allows HCPs to see patients and to receive a rebate for the services rendered. The Medicare provider number also allows medical practitioners to refer patients on to specialist services and request pathology or diagnostic imaging services. The Australian health care system functions quite differently in each state and territory of the country and remains difficult for health practitioners to navigate and especially, health consumers (Helena et al., 2014).

Women who experience PND are one sub-group of health consumers who remain disadvantaged within the current system when accessing health care that is timely, acceptable and suitable for their needs (Braveman & Gruskin, 2003; Dolja-Gore, Loxton, D’Este, & Byles, 2014). This is particularly evident within rural and remote areas where access to health care may already be compromised before a patient enters the consulting room (Coward, 2006). In addition, accessing complementary and alternative therapies may be compromised by the power of the medical model and its impact on health consumers’ access and choice.

To examine these challenges, this study centres on the women’s lived experience as they seek both traditional medical and alternative health care in rural areas when experiencing PND. It also seeks to understand the current health system and how women and health professionals navigate it to provide and gain acceptable health outcomes.
This chapter gives an overview of the study by providing the background, purpose and significance of the study, as well as the theoretical grounding and contextual rationale of the research. In addition, the chapter outlines the study’s aims and questions, methodology, ethical considerations and limitations. The content of each chapter is outlined and presented to conclude the introductory chapter.

1.2 Research background

Postnatal depression is common among women who have given birth and up to three years afterwards (Almond, 2009). So common in fact, that Friedan (1963) documented this phenomenon in her book, *The Feminine Mystique*. Over the years, not even the feminist movement could change the rates of depression. These rates are typically reported to be as high as 25% of all women who give birth worldwide, although there is a wide variability in these rates (Affonso, De, Horowitz, & Mayberry, 2000; Craig, Judd, & Hodgins, 2005; Honey, Bennett, & Morgan, 2002; Miller, 2002).

These rates of PND commonly occur across many different countries and cultures. Epidemiological studies have been carried out in low and middle income countries and have found that PND exists in most countries around the globe (Almond, 2009). However, it has been shown that PND is more prevalent and severe in lower socio-economic countries and areas than it is in mid to high socio-economic countries and areas (Craig et al., 2005). Overall, it has been shown that one in seven women will experience some level of PND within the first year of giving birth (Friedman & Resnick, 2009).

In addition to the overall incidence of PND, it has been indicated that rural women, worldwide, are more likely to experience PND. For example, in a study conducted by Boyce, Johnstone, Hickey, Morris-Yates and Harris (2001), it was shown that rural Australian women are 1.6 times more likely to develop PND than their urban counterparts. In most cases, it was the social determinants of health experienced in rural areas and/or lower levels of access to appropriate health care services that were the underlying risk factors for PND (Annan, 2006; Craig et al., 2005;
Hauenstein & Peddada, 2007; Sears, Danda, & Evans, 1999). Additionally, women, particularly those from culturally and linguistically diverse (CaLD) backgrounds, as well as those in rural and remote areas, face difficulties in accessing services (Almond, 2009; Craig et al., 2005).

In recent years, complementary and alternative therapies have come to the forefront in health care. It has been shown that yoga, massage, and meditation have been effective in relieving stress, anxiety and reducing pain (Glover, Onozawa, & Hodgkinson, 2002; Nilsson, Kokinsky, Nilsson, Sidenvall, & Enskär, 2009; Trappe, 2012).

Music, specifically, has taken on a greater role in health care. It has been used within operating theatres and recovery (Nilsson et al., 2009); maternity suites and neonatal wards (Arnon et al., 2006; Browning, 2000); among those with dementia (Baird & Samson, 2015); and within the community (Abad & Edwards, 2004). In addition, the use of music in the delivery suite is becoming increasingly recommended to reduce pain and stress on the woman giving birth (Bruscia, 1991; Tseng, Chen, & Lee, 2010).

A literature review was conducted to understand depression and PND, specifically within rural and remote areas. It also reviewed the use of music within health care, specifically as a treatment for depression, including PND. The literature review also identified other complex issues encountered by women with PND and how these issues impacted overall health.

A wealth of research has been undertaken to better understand PND in addition to the use of music within medicine and health care. Music has been used among those experiencing depression, stress and anxiety; however, there were relatively few studies exploring the use of music among women who experience PND (Friedman, Kaplan, Rosenthal, & Console, 2010). This suggests that further research is required regarding the effectiveness of music as a therapy option for women with PND and particularly, for women living in rural and remote areas with this diagnosis.


1.2.1 Conceptual background

The conceptual framework of research consists of concepts, assumptions, expectations, beliefs and theories that support and inform the research; it plays a key role in developing the overall design (Maxwell, 2012). In other words, the conceptual framework attempts to explain what will be studied and the relationship between different aspects of the research (Miles & Huberman, 1994). This is developed by the researcher from several different sources including the researcher’s own knowledge and background as well as the background and knowledge of the participants, particularly in qualitative research; existing theory and research; pilot and exploratory research; and through experiments, or tentative theories about the subject (Maxwell, 2012; Robson, 2011).

Experiential knowledge determines what is brought to the research from the researcher’s own background and identity. Within this study, the researcher seeks to examine the experiences of women with PND when accessing health services in rural and remote contexts. However, the researcher, due to her own experiences with PND and seeking health care in regional contexts, does not undertake the research free from her own knowledge, understanding and preconceived ideas around women’s experiences (Ramazanoglu & Holland, 2002). In research, this is typically thought of as bias, and is generally something that the researcher attempts to reduce or eliminate (Maxwell, 2012). The challenge is to assume an unambiguous position that seeks to understand, expose, and address the aims of the research, while being critically conscious of the researcher’s self-location and how this may influence the overall research (Pillow, 2003). Nevertheless, the explicit incorporation of the background and identity of the researcher in the research process has gained theoretical and philosophical support over the years (Berg & Smith, 1988; Denzin & Lincoln, 2003; Jansen & Peshkin, 1992).

Prior theory and research often provides new insights and broadens the understanding of the phenomenon that is to be studied (Maxwell, 2012). Despite this, existing literature can also impact the way that research is framed due to its embedded assumptions. This can cause the researcher to overlook different ways of conceptualising the study or key implications of the results. Therefore, it is
important to identify the insights as well as the limitations of theories within the existing literature (Maxwell, 2012).

A review of prior research outlines existing theories and informs the research in other approaches. The existing literature provides the researcher with many valuable tools to guide the research including terminology, references to other publications and research, ways of framing research questions and describing the research, or presenting theory, results or conclusions (Locke, Silverman, & Spirduso, 2009). It also provides validity to issues and ways of dealing with them. Prior research can also contribute to study design in four key ways. First, prior research may provide justification for the research by inviting new and further research to address unanswered questions. Second, it can suggest alternative approaches or identify problems or solutions, which highlight certain methodologies. Third, prior research may be useful as a source of data. By reviewing this literature, the researcher is able to critically evaluate new data. For example, the researcher is able to evaluate if the information gathered is in agreement or disagreement with previously published data. This then leads to the fourth contribution; to generate theory. By evaluating new data against existing data, new theory may be articulated or existing theory may be further developed (Maxwell, 2012).

1.2.2 Theoretical background

As there have been relatively few similar studies relating to the effects of music on those experiencing PND, feminism was useful for understanding the lived experience of being a woman and having PND. This approach provided a perspective of PND that is juxtaposed to gender and the medical model of health and disease. The significance of feminism is that it has an emancipatory inquiry, it both documents, and advocates for social change and improving the status of women in modern societies (Reinharz, 1992; Stewart, 2004). This theory allows a more developed understanding of the complexities concerning PND, the services that are available to women, their use of complimentary approaches and by what means the current approaches can be improved for rural communities.
In addition, it is important to understand the theory of music therapy as there are increasingly more people working in every facet of life with individuals experiencing physical, mental and social disabilities who use music as a tool to improve quality of life. Music therapists, to a large extent, label the type of work they do according to the theoretical constructs of related fields such as medicine, psychiatry, psychology, or education. They then align themselves with theoretical traditions associated with the related fields (Davis, Gfeller, & Thaut, 2008). For example, music therapists may align themselves with the theory of science, which incorporates hermeneutic, positivist, or Marxist traditions. More recently, music therapists have moved towards working in an ecologically oriented model such as feminist music therapy, resource-oriented music therapy, or community music therapy among others (Curtis, 2015; McFerran & Rickson, 2014; Rolvsjord & Stige, 2015). Nevertheless, by working in one of these traditions, a frame of reference is provided, which, to a certain extent, determines the findings or places a limit on the practical work of music as therapy (Ruud, 2006).

Within the theory of music therapy there are three main concepts; sickness, music, and therapy, the definitions of which determine the most appropriate framework. The definition of sickness is determined by social context, historical situation, and extends beyond the confines of “being ill” (Ruud, 2006). The definition of music is often defined by theories that stress the aesthetics of music including its emotional aspects (Lauzon, 2011). However, (Ruud, 2006) states that “a theory of music therapy should include both syntactic and semantic aspects of music when its role in therapy is to be explained.” Within the three aforementioned traditions, the definition of therapy is diverse and sometimes, contradictory. Therefore, it is important to identify the interconnectedness between sickness, music, and therapy before definitions are chosen, which then define the theory of music therapy. However, having a good definition of music therapy does not guarantee a valid theory of music therapy. Yet, there are an increasing number of fields that rely on already established theories (Davis et al., 2008; Ruud, 2006).
To date, PND research has been focused on treating the condition through methods such as pharmacological, psychological and psychosocial therapy (Boath & Henshaw, 2001; Di Mascio, Kent, Fiander, & Lawrence, 2008). It has been shown that complementary and alternative therapies are becoming more accepted and provide greater choice to health consumers (Boath & Henshaw, 2001; Di Mascio et al., 2008). As very little research has been undertaken to examine the use of music for those experiencing PND, this explorative study attempts to provide insight into current health service provision; the challenges encountered by both women and health professionals regarding current services and processes; and the impact or effect that music may have on women with PND.

1.2.4 Rationale of the study

Issues and challenges regarding access to, and the acceptability and suitability of health services for women experiencing PND in rural and remote contexts have not been well explored. Such issues include what services are available, what processes are involved to gain access; how women actually access health services; the health service’s suitability to their needs; determining if music has been used among women to alleviate PND symptoms; the extent to which therapies such as music therapy have been successful in alleviating PND symptoms; and what are the difficulties, if any, in accessing music therapy services in rural and remote locations. Therefore, this study adds to existing knowledge and generates new knowledge and insights that are potentially useful locally, nationally and internationally. The study contributes to the current knowledge concerning PND, health service suitability, and the use of music as a complementary therapy.

1.3 The context of the study

Tasmania is a small island off the southeast coast of mainland Australia. It has its own social and cultural environment. Tasmania lacks the large and dense populations of cities like Melbourne and Sydney (ABS, 2012). An estimated 42.2% (214,705) of Tasmania’s total population (507,643) live within Hobart, the capital
city, which is not considered a major metropolitan city, but an ‘inner regional’ centre (AIHW, 2011). The remainder of Tasmania’s population is scattered across Launceston, the second largest inner regional centre, Devonport, Burnie and the many other small towns, which are considered outer regional or remote areas in Tasmania, as shown in Figure 1.1 (ABS, 2006; AIHW, 2011).

![Figure 1-1: Tasmanian level of remoteness](image)

1.3.1 Births in Tasmania

There have been on average 6,290 live births in Tasmania over the past five years with a steady decline in numbers since 2011, as shown in Table 1.1. Despite this decline, it has been shown that nationally, 16% of women who have given birth are diagnosed with PND annually (Beyondblue, 2015). Consequently, it is likely that in Tasmania, more than 1,000 women are diagnosed with PND each year. This figure does not include the cohort of women who experience PND but are not diagnosed (Beyondblue, 2015).

Table 1.1: Number of live births in Tasmania 2009-2013

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of births in Tasmania</td>
<td>6,551</td>
<td>6,278</td>
<td>6,518</td>
<td>6,131</td>
<td>5,972</td>
</tr>
</tbody>
</table>


1.3.2 Health care services

Within Tasmania, there are three publically funded hospitals, two in the major centres of Hobart, in the south, and Launceston, in the north, with a northwest hospital that has a campus in Burnie and another in the rural town of Latrobe. Within the context of these hospitals, there are several health care services available to families and their newborn babies, as indicated in Table 1.2. These in-patient and primary health parenting and child health centres are found throughout the state and are discussed in further detail below. It must be noted that within the state there is only one mother and baby unit dedicated specifically to meeting the needs of women. The challenge is that it is located in the capital city of Hobart and is situated within one of the private hospitals.

Table 1.2: Location of health care services for mothers and their babies

<table>
<thead>
<tr>
<th></th>
<th>North</th>
<th>Northwest</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child health centres</td>
<td>23</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>Parenting centres</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>In-patient services</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Mother-baby units</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

1.3.2.1 Child health centres
Child and family health nurses are based at local child health centres where they offer free routine child health and development assessments or ‘checks’ when the baby is two weeks, four weeks, eight weeks, four months, eight months, 12 months, 18 months, and three and a half years of age. Furthermore, CHNs offer parenting information on various topics including child health and development, practical parenting tips, nutrition, breastfeeding, sleep and settling, communication, play and safety, oral health, PND, fathering, balancing work and family life, injury prevention, SIDS, and immunisation. In most cases, CHNs are the first point of care, outside visiting a GP, that parents have regarding their child (Department of Health and Human Services, 2015a).

1.3.2.2 Parenting centres
Parenting centres are operated through the Child Health and Parenting Services (ChaPS) branch of the Department of Health and Human Services (DHHS). These centres are designed to offer intensive support to families experiencing difficulties with parenting such as PND, breastfeeding, and relationship issues which relate to babies and young children. The parenting centres are day services with consultations available with social workers, psychologists, as well as CHNs. There is one parenting centre in the north region and one parenting centre in the northwest region. The services are provided at low or no cost to the family. While there may be some opportunities for anyone to participate in some groups, a referral by the local CHN is generally required to access services at parenting centres (Department of Health and Human Services, 2015d).

1.3.2.3 In-patient services
For Tasmanians with a severe mental health disorder, community or in-patient care is available through Mental Health Services. At the time this study was conducted, there were two in-patient service centres allocated for the north and northwest regions of Tasmania. Although mothers with severe PND may be admitted to these in-patient facilities, the baby is not typically allowed to stay with the mother (Department of Health and Human Services, 2015b). There was one mother and
baby unit in Tasmania at the time of this study. Those who live in the north and northwest are required to travel to access this service since it is situated in the south of Tasmania.

1.3.2.4 Music therapists
In addition to mainstream health care services, registered music therapists are also located across all regions of Tasmania. In many cases, they provide services in rural and remote communities that focus on babies, children, mothers, right through to the elderly. Many music therapists have private practices and rely on community or non-government organisation funding to provide their services to many communities and individuals in Tasmania. Unlike other Australian states, currently, no music therapists are associated with any of the major hospitals in Tasmania.

<table>
<thead>
<tr>
<th>Table 1.3: Number and location of music therapists in Tasmania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music therapists</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>


1.3.3 Current health climate
The 21st century has brought about many changes in the economy that have shaped health service provision (Humphreys, 2009; Oberlander, 2011). Health care, one of the highest spending public sectors of most westernised economies, has implemented greater budgetary restraints recently. These measures have involved bed closures, job losses, longer waiting lists and ever increasing costs to access health services, which have contributed to deteriorating health outcomes (Humphreys, 2009). Moreover, the current Tasmanian government, due to state debt, is placed in a situation where they have had to reduce health spending by more than $150 million by 2014-15 (Giddings, 2011a). It is within this context that this study was conducted.

In addition to a number of measures, there has been a reduction in health service employees that was estimated to be up to 9.0% of the workforce or 2,300 full-time
equivalent jobs (Brown, 2011; Giddings, 2011a, 2011b; Glumac, 2011; Poskitt, 2011). There has also been the announcement regarding the merging of Tasmanian health services and reductions in frontline services as a measure of local cost savings and the overall national health reform, which is underway (Ferguson, 2014; Hidding, 2015). These measures commenced prior to this research being conducted; therefore it is within this climate of fear, anger and frustration that interviews took place. The fear and anger are reflected within a significant proportion of the dialogue, text and discussion throughout the study, where services were in a state of flux or even doubt.

1.4 Research aims and objectives
The literature remains relatively sketchy regarding PND and the role music plays as a complimentary or alternative approach to care. Therefore, the aim of the research is to examine the perspectives of and issues concerning rural Tasmanian women with PND where access to services is limited or non-existent and to explore what role music plays in relieving PND symptoms.

1.4.1 Research questions
In relation to the research aims, the study attempts to respond to the following research questions:

1. What are health care providers’ perspectives regarding current health care services, what improvements are required, and what impact does music have on PND?

2. What are the current services available and accessed by women with PND?

3. What are the lived experiences and perceptions of rural women concerning PND?

4. What impact has music had in reducing the effects of PND among rural Tasmanian women?
5. What are the implications and recommendations for health services and policy makers to address PND using music therapy?

1.4.2 Research objectives

To guide the research questions, the study focuses on the following research objectives:

1. To examine HCPs views on health care for women with PND in rural Tasmania; what influence music has and its acceptance; and what can be done to improve or implement services for women in Tasmania with PND;

2. To examine what services are available, promoted, known and accessed by women with PND in rural Tasmania;

3. To ascertain how women in rural Tasmania who have experienced PND perceive PND;

4. To understand if and how music has been helpful in the management of PND; and

5. To provide recommendations for health policy makers in addressing PND using complementary medicine (e.g. music therapy).

1.5 Overview of research methods

The methodological framework seeks to inform and guide the research aims and questions. As this study used an explorative research approach, with a focus on meaning and lived experience, qualitative methods were used to address the research aims and questions. In relation to the qualitative aspect, phenomenology was adopted as a theoretical framework for examining the everyday subjective experiences of an individual’s lived world, where meaning is shaped and produced and continuously subject to change (Bowling, 2005; Greenhalgh, 2007; Liamputtong & Ezzy, 2005).
Phenomenology is both a philosophy and research approach in which phenomena are explored (Carpenter, 2010; Creswell, 1998; McConnell-Henry, Chapman, & Francis, 2009). Phenomenology’s strengths are in its ability to provide “rich, in-depth understandings about social phenomena in their natural settings, which cannot be captured by quantitative methodologies” (Wong & Lohfeld, 2008, p. 54). In addition to the insights into lived experience that phenomenology provides, feminism will situate the lived experience within the context of gender and being a woman. These central theories and the methodological approach enable the researcher to “escape their ideas, subjectivity, politics, ethics and social location, while emphasising participatory, collaborative and empowering forms of inquiry” (Patton, 2002, p. 130).

1.5.1 Research design and study sample

Guided by feminist research perspectives, two qualitative research methods were utilised in this study to collect data. Semi-structured interviews were utilised to gather qualitative data from a convenient sample of 23 key HCPs, while in-depth interviews were conducted with 20 women with diagnosed PND, recruited through child and health services, to gain personal insights into their lived experiences.

The HCPs who participated in this study consisted of GPs, CHNs, psychologists, mental health coordinators, and music therapists. The semi-structured interviews with these participants’ generated data that highlighted the issues and problems they encounter in endeavouring to support women with PND. The advantage of having face-to-face contact, particularly with key HCPs, enabled meaningful connections to be made, which aided in distribution of information to other HCPs and women experiencing PND (Gaglio, Nelson, & King, 2006).

In conjunction with semi-structured interviews with HCPs, in-depth interviews were conducted with women who were either identified through a HCP, who responded to an advertisement to participate in the study, or through snowball sampling. Choosing in-depth interviewing allowed the development of additional questions when they were required to further probe the data.
In-depth interviews allow the researcher to know the participants, to learn about their feelings, experiences and the world in which they live, whereas narrative inquiry, which was considered as an approach, enables in-depth storytelling to reveal pertinent experiences of individuals and what matters to them (Liamputtong & Ezzy, 2005). The use of in-depth interviews was to ensure that the care of the participant was central to the research process.

The overall aim of the semi-structured interviews with the HCPs and in-depth interviews with women who have or have had PND was to gather rich qualitative data concerning women who have experienced PND and the services available to them, particularly in rural Tasmania where services are limited. Qualitative research focuses on the insights, meanings and experiences of women and focuses on the depth rather than the breadth of information (Bernard, 2000).

1.5.2 Data analysis

For the purposes of this study, one analytical approach was used; thematic analysis. Thematic analysis is a method that systematically identifies recurring themes, patterns of living, behaviour and experience, which then become a description of phenomenon (Aronson, 1994; Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2008). These themes are viewed in the context in which they were developed, which also allows for the identification of new or emerging themes (Aronson, 1994; Boyatzis, 1998; Fereday & Muir-Cochrane, 2008; Pope, Ziebland, & Mays, 2000).

This approach was selected to allow a simple but powerful method of identifying key patterns regarding the realities of mothers with PND living in rural and remote Tasmania as well as the issues and challenges for HCPs in treating women with PND. These major themes highlight the phenomenon of the study and will be separated into nodes, which will later be compared with the expressed views.

1.6 Ethical considerations

The present research was granted ethical approval on the 5th of December, 2013 (Ethics Reference No: H00133624) by the Human Research Ethics Committee
(Tasmania) Network (see Appendix A). The National Statement on Ethical Conduct in Research Involving Humans (Commonwealth of Australia, 2007) outlines four principles to ensure research is conducted in an ethical manner. These principles or guidelines include research merit and integrity, justice, beneficence and respect for human beings, which are discussed below.

Conducting a thorough literature review, weighing up the possible benefits of the research and assessing its contribution to knowledge to improve the welfare and wellbeing of the participants suitably addressed research merit and integrity. The study was designed using appropriate methods to achieve the aims of the research. Lastly, integrity was maintained by having a broad and collaborative research supervisory team, which had adequate qualifications and competence to oversee the research being conducted.

In relation to justice, the research was conducted in a manner that addressed fairness; participants were not exploited or placed under any unfair burden. Opportunity was given to all known individuals to participate in the study. To further enable fairness in recruitment and distribution, third parties, such as the University of Tasmania, DHHS, medical practices and CHNs were invited to assist with the study. Their roles were to disseminate information regarding the research to all known women and HCPs. In addition, as publications have become available, key organisations and individuals were made aware of the study to ensure further dissemination of the findings.

Beyond addressing justice, beneficence and minimising the risks of harm or discomfort to research participants was central to the research. The study was designed to minimise possible risks for all participants. Special care was provided to ensure respect for the participants’ rights, beliefs, perceptions, and customs. The researcher ensured that the welfare of the participants was at the forefront of the research. In addition, it was vital to minimise any harm, risks of harm or discomfort to participants when undertaking the research and ensure participants were aware of the potential benefits and risks from their participation. Participants were made aware they could discontinue their participation at any time in the research process.
In the case of harm, risks of harm or discomfort being experienced by participants, the research would have been suspended. The researcher designed the research to minimise the risks of harm or discomfort to participants; report promptly to the relevant ethical review body if a problem arose; and take prompt steps to deal with any unexpected risks. This design included whether the research should be discontinued or at least modified. If required, counselling services would be arranged to address any discomfort or distress caused to the participant.

Lastly, respect for human beings is encompassed in each of the National Statement’s principles and included the privacy, confidentiality and cultural sensitivity of each participant. Also, it was made clear that participation in the interview was voluntary and participants were able to withdraw their participation and data at any time without providing an explanation, or reprisal. A key element of respect is the protection of participants’ identity. This protection was achieved by assigning numerical codes to conceal each participant’s identity. As citations from the interview data were used, it was presented in such a way that the background and identities of each participant were protected. All raw data obtained in the study is maintained in locked and secure filing cabinets, while all electronic data remains on password protected computers at the Centre for Rural Health, School of Health Sciences, University of Tasmania.

1.7 Limitations of the study

At the outset of the study it was understood that there were several limitations of the research. Most notably, the focus of the research had unexpectedly shifted from an emphasis on the use and value of music among women with PND, to identifying that existing health services are ill equipped to meet the fundamental needs of rural women in the postnatal period. Additional limitations included a small number of participants from within a small study population, possible bias in participant recruitment from both participant groups, and researcher bias. These limitations impact on the generalisability of the findings, particularly for those living and working in very remote locations. In this case, the data may not be transferrable to all HCP or PND populations; nonetheless, the results of the study
sample may be more generalised back to the study population. The study does provide extensive insights and understanding into the experiences and challenges of PND in rural and remote Tasmania.

Despite a small number of participants within the study population, the quality of the data may not be compromised. Within qualitative research it is the depth, not the breadth of the data that is most important (Lapan, Quartaroli, & Riemer, 2012). So while there were only 20 women with PND and 23 HCP participants, the information shared by each individual contributed to the depth of understanding of the lived experience of women with PND in rural and remote Tasmania.

It is acknowledged that the methods of participant recruitment may result in sampling bias. There are two main goals in participant recruitment. The first goal is to recruit participants that adequately represent the study population. The second goal is to recruit sufficient participants that saturation may occur (Patel, Doku, & Tennakoon, 2003). The type, location and time frame of advertisement, are all factors that may impact participation (Patton, 2002). In the case of this study, using flyers posted at child and family centres or general practices may attract women with PND participants who are or have been receiving treatments or seeking further access to PND services. Thus, the women may already have used PND services and have interest in other possible treatment options. Additionally, recruitment of HCPs through letter or email invitation and ethics guidelines, may exclude those who work in hospital-based care as they may not be aware of the research.

By using semi-structured and in-depth interviews, it is possible to make sure that the relevant data is obtained and probe further when more information is required (Patel et al., 2003; Patton, 1999). The interview may be influenced, either positively or negatively, by the relationship between the interviewer and the participant. For example, the appearance, manner, method of administration or recording of responses, may all influence participants’ responses (Armstrong, White, & Saracci, 1992). Additional bias may also be generated from the researcher. During the interview process the researcher may “limit their curiosities so they only discover
what they think they don’t know, rather than opening up their inquiries to encompass also what they don’t know they don’t know” (Chenail, 2011, p. 257).

Although these limitations may deter the generalisibility of the research findings to other rural and remote locations, the findings are representative of the research area and may be transferred back to this area. Likewise, despite possible research limitations, all efforts have been made to provide extensive insights into the issues and challenges faced by women with PND and the HCPs who strive to provide care and support for these women. This study also enables understanding of the lived experience of PND in rural and remote Tasmania.

1.8 Thesis structure

The thesis is divided into six chapters to provide insight into the research’s aims, objectives and questions. It is structured to provide a background to PND and the use of music while highlighting previous research. It provides a comprehensive discussion regarding the theoretical framework underpinning the study; the design of the study; and the results, inferences and discussion pertaining to the current research. A more detailed outline of each chapter is provided below.

- **Chapter 1 – Introduction (this chapter):** introduces the study by providing the background, rationale, purpose and theoretical framework of the research. It outlines the research aims and questions that provide the framework for the research and the issues that the study has identified.

- **Chapter 2 – Literature review:** provides an overview of the current literature concerning PND as well as the therapeutic use of music. This forms the basis for understanding the issues encountered by women with PND in rural and remote Tasmania as they seek treatment. It also provides the context within which the HCPs work.

- **Chapter 3 – Methodology:** describes the research framework and design of the study to address the research questions; the validity of the tools used; and the data collection, management and analysis process.
• Chapter 4 – Results: reports on the data collected from interviews. It also provides insight into the lived experience of PND for women who reside in rural and remote Tasmania. Further, it provides understanding of the issues and challenges faced by the HCPs who strive to provide support and treatment for these women and their families. This chapter also highlights the use of music to assist with PND symptoms by women, and HCP views and perceptions of using music to treat PND.

• Chapter 5 – Discussion: discusses the results of the qualitative data analysis. It outlines the experiences and challenges of women with PND living in rural and remote Tasmania as well as the issues and challenges encountered by HCPs working in these areas. It also informs how each participant group attempts to overcome these challenges. The potential use of music to treat PND in the future is also discussed in this chapter.

• Chapter 6 – Conclusion: provides an overview of the research findings, their significance and how they have been disseminated. In addition, the chapter discusses the strengths and limitations of the current research and suggests future directions for research. The chapter concludes by providing a number of recommendations.

1.9 Conclusion
This chapter has provided an overview of the thesis; the background and purpose of the study was introduced, highlighting the significance of the study. Moreover, the context in which the study was conducted was provided to give an insight into the challenges encountered by both HCPs and women who experience PND. This insight was followed by a discussion of the research context, and the research’s aims and questions. In addition, the research methods, ethical considerations and limitations were highlighted. Finally, the thesis structure was provided, summarising each of the chapters and providing a brief overview. The following chapter reviews current literature, including the history, prevalence, diagnosis, and treatment options for
women with PND. Music therapy and the use of lullabies to treat depression, including PND will also be discussed.
Chapter 2: Literature Review

2.1 Introduction

Chapter one introduced the background and purpose of the study, while highlighting the study’s significance. The introduction also provided an overview of the challenges women with PND encounter when residing in rural and remote Tasmania. It also highlighted the theoretical framework and discussed the aims and objectives of the study.

This chapter provides an understanding, through a review of the current literature, of the history, prevalence, diagnosis, and treatment options for women with PND. The use of music and music therapy is also discussed. This context forms the basis for understanding many of the issues encountered by women with PND and their families, in rural and remote Tasmania as they seek treatment.

2.2 Literature search strategy

A literature search was conducted to understand depression and specifically, PND. It also reviewed the use of music within health care, particularly as a form of treatment for those who experience depression such as PND. In the final phase of the research, the literature was utilised as a comparison to the findings of the current study.

An initial online literature search was conducted between October 2012 and June 2013. A primary search of MEDLINE, ProQuest, PubMed, PsycInfo and Scopus databases was conducted. This was to identify journal articles dating between 1975 – 2013 that discussed and highlighted postnatal (postpartum) depression and its treatments as well as the use of music as a treatment for all aspects of depression, but specifically, PND. Key word searches were used and included word combinations, as outlined in Table 2.1.
Table 2.1: Key words and terms used in the literature review

<table>
<thead>
<tr>
<th>Key words and terms</th>
<th>Synonyms and alternative words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postnatal depression, postpartum depression, depression</td>
<td>PND, depressive disorder</td>
</tr>
<tr>
<td>OR</td>
<td>OR</td>
</tr>
<tr>
<td>Rural depression, rural postnatal depression</td>
<td>Remote, country, outback, farming, isolated, distant</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>Music, music and medicine, music therapy, music listening.</td>
<td>AND Lullaby, songs, singing, playing.</td>
</tr>
</tbody>
</table>

The aim was to identify articles that discussed or examined the use of music as a treatment for depression, specifically PND. A secondary manual search of the identified articles’ reference lists was also undertaken to source any additional studies which were not captured within the online databases. In addition, a subsequent online search was conducted by searching Google Scholar and Cross Search through the University of Tasmania’s library for generic ‘grey’ literature related to the subject area. This type of search was worthy as an additional search method as it found literature which was closely related to the key words and terms used. These methods yielded 124 articles and reports.

The inclusion criteria for the current literature review included:

- articles that were in English;

- studies that were conducted with women diagnosed with clinical depression as well as those with PND regardless of age, ethnicity or region; and/or scored 12 or higher on the Edinburgh Postnatal Depression Scale (EPDS); and

- reports on the implementation of an intervention program using music aimed at improving the psychological health of the depressed postnatal woman.

Excluded from the review were:
- book reviews;
- magazine articles;
- newspapers;
- government and organisation reports;
- systematic and literature reviews;
- articles published in languages other than English; and
- articles relating to clinical aspects of PND.

All of these documents except for systematic reviews are classified as secondary, or grey literature. Although they may provide beneficial information at the initial stages of the literature review to inform the general knowledge of the researcher, they are generally not included in a literature review. Further, grey literature is rarely peer reviewed. For the purpose of this study, systematic reviews were not included because they included men and therefore did not meet the inclusion criteria. Additionally, systematic reviews focus on one specific research question and, thus, do not provide the depth of information required for exploring lived experience.

2.3 An overview of current studies

The 124 articles were reviewed by the researcher according to the inclusion criteria. As shown in Figure 2-1, 86 articles and reports were excluded as they were government and organisational reports or articles which did not contain research findings regarding music therapy, but were surveys, supplementary research or discussed depression, PND and health outcomes. A further 13 articles were excluded, as they were systematic literature or Cochrane reviews, 12 of which were reviews regarding gender, rurality and depression, interventions and programs for individuals with PND or the use of music therapy (Almond, 2009; Boath & Henshaw,
2001; Bruscia, 1991; Chan, Wong, & Thayala, 2011; Creighton, 2011; Eaton & Kessler, 1981; Gamm, Stone, & Pittman, 2010; Kessler et al., 2003; Lopez, Mathers, Ezzati, Jamison, & Murray, 2006; Maratos, Gold, Wang, & Crawford, 2008; Parlee, 1994; Patterson, 2000), while the remaining literature review specifically discussed the validation of the EPDS (Gibson, McKenzie-Mcharg, Shakespeare, Price, & Gray, 2009).

Figure 2-1: Method of literature review
The remaining 25 articles were not related to music and PND, however, were related in some way to music as a health intervention. Among these, 13 studies referred to the use and effects of music on neonates and infants (Baker & Mackinlay, 2006; Cevasco, 2008; Creighton, 2011; Friedman et al., 2010; Hanley, 2010; Lai et al., 2006; Mackinley & Baker, 2005; Milligan, Atkinson, Trehub, Benoit, & Poulton, 2003; Robb, 1999; Shenfield, Trehub, & Nakata, 2003; Trehub, Hill, & Kamenetsky, 1997; Trevarthen & Malloch, 2000; Young, 2008). In addition, each of these articles referred to and discussed the mother’s wellbeing. One single study discussed the use of music to relieve pain and anxiety in post-operative paediatric patients (Nilsson et al., 2009). An additional study examined the use of music to address depression in adolescents (Field, Martinez, Nawrocki, Pickens, & et al., 1998), while ten studies discussed the use of music for the treatment of depression, pain and anxiety in adults and the elderly (Allison, 1991; Chan, Chan, Mok, & Kwan Tse, 2009; Chang, Chen, & Huang, 2008; Erkkilä et al., 2011; Evans, 2010; Freidrich, 2004; Gold et al., 2011; Tornek, Field, Hernandez-Reif, Miguel, & Jones, 2003; Trappe, 2012; Tseng et al., 2010).

Regardless of this extensive search of the literature, there were no journal articles concerning research that related to the use of music as an intervention for women specifically with PND. Within the literature, very few papers exist which highlight music therapy or music medicine programs and outcomes that specifically target the treatment of women with PND. This may be due to music therapy and music medicine not being sufficiently well defined, researched or applied in treating women with PND (Terry & Terry, 2012).

Currently, there are three distinct groups of research which were found within the literature. Firstly, these include research which examined the effectiveness of the use music as an intervention among infants, neonates and postoperative patients. Conversely, the second group of research assessed the use of music as a treatment for patients with depression, anxiety and stress. However, many of these music interventions or programs were pilot studies which required greater development and evaluation and were not geared specifically for women with PND (Terry &
The third group focused on the use of music for attachment and bonding and only alluded to further effects for the mother.

The possible benefits of music therapy (e.g., relaxation, attachment and bonding) for mothers were alluded to in several articles; yet this was not the focus of the research or discussion. However, it must be noted that one study conducted by Friedman and colleagues (2010) examined the use of lullabies in an eight week group program, for a sample of 48 antenatal and postnatal women with a diagnosed mental illness. The sample included women diagnosed with depression, bipolar disorder, schizophrenia, or schizoaffective disorder and both psychotic and non-psychotic conditions. PND was included but not exclusively studied.

2.4 Depression: a background to understanding PND

As outlined previously, very few papers, if any, highlight the use of music to treat women who experience PND. As such, there is a need to understand where this major depressive disorder sits among the various depressive disorders and why it may receive less attention. An understanding of PND may then lead to an understanding of its treatments.

Depression involves pathologically severe or persistent states of sadness. It is commonly used to refer to emotional states of sadness, despair, numbness, emptiness, deadness, hopelessness and related ‘down’ or ‘blue’ moods that often involve a reduction of normal levels of: energy, interest, mental focus, pleasure, social engagement, appetite, agitation, overeating, anxiety and fear (Haddad & Gunn, 2011; Wakefield, 2009). Such emotional reactions have always been viewed by physicians as ‘normal’ (Berrios, 2009; Wakefield, 2009).

Depression also refers to a pathological condition that is one of the most common mental health disorders internationally (Kessler, 2009). In depressive disorders, the very same experiences that can occur ‘normally’ in response to grief and loss become pathologically severe and persistent. The symptoms, although possibly initially triggered by a negative event as in normal sadness, have a duration or intensity that is unrelated in any proportionate way to such environmental events.
They have a propensity to continue even if the triggering stimuli ceases or is reversed (Horwitz & Wakefield, 2007; Wakefield, 2009).

*The Diagnostic and Statistical Manual of Mental Disorders, fifth edition* (DSM-V) as well as the World Health Organization’s *International Classification of Disease, tenth edition* (ICD-10) define the symptoms of major depressive disorder as a condition including five or more symptoms that last two or more weeks and includes either depressed mood or diminished interest or pleasure. Further, there is a distinction between depression and the distress and angst that are a normal part of the human experience.

There is not necessarily any definitive criteria related to a clear causal mechanism with associated biological markers. As with most psychiatric disorders, there are problems defining the boundaries of depression and there are difficulties delineating it from other mental disorders. For example, in the community as well as in primary care settings, the most prevalent mood disorder is a combination of depression and anxiety (Haddad & Gunn, 2011).

The symptoms of depression are far reaching and visible within every social class and nation (Weissman & Olfson, 1995). Millions of people worldwide experience clinical depression while many more experience subclinical depressive states (Kessler & Bromet, 2013). The effects of depression reach beyond those who are afflicted; education, employment, marriage, children and extended relationships can all be implicated (Ingram, 2009b; Kessler & Bromet, 2013).

Depression is currently considered the second-most disabling disorder in the world and is predicted to be the most disabling disorder within the next two decades (Kessler, 2009; Kessler & Bromet, 2013; Lopez et al., 2006; Nolen-Hoeksema & Keita, 2003). Depression impairs functioning in all areas of life. It can also have grievous effects on physical health and, in the most extreme form, is associated with suicide and death. Depression remains a pervasive public health concern (Nezu & Nezu, 2009).
2.4.1 Types of depression

Depression is classified as a mood disorder (American Psychiatric, 2000), which is then further classified into two major groups or types. Historically, these classifications included “psychotic” or “endogenous” and, “neurotic” or “exogenous” (Shagass, 1981). Psychotic depression typifies manic depression, psychotic depressive reaction, involutional depression and possibly schizo affective depressed patients. Neurotic depression would include the depressive neurosis, non-psychotic depression, situational depressions, grief reactions and so on (Shagass, 1981). While neurotic depression no longer exists in the official nomenclature, psychotic depression continues to be recognised.

Currently, the various types of depressive disorders classified by the DSM-V are unipolar disorders, including: postnatal depression, major depressive episode and dysthymia; bipolar disorders and other subtypes and classifications, which are classifications that do not fit under unipolar or bipolar disorders (American Psychiatric, 2000). Each classification can either be reactive depression, which results from stressful life events, or endogenous depression (melancholia) and are not responses to stress but more driven by a dysfunction of normal neurobiological processes. Endogenous depression is also associated with more severe depressive symptoms such as “psychomotor retardation” (Ingram, 2009a) (see Appendix B).

2.4.2 Types of perinatal mental disorders

Perinatal mental disorders are frequently divided into three categories; postnatal blues, also referred to as ‘baby blues’, PND and puerperal psychosis. These disorders have not been clearly separated and there is much debate about whether they are three separate disorders or one disorder that ranges along a severity continuum (Boath & Henshaw, 2001; Najman, Andersen, Bor, O’Callaghan, & Williams, 2000). Nevertheless, each of these categories is discussed individually.

2.4.2.1 Baby blues

The mildest and most prevalent of the three disorders is ‘baby blues’, which is characterised by a transient change in mood that occurs in the first few days
postpartum and typically, lasts from 24 to 48 hours. Symptoms include: weepiness, irritability, insomnia, anxiety, and depression (Boath & Henshaw, 2001; Miller, 2002). Prevalence rates range from 26%-85% and appear to be so common that it is often regarded as a normal reaction resulting from the hormonal changes immediately following childbirth (American Psychiatric, 2000; Boath & Henshaw, 2001; Crawley, 1998). There is no determined treatment provided, aside from support, assurance and practical help in order to allow the mother to rest sufficiently (Di Mascio et al., 2008; Ray & Hodnett, 2001). There have been frequent diagnosed cases of baby blues, which may lead to clinical postnatal depression. However, this is not always the case (Boath & Henshaw, 2001; Gibson et al., 2009). Although some studies show that most women with severe baby blues show improvement by six weeks, in the study conducted by Hannah, Adams, Lee, Glover, and Sandler (1992), it was found that nearly half of mothers with PND had initially suffered severe baby blues.

### 2.4.2.2 Puerperal psychosis

The most severe form of perinatal mental disorder is puerperal psychosis, which is an extremely incapacitating, but less common disorder. Evidence supports a specific relationship between puerperal psychosis and bipolar disorder (Bergink & Kushner, 2014; Boath & Henshaw, 2001). This type of perinatal mental disorder occurs in only one or two in every 1,000 childbearing women (Boath & Henshaw, 2001). However, true incidence rates for puerperal psychosis may be higher as this rate is determined by reports of admission to psychiatric hospitals and many women may be treated at home, particularly if facilities for admission with the baby are not available (Di Florio, Smith, & Jones, 2013). It is important to note that despite the identified relationship with bipolar disorder, 50%, or more, of women who develop puerperal psychosis have no history that would warrant categorisation as high-risk for developing puerperal psychosis (Di Florio, Seeley, & Jones, 2015; Di Florio et al., 2013; Jones & Smith, 2009).

Puerperal psychosis has a propensity to occur very closely after childbirth; typically within two to three days. A number of factors have been identified as possible
triggers. These include: genetic factors, obstetric risk factors, changes in medications, hormonal factors, and sleep deprivation (Boath & Henshaw, 2001; Di Florio et al., 2013).

The severity of the symptoms, characterised by severe depression, mania, hallucinations or delusions, typically necessitates hospitalisation (Bergink & Kushner, 2014; Boath & Henshaw, 2001). A range of psychotropic medications may be utilised depending on the woman’s experiences, the level of disturbance and previous responses to medication (Di Florio et al., 2013; Robertson, Jones, Haque, Holder, & Craddock, 2005). The prognosis for women who suffer from puerperal psychosis and receive treatment is generally good; however, ongoing professional help is typically required long term. If left untreated, complications include neglect of the baby, suicide or infanticide, and recurrence (Bergink & Kushner, 2014; Di Florio et al., 2013).

2.4.2.3 Postnatal depression
Finally, the intermediate form, the least defined of the three disorders and the focus of the review, is PND (Boath & Henshaw, 2001). Unlike the baby blues and puerperal psychosis, which are distinguished from depression by childbirth, the evidence that PND is a distinct syndrome, or related to reproduction, is contested (Boath & Henshaw, 2001; Friedman & Resnick, 2009). Much debate has centred on whether PND is an ‘atypical’ disorder or a major depressive disorder occurring within the context of an ‘incidental puerperium’ (Boath & Henshaw, 2001). Nevertheless, it is important to consider PND as different from depression at other times, as PND has a predictable time of onset (American Psychiatric, 2000; Boath & Henshaw, 2001).

2.5 Postnatal depression
The DSM-V and ICD-10 criteria for diagnosing major depression allow physicians to note the onset of symptoms within the postnatal period, which is between four and six weeks postpartum (Almond, 2009). Typical symptoms include, but are not limited to, loss of control when usually able to manage; inability to do household
tasks; tearfulness for no apparent reason; overwhelming feelings of anxiety; poor appetite or overeating; fear of being alone; obsessive thoughts or activities; suicidal thoughts, plans, or actions; poor self-image; inability to think clearly or find the right words; exhaustion or over-concern about lack of sleep; depressed mood; loss of sexual interest; fear of social contact; exaggerated fears about health and safety of self, baby and/or partner and other unexplainable somatic symptoms including headache, abdominal pain or breast tenderness (Almond, 2009; Austin & Highet, 2011). However, identification of these symptoms may be difficult as many are viewed as typical changes associated with childbirth and early parenthood (Hoffbrand, Howard, & Crawley, 2001).

Postnatal depression is not distinguishable from major depression except in terms of timing. A diagnosis of PND requires the onset of a major depressive episode within four weeks of delivery (American Psychiatric, 2000). However, most researchers and clinicians are more liberal with timing; the first major depressive episode occurs at any time within 12 months of delivery can fall within the scope of PND (Stevens, 2009). Postnatal minor depression is not to be confused with baby blues as it is more serious, less common and threatens the mother’s emotional and physical health as well as the health of the baby (Stevens, 2009). PND covers a full range of symptoms from mild depressive episodes to psychotic episodes (American Psychiatric, 2000, p. 422).

### 2.5.1 Causes of postnatal depression

There is no single known cause of PND and no single treatment (Almond, 2009). The factors observed to be influential in the development of PND are broadly biological, psychological, and social. Biological causes include family history of psychopathology or past history of depression (antenatal or previously). Psychological factors include stressful life events related to pregnancy or birth (Almond, 2009). Social factors contributing to the development of PND include: difficulties in marital or partnered relationships; lack of support; socio-economic adversity; infant health and temperament; unrealistic expectations of motherhood and personality factors (Almond, 2009; Craig et al., 2005).
It is thought the occurrence of PND may begin in the prenatal or antenatal period, but, this is not the case with all who experience PND (Mallikarjun & Oyebode, 2005). It is anticipated that if a woman’s risk of developing PND can be identified, then the appropriate interventions may be initiated before onset occurs (Beck, 2001).

Trevathan (2010) states that there may be a number of explanations or theories which explain postnatal depression. She suggests that there are a number of adaptionist theories and that PND may be a phenomenon. PND may occur to stimulate greater help from others so that mothers save energy, or that external factors take less precedence than the baby. However, as only 10-25% of women experience PND, it has been argued that these theories may be less plausible (Campbell, 2012). Eastwood and colleagues (2013) have indicated that there are a number of external factors may explain some underlying causes of PND. These factors included neighbourhood adversity, social cohesion, health behaviours, housing quality, social services, and support networks which may have an impact on maternal psychological distress and depression.

### 2.5.2 Incidence of postnatal depression

Postnatal depression is common among women with rates typically reported to be between 10%-25% of all women who have given birth (Craig et al., 2005; Honey et al., 2002; Miller, 2002). These rates occur across many different countries and cultures. Epidemiological studies have been carried out in low and middle income countries and have found that PND exists in most countries around the globe (Almond, 2009). Halbreich and Karkun (2006) appraised 143 studies conducted in 40 countries and concluded that the commonly stated incidence of 15% is a gross underestimate and cannot apply to developing countries where they suggest the prevalence can be as high as 60% (Almond, 2009; Halbreich & Karkun, 2006).

The review of literature revealed that most studies used the EPDS to assist with diagnosis and provided consistency in cross-country comparisons. The research further indicated the likelihood of PND to be more prevalent in lower socio-
economic areas and countries with the severity being much greater than that of mid to high socio-economic areas and countries (Craig et al., 2005). Regardless of the debate, the prevalence of PND is most commonly reported to be between 10%-15% of postnatal women (Honey et al., 2002). This equates to approximately one in seven women are diagnosed with PND within the first postnatal year (Friedman & Resnick, 2009).

2.5.3 Diagnosis
As outlined previously, there are no known causes of PND. However, several risk factors have been identified which may increase the likelihood of developing PND. Commonly noted risk factors, or predictors, that have been associated with PND include prenatal depression, postpartum blues, and previous history of depression. Other commonly noted risk factors include child care stress, life stress, social support, prenatal anxiety, marital (dis)satisfaction, infant temperament, socioeconomic status, self-esteem, marital status, and unplanned or unwanted pregnancy (Beck, 2001; Miller, 2002).

Women with PND have been reported to be poor at seeking appropriate help. A study conducted in the United Kingdom by (Whitton, Warner, & Appleby, 1996) during a treatment trial for women identified as postnatally depressed, revealed that 90% of the women recognised something was wrong but only a third realised they were depressed, dismissing their feelings as tiredness, or problems with family members including partner, baby, and other children. In the same study, more than 80% of women had not reported their symptoms to a health professional. In Australia, screening for PND is typically conducted by a GP or CHN (Austin & Highet, 2011). Under the current best practice guidelines, each woman is to be tested at 6-12 weeks postpartum to ensure they are not exhibiting symptoms of PND (Austin & Highet, 2011). Due to inadequate help seeking behaviours, formal screening tests, such as the EPDS, may detect PND better than unstructured questioning (Baker & Oswalt, 2008; Crawley, 1998).
Multiple medical professionals are involved during the perinatal period, all of which have the ability to identify PND symptoms. This should ensure that symptomatic women are identified. However, due to “the diffusion of responsibility within the system” many women are missed (Poole, Mason, & Osborn, 2006, p. 363). Reported evidence suggests that fewer than half of all PND cases are detected by primary HCPs and that using a formal screening tool such as the EPDS increases the likelihood of depressed women being detected (Baker & Oswalt, 2008; Buist et al., 2006; Hearn et al., 1998) and therefore, getting needed treatment (Sobey, 2002).

2.5.3.1 The Edinburgh Postnatal Depression Score
The EPDS is a 10 question, self-reported questionnaire in which women are asked to rate how they have felt in the last 7 days (see Appendix C). Each question is scored 0–3 (resulting range 0–30) and completion takes around five minutes (Gibson et al., 2009). However, the EPDS is only a screening instrument and a subsequent clinical diagnosis must be made by an appropriately trained health professional, such as a GP, psychologist or psychiatrist (Gibson et al., 2009; Najman et al., 2000).

The use of screening instruments as well as knowledge and recognition of PND symptoms by HCPs is only a part of identification. Identification of women with PND is made more difficult by the reluctance of women to be recognised as having PND or to seek help for it (Poole et al., 2006). Generally, women who receive the questionnaire are positive about the screening. However, some reservations are held (Buist et al., 2006). A study conducted by (Russell, 2006) concluded that the EPDS gives women an opportunity to discuss feelings that may be difficult to talk about. Conversely, (Shakespeare, Blake, & Garcia, 2003) reported that women preferred to speak about their feelings and experiences with someone that they could trust rather than complete a questionnaire.

It has been argued women might underscore so as not to receive a diagnosis of PND, and therefore, avoid the stigma of having a mental health disorder or being labelled an unfit mother (Poole et al., 2006; Shakespeare et al., 2003). It may be necessary then for the HCP to be flexible when screening for PND. Conversation or
an interview with the mother may be a more comfortable and personal way of discussing her experiences than a questionnaire.

The EPDS has been translated and validated into many (20) languages other than English (Gibson, et al., 2009). The EPDS, developed by Cox et al., was first published in 1987 and has been used widely across varying parts of the globe with similar results, making the questionnaire favourable for detecting PND (Craig et al., 2005; Gibson et al., 2009). Despite being widely used and tested, it has been argued that there are flaws with the accuracy of the scoring; the questionnaire is self-reported and language and culture play a part in how questions are responded to (Craig et al., 2005; Gibson et al., 2009). Thus, false positives as well as false negatives have been shown to occur in some instances (Gibson et al., 2009). It has also been noted that some women may not answer the questions accurately for fear of stigma or a lack of understanding, thus creating a reporting bias within the score (Craig et al., 2005).

The EPDS is a preliminary screening tool aimed at providing a basis for the diagnosis and treatment of PND (Gibson et al., 2009). Screening using the EPDS for PND is currently recommended in Australia and the USA, but not the UK. In the UK, the policy has shifted from formal screening to opportunistic case finding for PND through health visitors in the home (Gibson et al., 2009).

2.5.3.2 Other testing tools
There are other testing tools, such as the Beck Depression Inventory, Depression, Anxiety and Stress Scale (DASS) or diagnostic interview, which are used by psychiatrists and other medical clinicians to diagnose depression and anxiety, including PND. However, these require specialist training to administer and analyse results. Further, assessment tools such as those previously mentioned do not take into consideration the life changes that are present at times such as the birth of a baby, often giving misleading results (Cox, Holden, & Sagovsky, 1987).
2.5.4 Treatments available for postnatal depression

The treatments for PND are varied but few and most require further consultation by a specialist. The treatment of depression in the postpartum period is similar to the treatment of depression in general. These treatments fall under four main categories, which include pharmacological, psychological, psychosocial, complementary and alternative therapies (Boath & Henshaw, 2001; Di Mascio et al., 2008). Complementary and alternative therapies are becoming more accepted within western cultures, providing greater choice for possible treatment options. Nevertheless, very little research has been carried out on the treatment of PND using complementary and alternative therapies (Boath & Henshaw, 2001; Di Mascio et al., 2008).

The aim of treating PND is to decrease symptoms and consequences of depression and to ensure infant exposure to both maternal depression and to psychotropic medications is minimised (Friedman & Resnick, 2009). The clinician determines the depressed mother's level of distress and the functional impact on her parenting. The clinician determines the need for in-patient psychiatric treatment (if she is suicidal, homicidal or severely impaired) or management on an out-patient basis with close follow-up. Consideration should also be given to what support system she has in place and her willingness to ask others for needed assistance. Arranging for home visits by a CHN may be very helpful (Di Mascio et al., 2008; Friedman & Resnick, 2009).

2.5.4.1 Pharmacological treatment

The use of antidepressants is the most widely accepted therapy after diagnosis of PND, despite side effects to both the mother and baby (Boath & Henshaw, 2001). These side effects include drowsiness and headaches as well as the excretion of medication into breast milk, warranting the cessation of breastfeeding in some cases (Boath & Henshaw, 2001; Crawley, 1998; Friedman & Resnick, 2009; Miller, 2002). These are not mild side effects to a new mother as they may greatly hinder day-to-day activities and have lasting effects on her baby. Therefore, the use of
antidepressants is usually reserved for those with moderate to severe cases of PND where the benefits outweigh the potential risks (Friedman & Resnick, 2009).

2.5.4.2 Psychotherapy and psychosocial therapies
Psychotherapy and psychosocial therapies have also been shown to benefit mothers with PND. These therapies usually include one-on-one counselling with an accredited therapist, group therapy sessions with other mothers with PND, and other similar treatments. Group treatments are frequently recommended for PND, in part because their inherent social support is often highlighted as reducing the likelihood of depression (Honey et al., 2002). There are a range of group treatments for which beneficial outcomes are reported. These treatments include support groups, counselling groups, and interpersonal therapy groups, as well as eclectic groups which combine elements of mother-infant dyadic relational therapy, cognitive behavioural therapy (CBT), interpersonal therapy and family systems (Craig et al., 2005; Honey et al., 2002).

2.5.4.2.1 Cognitive behavioural therapy
Some studies have suggested that cognitive behavioural therapy (CBT) has been as effective as antidepressants in treating severe PND (Almond, 2009; Appleby, Warner, Whitton, & Faragher, 1997). Pharmacological treatments are often not favoured by postnatal women and positive results for non-medical analysis show positive results for non-medical interventions too. Group therapy, interpersonal therapy and CBT on their own show positive and statistically significant results (Almond, 2009). Many women have considered not utilising pharmacological treatments, such as antidepressants, listing risks to both self and baby as the principle reasons (Hoffbrand et al., 2001; Whitton et al., 1996).

2.5.4.2.2 Social treatment
The social treatment of PND is based on evidence found on the social origins of the disease. There are women who strongly believe that lack of social support is more significant in contributing to PND than other factors (Almond, 2009; Cutrona & Troutman, 1986). Although there is much evidence that psychological treatments
are successful, most rural women have limited access to these interventions. Studies have shown that many women, particularly women from culturally and linguistically diverse backgrounds, as well as those in rural and remote areas face difficulties accessing services (Almond, 2009; Craig et al., 2005). Group therapies, whether in person, on the phone or through electronic mediums, have been shown to provide social support and assist in the eradication of social myths surrounding motherhood and parenting (Honey et al., 2002; Najman et al., 2000). In addition to social support, education and empathy are shared (Honey et al., 2002; Ray & Hodnett, 2001). There is not one program that has been found to be better than another in this type of treatment setting; however, more longitudinal research needs to be conducted (Craig et al., 2005; Honey et al., 2002).

**2.5.4.3 Complementary and alternative therapies**

Complementary and alternative therapies have come to the forefront in treating many forms of ill health, both mental and physical. Yoga, massage, meditation and music therapy have been effective in relieving stress, anxiety and the amount of pain patients experience (Glover et al., 2002; Nilsson et al., 2009; Trappe, 2012). For mild to moderate PND, psychological and mind-body approaches may be more desirable than medications as they do not present risks of side effects (Honey et al., 2002). Music, specifically, has taken on a greater role in operating theatres and recovery wards, maternity suites and neonatal wards in hospitals as well as within the community. In addition, the use of music in the delivery suite is becoming more frequently recommended as the amount of pain, as well as the stress on the mother, is reduced (Bruscia, 1991; Tseng et al., 2010).

**2.6 Understanding rural women and postnatal depression**

The experience of PND in rural areas is less well understood (Bilszta, Gu, Meyer, & Buist, 2008; Boyce et al., 2001). PND research has largely been limited to Caucasian, married, and mid- to high socio-economic women who reside predominantly in urban areas (O’Hara & Swain, 1996; Villegas, McKay, Dennis, & Ross, 2011). Consequently, there are still questions about the potential impact of socio-
demographic characteristics, such as rural residence, that may contribute to depressive symptoms during the postnatal period (Villegas et al., 2011).

Depression, including PND, affects the population regardless of locality. It has been shown that there may not be significant differences in the rates of depression between rural and urban localities (Fortney, Fortney, Harman, Xu, & Dong, 2010; Judd et al., 2002; Kilkkinen et al., 2007; Probst, Laditka, Moore, & Harun, 2006; Romans, Cohen, & Forte, 2011). However, rural residence has been associated with characteristics that often accompany depression, such as poverty, lack of education, lack of access to or utilisation of mental health services, stigma related to mental health conditions and chronic disease (Brossart et al., 2013; Kilkkinen et al., 2007; Probst et al., 2006).

Within the last decade, studies have found that rates of depression in rural areas tend to be higher than those in urban areas, and attribute this increase to poverty, lack of education and employment, stigma and lack of services, particularly mental health services (Brossart et al., 2013; Kessler et al., 2003; Probst et al., 2006). Rural residence, as a variable in mental health, continues to remain a contentious issue (Kilkkinen et al., 2007). Despite a great deal of concern being expressed about psychological disorders in rural and regional Australia, only limited data is available, warranting more thorough research in this area (Kilkkinen et al., 2007; Patterson, 2000).

2.6.1 Social determinants within rural contexts

Certain contextual and cultural factors may also confound our understanding of depression in rural communities. Several studies have reported high rates of depression among women in rural clinics and it is known that women in rural areas experience unique problems that increase their risk of depression and abuse. These include: social isolation; limited occupational options that contribute to financial instability and poverty; and lack of childcare (Annan, 2006; Hauenstein & Peddada, 2007; Sears et al., 1999).
In the study conducted by Judd et al. (2006), it was noted that financial difficulties, government bureaucracy, decision making, complexity of work and workload, family problems, isolation and loneliness were all contributors to the high suicide rate among farmers in Australia. In the same study, it was also recognised that the higher rate of suicide among Australian farmers cannot be explained by an elevated rate of mental problems (Judd et al., 2006). Further, in a more recent study conducted in the UK by Hounsome, Edwards, Hounsome, and Edwards-Jones (2012), it was stated that there is higher psychological morbidity due to the increased number of stressors among farmers and their spouses compared to the non-farming population which may warrant access to appropriate mental health services. This, then, suggests that struggles within the farming industry in Australia may lead to a breakdown or strain on relationships which may increase the incidence and compound the impact of PND amongst rural women.

Most studies indicate that the causes of depression in men and women do not differ, but that women experience its causes and symptoms more frequently than men. There is evidence that social conditions, tied to women’s lesser power and status in society, contribute to higher rates of depression (Nolen-Hoeksema & Keita, 2003). Further, women are more likely to experience physical and sexual abuse, isolation, poverty, lack education, and have stronger links to traditional gender roles, which have been linked to depression through all the life stages (Groh, 2013; Koss, Bailey, Yuan, Herrera, & Lichter, 2003; Probst et al., 2006; Simmons, Braun, Charnigo, Havens, & Wright, 2008).

Although depression in women has been widely studied and discussed at length within the existing literature, the experiences of rural women are rarely included. This exclusion is particularly significant as rural experiences are unique to those who live within these regions. The mental health care that does exist in rural settings is traditionally patterned after urban models of care (Probst et al., 2006). These models may be inappropriate, inadequate, and insufficient in meeting the unique mental health needs of rural women. For example, rural women are more likely to be poor, unemployed or underemployed, older, less well educated, geographically isolated, and live longer distances from treatment centres than their urban
counterparts (Hauenstein, 2003). However, one needs to be cautious about the danger of stereotyping.

Traditional rural views of health care, stigma related to mental illness, reinforcement of more traditional gender roles, and lack of anonymity in rural communities also represent unique concerns for rural women (Groh, 2013). Given the social, cultural, and economic realities of rural women, and the reliance on GPs for mental health assessment and treatment, it is reasonable to assume that depression in rural women may go unrecognised by both the woman and her HCP and therefore, go untreated (Groh, 2013; Probst et al., 2006). It is essential to have a better understanding of rural women’s ability to recognise depressive symptoms and for them to use that knowledge to obtain effective mental health services. Thus, knowing the extent to which rural women are able to recognise depressive symptoms has the potential to guide patient education as well as the clinical practice of those who serve women living in rural communities (Groh, 2013; Price & Proctor, 2009).

In addition, a number of studies have examined factors that contribute to increased depression in rural women as well as factors that influence the seeking of treatment for depression. The socioeconomic risk factors include: high rates of poverty and/or unemployment; geographic isolation; limited educational and vocational opportunities; and limited access to mental health services (Coward, 2006; Hauenstein & Peddada, 2007). Sociocultural factors include: stigma about depression; lack of time; and perceptions that the primary care providers were not interested in their concerns (Van Hook, 1996). Other factors that impact the diagnosis of depression and subsequent treatment in rural women include: being under or uninsured; lack of access to health care options; and lack of access to supportive, ancillary services (Coward, 2006; Sullivan, Weinert, & Cudney, 2003).

The current knowledge about depression in rural women does suggest that they have significantly higher rates of depression than their urban counterparts and experience greater challenges and barriers, unique to living in rural areas (Simmons, Huddleston-Casas, & Berry, 2007). Depression in rural women is a serious and costly
health care issue with implications for family, community, and society. The
dependence on primary care providers to identify and treat depression is the
current standard of care for the vast majority of rural women (Groh, 2013;
Thorndyke, 2005).

### 2.6.2 Social stigma within rural contexts

The stigma associated with depression may have different implications for those
living in small rural communities where it is harder to maintain privacy as it relates
to one’s mental health status. Research on the negative labels associated with
receiving mental health care shows that rural residents with a history of depressive
symptoms are less likely to seek professional help (Lopez et al., 2006; Simmons et
al., 2008). Additionally, rural residents with more depressive symptomology are
more likely to view mental health treatment with stigma (Armstrong, Haeringen,
Dadds, & Cash, 1998; Simmons et al., 2008). Furthermore, rural women may not
seek care that is available, because traditional treatments are incongruent with how
women talk about and recognise their depression (Judd et al., 2002).

Boyce (2001) has suggested that rural Australian women are 1.6 times more likely
to develop PND than urban women. Another study conducted by Griepsma et al.
(1994) involving 185 women found that 57.8% of rural women in Australia (in the
Gippsland region) had an EPDS of 12 or higher at three months postnatal. This
extreme rate may be due to factors such as the high unemployment rate, above
12% at this time when Australia was experiencing recession (Griepsma et al., 1994).
Despite this, it was difficult to determine if high levels of unemployment was the
cause of such high EPDS scores. In addition, this high level of PND within this cohort
may be due to selection bias on the part of nurses who were used to recruit and
test each woman. Conversely, the result may be due to the Hawthorne effect of
mothers who were being studied. Regardless of the causes, it may be suggested
that the reported levels within the Gippsland cohort may be an overestimation
(Griepsma et al., 1994).
2.6.3 The urban and rural divide

More recently, in a longitudinal study measuring depression before and after birth among 1,966 rural and urban Victorian women, antenatal depression (defined as an EPDS score ≥15) was more prevalent among the urban women and PND (defined as an EPDS ≥13) was higher in the rural group at six to and eight weeks postnatal (Bilszta et al., 2008). In contrast, in a large Australian case control study, women from outside the greater metropolitan area of Victoria had significantly lower odds of having depression at between eight and nine months postnatal than women living in metropolitan areas (Brown, Lumley, Small, & Astbury, 1994).

Due to differences found between studies, there is some argument as to whether rural residence is a risk factor for PND. For example, people living in rural areas have been shown to be geographically isolated from family and others within their own communities as a result of small population density (Smith, 1998). Further, there is some evidence that relative newcomers to tight-knit communities may find it difficult to connect or engage with the community, and therefore, perceive limited social support. Rural residence may also be associated with low income, lack of insurance, low levels of education, increased risk of physical and sexual abuse, stronger links to traditional gender roles and poor access to health care, which have been shown to contribute to a decrease in mental health as well as help-seeking behaviours (Bilszta et al., 2008; Groh, 2013).

Although the number of studies directly relating to prevalence rates of PND in rural areas is limited, the results suggest that there are some important differences between rural and urban women and their risk for PND. Most studies reported elevated rates of PND among rural women as compared to worldwide incidence. These rates ranged from 23%-57.8% among rural women in developed countries, as compared to 10%-15% of women worldwide, suggesting elevated rates in rural communities (Villegas et al., 2011). However, it must be noted that varying definitions of the term “rural”, the use of differing assessment tools, and variable screening timeframes may contribute to inconsistencies in reported incidence rates when comparing rural and urban areas. Therefore, more research is needed to
adequately compare women from various rural and urban areas, controlling for possible variables, to determine if rural living influences prevalence rates.

When comparing psychosocial risk factors associated with PND, there is a danger of assuming they are the same for both rural and urban women. Each group of women live in different physical, economic and social environments, therefore, it is likely that the impact of place of residence, and the association between residence and risk factors for PND, will differ considerably (Bilszta et al., 2008; Lane, Roufeil, Williams, & Tweedie, 2002). It can be argued that place of residence may interact with known psychosocial risk factors that contribute to the development of PND. However, this has not yet been thoroughly investigated.

2.6.4 Treatments available to rural women

A lack of specialist mental health professionals is a major obstacle to the provision of psychological therapies for treating PND in rural areas, where many women do not have access to specialists or group therapies (Craig et al., 2005; Hoang, Lê, & Terry, 2013, 2014). It is argued if women could, no matter where they reside, prevent or at least self-treat PND, it may save them, and their families, added financial burden as well as the burden of separation for treatment (Craig et al., 2005; Hoang et al., 2013, 2014). The key is education, the more that is known about PND and its causes, the easier it may be to: alleviate its symptoms; reduce the time away from the new-born infant; and reduce the economic cost to the family and community as women are able to return home or to paid work sooner than otherwise anticipated (Beck, 1999; Villegas et al., 2011). Further research is therefore required into the field to determine the most productive and cost effective methods to alleviate PND, and how these methods can be developed to make them accessible to all. One method that has had little attention within rural contexts is the use of music as a complementary therapy.

2.7 Music therapy as an alternative

Music therapy is most commonly defined as an intervention where the therapist helps the client to promote health, using musical experiences and the relationships
developing through them (Erkkilä et al., 2011; Gold et al., 2011). In defining music therapy the Australian Music Therapy Association refers to the American Music Therapy Association (2015, p. 1) which states,

Music Therapy is the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. Music Therapy is an established health profession in which music is used within a therapeutic relationship to address physical, emotional, cognitive, and social needs of individuals.

Other programmes that use music for health-related goals, but in ways that do not qualify as music therapy, may be described as music medicine (Gold et al., 2011). Music therapy is defined further by Bruscia (1991, p. 5) as “an interpersonal process in which the therapist uses music and all of its facets – physical, emotional, mental, social aesthetic and spiritual - to help patients to improve, restore or maintain health”. However, Chan et al. (2011, p. 333) state that “music therapy...can be provided without a music therapist”. Published literature indicates a substantial number of studies that use ‘music listening’, without a theoretical framework or therapist’s involvement, as a form of music intervention, which may also be considered music therapy (Chan et al., 2011). As such, there is some discrepancy as to the definition of music therapy versus music medicine. Despite this discrepancy, in the context of this study, the term music therapy will be used to describe the use of music for the benefit of patient wellbeing.

2.7.1 Active versus receptive music therapy

Music therapy, although diverse, can be broadly categorised as ‘active’, where people re-create, improvise or compose music, or ‘receptive’, where people listen to music (Bunt & Stige, 2014). Receptive music therapy is more likely to be influenced by “cognitive-behavioural or humanistic traditions” (Maratos et al., 2008, p. 3) and may involve the inclusion of an additional activity such as relaxation,
meditation, movement, drawing or reminiscing while listening to live or recorded music (Maratos et al., 2008). It has been suggested that receptive music therapy can help reduce stress, soothe pain, and energise the body (Bruscia, 1991; Krout, 2007; Ventura, Gomes, & Neto, 2013; Vlismas, Malloch, & Burnham, 2013).

Active music therapy includes clinical improvisation techniques to stimulate, guide or respond to the patient who may use voice or any musical instrument of choice within the patient’s capability (Bunt & Stige, 2014). The music is often improvisational and many are psycho-analytically informed (Maratos et al., 2008). The basis of this action is to allow the patient to express emotions non-verbally. Often, a combination of active and receptive methods are used depending on the needs of the person, the therapist’s expertise, and the issues to be resolved (Maratos et al., 2008; York, 2003).

Music therapy is delivered over a range of time periods from single sessions to several years, and may vary in intensity from daily to weekly to monthly sessions. Patients may be seen individually or in a group setting. Music can enhance the non-verbal expression of emotion and can reach people’s inner feelings without being threatening. It can also be a tool for emotional catharsis (Chan et al., 2009; Evans, 2010). (Chan et al., 2009, p. 286) note the breadth of health care settings in which “the use of music activity” is used.

These health care settings consist of acute in-patient care including surgical care, coronary care, critical care and oncology settings; and out-patient care, including nursing home settings for agitated residents; and home-care settings for patients with chronic obstructive pulmonary disease, chronic non-malignant pain, sleep disturbance, and depression. Studies from a variety of settings throughout the lifespan have frequently reported effective music use (Chan et al., 2009). Furthermore, just as attention is paid to the art that adorns the walls of hospital corridors and rooms, the soundscaping of these areas, it is argued, should also be considered. A pleasing acoustic environment with appropriate music can help mask the background noise and potentially, speed the healing process (Freidrich, 2004).
2.7.2 The physiological effect of music

Music is made up of a combination of frequency, beat, density, tone, rhythm, repetition, volume and lyrics (Trappe, 2012). Music may influence physiological factors like blood pressure, heart rate, respiration, electroencephalogram (EEG) measurements, body temperature, and galvanic skin response (Tornek et al., 2003). Furthermore, music is thought to influence immune and endocrine function and to relieve pain, anxiety, nausea, fatigue and depression (Tornek et al., 2003). More recently, research has been conducted within the field of neuroscience in order to identify the effects of music on the mesolimbic system (Swaminathan & Schellenberg, 2015; Vuilleumier & Trost, 2015). It is the changes or alterations of the pathways in the mesolimbic system which has been linked to depression. (Vuilleumier & Trost, 2015) stated that, “music may have a direct influence on behavioural and cognitive processes mediated by the different brain systems, which can in turn be harnessed for therapeutic purposes.”

Moreover, music with a standard 4/4 metre and tempo that mimics the heart rate (between 60-80 bmp), has been found to have positive effects on psychological as well as physical health (Chang et al., 2008; Trappe, 2012). Music which incorporates a flowing, lyrical melody, simple harmony with soft tonal colour and easy rhythm promotes a reduction of heart rate and blood pressure and induces relaxation in adults and children (Chang et al., 2008). Although the literature cited here has shown positive effects, many inconsistencies still exist within this field and more research is needed.

2.7.3 The therapeutic role of music

There has been much research supporting the use of music therapy (Bruscia, 1991; Chanda & Levitin, 2013). This research covers the lifespan of humans—from neonates to palliative care (see Appendix D). Research has been conducted using lullabies to calm infants in settings ranging from neonatal intensive care units to households (Baker & Mackinlay, 2006). Music has also been found to boost biological development (Arnon et al., 2006).
Music use is prominent in the young to adolescent age group with a wide range of benefits. Music has been used in everything from learning to read and write, to behaviour aides for those with mild to severe mental and physical ailments, to relaxation techniques (Yinger & Gooding, 2014). The use of music has also been suggested as an alternative to some psychotropic medications for chronic depression among adolescents (Field et al., 1998) which may have possible harmful and long lasting side effects.

In the adult to old age years, the use of music is becoming more widely used for those with dementia and Alzheimer’s disease as well as those with respiratory or cardiac ailments (Chan et al., 2011). Stress and anxiety are reduced across the age spectrum from birth to old age and palliative care. When music therapy is added to the standard care of people with mild, moderate or severe depression it aids to improve their depression, reduce anxiety, and increase functioning (Erkkilä et al., 2011).

2.7.4 Lullabies and postnatal depression

Despite the research concerning music and music therapy, there has been little focus on the use of music specifically for women with PND. Nevertheless, it has been shown that lullabies are a universal and ancient song form that play an important role in comforting infants and providing a critical bonding experience between caregiver and infant (Baker & Mackinlay, 2006; Cevasco, 2008; Friedman et al., 2010; Hanley, 2010). Lullabies also fit the aforementioned criteria of having a standard metre, tempo matching that of the heart (60-80bpm), flowing melody and easy repetitive rhythm. Lullabies played for or sung to neonates have been found to assist in regulating heart rate and blood pressure, encouraging weight gain and later, stimulating early language development (Creighton, 2011; Freidrich, 2004; Friedman et al., 2010; Hanley, 2010; Robb, 1999; Trappe, 2012). Friedman and colleagues (2010, p. 220) postulate that

Singing lullabies facilitates a relaxation response in mothers and can assist in their ability to cope with the many demands of motherhood.
Lullaby usage in music therapy for mothers with or without diagnoses (of PND) serves a dual purpose—the lullaby and its accompanying gentle, repetitive multimodal interactions, such as patting, rocking, stroking, walking and swaying to the tempo of the music, simultaneously soothe the baby and allow the singer to release her emotions.

It has been found that some mothers use singing to assist in the regulation of mood; either to soothe or enliven their infants. There is some concern however, that traditional musical parenting practices, such as lullaby singing, are in decline with negative implications for both parent and child (Baker & Mackinlay, 2006; Young, 2008). It has also been found that parents rely heavily on baby and toddler groups to learn their song repertoire that they use at home both for play as well as for soothing a troubled infant (Young, 2008).

Young (2008) found that in a sample of 88 mothers, 58% reported the use of some form of music (recorded music, ambient music, or sleep aids such as mobiles or sleep teddies playing music) at bedtime or during daytime naps for their children. However, only 20% of the children were sung to. A small number of mothers (13%) described singing at times when baby needed soothing or distracting, such as when nappies were being changed, whilst 20% used singing for fun and to make their children ‘happy’. This suggests that the value of music as a means of soothing and regulating the mood of the baby is appreciated by mothers. However, live singing is generally being replaced by recorded music (Baker & Mackinlay, 2006; Young, 2008).

Parenting in many western cultures emphasises that children, from birth, sleep alone and such aids may help to fill the silence and provide a form of surrogate contact. Contrary to typical lullaby form, many sleep aids geared towards babies typically use western classical music selections which comprise complex harmonies, rhythms, changes in dynamics and generally, lack predictability. A baby may not have the cognitive skills to process such music. Studies have shown that infants prefer and respond to a predictable, static melody and harmony; those typically
found in lullabies (Baker & Mackinlay, 2006; Lai et al., 2006). Further, babies have been shown to prefer their mothers’ voices above all others (Baker & Mackinlay, 2006).

Sharing music can be a social event, bringing people together and allowing for the communication of feelings and emotions that may alter subtly within momentary changes. Studies have shown how music, including lullabies, promotes meaningful mother-infant interaction (Baker & Mackinlay, 2006; Milligan et al., 2003; Shenfield et al., 2003; Trehub et al., 1997; Trevarthen & Malloch, 2000). This is crucial for women suffering with PND as well their children. The musical qualities contained in lullabies are effective in calming babies, and promote a relaxation response in mothers, which can assist in their ability to cope with the demands of motherhood (Friedman et al., 2010; MacKinley & Baker, 2005). This is particularly important for mothers who may be experiencing difficulties with day-to-day coping, resulting in the development of feelings of failure, frustration, tension and guilt.

Lullabies are meant to soothe baby and induce sleep, which can lead to more frequent and longer durations of sleep. Furthermore, the mother is more likely to be reassured in her abilities to care for her child and therefore, lullabies may reduce the probability of PND (Baker & Mackinlay, 2006). Teaching lullabies, as well as parent education about infant sleep requirements, may be a viable option for those who do not have access to residential parenting centres, particularly those in rural and remote areas.

2.8 Reflection on the literature review

Within the literature, few papers exist that highlight music therapy or music medicine programs and their outcomes, specifically for women with PND. This may be because music therapy is relatively new and is still being sufficiently defined, researched and specifically developed for the use of treating women with PND (Allison, 1991). Currently, there are three distinct groups of research. Firstly, research which examines the effectiveness of common treatments for those individuals with PND yet did not use music as an intervention. The second group of
research assesses the use of music as a treatment for patients with depression, anxiety and stress. However, many of these music interventions or programs reported on in this body of research were pilot studies, which required greater development and evaluation and were not geared specifically towards women with PND. The third group focuses on the use of music for attachment and bonding and only alluded to further effects for the mother.

From the current literature, it is evident that more research is required to determine the effectiveness of music as an intervention. It has been noted by previous research that larger study cohorts and more quantifiable evidence and data are required. This remains problematic as study conditions are not always identical or possible to be reproduced. For example, a woman in labour for the first time will never have that first labour experience again. In addition, music which may have been helpful to ease pain and anxiety in the first labour experience may not have the same effect in subsequent labour experiences. Therefore, it is also difficult to determine if a woman would experience the same degree of pain and anxiety if music is used or absent as an intervention (Bruscia, 1991).

Despite the challenges in measuring and understanding the effectiveness of music as an intervention, one study, as highlighted previously, described the use of music as an effective intervention for both mother and baby (Friedman et al., 2010). Depending on the severity of the depression, the mother’s ability to care for herself and her child may be negatively affected. Furthermore, symptoms of mental illness may limit bonding between mother and baby due to insensitivity to the “infant’s cues, insecure attachments, signs of chronic stress” (Friedman et al., 2010, p. 219) and the infant’s level of cognitive development.

Friedman et al. (2010) argue that singing lullabies facilitates a relaxation response in mothers and can assist in their ability to cope with the many demands of motherhood. Lullaby use in music therapy for mothers with or without diagnoses of mental disorders serves a dual purpose—to soothe the child and allow the mother to release her emotions. The mothers who sang lullabies to their children reported improved mother-infant bonding, decreased stress and anxiety and a significant
increase in relaxation, which leads to a decrease in babies physiological signs of chronic stress (Friedman et al., 2010).

At the conclusion of the literature review, a number of specific and vital questions were raised. If music, which is accessible by all, works to aid in the reduction of depression, stress and anxiety, does it have the potential to alleviate the symptoms of PND as well as establish greater bonds between mother and child? If so, why is this not being more readily used?

Postnatal depression is a debilitating condition which potentially affects between 15%-60% of women who give birth. Any form of depression is debilitating. However, for mothers, depression is particularly difficult as demands change with the care of a new baby. Medical professionals use the EPDS as a guide to diagnosis but underdiagnoses can occur. A mother may attempt to avert diagnosis for fear of the stigma attached to PND and therefore, may not complete the EPDS test accurately. Nevertheless, the successful treatment of PND is largely dependent upon early diagnosis.

Currently, there are three main treatments for PND, pharmacological, psychological and psychosocial, although other holistic approaches are becoming more accepted. The most widely used form of treatment for women with PND is pharmacological, because of accessibility rather than preference. Pharmacological therapies are not always the best treatment option for new mothers as there may be adverse side effects from the medication to mother and child, as well as significant others. Psychological and psychosocial treatments, which have been found to be effective options, are not commonly available in rural areas where there is a significant lack of mental health specialists. Further, GPs generally do not have the capacity or training to provide these treatment options to their patients.

Music has been used in many diverse contexts with positive results. However, although there has been research regarding the use of music for depression, stress and anxiety, it has not been specifically researched as a treatment option for PND. The current literature suggests that further research is required regarding the
effectiveness of music, including lullabies, as a therapy option for women with PND in rural and remote areas.

2.9 Conclusion

This chapter has discussed, through a review of the current literature, prevalence, diagnosis and treatment options for women with PND. It has been identified that PND commonly occurs in various cultures and societies with an incidence rate typically reported to be between 10-25% world-wide. It was further observed that the causes of PND are broadly biological, psychological and social, either singly or in combination. However, why PND affects some women and not others remains a mystery. Women with PND living in rural and remote areas encounter many health care issues, most notably a lack of specialist mental HCPs, which leads to a lack of treatment options. Music therapy, as well as the use of lullabies, was also discussed. Some of the possible physiological and therapeutic benefits were also debated, including a reduction of depression symptoms in some patients. However, further research is required to determine the effectiveness of music therapy for women with PND as no literature was identified where music therapy was utilised as a treatment specifically for women with PND.

The next chapter will outline and discuss the research framework and design of the study to address the research questions informed by the current literature.
Chapter 3: Methodology

3.1 Introduction

The previous chapter has provided an overview of the published literature concerning PND and the use of music interventions to benefit health. The aim of this research was to examine the strategies rural Tasmanian women use to manage PND where access to services is limited or non-existent and particularly, to examine the role music may play in relieving PND. This study drew on phenomenology and feminist inquiry to address the research objectives. These objectives included 1) to examine HCP views on health care for women with PND in rural Tasmania, including what influence music has and its acceptance as a form of therapy, and what can be done to improve or implement services for women in Tasmania with PND; 2) to examine what services are available and accessed by women with PND in rural Tasmania; 3) to ascertain how women in rural Tasmania who have experienced PND perceive PND; 4) to understand if and how music has been helpful in the management of PND; and 5) to provide recommendations for health policy makers in addressing PND using complementary therapies such as music therapy.

This chapter outlines the research framework and design of the study to address the research aim, objectives and questions. It also discusses the rationale and the methodologies used for data collection and analysis. The qualitative method design involves data collection from both key HCPs and women with PND who resided in rural Tasmania. This was achieved by conducting semi-structured interviews with HCPs and in-depth interviews with women who had been clinically diagnosed with PND. The chapter concludes with a discussion regarding the analytical framework, which guided the analysis of the data.
3.2 Methodological framework

There are many ontological and epistemological parameters that underlie a methodology that in turn guides the research. The researcher’s ontological position, that is, their perspective on the ‘nature of reality’, guides how the ‘nature of knowledge’ is perceived, or what epistemological position is possible. Given that methodologies concern ‘the nature of knowledge’, the researcher’s epistemological position informs which methodologies are selected to conduct the research (Jonassen & Land, 2012; Liamputtong & Ezzy, 2005; Mertens, 2014). The methodology then follows the guidance given about the ‘nature of reality’ (ontology) and the ‘nature of knowledge’ (epistemology) to prepare the appropriate research design, or method to be used by the researcher to guide where to focus the research as well as how to organise and extract information (Jonassen & Land, 2012; Liamputtong & Ezzy, 2005; Mertens, 2014). The following methodological framework, illustrated in Figure 3.1, informed and guided the current research.

![Figure 3-1: Methodological framework](image)

The methodological framework of this study begins with a constructivist view. This view is typically coupled with interpretivism, which guides qualitative research (Creswell, 2013; Patton, 2002). Constructionist ontology and interpretivis
epistemology is guided by the idea that meaning is subject to experience. Meanings are thus varied and lead the researcher to look for “the complexity of views rather than narrowing into a few categories or ideas” (Creswell, 2013, p. 8).

Adopting this view means that the role of the researcher is to rely as much as possible on the participants’ views using broad and general questions so that the participant can construct the meaning. These meanings are constructed through social and historical contexts. Meanings are not simply imprinted, they develop through interactions with others and the historical and cultural norms that operate within individual’s lives (Creswell, 2013). Further, this ontology and epistemology gives the researcher the opportunity to acknowledge their own interpretation of meaning, which is generated through a particular historical and social perspective (Liamputtong & Ezzy, 2005). Accordingly, the focus of this research includes the context of PND experiences and music use for PND in rural and remote Tasmania where health care access is limited. It further seeks to include the perspectives of HCPs who seek to provide care for these women, which provides a different perspective of PND in rural and remote Tasmania and the use of music to treat the symptoms of PND.

Lastly, it is also vital that as individuals enter the realms of research, to recognise they bring with them their own view of reality, how they “view” the world, with each individual not observing reality exactly the same (Kuhn, 1996). An individual’s view of the world is often value-laden with their past experiences, personal ideas with undertones of the cultural and socio-political context of the day (Bowling, 2005; Creswell & Tashakkori, 2007; Kuhn, 1996). Therefore, it is vital “for the investigator to be aware of his or her theoretical perspectives and assumptions about the research topic... when designing research and analysing the data” (Bowling, 2005, p. 119).

Thus, my own acute awareness of this fact, that my own theoretical perspectives and assumptions must be taken into account are explicitly required to ensure the research is conducted as “objectively as possible” (Bowling, 2005, p. 120). Objectivity is required from inception to the interpretation of research results;
however, this value freedom is the ideal, yet social and natural science research remains innately value-laden.

3.3 Conceptual framework of the study

A conceptual framework is used in research to outline or to present a preferred approach to an idea or thought (Creswell, 2009; Creswell, Plano Clark, Gutmann, & Hanson, 2003; Creswell & Tashakkori, 2007; Morse, 2005; Tritter, 2007). The conceptual frameworks researchers use, whether unconsciously as a matter of tradition and training, or intentionally as a matter of choice, carry underlying messages about what and who needs to become the focus of the research (Creswell, 1998; Creswell, 2013). As outlined in the previous chapter, no known research has been published regarding the use of music to aid women with PND. However, a review of the literature indicates that research, employing a diverse range of theoretical, methodological, and analytical frameworks has explored PND, as well as music therapy (as previously outlined in Appendix B). As opposed to previous research regarding PND or music therapy, this study incorporates phenomenological and feminist theories in order to understand the meaning of the lived experiences presented by the study participants.

3.3.1 Phenomenology

Phenomenology is a philosophical approach where reality is viewed as constructed from an individual’s experiences and beliefs (Carpenter, 2010; Creswell, 1998; McConnell-Henry et al., 2009). It is also a research approach in which phenomena such as feelings of loneliness, jealousy and anger, or relationships such as marriage, employment, or those formed within programs, organisations, or wider cultures are explored (Carpenter, 2010; Patton, 2002). Phenomenology is the study of the everyday subjective experiences of an individual’s lived world – the life-world, where meaning is shaped and produced continuously (Bowling, 2005; Greenhalgh, 2007; Liamputtong & Ezzy, 2005).

Phenomenological approaches focus on exploring how human beings make sense of their experience and transform experience into consciousness, both individually and
collectively. This requires methodological, careful, and thorough capturing and description of how people experience some phenomenon—how they “perceive it, describe it, feel about it, judge it, remember it, make sense of it, and talk about it to others” (Patton, 2002, p. 104). In order to gather phenomenological data, “one must undertake in-depth interviews with people who have directly experienced the phenomenon of interest as they have ‘lived experience’” (Patton, 2002, p. 104). In other words, the actions of the individual can best be understood by placing them within the context of their own lived world. Phenomenology’s strengths are in its ability to provide “rich, in-depth understandings about social phenomena in their natural settings, which cannot be captured by quantitative methodologies” (Wong & Lohfeld, 2008, p. 54). Its purpose is to allow a researcher to borrow “people’s lived experiences so that the researcher can better understand the meaning or the significance of the event” (McConnell-Henry et al., 2009, p. 2).

Phenomenology has become a popular theory in many disciplines concerned with human experience such as nursing, sociology, social work, psychology, education and health (McConnell-Henry et al., 2009). Phenomenology is well established in research as a significant methodological approach within the health sciences. For example, phenomenology has been used to explore the lived experience of childhood cancer survivors (Karian, Jankowski, & Beal, 1998), what it means to be HIV positive in pregnancy and motherhood (Sanders, 2008), and the lived experience of migrants in acute care health care settings (Vydelingum, 2000).

Phenomenology was used to guide aspects of this study in order to understand the world of women with PND living in rural Tasmania (Van Manen, 1990) and how music was used to alleviate the symptoms of PND. This framework was used to generate a depth of understanding in relation to the health and wellbeing of women who experience PND, while providing a further insight into the medical practices and services that are available to these women. This philosophical perspective is a fundamental source of research understanding, which is not fully achievable through other research methodologies, particularly those that are quantitative in nature (Campbell, 2011; Van Manen, 1990; Wong & Lohfeld, 2008).
3.3.2 Feminist theory

In addition to understanding the lived experience that phenomenology provides, feminism situates lived experience within the context of gender and the meanings attached to being a woman. Feminism has been one of the most influential political and intellectual movements in the last fifty years which has had a tremendous impact on sociology (Ramazanğolu & Holland, 2002). Feminist ideas and approaches are increasingly important across the whole of the social sciences and humanities fields (Travers, 1991). Feminist methodology is shaped by feminist theory, politics and ethics, and is grounded in women’s experience. Logically, feminist methodology cannot be independent of the ontology, epistemology, subjectivity, politics, ethics and social situation of the researcher (Ramazanğolu & Holland, 2002). Further, “feminist inquiry provides not only conceptual and analytical direction but also methodological orientation in emphasising participatory, collaborative, change-oriented and empowering forms of inquiry” (Patton, 2002, p. 130).

Feminism defies patriarchal ‘truths’ that women are naturally inferior to men; it challenges the reasoning and scientific methods that are ‘blind’ to male dominance (Ramazanğolu & Holland, 2002). This defiance varies in degree but rests on moral and political positioning. What is distinctive is the particular political positioning of theory, epistemology and ethics that enables the feminist researcher to question existing truths and explore relations between knowledge and power (Ramazanğolu & Holland, 2002). A feminist perspective presumes the importance of gender in relationships and societal processes, and guides the study in that direction (Patton, 2002). Feminist inquiry asks “How is this perspective manifest in this phenomenon?” (Patton, 2002, p. 133).

Feminist researchers do not consider feminism to be a method in a traditional sense. Rather, feminism is a perspective on an existing method in a given field of inquiry or a perspective that can be used to develop other innovative methods. There is not one feminist theory. Feminist ideology is interdisciplinary and diverse, offering a deeper understanding of the forces and feelings that shape women’s lives (Annandale, 2008; Stewart, 2004).
The fact that there are multiple definitions of feminism means that there are multiple feminist perspectives on social research methods. However, one shared underlying principle in feminism is that women’s lives are important. Feminists are interested in women as individuals and as a social category (Reinharz, 1992). The important thing is to understand what women are going through. Women may have more control over their lives now than they ever have before but their autonomy is still heavily affected by ideological forces that prescribe what is ‘natural’ and desirable for their sex (Annandale, 2008; Payne & Doyal, 2010; Stewart, 2004).

Not all women may align themselves within any feminist theory or activism, but no one is untouched by feminism (Stewart, 2004). There are three main theoretically different feminisms; socialist feminism, liberal feminism and radical feminism. It was largely the radical feminists who pioneered ‘Reclaim the Night’ marches, women’s aid refuges, rape crisis centres and a strong women’s health movement. They argue that women must take back control of their own bodies and set out to educate others on how to do so. The legacy of this campaigning is even now evident in ‘woman-centred care’ and in a vastly changed provision of women’s health services (Annandale, 2008; Keane, 2014; Lagro-Janssen, 2012; Payne & Doyal, 2010; Stewart, 2004).

There are not just three feminisms, but many. Other identified feminisms include: lesbian feminism, black feminism, psychoanalytic feminism, eco-feminism, and post-feminism. There are many streams of feminist thought, feeding in and out of each other, coming together at some points and dividing at others. However, most feminist activism today is focused around common agendas rather than a shared theory (Stewart, 2004).

### 3.3.3 Feminist research

Feminist research has a strong commitment to changing the status of women in modern societies, to studying women, and to employing female feminist researchers. Feminist research is essentially research on women, by women, and for women (Stewart, 2004). Feminist research is an emancipatory type of inquiry, which
documents aspects of reality and takes a personal, political and engaging stance to the world.

Feminist research is obligated to contribute to social change through consciousness-raising or specific policy recommendations (Reinharz, 1992). Feminist research is connected to social change and social policy. Australian historian (Matthews, 1984, p. 24) proposes that feminist research aims “to understand the lives of Australian women in order that we might change our condition.” The international feminist community remains concerned that social research both contribute to the welfare of women and to knowledge. This is the dual charge that many feminist researchers see as part of their many responsibilities.

Feminist research is an established type of research, which has the specific purpose of studying women and their status in the community (Ramazanğolu & Holland, 2002). According to Reinharz (1992, p. 249) “feminist social research employs feminist theory in part because other theoretical traditions ignore or downplay the interaction of gender and power.” Feminist research is characterised by its philosophical base that acts as the guiding framework. Feminist research differs from traditional research in three central ways:

- its main focus is on the experiences and viewpoints of women and it uses research methods aimed at exploring these;
- it actively tries to remove or reduce the power imbalance between the researcher and participants; and
- its goal is to change social inequality.

Feminist research reaches into all disciplines and makes use of all research methods, sometimes singularly and sometimes in combination. Therefore, depending on the aims and objectives, feminist research has the potential to be used in nearly any study (Kumar, 2011).

Just as there is not one feminist theory, there is not one feminist way to do research. There is little ‘methodological elitism’ or ‘methodological correctness’ in feminist research. Rather, there is a primary focus on individual creativity and
variety. Feminist research focuses on enlightenment and social change using a variety of methods, which have been borrowed from other methodologies, particularly qualitative methods. The defining characteristic of feminist research is not the methods it employs but their application and purpose (Patton, 2002).

In certain cases, feminist researchers adopt the methods of a discipline without any major modification. They use a discipline for its power, turning it to feminist ends. In other instances, feminist researchers have found that a method must be modified to meet the demands of feminist research (Reinharz, 1992). Traditional research methods emphasise objectivity, efficiency, separateness and distance, whereas feminism “considers connection and empathy as modes of knowing, and embraces them in the criteria” (Reinharz, 1992, p. 24).

The broad-based nature of feminism means that it is compatible with many types of sociological work, and it is possible to conduct feminist research using a range of research methods. However, feminists generally have a preference for employing qualitative research methods and are more acutely aware than most qualitative research traditions about the political and epistemological assumptions informing the research process (Travers, 1991).

Qualitative research is an approach that explores and seeks to understand the meaning that individuals and groups give to social or human problems. Quantitative research is most often used to test an objective theory while having less emphasis on the context or meaning of the problem. Mixed methods combine both qualitative and quantitative research, which may generate a more complete picture of the problem than either research method alone (Creswell, 2013; Lapan et al., 2012). Although a mixed method approach may have produced a more complete picture of PND and music use among women with PND in rural and remote Tasmania, the choice of qualitative research for this study enables the researcher to focus deeply on the meaning experiences of the participants through their own voices. As outlined in the previous chapter, using music to treat PND is a relatively new concept and the value of the views and experiences of the women and HCPs may determine if it is a viable topic for further research.
3.4 The strengths of qualitative method

Qualitative research has made a valuable contribution to improving health care practice and policy, and to understanding the experiences of health care among health consumers (Pope & Mays, 2013). Qualitative research that may include methods such as interviewing, focus groups and participant observation also assists to provide greater and in-depth understandings of the issues raised from quantitative data. It is achieved by “establish[ing] an understanding of people’s lives, experiences and the subjective meanings” of a particular phenomena (Broom & Willis, 2007, p. 24). As such, it is a means to provide further insights to consolidate quantitative analysis and to enrich findings with intricate meanings, which does not always occur within quantitative research (Bernard, 2000; Broom & Willis, 2007; Calnan, 2007; Davis & Scott, 2007). The trustworthiness of qualitative research is determined by principles that include rigour, credibility and reflexivity to ensure that high-quality data is produced (Patton, 1999). Each of these principles, in relation to the current research, is discussed below.

3.4.1 Rigour and credibility

Rigour is the systematic approach to the research study that follows a defined process while seeking to overcome and address issues and challenges such as selective interpretation and presentation of findings (Grbich, 1999). Rigour was addressed in this study through the use of preliminary data, and an explicit attention to developing relationships with key individuals, the use of snowball sampling, and a familiarity with many of the issues that participants may have encountered. Using this approach, the research provided a sense of ownership among key HCPs that allowed a greater access to women, and more in-depth information being provided during interviews. In addition, credibility is one method used by qualitative researchers to establish trustworthiness by examining the data, data analysis, and conclusions to identify whether the proposed findings are correct and accurate. For qualitative researchers, credibility includes taking on activities that increase probability so that there will be trustworthy findings (Saini & Shlonsky, 2012; Shenton, 2004).
3.4.2 Validity

Validity is established by how appropriate and meaningful the inferences are in terms of the quality and assertions made based on the data (McDermott & Sarvela, 1999). In this case, validity refers to whether the methodologies chosen allowed for the aims of the study to be interrogated (Malterud, 2001). Validity in qualitative research also lies in the reader being convinced that the researcher has accessed and accurately represented the social world under study (Grbich, 1999).

Access to the lived world of the women was achieved by building rapport with key HCPs, who accepted the research being conducted and the researcher who was conducting the research. This led to greater insights concerning the experiences and contact with women that the researcher may not have had otherwise. Access to the women’s social world was also realised by developing trust with each of the women that led to a greater level of openness and truth. It must be noted that validity is also established by presenting multiple quotes, reflexive notes, and addressing complex questions within the data analysis phase by seeking further clarification from participants through member checking, which occurred in this study.

Further, validity is concerned with using research methods that provide consistent, dependable and stable information and occurs when the participant’s views and meanings have been expressively accessed (Grbich, 1999; McDermott & Sarvela, 1999). It is the capacity to provide representations of good quality research that are believable from the participant’s, rather than the researcher’s, perspective (Graneheim & Lundman, 2004; Shenton, 2004). Through validity, each participant’s voice becomes a more powerful vehicle within the research rather than being dominated by the researcher’s values, assumptions and suppositions (Denzin & Lincoln, 2000). To achieve this, tangible accounts of the women’s and HCP’s perspectives within the research are provided to authenticate the findings. The reader can analyse and judge for themselves the quality and authenticity of the data put forward (Liamputtong & Ezzy, 2005).
3.4.3 **Transferability**

Another measure of trustworthiness within qualitative research includes transferability, where the findings can be transferred to other people and settings (Graneheim & Lundman, 2004; Hungler & Polit, 1999; Shenton, 2004). In most cases, qualitative research is unable to be generalised to other populations. Transferability and generalisability are not aims of qualitative research as these are not its purposes. It is argued that these are standards of quantitative research that are applied to qualitative research, which is inappropriate (Marshall, 1996). However, it has been argued that qualitative research may be in part transferable to other populations that are in similar situations, or help to understand similar cases (Malterud, 2001). In the case of this study, its thorough and descriptive findings related to the needs, desires and challenges encountered by women with PND and the HCPs locally can possibly provide some valuable insight into other situations nationally and internationally (Malterud, 2001).

3.4.4 **Reflexivity**

The trustworthiness of the research methods also requires reflexivity, which further strengthens the rigour and validity of qualitative research. Reflexivity acknowledges that the researcher is part of the setting, context and phenomenon they are seeking to analyse and comprehend (Liamputtong & Ezzy, 2005). Consequently, the researcher needs to continually self-assess and identify their own subjectivity, preconceptions, motivation and theoretical foundations within the research process (Liamputtong & Ezzy, 2005; Malterud, 2001). To do this, the researcher must consciously account for their own feelings, thoughts and location within the research to produce more robust and less biased findings (Pillow, 2003).

3.5 **Data collection method**

Guided by the outlined methodological and conceptual frameworks, this study employed two key methods of data collection to determine the incidence of a phenomenon or condition within a population and achieve its objectives (Bonita, Beaglehole, & Kjellström, 2006). Within the study, there were two stages of data
collection. As shown in Figure 3.2, the initial qualitative data were collected from HCPs through semi-structured interviews. Data were also collected from women who had experienced PND at the second stage of the data collection process through in-depth interview. Each of these data collection processes will be highlighted in the following sections and their strengths and weaknesses, as well as how these were rectified or acknowledged within the study, are discussed.

Figure 3-2: Research design of the study
3.6 Data collection

Semi-structured interviews were conducted in order to gather qualitative data from key HCPs. In-depth interviews were conducted with women with PND to gain personal insights into the lived experience of PND. This is illustrated below in Table 3.1.

<table>
<thead>
<tr>
<th>Qualitative data collection</th>
<th>Instruments</th>
<th>Sample</th>
<th>Sampling techniques</th>
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<tbody>
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<td></td>
<td>In-depth interviews</td>
<td>N = 20 - 30</td>
<td>Purposeful sampling, snowball sampling</td>
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<td></td>
<td>Semi-structure interviews</td>
<td>N = 20 – 30</td>
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<tr>
<td>Sample</td>
<td>Women with PND</td>
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3.6.1 Study populations

Two distinct study populations were utilised in order to explore the experiences of PND in rural and remote Tasmania and understand what role music may play in alleviating PND symptoms. These two study populations included women from rural and remote Tasmania who had experienced PND and HCPs who attempt to provide care for women with PND in rural and remote Tasmania. Requirements for participation for each study population are outlined below.

3.6.1.1 Women with PND

The aim of the research was to explore the experiences of women with PND in rural Tasmania and understand what role music plays in alleviating PND symptoms. In order to participate in the study participants had to meet the following selection criteria:

- be a woman 18 years of age or older;
- reside in the north or northwest regions of Tasmania;
- have given birth within the previous five (5) years;
• have been diagnosed with PND by a GP, psychologist, or psychiatrist within the previous five (5) years; and
• have current support and/or professional treatment in anticipation of the possible distress from sharing personal experiences.

As these women have personally experienced PND in rural and remote Tasmania they may provide rich contextual information, which provides greater understanding of the issues and challenges of seeking health care for PND in rural and remote Tasmania.

3.6.1.2 Health care providers
Due to their wealth of knowledge and experience in working with women who have or have had PND, HCPs were selected to participate in the study. The HCPs who were targeted for recruitment included, but were not limited to: CHNs, perinatal mental health co-ordinators, GPs, psychologists, social workers, counsellors, and psychiatrists who have experienced working with women with PND. These HCPs worked in the north and northwest regions of Tasmania and therefore, understood and were aware of the key issues and challenges faced by women who experience PND within rural contexts. As such, they had rich contextual information to add to the researcher’s depth of study. Further, it was thought that their input would provide direction for improving future policy, both locally and nationally.

3.6.2 Development of interview questions
As part of trustworthiness within qualitative research, both the semi-structured and in-depth interview questions used in this study were based on those in the ‘Women’s experience of postnatal depression—beliefs and attitudes as barriers to care,’ study conducted by Bilszta et al. (2010). This Victorian study conducted focus groups with 40 women who were undergoing treatment or attending support groups for PND in order to understand how women’s experiences of PND influence their beliefs and attitudes and their choice to seek help. These researchers also explored ways that family, friends and health professionals facilitate help seeking behaviours. Many questions were incorporated into the final version of the current study’s interview questions, but were revised to suit the Tasmanian study’s context.
For example, the Tasmanian study focussed on understanding PND within a rural context, rather than an urban Victorian setting.

Although both question guides utilised questions drawn from the same study, questions were altered in order to accommodate the different participant groups. For example, the background questions for the HCPs focused on experiences regarding PND care and treatment, service provision, and screening and diagnosis. The background questions for the women were focused on the woman’s history including history of depression, feelings regarding the pregnancy and motherhood, work, education, and the like (see Appendices E and F).

In addition to the adjustments described above, reflexive processes were utilised to refine both interview schedules as the interviews were conducted. At the conclusion of each interview, a reflexive journal entry was made. These entries included reflective thoughts, comments, and questions that came about through the interview process. The reflexive journal allowed the researcher to express views, feelings and impressions gained from the participants (Finlay, 2002). The journal was also revisited throughout the analysis process to assist in the understanding of the discussions, contexts or the feelings derived from the interview at the time.

The research journal enabled the researcher to reflect on the interviews and the aspects that worked or did not work well. For example, after the first interview with a woman with PND, the researcher wrote:

*The first interview is finished! It went better than I expected. [Name] was very gracious and seemed almost exited to talk to me about her experiences. She never showed any reluctance when answering very personal questions and seemed relieved to have shared. She said that she wants to share her story so hopefully other women won’t have to go through the same things she did. There were a few questions that I think I need to be rephrased a bit. Some of the questions that were supposed to be quite open-ended were more closed (yes/no) than I thought they would be. I have made some notes*
on my interview sheet and will see if it works better for the next interview.

_Reflexive journal, 31 March 2014_

This reflexive process enabled the refinement of the interview questions, which occurred more frequently at the beginning of the data collection stage.

When interviewing the women, greater flexibility was required, as they each had their own story to tell. Although there were several questions regarding music use, as the women shared their experiences, often they would answer all of the questions at once. For example, after interviewing a particular woman, the researcher later wrote in her reflection:

_The music questions are good but I need to be aware that they can all be answered at once. When I asked [name], “Do you use music in your life? If so, how?” She answered all of the subsequent questions too. She told me about how she uses it to put her baby to sleep, how she has seen it affect other people that she knows, how she uses music to help her relax when things are getting a bit tough. Instead of using this part as questions, it really is just to make sure that I have the information for those topics. It’s just a guide to help draw out more information if they don’t volunteer it. The questions are a guide—don’t get stuck on them._ (Reflexive journal, 12 May 2014)

The researcher needed to be flexible to return to points and elements of the woman’s story in order to seek clarification and have the participant elaborate further on particular topics that were encompassed within the interview. This became particularly important when the participants lost focus and shared information that was not relevant to the research focus. For example:

_I think [HCP] got distracted by something because she was telling me about things that have nothing to do with the question that I asked. I asked her about her experiences with screening and she went on and on about what she does if a woman gets upset when they come to see her. Maybe screening_
has upset someone? When I asked her about that, she said that she has always had good reception from women when it comes to screening. I’m not sure what that was all about but I was able to take some clues and pull the interview back on track. (Reflexive journal, 10 February 2014)

3.6.2.1 In-depth interviews
In-depth interviews differ from structured interviews where the interviewer’s sole purpose is to collect the data elicited by the schedule. In contrast, in-depth interviewers evoke responses through highlighting concepts and ideas, and creating discussion (Bowling, 2005; Liamputtong & Ezzy, 2005; Minichiello, 2008). In-depth interviews are unstructured and flexible. There are few specific questions to be asked with no response codes. As with semi-structured interviews, this style of interviewing allows the interviewer to develop questions when they are required, as they best fit into the interview situation. The actual formulation and order of the questions may differ from interview to interview. In-depth interviews are usually long, sometimes extending over two or more sessions. As a research instrument, they have strengths and weaknesses of which researchers must be aware (see Appendix F).

In-depth interviews allow the researcher to know the participants, to learn about their feelings, experiences and the world in which they live, whereas narrative inquiry, which was considered as an approach, enables in-depth storytelling to reveal pertinent experiences of individuals and what matters to them (Liamputtong & Ezzy, 2005). Narrative inquiry “strives to preserve the complexity of what it means to be human and to locate these observations of people and phenomenon in society, history and time” (Polkinghorne, 1995, p. 5).

3.6.2.2 Semi-structured interviews
The method applied for gathering data from HCPs was semi-structured interviews. This method aims to focus on the richness and depth rather than the breadth of information (Bernard, 2000). Semi-structured interviews stem from the family of ‘in-depth’ interviews, where there are a number of categorisations and variations.
These include unstructured, non-directive and active interviews amongst many others, yet these terms are often synonymous with in-depth interviews (Liampittong & Ezzy, 2005; Wengraf, 2001).

Semi-structured interviews have fixed questions with negligible or no response codes, allowing for flexibility within the interview. This can ensure that further data is collected than may have been indicated on the interview schedule (Bowling, 2005). This flexibility also allows no specific ordering of the questions to occur, which may be required within other interview styles (Bowling, 2005).

The use of semi-structured interviews enables qualitative data to be constructed in the collaboration between the interviewer and participant. Qualitative methods, such as interviewing, encourage greater and in-depth understanding of the issues raised by “establish[ing] an understanding of people’s lives, experiences and the subjective meanings” (Broom & Willis, 2007, p. 24). Semi-structured interviews generate data which ‘shed light’ on, in this case, the issues and problems faced by HCPs who endeavour to support women with PND and their families. This interview style also promotes the ability to have face-to-face contact, particularly in this study, with key HCPs, which also enables the establishment of meaningful connections with key individuals to aid in the future distribution of information to HCPs (Gaglio et al., 2006).

3.6.3 Sampling methods

Qualitative research aims to provide understanding of complex issues. However, rarely is it practical, efficient or ethical to study entire populations. Therefore, recruitment of participants who can provide the most ‘rich’ data is imperative in qualitative research. An appropriate sample size is one that adequately answers the research question and may be determined as the study goes along. This is referred to as ‘data saturation’, or when no new themes emerge from the data (Marshall, 1996; Patton, 1999). Two approaches to selecting a study sample were utilised within this study, convenience and purposeful sampling.
Convenience sampling is selecting the most accessible participants. This type of study sample is the least costly to the researcher in both time and money. Convenience sampling however, risks a lack of diversity within the study population (Marshall, 1996).

Purposeful sampling is the most common sampling technique and involves the researcher actively selecting the most productive sample to answer the research questions. This is often determined by the researcher’s knowledge of the research area and their networks. Further, within this sampling method participants may recommend other participants to take part in the study—known as snowball sampling (Creswell, 2013; Liamputtong & Ezzy, 2005). However, during data analysis it is important for the researcher to consider subjects who support emerging explanations and, perhaps more importantly, subjects who disagree (Marshall, 1996).

3.6.3.1 Women with PND
Two approaches were taken simultaneously in order to recruit participants for in-depth interviewing; third party and community recruitment. Third parties such as the University of Tasmania, DHHS, general medical practices and GPs, CHNs, and other organisations such as child care centres, Playgroup Tasmania, and public and private primary schools were invited to assist with data collection via letter/email. The role of these parties was to disseminate information regarding the in-depth interviews with women. Community recruitment was used to identify potential participants through the use of advertisements/flyers, which were placed in public locations including: notice boards at child care centres; parenting centres and other child and family health centres; general medical practices; community centres; local newspaper agencies; primary schools; and club and association newsletters.

Additionally, purposive snowball sampling was used, starting with a few participants who agreed to distribute information sheets with researchers’ contact details amongst their network in the north and northwest regions of Tasmania. This first group of participants also explained the project’s background and interview process to potential research participants, who then contacted the researcher, if they
wanted to take part in the project. This was the most effective method in recruiting participants for the study. However, this led to the sample of women which included a high proportion of those who were middle class.

3.6.3.2 Health care providers
With the permission of and support from third parties (e.g., general medical practices, community health centres, local newspapers, clubs, and associations), HCPs were invited to participate in a semi-structured interview by the researcher either in person or via letter/email, telephone, and advertisements in each locality. In addition, a purposive snowball recruitment method was adopted, starting with a few HCPs who agreed to distribute information sheets, which included the researcher’s contact details, amongst their network in the north and northwest regions of Tasmania. This first group of participants also explained the project’s background and interview process to potential research participants, who then contacted the researcher if they wished to take part in the project.

3.6.4 Data collection techniques and procedures
Data collection techniques and procedures between each study cohort were similar, yet took into account the needs of each individual participant. Both data sets were collected and coded simultaneously, which is similar to the concurrent triangulation mixed method approach outlined by Creswell et al. (2003). This approach is focussed on data being collected separately, yet concurrently and then ‘integrated’ or mixed within the data analysis and interpretation stages of the study to answer the research questions. This synergistic approach has value when the combined data is greater than either data from either the HCP or women alone (Creswell, 2009). Within this study, each data collection were analysed individually and then as a whole. Any discrepancies in the results created discussion as to why or how it may have occurred, such as differences observed between the data from the HCP and the women (Creswell et al., 2003). The following section outlines the data collection techniques and procedures employed for each study cohort, which are also displayed in Figure 3.3 below.
3.6.4.1 Women with PND
It was anticipated that in-depth interviews would take approximately 60-90 minutes and participants may be interviewed one to three times depending on the quality of the information gathered. The interviews were arranged to take place at a time and a place convenient to both the participant and the researcher, such as a public venue, community health centre, or via telephone or video conference. In order to enable equitable participation, those who resided at remote areas such as King Island or Flinders Island but wished to take part in the study were interviewed via telephone or video conference.

Prior to commencing the interview, all participants were given a list of open-ended questions (see Appendix G), an information sheet, a leaflet including contact information for further support, if required (see Appendix H), and a consent form. It was requested that participants had a support person available and had informed their HCP of their participation in the study prior to commencing the interview(s) to ensure that appropriate support could be provided in the possible event that distress occurred. With permission from the participant, interviews were audio recorded. Audio files were then transcribed verbatim by the researcher into a text file and saved onto a hard disk. This was to assist in the analysis process.

Further, it was anticipated that those included in the recruitment process were likely to come from various cultural backgrounds including non-English speaking backgrounds. It was expected that these participants would have a reasonable understanding of English. If the participant had difficulty understanding the research process, giving consent for participation and voice recordings, the Translating and Interpreting Services were to be contacted at no cost to participants. The audio recordings from these interviews were then interpreted and transcribed into written notes.

3.6.4.2 Health care providers
The semi-structured interviews conducted with key HCPs in the north and northwest of Tasmania were intended to gather qualitative information about PND, its treatments, and the efficacy of services available to women with PND in rural
Tasmania. The semi-structured interviews were arranged to take place at a time and a place convenient to both the participant and the researcher such as a public place, community health centre, or via telephone, or video conference. Prior to the commencement of the interview a list of open-ended questions (see Appendix E), an information sheet, and consent form was given to each participant. With permission from the participant, the interview was audio recorded for the purpose of transcription and analysis. It was anticipated that the interviews would be approximately 30-60 minutes so as not to be over burdensome on the HCPs time.

*Figure 3-3: Data collection and analysis process*
3.7 Data management

Several steps were taken to prepare data for analysis. These steps included transcription, checking transcribed data for validation and coding of the data. All interview transcriptions were managed and analysed using QSR NVivo v10 (QRS International, 2012), a qualitative data analysis program that can be used for organising and analysing unstructured information (QRS International, 2012). It was chosen to simplify the coding procedure (Richards, 2009).

3.7.1 Data transcription

All interviews were transcribed verbatim into Microsoft Word and checked for accuracy against the audio recordings. The transcribed text was then entered into NVivo software v10.0 (QRS International, 2012). NVivo software v10.0 was used to aid data collation and coding as “software for qualitative data analysis can benefit the researcher in terms of speed, consistency, rigor, and access to analytic methods not available by hand.” (Weitzman, 1999, p. 1241)

3.7.2 Data coding and checking

Data were analysed thematically. The steps involved initial or open coding followed by axial coding (Corbin & Strauss, 2008). Initially, descriptive coding was performed to help with the identification of the data. Descriptive coding is the process of defining information about the studied cases (Richards, 2009). Accordingly, all participants were coded based on their information and the order in which they were interviewed. For example, the second HCP to be interviewed was presented as “HCP 2”.

Initial or open coding was concerned with identifying, naming, categorising and describing actions or events (Corbin & Strauss, 2008). These analytic procedures involved “breaking down, examining, comparing, conceptualising and categorising data” (Strauss & Corbin, 1998, p. 61) into discrete textual segments, such as words, sentence fragments, sentences, or paragraphs. It is important to note that these initial codes “are provisional, so will end up considerably modified” through the process of continual verification and saturation (Yates, 2004, p. 207). Drawing on
these textual segments or initial codes, critical themes may emerge from the data. In this study, initial coding was conducted by examining each line or set of lines for emerging themes.

In the second step, axial coding, an “axis” or a connection was made between concepts (Sarantakos, 2005) and the analysing process revolves around the axis of one category at a time (Yates, 2004). The main purpose of this stage in the analysis process was to interconnect themes to construct higher order concepts. The themes identified in the initial or open coding were turned into specific categories where similar themes were collapsed into higher order themes. This process is also referred to as topic coding (Richards, 2009). While the initial or open coding stage is usually seen as fracturing data into separate and distinct codes or themes, the axial coding stage brings “the complexity of the context back into the picture” (Mertens, 2005, p. 424). According to Yates (2004), axial coding can be started when open codes have taken shape and are placed in relationship to other codes. During this process, data considered appropriate to the research aims and the intended analysis were systematically organised into themes and subthemes.

3.8 Data analysis

Data were entered into NVivo software v10.0 (QRS International, 2012) which was used to aid data collation and coding. Using the auto-coding function of NVivo software v10.0, data were collated based on question headings. The data were then analysed for emerging themes. Analysing qualitative data, such as interviews and field notes can be achieved through any number of methods (Aronson, 1994; Pope et al., 2000). As indicated previously, the analytical approach used in this study was thematic analysis.

Thematic analysis is a method used to systematically identify recurring themes, patterns of living, behaviour and/or experience, which then become a description of phenomenon (Aronson, 1994; Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2008). Braun and Clarke (2006) and Boyatziz (1998) state thematic analysis is very versatile as it is less theoretically bounded as other analytical methods. This
approach resembles grounded theory, however, lacks the development of theory whereas theoretical thematic analysis identifies themes and codes them according to previous research and pre-existing coding frames. These themes are viewed in the context in which they developed, allowing for the identification of new or emerging themes (Aronson, 1994; Boyatzis, 1998; Fereday & Muir-Cochrane, 2008; Pope et al., 2000). As information emerges from the data, it is placed into the corresponding pre-classified or newly identified themes (Aronson, 1994). They can be patterns of “conversation topics, vocabulary, recurring activities, meanings, feelings, or folk sayings and proverbs” (Taylor & Bogdan, 1984, p. 131).

Following the initial step of gathering the data into large groups of similar data, these clusters of data were broken down into smaller groups or “sub-themes” and then re-grouped into overarching themes (Boyatzis, 1998; Braun & Clarke, 2006). The process of thematic analysis is to assemble the singular, small and at times meaningless ideas or experiences from individuals (Boyatzis, 1998). When combined together with similar ideas and experiences from many other individuals, they form a “comprehensive picture of their collective experience” (Aronson, 1994, p. 2). Once thematic analysis was completed, a valid argument was made regarding the themes selected and identified. Inferences were made from the rich data, identified themes and phenomena and how these relate to the literature to form a tapestry of findings, interpretations and conclusions (Aronson, 1994; Fereday & Muir-Cochrane, 2008; Pope et al., 2000).

Boyatzis (1998) and Braun and Clarke (2006) argue that thematic analysis is versatile as it is less theoretically bounded as other analytical methods. Therefore, researchers need to ensure the theoretical position of a thematic analysis is made clear at the outset. As such, the thematic analysis used in study followed the theoretical position of the essentialist or realist paradigm “which reports experiences, meanings and the reality of participants” (Braun & Clarke, 2006, p. 81). This paradigm was selected to report the “experiences, meanings and the reality of participants... in a straightforward way, because a simple, largely unidirectional relationship is assumed between meaning and experience and language” (Braun & Clarke, 2006, p. 81).
In addition, the thematic analysis used within the study draws on both an inductive and theoretical approach. Inductive thematic analysis is where themes identified are linked to the data. (Braun & Clarke, 2006, p. 83) explain:

In this approach, if the data have been collected specifically for the research, the themes identified may bear little relation to the specific questions that were asked of the participants. They would also not be driven by the researcher’s theoretical interest in the area or topic. Inductive analysis is therefore a process of coding the data without trying to fit it into a pre-existing coding frame, or the researcher’s analytic preconceptions. In this sense, this form of thematic analysis is data-driven.

This approach was selected to allow a simple method of identifying key patterns regarding the realities of mothers with PND living in rural Tasmania as well as the issues and challenges for HCPs in treating women with PND. The major themes, which highlight the phenomenon of the study, are separated into nodes and later, compared and contrasted with the expressed views.

3.9 Conclusion

This chapter has outlined the methodological framework used in this study in the collection, management and analysis of the data. It is argued that the chosen methodology provides the ability to uncover the lived experience of the women and the challenges encountered by HCPs who provide care for women with PND. The method of analysis provides the capacity to evaluate the women’s experiences and the services they access in Tasmania. The study’s findings are presented in the following chapter.
Chapter 4: Results

4.1 Introduction

The previous chapter outlined the methodological framework and methods used in this study. The qualitative methodology used in the collection, management and analysis of the data was highlighted, outlining the narrative to uncover the lived experience of women and the challenges encountered by HCPs who endeavour to provide care for women with PND. The interviews and written comments were used to respond to each of the research questions.

The in-depth interviews with each of the 20 women and semi-structured interviews with 23 HCPs provided a narrative of their experiences relating to screening, diagnosis, and service provision across the north and northwest regions of Tasmania. These findings are discussed thematically using a number of pertinent quotations. Many of the themes that emerged from the interviews with both participant groups were parallel and it was felt that combining these two sources of data in one results chapter would be less repetitive and give strength to the themes identified.

Initially, the characteristics of each participant group are presented, followed by the five major themes identified through the process of data analysis. These five themes are the women’s story, health care referral processes concerning PND, challenges with the current processes, music as “self-coping”, and suggestions to overcome barriers. In addition to each major theme, sub-themes and clusters were developed and are presented in this chapter.

4.2 Participant profile

The participants within this study consisted of two unique groups which included HCPs and women who have experienced PND. Each group of participant’s specific characteristics are highlighted below.
4.2.1 Health care providers

The HCPs interviewed were recruited from a variety of service backgrounds and through a variety of recruitment methods. This included meeting personally with the organisation, personalised letters to HCPs, and through various media outlets including radio, television and print media, as outlined in Table 4.1. The most effective method of recruitment was through personally meeting with each organisation to discuss the research and its objectives.

Table 4.1: Recruitment of health care providers

<table>
<thead>
<tr>
<th>Health Care Providers</th>
<th>Meeting with organisation</th>
<th>Mail out invitation</th>
<th>Flyers</th>
<th>Media</th>
<th>Third parties</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family and Child Health Nurse</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Psychologist</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>General Practitioner</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Music Therapist</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Social Worker</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>23</td>
</tr>
</tbody>
</table>

Within the HCP cohort, there was a mixture of participants who worked full time, part time and in various capacities including managerial and co-ordination roles, education and front line services. Table 4.2 illustrates that 56.5% of participants were CHNs within state funded organisations and 69.6% of HCPs had more than five years of experience within the industry.
### 4.2.2 Participating women

In-depth interview participants included 20 women who were recruited from north and northwest Tasmania. The majority were recruited through third parties such as HCPs, or those who had already participated in the study, as indicated in Table 4.3. It should be noted that only 10% of participants resided in the northwest while 90% resided in the north; this was due to the inability to gain access to and recruit participants as outlined in chapter three, section four.

#### Table 4.2: Demographics of health care providers interviewed

<table>
<thead>
<tr>
<th>Characteristics (N=23)</th>
<th>Number of participants (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Care Provider</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Child and Family Health Nurse</td>
<td>13</td>
<td>56.5</td>
</tr>
<tr>
<td>- Psychologist</td>
<td>3</td>
<td>13.1</td>
</tr>
<tr>
<td>- General Practitioner</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>- Music Therapist</td>
<td>3</td>
<td>13.1</td>
</tr>
<tr>
<td>- Psychiatrist</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>- Social Worker</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Organisation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- State Funded</td>
<td>16</td>
<td>69.6</td>
</tr>
<tr>
<td>- Private Practice</td>
<td>6</td>
<td>26.1</td>
</tr>
<tr>
<td>- Federally Funded</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Years of experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Less than 2 years</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>- 2 to 5 years</td>
<td>5</td>
<td>21.7</td>
</tr>
<tr>
<td>- More than 5 years</td>
<td>16</td>
<td>69.6</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Female</td>
<td>21</td>
<td>91.3</td>
</tr>
<tr>
<td>- Male</td>
<td>2</td>
<td>8.7</td>
</tr>
</tbody>
</table>

#### Table 4.3: Recruitment of women in north and northwest Tasmania

<table>
<thead>
<tr>
<th>Women</th>
<th>Mail out invitation</th>
<th>Flyers</th>
<th>Media</th>
<th>Third parties</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Tasmania</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>Northwest Tasmania</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>14</td>
<td>20</td>
</tr>
</tbody>
</table>
Data such as age, marital status, education, and employment status were also obtained within the interview process. Table 4.4 illustrates that 60% were 30-40 years old, 65% had completed university education and were in paid employment, and 95% were either married or in a de facto relationship. As Abrams and Curran (2009) highlight, middle class women are more likely to seek treatment than their lower income counterparts. As recruitment was achieved through service providers, this may explain why the sample of women included a high proportion of those who were middle class.

Table 4.4: Demographics of women interviewed

<table>
<thead>
<tr>
<th>Characteristics (N=20)</th>
<th>Number of participants (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 20-30 years</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>- 30-40 years</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Single</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>- Married or De Facto</td>
<td>19</td>
<td>95</td>
</tr>
<tr>
<td>- Divorced or Separated</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Completed University</td>
<td>13</td>
<td>65</td>
</tr>
<tr>
<td>- Completed High School Certificate</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>- Did not complete High School</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Full Time</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>- Part Time</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>- Stay-at-Home Mum</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td><strong>Area of Residence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North</td>
<td>18</td>
<td>90</td>
</tr>
<tr>
<td>- Northwest</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>

### 4.3 Data analysis

The qualitative data collected from HCPs and women diagnosed with PND, were analysed with the assistance of the data management tool, NVivo v10.0, a software package developed for qualitative research (QRS International, 2012). As part of the analysis, the data were coded and organised into ‘nodes.’ Within the thematic analysis, the results were presented in terms of themes, which included the women’s story, health care referral processes concerning PND, challenges with the current processes, music as “self-coping”, and suggestions to overcome barriers, as
outlined in Table 4.5. This table illustrates the emerging major themes, sub-themes and clusters as well as the interconnectedness between both participant groups that were identified through the thematic data analysis process. These themes were then developed into a mud map to illustrate the emerging major themes and sub-themes, and their interconnectedness as demonstrated in Figure 4.1. Each of the major themes are discussed in detail below.
Table 4.5: *Coding used within thematic analysis of qualitative data*

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>The women’s story</td>
<td>- History of depression or anxiety</td>
<td>- Screening and diagnosis among HCPs</td>
</tr>
<tr>
<td></td>
<td>- Expectations of parenthood</td>
<td>- Screening and diagnosis among the women</td>
</tr>
<tr>
<td></td>
<td>- Planned pregnancy vs unplanned pregnancy</td>
<td>- Suspicion, fear and lying within the screening process</td>
</tr>
<tr>
<td></td>
<td>- Caesarean section vs. natural birth</td>
<td>- Limited literacy and its impact on screening</td>
</tr>
<tr>
<td></td>
<td>- Breastfeeding</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sleeping</td>
<td></td>
</tr>
<tr>
<td>Health care referral processes</td>
<td>- Child and Family Health Nurse process</td>
<td>- Perception of lack of action</td>
</tr>
<tr>
<td></td>
<td>- GP process</td>
<td>- Generic Services</td>
</tr>
<tr>
<td></td>
<td>- Psychologist and Social Work process</td>
<td>- Timely referrals</td>
</tr>
<tr>
<td></td>
<td>- Music Therapist perspective</td>
<td>- Personal and professional views of PND by HCPs</td>
</tr>
<tr>
<td>Challenges with the current</td>
<td>- Screening and diagnosis</td>
<td>- Cost impacting referral patterns and choices</td>
</tr>
<tr>
<td>processes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Referral issues</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Waiting lists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Location</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Cost relating to treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Disregard for needs of family</td>
</tr>
<tr>
<td>Music as “self-coping”</td>
<td>- Experiences of HCP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Experiences of women</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Therapeutic use of music</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Consideration regarding future use of music within health care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Issues relating to music as therapy</td>
<td></td>
</tr>
<tr>
<td>Suggestions to overcome</td>
<td>- Education</td>
<td>- Education for GP</td>
</tr>
<tr>
<td>barriers</td>
<td></td>
<td>- Education for parents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Public education</td>
</tr>
<tr>
<td></td>
<td>- Screening and diagnosis</td>
<td>- Regular screening</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Use of EPDS</td>
</tr>
<tr>
<td></td>
<td>- Support services</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Acute care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Parenting centres and women’s groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Continued support systems for HCPs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Use of music</td>
</tr>
</tbody>
</table>
Figure 4-1: Mud mapping of thematic coding process
4.4 The women’s stories

In addition to the demographic data, each of the participants shared their ‘story’. These stories underlined a number of themes which included past history of depression or anxiety, their experiences during pregnancy and child birth, and expectations of parenthood. The expectations of parenthood included feeding and sleeping issues.

4.4.1 History of depression or anxiety

Five of the 20 women interviewed had been diagnosed and received treatment for PND, including medication for depression or anxiety previous to their diagnosis of PND. During their pregnancy, each of the five participants shared that they were instructed by their GPs to discontinue the use of medication for the safety of their developing babies.

_The doctor told me that the medication I was on while I was pregnant would have big side effects on the baby. The doctor said that I need to not be on the medication but I need to take something so they gave me something else but it just didn’t work._ (Woman 11)

No other support was offered to these women during their pregnancy nor was it addressed during their antenatal care. One woman shared:

_Even though I had been on antidepressants off and on for a long time when I was pregnant with [baby’s name], the doctor told me that I couldn’t take the antidepressants anymore. So I went off pretty fast but there was nothing else for me. Even when I went to see the midwives, nothing was ever really talked about._ (Woman 5)

There were three other women who shared that they had family members with a history of depression or anxiety but that they themselves did not have a previous history.
I don’t remember any [times of past depression] but when I spoke to my parents about my depression, dad mentioned that his grandmother maybe. I think she had some depression. So it’s not prevalent. (Woman 1)

4.4.2  Expectations of parenthood

The expectations of early parenthood were not met for all of the women interviewed. Most shared the expectation that mothering would be a natural thing that would come very easily. One woman remarked:

When I would think about having children, I thought that I would be the fun mum, who plays with her kids and sing songs and reads to them from the day they are born. It just wasn’t like that for me. What I thought would just be so normal ended up just being too hard most of the time. (Woman 13)

Two mothers in particular expressed feelings of devastation when things did not go according to their expectations. One of these participants worked in the health care industry and had been told by others “What a natural mother I would be because I was so good with children. But for me, it didn’t come very naturally.” (Woman 2)

The other woman had worked in education for several years and:

Thought that because I am a teacher and can manage a room of 20 to 30 children, one that is my own should be quite easy. It was not at all what I expected. This one was much harder than a room full of kids. I just didn’t know what to do. (Woman 9)

4.4.3  Planned pregnancy vs unplanned pregnancy

Four of the women interviewed revealed that their pregnancies were unplanned. Despite the unexpected pregnancy, each of these women expressed feelings of happiness about the pregnancy and anticipated positive outcomes for the baby and the family. For the other 16 participants their pregnancies were planned. Two participants had undergone IVF in order to have a baby. One participant had undergone IVF treatments more than 10 times before she finally became pregnant. Because of her numerous experiences with IVF, she expressed that she had
“heightened anxiety because of possible loss of the baby during pregnancy, which carried on after the birth.” (Woman 9)

4.4.4 Caesarean section vs natural birth

Four of the women interviewed had caesarean section deliveries of their baby. This was not the outcome any of these women had expected.

I didn’t know of any women in my family that had any trouble having babies. I didn’t think I would be any different. I ended up having to have an emergency c-section and that was not what I thought would happen, at least not to me. (Woman 13)

Another woman expressed frustration that she:

received no information about the procedure beforehand. All I knew was that I was going to have my baby the next day and I needed to be at the hospital at 7:30am. (Woman 1)

Another participant stated that her caesarean section delivery was “very traumatic and happened very quickly” (Woman 2). She continued, stating that:

It was very difficult to take care of my baby and recover from the procedure at the same time. There were so many things I was expected to do that I really couldn’t do. I could barely get out of bed without help for the first few days. (Woman 2)

For some of the other 16 women who had natural deliveries, not everything went according to plan. One woman expressed that her

labour and deliveries were fairly straightforward but I had really big babies. Both of my babies were over four and a half kilograms! Those are big babies and cause different problems like having to deal with major tearing and stiches. It’s really painful and quite traumatic! (Woman 4)
4.4.5 Breastfeeding

Over half of the women expressed frustration about having difficulty with breastfeeding. After sharing her difficulties with breastfeeding her baby, one participant stated that:

*Breast is not always best for every woman or every situation. I felt so much pressure to continue to breastfeed even though it was causing a great deal of stress and pain for me and just not working. It’s just not as easy or natural as they say it is for every woman.* (Woman 6)

Another woman shared her feelings of frustration with breastfeeding when she stated:

*No one seemed to know why I was having so much trouble with feeding. I even had the lactation consultants calling other people because she couldn’t figure it out. Everything seemed to be fine for me and my baby, but it just wasn’t working. It was just so frustrating!* (Woman 20)

Other participants expressed that there was too much pressure on women to breastfeed from friends, family members, the CHN, and media. One woman shared that though she had mastitis several times and had been admitted to hospital because of it, she continued to be pressured by hospital workers to continue to breastfeed “because that is the best cure for it [mastitis].” (Woman 9) Those who had difficulty breastfeeding all sought help from local lactation consultants and the breastfeeding association; with many reporting conflicting and confusing advice. However, they all felt that they tried the best they could but ultimately stopped before their baby was six months old.

There were a few others who, due to prescribed antidepressants or anti-anxiety mediation, also ceased breastfeeding before their baby was one year old. Cessation of breastfeeding for these women was often accompanied with guilt, frustration and a sense of failure. One woman shared:
I knew that the antidepressants would help but I just felt like I wasn’t doing the best thing for [baby’s name] when I stopped breastfeeding. I guess I just felt bad about it. (Woman 5)

4.4.6 Sleeping

Sleep was the most commonly mentioned failed expectation of parenthood. One woman stated that she was “shocked by the sleep deprivation I had with my second baby. My first baby was such a good sleeper” (Woman 3). Another woman summed up all of their experiences when she stated:

It’s easy enough to tell someone to have a sleep when your baby does but, if you have other children or a baby that doesn’t sleep very well you just don’t get to sleep. It’s all day and all night for some of us, even for me with a really supportive husband and family. An hour or two here and there just isn’t enough. (Woman 12)

4.5 Health care referral process concerning PND

Beyond the women’s experience of PND and giving birth, HCPs provided an outline of the health care process around giving birth and the postnatal period, including PND. These perspectives and processes varied between and within different health care professions. For example, CHNs used the EPDS as a screening tool whereas GPs relied solely on differential diagnosis. Each of the health care profession’s processes are highlighted in Figure 4.2 below and are outlined in detail in the following sections to highlight the variances between the referral processes in order to provide care for women with PND. Figure 4.2 also depicts the confusion that may result in the referral process for both HCPs and women with PND.
4.5.1 Child and Family Health Nurse process

As previously outlined, the CHNs used the EPDS, and/or a number of varying practices. In most cases, according to new guidelines being followed by the CHNs, the EPDS was used as a screening tool at eight weeks postpartum. Until recently, the EPDS was being used at week two, three months and at six months postpartum. However, it was solely being conducted at week eight postpartum at the time of the interviews. Many nurses felt that this change in screening times was problematic as the additional checks, particularly the six month check, would still be beneficial in identifying women with possible PND. Nevertheless, the changes were stated to be
based on current research and the policies of the Department of Health and Human Services:

So, it’s [EPDS] just at the eight week check at the moment. We just changed it from three months and six months. It’s the ideal time. If you read the literature you would expect it to peak in that time and, hopefully, if you got treatment in the three months you’d be improving again at six months. But, you may not. But it wasn’t a good time in relation to when babies attended for other things and so we moved it to six weeks which is a bit early and then we moved our checks to four weeks and eight weeks so it is eight weeks now, and is in my mind a bit on the early side. But the department bases its guidelines on what’s in the literature. At least that’s what they tell us. (HCP 8)

In some cases, the EPDS was being conducted in the antenatal period, and hospitals would then flag those who were considered at risk with the CHNs prior to the birth of the child. This was felt to be beneficial due to the delay between birth and their first well baby visit with the CHN. Yet a number of women may still not be seen as attendance at the service was voluntary and “they [were] the lucky ones that get picked up early” (HCP 6). In other cases, it was indicated that the EPDS could be undertaken “whenever we think it is clinically warranted or necessary” (HCP 5), such as at six months postpartum. Nevertheless, as it was not policy, this additional screening could easily be overlooked.

In some cases, CHNs were initially sceptical about the sensitivity and impact the EPDS had on screening. However, through its use, learned that it was an effective tool to ‘pick up’ PND among those who were demonstrating less obvious signs. One CHN stated:

I used to believe it would be pretty obvious if they have PND; you don’t really have to screen everybody because it will stand out. But it doesn’t! It’s not obvious... [It] never ceases to amaze me ... the ones you pick up on screening. (HCP 3)
Overall, the EPDS was seen as effective in practice, to highlight risk and provide guidance for the ongoing care of women in the postnatal period.

Once the screening had occurred, there was again diversity in practice. In most cases, women were referred to their GP. In other cases, and depending on the severity of the EPDS score, women were referred to other services for further screening and assessment. Examples included the perinatal mental health co-ordinator, who may undertake further screening and if required, refer to the GP. In this way, there was the option for CHNs to seek a second opinion if they were unsure and the woman was considered ‘at risk’, yet may not be severe enough for immediate referral. In some cases, where other services were unavailable for a second opinion, the CHN had other processes in place to ensure the woman who may be at risk was safe and their needs were met. For example, one CHN highlighted her approach:

> *If the EPDS score is borderline...we usually just talk about it a fair bit and I would book a follow up visit in a couple of days and get them to come back if I had any further concerns.* (HCP 4)

If a woman was screened with the EPDS and assessed as high risk, a referral was made by the CHN to their GP, who would then provide an official diagnosis, treatment and further referral to social worker, psychologist or psychiatrist. A CHN stated they were the gateway for women to receive the appropriate care, yet “the GP is the person with much more knowledge and they know the seriousness of the issue” (HCP 6). In addition to the GP, if PND was serious enough, women would also be referred to their regional hospital for care and support. Yet, in most cases, women were managed and provided with continued support from both the CHN and GP.

**4.5.2 GP process**

Compared with the CHN screening process, it was highlighted that when women presented to their GP, an interview process was employed as part of establishing a rapport with the patient and the differential diagnosis. It was stated that building a
rapport with a patient with these symptoms was at the forefront of the doctor patient relationship, as it assisted with determining if the mother was experiencing baby blues or PND. However, it was indicated that at times, this can be challenging as the doctor is not always aware that the patient has recently given birth. For example, one HCP highlighted this issue when they stated:

*Quite often I don’t know that the woman has delivered... I might see a woman initially at six weeks or nine weeks and organise the initial antenatal stuff and then not see them again until they come back with their two month old [baby].* (HCP 10)

Despite this challenge, rapport was important and needed to be ongoing throughout the health care relationship and as part of the differential diagnosis over time. Further, it was indicated that there were other tests that may be conducted, such as blood tests, to assist with this process. One HCP stated:

*Sometimes depression symptoms can be something else. Blood tests can show if there is a problem with the thyroid. Knowing if there are physical issues can be helpful.* (HCP 10)

Developing rapport over a long period of time was vital. Although it was revealed that if there was a history of PND with a particular mother, a referral to a psychiatrist would be indicated.

It was highlighted that GPs used clinical interviews as part of the differential diagnosis. One GP also employed the EPDS as part of this process to establish a diagnosis. The use of the EPDS was typically opportunistic and was dependent upon the woman and the situation. Despite these methods and approaches to diagnosis, it was suggested that PND should be diagnosed more often and with greater accuracy, especially when mothers bring their new babies in for routine and milestone appointments. For example, one GP stated that:
The kids come back routinely... for their two, four, six and 12 monthly vaccinations and stuff. We focus on the kids and I guess it would be better to have a bit of time to catch up with the mother... (HCP10)

Utilising the interview, the EPDS and other routine testing was in the suite of activities and core skills to establishing a differential diagnosis of PND and referring on to other services for more specialised health care. However, beyond these core skills it was highlighted that it was about working with the woman to find what worked for her and her needs at the time. Often, it was about giving her and her partner a choice around making those health care decisions collaboratively as a team. This was highlighted by one GP who stated:

[I] talk to them about what their options are, whether we look at counselling, seeing a psychologist or just seeing me and work our way through it. We may discuss what their thoughts are around medication to manage it. It depends, too, on their partner supports and their understanding of what is happening. (HCP 10)

4.5.3 Psychologist and social work process

Three different pathways lead women with PND symptoms to be seen by the psychologist or social worker. One pathway is through a hospital’s Department of Emergency Medicine. When a woman presents herself to a hospital with symptoms of PND, medical practitioners assess, diagnose and may offer social work and psychology support or further assessment by a psychiatrist. In most circumstances, women are referred back to the GP from the hospital setting to determine if medication is appropriate and to involve the local social worker in getting practical support.

In some circumstances, the GP may be bypassed in the referral process. A CHN may refer the patient directly to a psychologist or social worker within the Parenting Centre referral stream. Referrals from a CHN may come through the ‘enhanced model of care’, which are typically focussed on a holistic model of care for women. This holistic approach has been established through the ongoing relationship
between the CHN and mother that focuses on the growth and development of the baby, but also on a mother’s mental health during the postpartum period.

Regardless of which process occurs, for a woman to be referred to a psychologist, the EPDS was not the end of the screening process. The psychologists and social workers who were interviewed indicated that the EPDS is only “a very loose indicator and is not enough in itself. Screening and assessment needs to be much more thorough” (HCP 9). From their perspective, the EPDS is a guide to inform the actual assessment but it is not the indicator of PND.

Despite this, it was believed that all HCP should not underestimate the importance of the first contact with women as it was highlighted that it is where:

> you really start to get a sense of what is going on... The person-to-person contact is absolutely vital to a good assessment... It’s done through the therapeutic or professional relationship. (HCP 9)

Those psychologists or social workers who were interviewed indicated that they had never assessed women using the EPDS but used previous EPDS information to inform their own assessment as “there are definitely no other [screening] tools used in Tasmania” (HCP 3).

In addition to the EPDS, the psychologist and social worker assessments also included a holistic bio-psycho-social assessment that included asking questions about depression, appetite, sleep patterns, mood, anger, risk factors, protective factors, financial worries, and any other worries.

> I look at the EPDS and I might ask more questions. I know to ask about depression question about appetite, sleep, mood, anger, sleep deprivation, risk factors, protective factors, any other worries, financial worries. I look at it from a holistic point of view. If it becomes clear that there is more of a mental health problem and there is anxiety and depression I go into more detail. (HCP 13)
It was also expressed that within the assessment period, it is really important for whoever is assessing women to have a rapport and an established relationship with each woman.

*When I do the assessments I have to really make sure that the women feel comfortable. They need to know that they can trust me. That rapport is so important.* (HCP 9)

The purpose of the assessment by the psychologist or the social worker was largely to determine the best pathway for ongoing care. If a woman was deemed to be at moderate to high risk of depression or anxiety, it was accepted that a psychiatrist or psychologist with specialist training is most appropriate and a woman may require further consultation with her GP for medication management. If the woman was deemed to be at a mild to moderate risk of depression and anxiety, the pathway to care may be continued care with the psychologist, referral to other social services for practical support which “needs to be an individualised approach to get the best results.” (HCP 2)

### 4.5.4 Music therapist perspective

Registered music therapists who were interviewed worked within the community setting as well as the health care sphere. It was found that the registered music therapists were also assisting women with PND and their families.

*I have worked with people in aged care, and I have a private practice so I also run some groups with mothers and fathers and their children within [location]. I was running a group specifically for mums with PND...it was specifically targeted for PND mums and their babies.* (HCP 14)

Another music therapist also revealed:

*I run a “Sing and Grow” program at [local centre]... for helping vulnerable families in the community; like indigenous families, families where there’s mental illness issues, problems with attachment, drugs and alcohol, and families like that. I also do home sessions and small group sessions within the community.* (HCP15)
The referral process for music therapy was comparable to that of the CHN. Women could self-refer to music therapists or be referred to registered music therapists within local communities by CHNs, GPs, psychologists, child protective services, as well as non-government organisations such as Anglicare.

Anyone can come to a music therapist. We don’t have to have a referral from a doctor or anything like that. But I’ve had referrals from just about everywhere. It’s not uncommon to have someone like Anglicare or child protective services, or quite a lot the child health nurses call and ask if I would be able to help someone. (HCP 15)

Registered music therapists did not always know if there has been an official diagnosis of PND when they received a referral. Therefore, a holistic assessment was conducted to determine the needs of the woman and her child or family.

In nearly all of my sessions there is someone who has been referred to me for PND. It’s identified by referrals through “Launch into Learning”, Child Health, Child Protection, Anglicare, Mission Australia, or any other organisation that works with families that is associated with the Child and Family Centre. It can be an informal process like a phone call to say that they think my client could benefit from music therapy. If it’s for a one-on-one session I go and build rapport and safety and security and we can talk about those things. That helps me to know what their needs are so I can help. (HCP 15)

As well as receiving referrals, registered music therapists could also make referrals to other service providers such as the CHN or GP if further health care was required. One music therapist shared:

If there are issues that are beyond my scope I can refer them to other services for women with PND. I would probably refer her to the Child and Family Centre because they have access to all the different channels that a woman can go to or maybe her GP. I wouldn’t take it upon myself to deal with it solely. To go through those channels initially is probably important so they are on the radar so the people who are out there who can help her are available. But they can
also be referred though the Child Health Centres to music therapy if they want to. (HCP 14)

4.6 Challenges with current process

Identified within the interviews with both the HCPs and the women were challenges with the current processes of screening and diagnosis as well as treatment options. Though each group had differing perspectives, the underlying issues themselves were not dissimilar. The challenges presented include screening and diagnosis, issues with the current referral process, service issues and received treatments.

4.6.1 Screening and diagnosis

Screening and diagnosis was a commonly shared challenge from the perspective of both the HCPs and the women who were interviewed. Though the concerns about the screening process differed between the two groups on some aspects, there were two points identified in which similar concerns were expressed—truthfulness and literacy. There were other concerns identified that were unrelated issues between the two participant groups. The HCPs identified issues with screening provision including who was the most appropriate to conduct the screening and when and where it should take place. Although there were concerns shared by the women regarding by whom and where women should be screened, they also shared concerns regarding who should be screened and the referral process in general.

4.6.1.1 Screening among HCPs

Within the interviews many HCPs discussed a number of current issues and challenges. One commonly shared challenge revolved around how the best outcome for women can be achieved, including where to send women for screening and diagnosis. It was stated that the hospital had new policies for women with PND but many HCPs indicated a lack of faith in the hospital process. There was a fear that women could get lost in the system. One HCP, when talking about the hospital system, stated:
My understanding is that it’s too expensive or [there is] a long wait list to get a diagnosis from a hospital psychiatrist. (HCP 13)

Consequently, HCPs sent women to their GP because of convenience, cost, and the knowledge that their needs may be better met.

The HCPs generally agreed that when women present in an acute setting, PND is not usually the primary presenting issue and women may not be adequately assessed due to stigma, lack of awareness and the medical model. One HCP stated:

*From a hospital point of view, I think we don’t usually get referrals for PND as such, as it tends to be disguised under other presenting issues. (HCP 13)*

While another HCP added:

*So many health practitioners come from a medical model...and I think that’s where a lot of people get missed because they don’t have any evident pathology. However, once you actually sit with that person and do an interview with them the pieces start to fall into place. (HCP 9)*

Despite many HCPs preference for sending women to their GPs, other HCPs indicated the CHNs were better able to screen and were more proficient around PND issues than some GPs and other HCPs within the hospital setting.

*The Child Health Nurses are better at [screening] than some GPs and doctors at the hospital, but I think it’s really important for whoever’s assessing women that they really need to have a rapport and established a relationship before they expect to get any honest responses. (HCP 13)*

### 4.6.1.2 Screening among the women

From the women’s perspective, it was shown that less than half of the participants were screened before the birth of their babies. Among those who were screened, three women were identified as having ‘possible’ depression and anxiety. None of these women stated that they received any kind of follow up care, nor were they referred to services for treatment during the antenatal period. For example, one woman stated:
I didn’t have any screening during my pregnancy. I guess I didn’t fit the profile. Maybe, if I had been screened, it [depression and anxiety] would have been picked up sooner. (Woman 6)

Another woman spoke of the difference in antenatal care between hospitals. For her first child she went to a large regional hospital; where she was screened but received no follow up. For her second child she went to a more rural hospital where no screening was undertaken. In response to this inconsistency she stated:

Maybe it just depends where you go for your antenatal care whether you are screened or not. But you would think that information would be helpful for after you have the baby, you know, something to check against. (Woman 3)

### 4.6.1.3 Suspicion, fear and lying within the screening process

Most women indicated that they had no concerns about being screened after the birth of their babies. Yet, it was noted that many participants felt that they could not answer the questions honestly and admitted to lying during screening in order to appear as if they have “got it together” (Woman 10). One woman explained further:

Anyone could answer [the EPDS] any way they want, to appear that they are doing ok or because they don’t want anyone to know that they aren’t really coping. The questions weren’t very specific to having a baby. (Woman 3)

Among those women who were employed, particularly those who worked in the health care and education industries, reported that there was a lack of discussion about depression and anxiety and its symptoms in both the antenatal and postnatal periods. Each of them reported falsifying their answers during screening. One of these women shared:

When I met with the CHN, she would ask how I was doing. I would try to tell her that things weren’t going so well and the CHN would just reassure me and tell me I was doing a great job and to keep persevering and things would
get better. When I was finally given the screening form to fill out I lied just to make my CHN happy. (Woman 4)

Many HCPs also discussed the common assumption that women can manipulate their answers during the screening process, or ‘fake it’, if they are not really ready to open up to those feelings. Most HCPs agreed that women from middle and upper classes are typically some of the most severely postnatally depressed women but as one HCP stated, “they hide it very, very well!” (HCP 9)

Inter-professional suspicion was also identified in regards to the accuracy of information provided by women during the screening process. When sharing an example of this challenge one HCP stated:

There was a girl that got 29 out of 30 [on the EPDS] and there was a question from another health professional who said, ‘she has probably exaggerated’ which was inferring that maybe she was wanting attention. That was interesting, but I guess it comes back to that same assumption that some women may fake it. (HCP 13)

4.6.1.4 Poor literacy and its impact on screening

Amongst the women, there was one who objected to the screening. However, this woman indicated that it was not the actual screening itself but the number of times and how the screening was administered. For this woman, screening was offered frequently and was paper based rather than verbal, to which this woman stated:

I don’t read very good so it makes it hard. I don’t really know what some of it says. I mean, why couldn’t she [CHN] just go through it with me, you know? Maybe it could be done that way instead of just filling out some form. (Woman 11)

This was reverberated among the HCPs, some of whom stated that some women were suspicious and demonstrated a lack of understanding regarding screening. Despite most HCPs stating that they have had little, if any, negative response to the EPDS, it was noted that some women may not be screened at all. As one HCP explained, this “is because of the low literacy levels and lack of understanding
This same HCP continued further indicating that, “some [women] even have that fear of ‘where is this going?’ or ‘what are you going to do with this [information]?’” (HCP 3)

### 4.6.2 Referral issues

Apart from screening and diagnosis challenges, there were also challenges for both the women and the HCPs within the referral process. Five common themes regarding referral issues emerged from interview data. These issues included perceived lack of action, non-clinical support service use, timely referrals, personal and professional views of PND, and cost impacts on referral patterns and choices. These issues were common between both the HCPs and the women.

#### 4.6.2.1 Perception of lack of action

Despite all of the women being screened by their CHN using the EPDS, only two women were referred on to other services. Both women were referred to their local parenting centre for assistance. One woman was referred to her parenting centre for assistance with sleeping and settling her baby. She reported that the assistance provided was not very helpful.

> They didn’t call it controlled crying but it was basically controlled crying.

> They wanted me to put my baby down and just let her cry. I couldn’t handle listening to her cry. It just made things worse for me and my baby didn’t sleep any better. (Woman 10)

The other woman was referred to her parenting centre for help with breastfeeding. She reported that she felt “too much pressure to continue breastfeeding even though it wasn’t going very well.” (Woman 9)

While these two women had been referred for further support, no further screening was undertaken after visiting the parenting centres and they were not referred on to their GP for further screening or diagnosis. The data analysis indicates that none of the women were referred by their CHN to their GP for further screening and diagnosis. In each case, the women saw their GP without being referred. However, many went to visit their GP due to the urging of their partner or other family
members. For most women, the GP referred on to other services such as a psychologist or psychiatrist, or prescribed medication. One woman revealed that her visit to the GP was not helpful. She stated:

*My GP was useless. When I went in he just said, “What do you want from me?” It would have been better if he had said “This is what I think and these are your options” or “Let’s try this and see how it goes.” But maybe, he just doesn’t have enough knowledge about PND or maybe he just doesn’t have the time?* (Woman 10)

Beyond the challenges encountered by each of the women, four were highlighted among HCPs and a number of women. These challenges included generic services, timely referrals, personal and professional views of PND, and cost.

### 4.6.2.2 Non-clinical support services

There were government and non-government services, both clinical and non-clinical support services that were available to support women and their families. If women were screened, often what happened next was determined by information gained throughout the screening process, including the EPDS and interview. If it was determined that a woman was in the high risk range they were typically referred on to other services. However, it was felt that women were referred to agencies that were not mental health services or clinicians who could provide appropriate care. For example, it was highlighted that women were often referred to services such as Anglicare or City Mission, who provide physical and social support, but may not have the requisite staff or clinical skills to meet the needs of women with PND.

In addition, it was highlighted that there was often a lag in time before a service or clinician recognised that further assessment was required and then linking women to the appropriate services. This difference in time may have led to further or continued poor mental health. It was observed that some services were good at this timeliness. However, there were other services which did not routinely screen, which had a large impact on the outcomes for women. One HCP stated:

*There are some really good services that actually engage the women who need support and link them together with services... If the [PND] risk factors
are routinely screened for, then the support services would flow naturally.

(HCP 2)

This process was further complicated by the lack of specialist services in various areas of Tasmania, which may cause delays in women being seen by the appropriate professionals or supported through the appropriate services.

4.6.2.3 Timely referrals

One of the biggest challenges reported by HCPs was the ability to get women into the appropriate services in a timely manner. For example, two HCPs stated:

You can’t get them in to see somebody today or tomorrow; it’s impossible. Even if they go to a GP... it can be four weeks to three months before they receive [psychologist or psychiatric] care. There is a lack of timeliness, which leaves us waiting... for far too long without therapeutic interventions. (HCP 3)

We have trouble getting an appointment straight away with the GP [and] the Mental Health Helpline... [is] very unhelpful and really quite rude at times. (HCP 5)

In order to assist with this challenge, perinatal mental health co-ordinators were employed at the parenting centres in Launceston and Burnie to assist CHNs to organise the appropriate care for women and their children. This may include clinical or nonclinical care. However, these positions were not permanent, but fixed term, funded by the National Perinatal Depression Initiative.

4.6.2.4 Personal and professional views of PND

In addition to timely referrals, there was the challenge of referring to health professionals who are appropriate for the women. Some HCPs expressed concerns about the attitudes of some GPs who were providing care to women who could have PND. This was specifically highlighted when one HCP stated:

I have one GP who just doesn’t believe in it [PND]. “It’s a load of rubbish; they are just mums who need to get over it.... You are just wasting my time.”
How could a woman talk to him? It’s really hard when you know they are a client of his but there is nothing you can do about it. (HCP 8)

On the other hand, some GPs were identified as being ‘PND friendly’. If there was a situation where a woman did not feel comfortable speaking to her GP, the HCPs could contact one of these ‘PND friendly’ GPs. Many of these ‘PND friendly’ GPs were women, which often made it easier for the woman to speak of her experiences. However, as one HCP acknowledged:

This could be a good thing to do but that is also crossing some borders of ethics to tell someone to go to another doctor because they don’t get the answer they want from the doctor they’ve got. (HCP 8)

Overall, it was agreed that some GPs were excellent and refer to other services or specialists; some worked together very well with other HCPs; while others took the woman into their care. However, it was recognised that the personal and professional views of a GP influenced which GPs women were referred to by other services; and impacted if and where a woman received further care after seeing a GP.

4.6.2.5 Cost impacting referral patterns and choices
Factors such as location, transportation, low cost health care such as ‘bulk billing’ and practices not receiving new patients due to ‘closed books’, also impacted the referrals women received to appropriate care. These factors play a large role in women’s ability to access timely and appropriate care.

Paying for services was highlighted as one of the key inhibiting factors among all patients, both those with limited and high incomes. The cost of accessing potential long term care from a GP, psychologist or psychiatrist was observed to be quite impossible for many, and inhibited the care being accessed. For example, one HCP outlined:

I think for the lower socioeconomic people, people struggling with money, it is much harder both because of the stressors of financial problems, social isolation and their access… it is more difficult…. It comes down to if people
have the money to afford to see a psychologist or to afford their medications or to be able to afford to get some support like child care. (HCP 10)

In addition, a HCP specifically outlined the issues of cost and their frustration concerning the bureaucracy that patients encountered when attempting to access ‘free’ health care:

[A woman had] been offered... a certain number of free visits with a psychologist or psychiatrist. However, when she rang to make the actual appointment she was told that she would have to pay $130 upfront and then claim it back... I don’t know whether the GP just isn’t doing the correct paperwork or whether it’s the psychologist putting their own slant on things but it’s very frustrating. (HCP 5)

4.6.3 Service issues

There were also challenges identified in regards to services. Most HCPs agreed that there was a lack of services specifically for the treatment of PND due to various factors. It was suggested by one HCP that:

In the mental health world, it’s [PND] not seen as a massive illness so it is really hard to get into the mental health world, especially in Launceston. We don’t have any useful facilities. (HCP 8)

When services were identified for the treatment of PND, other challenges were commonly mentioned, such as long waiting lists, location, cost and age restrictions.

4.6.3.1 Waiting lists

Long waiting lists to see appropriate HCPs was the most common concern for HCPs in regards to service provision. It was recognised that both specialists and more accessible services, such as parenting centres, have long waiting times. For example, one HCP stated

We can refer women to them [parenting centres] if they could do with seeing our psychologist at the parenting centre but there is a very long waiting list at the parenting centre too. (HCP 4)
4.6.3.2 Location

Location of services was the second most common concern among HCPs regarding service provision. It was identified that there was a shortage of appropriate specialist HCPs for women with PND in the north and northwest regions of Tasmania. HCPs stated that:

*There is a visiting psychiatrist once a month, I don’t know what the particular specialty is but, that is important with a psychiatrist just as with any other specialist.* (HCP 1)

and

*The support is just not out there; specifically for PND. There isn’t much at all in the northwest coast, if anything.* (HCP 5)

There was a mother and baby unit in Hobart at a private hospital but that excluded a lot of people due to the requirement to have private health insurance. This limited the access to treatment for the lower socioeconomic as well as middle class women in Tasmania. There were also mixed reports back to HCPs by women who had stayed there. One HCP reported:

*I have also had really mixed reports about it [mother and baby unit] as to how helpful it is. Women who have PND have gone down there and the PND wasn’t even raised as an issue. It’s not always helpful so, I think carefully before referring but really, there is nowhere else.* (HCP 9)

4.6.3.3 Cost relating to treatment

In regards to service provision, cost was the third highest concern among the HCPs. One HCP shared her concern for the mums from the middle income bracket who were typically educated and used to functioning at a high level, but may not have private health insurance or the required funds to pay for specialist services:

*My concern is what about all the middle class mums? ...the husband or partner is working very hard to pay for all of the props and the lifestyle. I would say some of the most severely PND women I have seen are in the middle classes of the community. They don’t always have private health
insurance or the money to pay for services, and counselling can be very expensive...It’s very difficult because there is nothing for them. (HCP 9)

Another HCP stated:

I don’t know about private or public health care but it comes down to if people have the money to afford to see a psychologist, or afford their medications, or to be able to afford to get some support like child care. It’s the cost that determines what, if any, service they receive. I have to keep that in mind when I consider what [treatment or service] will be best for [the woman]. (HCP 10)

The issues around cost were also stated by a number of women who indicated, when discussing counselling, that the cost involved was more than just the cost of the counselling itself. For those who resided on the east and west coasts of Tasmania, or away from major centres, the ability to access counselling required hours of travel, which then required long-term babysitting as the baby was generally not welcome at the appointments because their presence could be distracting for the mother. This resulted in the partner typically taking time away from paid work and staying at home to take care of the child or children while the woman attended her appointment with the psychologist or psychiatrist. This then often resulted in lost wages, causing more economic stress for many of the women and their families.

4.6.3.4 Disregard for needs of family
Regardless of waiting lists, location, and cost, a disregard of the entire family unit within services, including the GP, was of concern to the psychologists, psychiatrist, social workers and CHNs. One HCP stated:

Women don’t have PND in a vacuum so that bothers me that there is a whole family behind all of this that may not be getting the help they need. (HCP 9)

Another HCP stated:
How they are relating to their baby is a big, big thing and to make sure that the depression is not having a big impact [on the rest of the family]. Quite often when they go to the doctor they will go without their baby, or the social worker without their baby, or the counsellor or the psychologist or psychiatrist without their baby. There is nobody really watching what is going on between mum and bub. (HCP 3)

4.6.4 Treatment received

Each of the women received treatment of some kind. These treatments varied for each woman and included, either singularly or in combination, medication, counselling, Electro-Convulsive Treatment (ECT), and other ‘alternative’ therapies including yoga, and naturopathy. For more than half of the women interviewed, the treatments were relatively short term (≤6 months), for others, the treatment had been long term (≥12 months).

4.6.4.1 Medication issues

Of the 20 women interviewed, half received medication prescribed by their GP as the only treatment. All of these women lived in areas of very limited access to psychologists or psychiatrists. One such woman revealed that when women:

live in places like this, there aren’t usually any mental health specialists in the area. It can be impossible to have to drive two and a half hours to Launceston or three hours to Hobart with a baby, and sometimes other children, for appointments every week. Medication was really my only choice. It’s a bit hopeless on the east coast. (Woman 8)

For those women being solely treated with medication, all of them discontinued breastfeeding and felt guilty about doing so. Each also experienced side effects from the medication including drowsiness, nausea, dizziness, upset stomach, and “foggy head” (Woman 8), which impacted on their ability to parent.
4.6.4.2 Counselling issues
Three women received counselling from a psychologist or psychiatrist as the only course of treatment. For each of these three women, the counselling was reported to be of help, yet they all expressed a desire for more practical intervention. One woman also voiced her concern over the cost of counselling.

*I went to counselling and I received like five sessions for free. Well, I had to pay for it then I could claim it back. Once those sessions were finished though, I had to pay for it without being able to claim anything back. It was really expensive. It was like $120 each time I went. I ended up stopping because we just didn’t have the money.* (Woman 5)

Seven of the women interviewed received a combination of medication and counselling.

4.6.4.3 Issues regarding other treatments available
Three women were admitted for in-patient care at the mother and baby unit in Hobart. One of those women received several sessions of ECT. Another mother who was admitted to the mother and baby unit spent some time with the music therapist as well as receiving counselling and medication. As well as receiving counselling and medication while admitted to the mother and baby unit, the third mother found that the midwives would take care of the baby at night so she could sleep. These three women were the only women interviewed who had private health care coverage. Each also expressed concern about the type and quality of services received by those who do not have private health care coverage. One of these women stated:

*I don’t know what women do who don’t have private health or have the knowledge of services that I do. I just don’t know where they would go for help.* (Woman 6)

One woman shared her experience with ‘alternative’ treatments. Because the waiting time between seeing the GP and the appointment with the psychologist was more than four weeks, and her personal preference not to take antidepressants,
she decided to see a naturopath who suggested she take several vitamins to help with the symptoms she was experiencing. In relating this experience she stated:

*I saw the naturopath who put me on all these vitamins like B and, I can’t remember them all. They made up this special mix and I took them for about three months and I didn’t feel any different. I finally went and saw a different GP and I went on antidepressants. They also put me on a mental health plan and I started counselling for like 12 sessions.* (Woman 3)

### 4.7 Music as “self-coping”

Throughout the interviews both the women and the HCPs shared experiences regarding their use of music as a tool to aid in “self-coping” for both themselves and others. They further shared their views regarding the use of music as therapy within the realm of health care, as well as insight into the possibility of the future use of music as therapy to treat PND. In addition, issues and challenges regarding the use of music as therapy were identified.

#### 4.7.1 Experiences of HCPs

When initially asked about using music in their personal or professional lives, most HCPs indicated that they did not. Yet, upon further reflection, music was used for a variety purposes. One HCP recognised:

*I don’t listen to music very much, only in the sense that most film has music as part of the film. So, yeah, subliminally I guess I am listening to music. It actually drives all parts of the emotional components of a movie.* (HCP 1)

In many cases, it was highlighted that it often occurred unconsciously or without any thought.

*I guess I use it [music] a lot while I am driving. I just turn it on without even really thinking about it. Sometimes when I get home from work I will just turn the stereo on. It’s not to listen to really. I don’t think about it much, it’s automatic.* (HCP 21)
Every HCP related personal experiences with music in their own lives, both private and professional. Some experiences included the use of music for enjoyment or entertainment; as a study aid; while driving; to help set the mood for other activities; for relaxation purposes, including meditation rituals and yoga; exercise; and when playing with children or grandchildren, including lullabies and nursery rhymes. One HCP related her experiences of using music with her children:

\[ I \text{ sing to my children and we usually have a funny song when we are reading books. It’s a daily occurrence. We have down time after school usually where we lie on the floor and make up silly songs to a tune that we know where we add our own words. And lullabies, I still sing lullabies to my kids even though they are five and seven now. They just love it! (HCP 4) } \]

4.7.2 Experiences of women

Similarly, each of the women was asked if and how music was used. Every mother stated that they also used music every day in a variety of ways. Each woman shared an interest in music, both before and after the birth of their babies. However, more than half of the women identified a decreased use of music after their babies were born. The most common reason given for not using music was a desire to have a quiet atmosphere in order for the baby to sleep as “the noise of the music was just too much” (Woman 7). In one circumstance, a woman who was admitted for in-patient care was given music to aid in relaxation and sleeping for both her and her baby by a registered music therapist. She shared that she had positive experiences with music, stating:

\[ \text{the relaxation music CD that they gave me at the mother baby unit was really helpful for my baby with sleeping and settling, and it was really helpful for me as well. It still works and I still use it now. (Woman 9) } \]

4.7.3 Therapeutic use of music

Each HCP identified the impact, to some degree, that music has on mood. Each described instances of a change in mood, within themselves and among others, primarily because music was playing or being played. Every HCP related positive
experiences in regards to music. Apart from the registered music therapists, six other HCPs stated that they had worked in settings where music use was encouraged. One HCP, who had previously worked in an acute setting, stated:

*We would often encourage the people there to listen to music while they are lying there in bed to help them feel more peaceful. The medical model tends not to encourage any of that, but I think it is quite good. The social workers and nurses are more likely to encourage that sort of thing. (HCP 13)*

Similarly, another HCP also witnessed music as a therapy and shared their experiences when working in another setting. They stated:

*I used to work with kids with disabilities and music would alter their mood, even their tone, particularly those children with cerebral palsy. I have worked with disadvantaged kids a bit too and they certainly used music to help express their feelings in a positive way. (HCP 10)*

A different HCP stated that in their current role, there had been opportunities for people to be referred to music therapy groups. When relating these experiences, it was stated:

*I have referred at least 20 mums to [a] ‘Sing and Grow’ group at the [regional city’s] family centre. It’s amazing! Everyone goes back. I have never known a mum to go and then say ‘that was rubbish I’m not going back again’. I wouldn’t mind betting that some of the women I have seen, if they weren’t going to this group, might have ended up feeling not so good. I guess an ounce of prevention is worth a pound of cure. (HCP4)*

### 4.7.4 Consideration regarding future use of music within health care

Every HCP stated that they would consider using music for their patients to assist in the reduction of stress and anxiety as well as depressive moods associated with PND. Similarly, each woman reported that they would be willing to consider the use of music as a treatment for PND. Each group recognised that the use of music in general was easy to access, simple to maintain and beneficial to everyone as well as being a “natural part of our daily lives” (HCP 13). One woman said:
I think music potentially has a large role for depressed mothers. It would be great if there was a music therapy group for mothers, babies and both of them together I think it could really work. (Woman 6)

4.7.5 Issues relating to music as therapy
Although each of the participants, from both groups, provided positive responses to the potential use of music as therapy in the future, there were also concerns regarding how to achieve the best outcomes. These concerns were centred on the evidence base of music as therapy; culturally or therapeutically appropriate music; having adequate access to registered music therapists who are affordable, accessible and acceptable; and the stigma surrounding music as a therapy. For example one of the HCPs stated:

Until [music therapy] becomes part of the culture, the department recognises it, and has fewer stigmas – that you aren’t weird or hippy if you have music or singing as therapy…then music as a therapy will continue to be difficult to overcome barriers to achieve best outcomes for the patient. (HCP 13)

4.8 Suggestions to overcome barriers
As identified above, there are multiple barriers to treatment as well as issues within treatments. Largely, the women interviewed did not have many recommendations to help overcome these issues. The HCPs however, made several recommendations.

4.8.1 Education
The most recommended suggestion to overcome barriers by both the HCPs and the women was education. Education was recommended for the GP, parents, and the general public. Education for GPs was recommended so as to be able to competently and confidently screen and diagnose, as well as provide acceptable treatment options to women. Education for women and the general public was recommended to aid in the reduction of stigma and increase understanding and recognition of symptoms.
4.8.1.1 Education for GP
Education was suggested to overcome barriers to screening, diagnosis and treatment. Many of the HCPs and several women suggested more and better education regarding PND, its symptoms, and treatment options for GPs in order to provide better outcomes for women and their families. One HCP stated:

*I would like to see more GPs educated about PND. They have a huge responsibility. They need to be aware of how to assess, how to treat, and what support is available and appropriate for that woman.* (HCP 13)

It was also suggested that current information about breastfeeding and taking anti-depressants or anti-anxiety medication needs to be more readily available and shared. This would assist GPs to be better able to prescribe appropriate medications to women who would like to continue breastfeeding.

4.8.1.2 Education for parents
Several women also suggested that women and their partners receive more information about what PND is, what its symptoms are and where to go for help. It was suggested that this take place in the antenatal period during antenatal checks or “at the antenatal classes offered at the hospital” (Woman 12).

4.8.1.3 Public education
It was suggested by both participant groups that there needs to be more public awareness about PND in order to reduce stigma. One woman explained:

*PND doesn’t mean that a woman is a bad mother or that she is incapable of taking care of her child. It just means that her picture of motherhood doesn’t look like a ‘Huggies’ ad. I think people need to know that.* (Woman 14)

Her opinion was shared by a HCP:

*People need to be more understanding of it [PND]. There is a lovely storybook version of what people expect and mothers often buy into that image. Reality can often be very different to what is portrayed in the media. I think PND is still very much a taboo subject. I think there is still that fear*
that if something is identified as not being perfect then other services, like child protective services, might be brought in. (HCP 11)

4.8.2 Screening and diagnosis

Screening and diagnosis presented challenges for both women and HCPs. Along with the challenges, suggestions to overcome these challenges were identified. These suggestions include regular screening as well as education regarding how best to use the EPDS when screening for PND.

4.8.2.1 Regular screening

Regular screening throughout the antenatal and postnatal period was recommended by most of the HCPs. It was suggested by that regular screening at the time of immunisations would be helpful for the GP to understand and monitor how well the mother and baby are doing. One HCP suggested that “a reminder in the blue book where the immunisations are would be a great opportunity to do screening and talk to the mum about how she is going” (HCP 10). It was further suggested that this would help to develop a greater relationship with the mother so, if an issue did arise, it could be handled immediately, instead of having to potentially wait long periods of time for diagnostic appointments.

4.8.2.2 Use of EPDS

It was suggested by many HCPs that it would be helpful to have more education about the EPDS and how best to use it when screening. With better education, it could be used to identify depression and anxiety, and would assist to determine the best course of treatment. One HCP stated:

*I think the EPDS is widely used and the identification of women in Tasmania is particularly good and we’ve got pretty good screening rates among the CHNs. It’s what happens after women are identified that concerns me. (HCP 2)*

It was further suggested:
There possibly needs to be more [education] on using screening tools like the EPDS and using them to also look at anxiety related difficulties. Just that can make a difference on what kinds of treatments would be best. (HCP 2)

4.8.3 Support services

There were four main suggestions to overcome challenges in regards to support services. These suggestions included the addition of an acute care facility, or mother and baby unit, in the north, more diversity and greater availability of support services at the current parenting centres, continued support systems in place for referral for the HCPs, and the possible inclusion of music as a therapy for women with PND.

4.8.3.1 Acute care

Nearly all of the HCPs and all of the women who received in-patient care suggested that there would be great benefits to mothers and their families if there were a mother and baby unit in the north of Tasmania for those who resided in the north and northwest regions and needed long term in-patient care. One woman who received in-patient care shared her experience.

I was in Hobart with the baby, and my husband and our other children were in Launceston. He would come when he could but it would still be several days before we would see each other again. He even had to take off work to be in Hobart sometimes. It would have been so much easier if there was a mother-baby unit in Launceston. (Woman 6)

Another woman stated:

It was so hard. I was in Hobart and my husband was in [a rural town]. He never knew what was going on. It was hard for him and it was hard for me. It would have been nice to have had some counselling together while I was at the mother-baby unit. (Woman 9)

It was further suggested that there should be more accessibility to the mother and baby unit for those who did not have private health care cover. One HCP stated:
There are women who need the care but just can’t access it because they don’t have health insurance or it’s just too expensive. Some women need in-patient care and if they don’t have cover they might be sent to the psychiatric ward and that’s just not a good place for a woman with her baby. That would make it [the depression and anxiety] worse. (HCP 21)

4.8.3.2 Parenting centres and women’s groups
It was recommended by more than half of the HCPs that it would be beneficial to have more services available at the parenting centres and family and child centres. They further indicated that the centres are already available and have been built for the purpose of supporting parents and their children. One HCP suggested that having a broadly focussed service to meet the needs of all aspects of motherhood. They suggested it would be

Somewhere people could go for day visits, or night visits, or week long visits...
a one stop shop and where there’s some really skilled people providing different therapeutic ways of working with women with PND that is affordable. (HCP 9)

4.8.3.3 Continued support systems for HCPs (perinatal mental health coordinator)
All of the HCPs indicated that it would be beneficial to keep the perinatal mental health co-ordinators to assist with information gathering and accessing support services. They provide HCPs with a resource to current and available services, referral processes, and current waiting times for accessing services.

While expressing frustration with accessing services for further PND assessment, one HCP declared that GPs were hard to access and calling the ‘mental health line’ had not been helpful. However, it was the

The perinatal mental health co-ordinator [who] has been able to help get easier access to supports within the mental health service and even the assessment team. (HCP 15)
The role and purpose of the perinatal mental health co-ordinator is concerned with mapping services for women who have mental health difficulties in the perinatal period and developing systems and pathways of care for those women. One HCP indicated that “there is also consultation available for DHHS employees who are managing these women both in the community and as in-patients” (HCP 2).

4.8.3.4 Use of music
As stated above, all HCPs indicated that they would consider using music as, or as an element of, a treatment program for women with PND as long as they knew where to refer women to for such treatments. It was suggested that more information about music as therapy, as well as where these therapies were available, be made known to HCPs so that referrals could be made. For example, one HCP stated:

_I have seen music work to alter mood in the past. I guess the only problem I have is access. Where would I send somebody? How would I encourage them to use it?_ (HCP 2)

4.9 Conclusion
This chapter has discussed the interview findings with both the HCPs who care for women with PND and women with PND. A number of key themes and sub-themes were identified, which demonstrated the lived experience of women with PND, and the experiences of HCPs in providing care to these women. These themes include the women’s story, health care referral processes concerning PND, challenges with the current processes, music as “self-coping”, and suggestions to overcome barriers. In addition to each major theme, additional sub-themes and clusters were developed and presented within this chapter.

The next chapter will discuss the findings from chapter four and provide a number of comparisons between the views and insights from each participant group. This discussion will provide an overarching understanding to answer the research questions, which relate to the views of PND as well as access to services and service provision for women with PND in the north and northwest regions of Tasmania.
addition, the chapter will provide an understanding of the views of both participant groups regarding the use of music for women with PND in rural Tasmania.
Chapter 5: Discussion

5.1 Introduction

Chapter five provides a discussion regarding the findings reported in chapter four and outlines a number of comparisons between the views and insights from each participant group. This discussion will provide an overarching understanding to answer the research questions, which relate to the views of PND as well as access to services and service provision for women with PND in the north and northwest regions of Tasmania. In addition, the chapter provides an understanding of the views of both participant groups regarding the use of music for women with PND in rural Tasmania.

5.2 Results in relation to research question one

Research question one: *What are health care providers’ perspectives regarding current health care services, what improvements are required, and what impact does music have on PND?*

5.2.1 Health care providers’ perspectives

The findings that address this research question enabled a better understanding of the positives and challenges concerning service provision across rural and regional Tasmania. Despite this, there were differing perspectives concerning PND among the various HCPs. For example, the most common concerns that were shared regarded the adequacy of current health care services. These concerns related to matters in screening and diagnosis, referral, and service provision. Each of these concerns is discussed, in detail, below. However, these findings suggest that HCPs regard the current referral process and health care services as inadequate for the care of women with PND in rural and remote Tasmania.
5.2.1.1 Screening and diagnosis
The screening and diagnosis process was highlighted to be problematic. CHNs most frequently undertook the preliminary screening using the EPDS with women and were suggested to have a stronger rapport with women. In contrast, GPs did not typically use or rely on the EPDS, or any other screening or diagnostic tools, but used differential diagnosis and other information that may have been provided by the CHN to determine diagnosis. The concern among CHNs was that if GPs rely solely on differential diagnosis, and omits using screening tools, many women experiencing PND may go undiagnosed and therefore may be unable to receive appropriate and timely treatment.

These findings were shown to be consistent across other western countries, where family physicians were aware of screening tools for PND, yet did not always utilise them. It was suggested that this limited use of screening tools may be due to the perception that the process may be more time-consuming or expensive. It was also suggested that there may be uncertainty concerning how to then provide the most appropriate care, particularly if a woman is breastfeeding (Gunn, Young, & Lumley, 1998; Seehusen, Baldwin, Runkle, & Clark, 2005, p. 105). However, within this study, it was highlighted that diagnosis was the principal issue. At times it was the GP’s personal beliefs or professional views regarding the authenticity of PND as an illness that had an impact on the care provided. The age and sex of the GP has been shown to influence the postnatal care that a woman may receive, with female GPs being more aware of psychosocial needs among women in the postnatal period (Gunn et al., 1998).

5.2.1.2 Referral issues
In addition to screening, other prevalent concerns were uncertainty concerning available treatments, support services, and long waiting periods for treatment to commence. GPs were not always aware of what treatments and support services were available or what the wait time for treatment may be. In these circumstances, the perinatal mental health co-ordinator was found to be a valuable asset in determining the best available treatment option. They enable mothers to be
screened for depression, provide training to health care professionals, and improve care and support for women at risk.

The perinatal mental health co-ordinator also enables the CHN to refer a woman to the local parenting centre for further screening and assessment if there is uncertainty regarding possible PND. Through this assessment, it could be determined if the woman is in need of practical support, such as help with sleeping and settling and/or feeding, or requires specialist care. Further, the perinatal mental health co-ordinators are involved in the training of other health professionals who may be unfamiliar with the symptoms, diagnosis, and current available treatments for PND.

This process also provides the opportunity for HCPs to identify what services are available and which ones have long waiting periods. In so doing, the care and support for women at risk may be improved. The perinatal mental health co-ordinator may be the bridge that is necessary for obtaining appropriate service provision. They can also act as the voice of the woman where she may not otherwise feel able to share her concerns. However, as this is a relatively new position in Tasmania as well as world-wide, there is yet to be any published evidence regarding its benefits for HCPs and women (Austin, Reilly, & Sullivan, 2012).

Beyond the immediate benefits of the perinatal mental health co-ordinator, it was identified that there may be issues when CHNs refer a woman to their GP. Some GPs have been identified as ‘unhelpful’ in regards to PND due to their personal or professional views of PND. In order to avoid this difficulty, a CHN may refer a woman to the perinatal mental health co-ordinator, who is typically a psychologist or social worker, for further assessment and referral to other GPs who are ‘PND friendly’.

5.2.1.3 Service issues

Although there are new and developing referral processes in place, it has been found that most services that specifically cater for women with PND have a long
waiting time in Tasmania. The only exception is the immediacy of prescription medication. It has been suggested that most women who are diagnosed with PND by their GP are prescribed antidepressants (Buist et al., 2005; Hoffbrand et al., 2001; Turner, Sharp, Folkes, & Chew-Graham, 2008). Discourses concerning the medical model suggest that the doctor takes on a patriarchal role and that women remain passive in the interaction. Further, some women may freely accept these patriarchal ‘truths’ and be prepared to accept this single form of treatment. While others may defy the medical model, alternative treatment options may not be given, and they are thus, compelled to be compliant (Boath, Bradley, & Henshaw, 2004; Celik, 2007).

However, within the powerful discourses of the medical model, prescribing medication does not guarantee that the woman will actually fill the prescription and be compliant with medication. This response by the woman may be about fear or in defiance of the doctor and the medical model. Despite this defiance, there may be no other alternatives that can adequately address the woman’s psychological or psychosocial needs.

Beyond the defiance, it is understood that treatment for issues such as PND may require extended consultation time, which is often limited in general practice (Dambro, 2004; Deveugele, Derese, van den Brink-Muinen, Bensing, & De Maeseneer, 2002; Freeman et al., 2002). Further, some GPs may not have adequate training to provide such treatments. In addition, they may not have the breadth of knowledge concerning other resources to assist women outside of the local area or may lack knowledge concerning a woman’s financial situation that may limit her capacity to access the services she is being offered (Buist et al., 2005). As such, medication may be deemed the most practical or realistic rather than the ideal option in many situations. However, this approach may not align with a woman’s preference regarding PND treatment (Buist et al., 2005).

Personal treatment preferences were difficult to meet with only one mother and baby unit in the state. The current mother and baby unit remains less accessible, particularly for women and their families who are living in the north and northwest
of the state, as the unit is located in Hobart, located in the south of the state in the capital city. Treatments at mother and baby units in Australia are extensive, including “biological, cognitive-behavioural therapy, childcare, parenting advice and education, and couple and supportive therapy. The use of mother-infant and psycho-dynamic therapy, art, music and dance therapy is more variable among the units” (Buist et al., 2004, p. 82). As part of the care that is provided, both the mother and the baby are taken into consideration in the treatment pathway (Buist et al., 2004).

Other more generalist services are available and more accessible across the state, such as parenting centres. These have been developed to “provide intensive support for a range of parenting issues including postnatal depression, breastfeeding and relationship concerns which relate to early childhood” (Department of Health and Human Services, 2015c). As highlighted previously, generic services such as parenting centres, playgroups, pram walking groups and mothers groups are often encouraged for mothers who may be experiencing PND (Armstrong & Edwards, 2004). These options are very good for socialisation, however; in some cases do not emphasise treatment (Armstrong & Edwards, 2004).

Cost of accessing specialist services was indicated as a concern by many HCPs within this study and is reflective of other Australian studies (Buist et al., 2005). The HCPs indicated that services are available for those who can afford them. For those with low socioeconomic status, health benefits and services may technically be available; however there may be very long wait times or there may be a required initial financial outlay. For those women in the middle income bracket, it was suggested that there are no benefits in relation to health care and many may not be able to afford private health cover or the initial financial outlay for services. It was suggested that the middle income bracket is the group that is of most concern for HCPs. These women are typically well educated and were also viewed as the most likely to mislead the HCP to avoid the stigma associated with mental health issues.
5.2.2 The improvements that are required

There were many suggestions made by HCPs to improve on the services available for women with PND in the north and northwest regions of Tasmania. These suggestions included education, screening and diagnosis, support services. These suggestions are discussed, in detail, below.

5.2.2.1 Education

It was suggested that education be a high priority for both HCPs as well as the greater public in order to provide the best possible outcomes for mothers and families. Education for the GP is essential as these specific HCPs are the ‘link’ to further health care services. In order for the GP to recommend or provide appropriate health care, a greater understanding of PND, its symptoms and treatments, is required. This may supply GPs with the information they need to prescribe appropriate medications that enable women who wish to continue breastfeeding, to do so (Jayawickrama, Amir, & Pirotta, 2010). Better education for GPs would also enable referral to the most appropriate psychologist, if medication is not required; and provide knowledge of and access to treatment options other than medication which may be more desirable to the mother and have a more beneficial outcome for her family (Gunn et al., 1998). The recommendations of the HCPs and women in this study are supported by broader reviews of PND. In 2005, it was recommended that family physicians, or GPs in Australia, receive training in mental health issues such as PND, the use of screening tools, and receive information regarding effective treatments (Seehusen et al., 2005). This is particularly important for women who reside in rural areas where access to specialist mental health care specialists is limited (Geller, 1999; Hauenstein et al., 2006).

Education for the general public in regards to PND and its potential effects on the baby is essential and may help reduce the stigma associated with PND. In a recent cross-sectional telephone survey conducted across Australia it was found that awareness of PND is well recognised within the community, particularly among younger participants (Highet, Gemmill, & Milgrom, 2011). However, risk factors
were not as easily identified (Highet et al., 2011). In a similar study conducted in Canada it was found that there were high rates of recognition of PND, yet risk to the baby was less well understood (Kingston et al., 2014). As the general public become more aware of depression, its causes, and treatments, the greater the probability that stigma will decrease (Goldney, Dunn, Dal Grande, Crabb, & Taylor, 2009; Highet et al., 2011).

5.2.2.2 Screening and diagnosis
In addition to education for GPs regarding the symptoms and treatments of PND, participants in this study suggested that more education is needed for all HCPs regarding specific screening and diagnosis. Education about the EPDS is warranted to better identify anxiety as well as depressive symptoms. When used correctly, the EPDS enables a better understanding of how the woman is coping with her transition to motherhood. It is recognised that the EPDS is not a diagnostic tool but can be a good indicator of depressive or anxious symptomology. This may also enable further diagnosis and aid in treatment.

Although regular screening by the CHN is very good in Tasmania, this does not guarantee that those who need further help are receiving it. Therefore, it was recommended that the GP also conduct regular screening during visits for immunisations or perhaps, during visits for other baby related matters. It has been demonstrated that many women will seek professional help for the baby but not necessarily for herself (Dennis & Chung-Lee, 2006). This is especially true of women who view their baby as having a difficult temperament (trouble with sleeping, excessive crying, trouble feeding); a common complaint amongst women with PND. If the GP could identify the risks, screen, and diagnose at one time this may alleviate some of the burden for the woman in seeking out referrals after being identified as at risk by the CHN. Further, this may reduce the time from screening and diagnosis to provision of appropriate care.
5.2.2.3 Support services

Continued support systems for the HCPs were identified as being necessary in order to provide the best possible treatment options for women with PND. In Tasmania, this support system was identified as the perinatal mental health co-ordinator. This position encompasses many different roles, including some individual counselling for women, provision of mother’s groups at the parenting centre, and a liaison for other HCPs concerning suitability and availability of services.

Nearly all of the HCPs indicated a lack of acute care settings that incorporate the care of the woman with the needs of the baby and other family members. It was suggested that a mother and baby unit be made available in the north of the state to better accommodate those in rural and remote areas. This may allow for the treatment of additional ‘public’ patients.

As well as a mother and baby unit, more services are needed at the current parenting centres. These centres are already available and provide care for the mother and her family. These centres enable education and assistance in dealing with sleeping and settling, breastfeeding, PND, and other family matters. By having more services available within these centres, issues regarding the help-seeking behaviours of women, including stigma, may be addressed. For example, as identified by (Dennis & Chung-Lee, 2006) stigma may prevent some women with PND from accessing care. Therefore, some women may be opposed to going to a psychologist’s office for care, but, these same women may not be opposed to going to a local parenting centre for the same treatment. Furthermore, many of the parenting centres have the capacity to provide child care at reduced or no cost to the woman if she is attending workshops or receiving treatment.

5.2.3 What impact does music have on PND?

The third element to the first research question concerns HCP perceptions of the impact or role, if any, that music has on PND. To determine the impact of music on PND each of the HCPs shared personal and or professional experiences of music use. It was identified that music use in everyday life is common, varied and typically enjoyable and has an impact on mood. However, there were far fewer experiences
with the therapeutic use of music in health care among the HCPs in Tasmania. Nevertheless, as outlined previously, almost half of the HCPs had directly witnessed positive outcomes when music was used as a therapy. Despite most HCPs lack of knowledge about the therapeutic use of music, all of them could recognise the benefits of music as therapy. Some of the benefits recognised included easy access, low maintenance, and beneficial to mother and baby.

As highlighted within the literature review, results of the use of music therapy have not been specifically identified for women with PND. However, to date, there is valuable and translatable evidence in the use of music therapy for the treatment of major depressive disorders among men, women and adolescents. The use of music in health care has been used intentionally, or otherwise, in nearly every culture and language (Horden, 2000). One of the benefits of music therapy is the ability to incorporate and use one’s culture within the treatment, making it a culturally appropriate option for many clients.

Each of the music therapists who participated in this study worked with diverse groups covering the lifespan, from mother and baby groups to aged care. They were also able to provide care in diverse settings, such as individual care in a person’s own home; group care in community facilities, such as family and child centres or parenting centres; or work with individuals or groups in acute in-patient facilities, such as the mother and baby unit or aged care.

As a group of health professionals in Tasmania, music therapists are not recognised as allied health professionals and were not well utilised within mainstream health care. This, again, highlights the social power of the medical model over other alternative health care options. At the time this study was conducted, music therapists had not been allocated Medicare numbers for billing purposes. Nevertheless, it was suggested that as the benefits of music as therapy become more widely understood, views will change, and it will become a more accessible treatment option. This may be due to music therapists being recognised in other Australian states as legitimate allied health professionals.
Although there have been identified and documented benefits of the therapeutic use of music, stigma and the powerful influence of medical discourse in the community, inhibits some people from accessing this type of treatment. It was hoped that as more people utilise music as therapy and understanding increases, the acceptability will increase among the general population and therefore, reduce the associated stigma of complementary and alternative therapies, including music therapy.

5.3 Results in relation to research question two

Research Question two: What are the current services available and accessed by women with PND?

The current services that are available and accessed by women with PND in rural and remote Tasmania are limited in variety and accessibility. These challenges are not uncommon for those who reside in rural areas as health care services are typically limited and generally dependant on the local GP (Hauenstein et al., 2006; Mulder et al., 2000; Price & Proctor, 2009; Turner et al., 2008; Villegas et al., 2011). In many instances of illness and where women experiencing PND are seeking care, the GP remains the ‘gatekeeper’ to be referred to for access to other health services.

Within this study, it was highlighted that there were three primary sources of treatment accessed by women with PND in rural and remote Tasmania. The most prevalent treatment was medication. In many cases, this was contrary to the attitudes, beliefs and desires of the women who were seeking care (Goodman, 2009; O'Hara & McCabe, 2013; Pearlstein et al., 2006; Turner et al., 2008; Whitton et al., 1996). Counselling, with either a psychologist or psychiatrist, was the second most offered treatment among those experiencing PND and was the most preferred treatment option amongst women (Goodman, 2009; O'Mahen & Flynn, 2008; Pearlstein et al., 2006). In some instances, medication and counselling was provided in unison. Lastly, there were some women who sought and received alternative treatments that included yoga, naturopathy, and music therapy. These alternative
treatments were often in combination with other more traditional treatments or were utilised while waiting for other, more conventional, treatment to commence. These three treatment options were utilised most often. Yet, the lack of choice that women had when seeking and accessing services was highlighted. This lack of choice centred on three main themes that include service acceptability, cost and needs of the family being met.

5.3.1 Service acceptability that impacts choice

It was highlighted that there may not be any specialist health services in the immediate area where women were living in rural and remote regions of Tasmania (Arcury, Preisser, Gesler, & Powers, 2005; Hoang et al., 2013, 2014; Mulder et al., 2000). This accessibility issue may only be remedied through substantial travel to access appropriate health care. For example, if a woman is diagnosed with PND and resides on the west coast of Tasmania, the nearest mental health service is located at the North-West Regional Hospital (NWRH) in Burnie, a distance of 180 Kilometres or approximately two and a half hours of travel time.

However, due to the limitations of the mental health services at the NWRH, located in a regional centre, the requisite care may not be available. This would then require the woman to travel to either Launceston (334 Km) or Hobart (299 Km) for the most appropriate care. Further, even if there is a specialist that visits the area on a regular basis (typically once per month) the specialist may not have a practice focus or specialist training best suited to the woman’s needs (Turner et al., 2008). Therefore, women who are diagnosed with PND in the most rural and remote locations of Tasmania have a propensity to be prescribed antidepressants by the GP as the sole treatment (Ericksen et al., 2005).

In many instances, remote locations experience GP shortages and in many cases, the GP is a locum that may spend a few days or weeks at a time in an area. This fluidity of health care practitioners in rural and remote areas adds another element of complexity as there may not be an opportunity for rapport to be developed between patient and doctor, which enables ‘best practice’ (Bilszta, Ericksen, Buist,
Furthermore, as outlined previously, the locum GP may be unfamiliar with existing services that may be available in the area.

Beyond primary care at the GP level, other more tertiary health care services, such as mother and baby units have been established throughout Australia. These services include physical support, breastfeeding support, multidisciplinary treatment of PND, direct observation of mother-infant interaction, the promotion of a healthy mother-baby relationship as well as the inclusion of other family members (Pearlstein, Howard, Salisbury, & Zlotnick, 2009). As highlighted in section two of chapter five, within the Tasmanian context, if a woman requires this tertiary in-patient care, the only mother and baby unit is located in Hobart, the capital city, at a private hospital. To further add to this access issue, the private hospital is funded by the state government to provide only one bed for a ‘public’ patient at any one time. Consequently, there is often a long waiting period for admission and other treatment options between referral and access to the mother and baby unit is often non-existent or inappropriate. For example, a woman can be referred for treatment at a mental health facility, yet there is an inability for the baby to accompany the mother. Conversely, among those who require in-patient care and have private health insurance, the waiting time is greatly reduced, depending on health insurance policy, and the baby may be kept with the mother.

### 5.3.2 Cost that impacts choice

In addition to service acceptability, there is a contrast between pharmacological and psychological or psychosocial treatments for PND in terms of cost, which impact accessibility. Most antidepressants are covered by the pharmaceutical benefits scheme (PBS) in Australia, which ensures medications are provided at reduced or negligible cost to the consumer. However, in some cases the cost of prescribed medications may vary widely depending on strength, brand, type and number of medications required. Several women highlighted that even this expenditure was a source of financial distress and friction in the home.
Alternatively, psychological treatments compared to medications can be quite costly and may lead to an increase in financial stress, which in itself is recognised as a risk factor for PND (Eastwood, Phung, & Barnett, 2011). As outlined previously, a mother from the east coast of Tasmania diagnosed with PND may be sent by her GP to a specialist psychiatrist for counselling that may require a four to six hour drive round trip. The cost incurred includes not only the fee for the session but also the costs of transportation, child care and time off work for herself, and/or her partner, which may result in loss of income. This is further compounded by the stress of travel on the mother, baby and other family members.

5.3.3 Needs of the family that impacts choice

When services were accessed, it was found that the wellbeing of other family members was often ‘forgotten’ or not included as part of many treatment options. This is in contrast to current research (Boath et al., 2004; Buist, 2014; Letourneau et al., 2012; Pearlstein et al., 2009). In this study, there was little regard for the interaction between mother and baby, mother and partner, or mother and other children. This is despite the known relationship between PND and negative effects on mother and infant attachment, partner relationship, and relationships between mother and other children (Boath et al., 2004; Buist, 2014; Letourneau et al., 2012; Pearlstein et al., 2009). As outlined previously, HCPs lacked confidence and knowledge around the diagnosis of PND. This may have further implications for the individual woman and her family. For example, a HCP may not have the requisite knowledge or skills to address the impact of PND on the family unit. This inability may be due to little training or professional development, a lack of rapport with the woman and family, the stigma associated with PND, which may impact on families, or being unfamiliar with local services that incorporate the family unit as part of the treatment process.

5.4 Results in relation to research question three

Research question three: What are the lived experiences and perceptions of PND among rural women?
The lived experiences and perceptions of PND among rural Tasmanian women are as unique and individual as the women themselves. As outlined in chapter four section four, there were six central themes that emerged from their stories that highlighted their lived experiences. These themes included a history of depression or anxiety, expectations of parenthood, planned versus unplanned pregnancy, caesarean section versus natural birth, breastfeeding, and issues around sleeping. Although related to PND, these themes were not specifically the causes of PND among these women, but provide insight into the contributing factors, which led to experiencing PND.

5.4.1 History of depression or anxiety

Women’s lived experiences were informed by what was happening around the perinatal period and by previous experiences and health conditions. It was highlighted that there were five women who had a history of depression or anxiety. It has been shown that depression or anxiety prior to or during pregnancy, may indicate increased risk for depression during the postnatal period. However, this is not a sole contributor to PND, which may provide some insight into why the remaining women did not have these prior experiences (Chojenta, Loxton, & Lucke, 2012; Milgrom et al., 2008).

5.4.2 Expectations of parenthood

In addition to previous experiences, each woman indicated that her expectations of parenthood within the perinatal period were not met. Expectations varied for each woman but were centred on what being a ‘good mother’ meant to them and the inability to meet this expectation. As (Woollett & Marshall, 2001) outline, the typical perceptions of motherhood include the views that women are natural mothers who are immediately able to care for their babies and are satisfied and fulfilled in their roles of selfless carers and nurturers. These perceptions are perpetuated by women, men and societies despite books and antenatal and parenting classes revealing a more realistic version of motherhood (Mauthner, 1999; Mauthner, 2002; Woollett, Phoenix, & Lloyd, 1991).
Beyond the expectations of parenthood, each of the women within this study experienced a sense of guilt associated with their feelings of depression and unfulfilment, as has also been identified in previous research (Mauthner, 2002). Each perceived that they had a good life and nothing to be depressed about—a healthy baby, a loving and supportive partner, and most had extended family and friends nearby who provided some degree of support. These were things that they did not typically associate with mental health issues such as PND. It is suggested that every woman struggles with the expectations versus the realities of motherhood to some degree; yet how much of this struggle contributes to PND is yet to be established (Choi, Henshaw, Baker, & Tree, 2005; Mauthner, 1999).

5.4.3 Planned vs unplanned pregnancy
Only two of the women reported that their pregnancies were unexpected. Both women indicated that, although the pregnancies were unplanned, they and their partners were happy about having a baby. Despite this, it is likely that an unintended, mistimed or unwanted pregnancy may be a contributor to PND (Mercier, Garrett, Thorp, & Siega-Riz, 2013; Warner, Appleby, Whitton, & Faragher, 1996). In a recent study conducted by (Mercier et al., 2013) it was found that women whose pregnancies were unplanned were twice as likely to be diagnosed with PND up to 12 months following the birth.

5.4.4 Caesarean-section vs vaginal deliveries
Four women had caesarean sections rather than their planned vaginal deliveries. There has been some speculation regarding the correlation between caesarean section delivery and PND. In an Australian study conducted by (Johnstone, Boyce, Hickey, Morris-Yates, & Harris, 2001), attempting to determine obstetric risk factors for PND in an urban and rural sample, it was determined that, though there was no significant association with an increased risk for PND, caesarean section delivery showed a marginal increase in risk for PND. Significant risk of PND was attributed to psychosocial factors. However, obstetric risk should not be overlooked.
Despite caesarean sections being widely performed and accepted in Australian society, for the women in this study who had caesarean sections, there was some perceived sense of ‘failure’, despite the procedure being deemed ‘medically necessary’. This perception has been shown to stem from the belief that every woman is capable of giving birth and that those who require assistance are not as capable of being ‘good mothers’ (Malacrida & Boulton, 2012).

From a feminist perspective, when a woman becomes pregnant and the birth of her baby approaches, she loses control and power over her body. Her body becomes medicalised and mechanised in such a way that the pregnancy and birth are treated like diseases. Rather than natural physiological processes, they are treated as events that need to be controlled and fixed (Johanson, Newburn, & Macfarlane, 2002). Women’s bodies are placed in a sphere where male dominated and patriarchal medicine intervenes in such a way that the woman’s voice grows irrelevant, silent and, as a person, she becomes lost. In this way, the woman becomes a shell, a delivery system for new life; her wishes, desires and expectations become irrelevant (Hyde & Roche-Reid, 2004; Johanson et al., 2002; Maggioni, Margola, & Filippi, 2006). This process leads to a perceived helplessness, which is associated with unsatisfying birth experiences, postpartum depression, and posttraumatic stress symptoms (Bylund, 2005; Ford, Ayers, & Wright, 2009; Rudman, El-Khoury, & Waldenström, 2007).

The findings from this study support those mentioned above. The four women who took part in this study who had unplanned caesarean sections each identified feelings of helplessness and trauma as well as disappointment and frustration that their desires and expectations of childbirth had gone unfulfilled. One woman in particular expressed feelings of frustration that she had not been informed regarding the details of the procedure and was not given the opportunity to ask any questions beforehand. Another woman also experienced frustration at the expectations put on her to completely care for her baby so soon after the procedure when she could barely get out of bed without help. For each of these women, the person behind the procedure became lost.
5.4.5 Breastfeeding

Similarly, or in addition to the expectations of motherhood, breastfeeding is often thought to be something that is natural and every woman can do easily. For some of the women who took part in this study, this was not the case. For them, breastfeeding was often painful, difficult, and a source of frustration, guilt and a sense of failure. Although breastfeeding does not prevent PND, cessation and the sense of failure around the inability to breastfeed may be a contributing factor (Hatton et al., 2005). It has been found that women who have an EPDS score greater than 10 are more likely to terminate breastfeeding early (Fergerson, Jamieson, & Lindsay, 2002). However, it was determined that depression was an issue prior to the cessation of breastfeeding (Cooper, Murray, & Stein, 1993; Misri, Sinclair, & Kuan, 1997). Another study has indicated that there are no differences in depressive symptoms between breastfeeding and non-breastfeeding women, but is more directly linked to a history of depression (Lucas, Pizarro, Granada, Salinas, & Sanmartí, 2001).

5.4.6 Sleeping

For all of the mothers in this study, sleep was a failed expectation related to parenthood. Although every woman shared an understanding that lack of sleep was certainly inevitable, all were caught ‘off guard’ and were surprised by the continued exhaustion. For some, it was the baby who did not sleep and therefore, the mother did not get adequate sleep. For others, the baby slept but older children did not allow adequate time to get enough sleep. For others still, although the baby slept, anxiety was heightened and prevented sleep even when the baby was sleeping.

Within Australia, a lack of sleep has been associated with PND (Armstrong, Quinn, & Dadds, 1994; Smart & Hiscock, 2007). An Australian study conducted by Armstrong et al. (1998) found that there was a direct correlation between infant sleep disturbance and depressed maternal mood. Of the 70 participants, 40% had been diagnosed with PND and had EPDS scores greater than 12. At the conclusion of the intervention only 4.3% returned EPDS scores greater than 12. It is, therefore, likely
that significant numbers of women are diagnosed with PND who are suffering from chronic sleep deprivation (Armstrong et al., 1998). A more recent study which included both the mother and father reported similar findings (Smart & Hiscock, 2007). This correlation emphasizes the importance of a holistic approach in the diagnosis of PND; examining all aspects of woman’s, child’s and familial lives. If this does not happen Armstrong (1998, p. 262) suggests that these mothers “may receive treatments which is at the least unnecessary and, at the worst harmful.”

5.4.7 Treatment

Within this study, each woman attended her well baby visits with the CHN and the GP and for each of the participants there was a period of help seeking. However, it was highlighted that none of the women were referred to the GP for further screening and diagnosis by their CHN. Contradictory to the findings of earlier studies (Dennis & Chung-Lee, 2006), each of these women sought help for themselves of their own accord, or at the suggestion of their partner or family member. However, consistent with earlier findings (Dennis & Chung-Lee, 2006), within the screening process, most women lied when undertaking the EPDS in order to appear that they were ‘coping’ with the changes associated with child birth and early parenting. In some cases, it was to appease the CHN, who may have been overbearing or difficult to work with, or due to the fear that other circumstances would be ‘found out’. For example, one woman refused screening by the CHN when offered because of poor literacy rather than opposition to screening or fear of being diagnosed with PND.

The treatments received by the women were in line with the suggested treatments for PND, which included pharmacotherapy, psychotherapy, or a combination of the two (Boath & Henshaw, 2001; Goodman, 2009; O’Hara & McCabe, 2013; Pearlstein et al., 2006). Those who received counselling found that it was helpful, but did not provide assistance with practical necessities and the cost of the service was also of concern. All but three of the women were prescribed antidepressants or a combination of antidepressants and anti-anxiety medication. All of these women ceased breastfeeding due to concerns about the effects of the medication on the
baby, despite confirmation from the GP that it was ‘safe’ for them to continue breastfeeding while taking the medication. This mirrors the results from both Whitton et al. (1996) and Chabrol, Teissedre, Armitage, Danel, and Walburg (2004) studies, which found that despite assurances from the prescribing physician that breastfeeding while taking antidepressants causes no short term harm to the infant, acceptability rates were low (19% and 2% respectively). Each study indicated that psychotherapy was the preferred treatment option. Additionally, for this study’s participants, the cessation of breastfeeding brought feelings and perceptions of being a ‘bad mother’ and guilt—like they had failed. Further, each woman experienced side effects from the medication in varying degrees. It was highlighted that some of these side effects hindered the care that they were able to provide for their child or children.

Other complementary and alternative treatments were also utilised by the women. These treatments were wide in their scope and encompassed several ECT treatments and in-patient care at the mother and baby unit, to music therapy sessions at the mother and baby unit and naturopathy. Those who were admitted to the mother and baby unit found it extremely helpful as they received a combination of commonly accepted treatments, the option of complementary therapy (e.g., music therapy) and practical support. However, separation from family was very difficult for the woman and her family.

One woman who sought treatment from a local naturopath found no relief for her PND symptoms. This type of treatment was also costly. However, this treatment was sought as the wait time for other treatments was inhibitory and very long. Treatments such as complementary and alternative therapies can supplement more standard approaches. However, additional evidence is required to determine efficacy and safety (Horowitz & Goodman, 2005).

5.5 Results in relation to research question four

Research question four: What impact has music had in reducing the effects of PND among rural Tasmanian women?
As outlined in chapter four, section seven the HCPs shared experiences of music involvement in their personal and professional lives. However, very few of the mainstream HCPs recognised that music could be used within or as part of the healing process. This suggests again that the medical model has a powerful discourse, which determines what is deemed appropriate and medically sanctioned health care. Alternatively, within section four of chapter four, the women who participated in this study shared experiences of music use throughout their lives, including the postpartum period. Despite some women noting a reduction in music use after the birth of their baby, those who continued to use music recognised that music had been helpful in reducing the impact of PND symptoms. Music assisted these women with relaxation, sleeping and settling baby, and as a mood enhancer.

5.5.1 Relaxation

For some women, including the mothers in this study, breastfeeding may be regarded as stressful in the early postpartum period. Relaxation has been linked to successful breastfeeding, which has in turn been linked to a greater bond between mother and baby. Breastfeeding may increase the amount of time the mother holds the baby, and thus, face to face interactions, and may result in greater maternal self-esteem due to the mother’s sense that they are able to meet the needs of the baby (Lauwers & Swisher, 2011; Procacci, 2005). However, breastfeeding has been found to be reduced among women with PND. As identified in a case control study, music listening or music therapy may be an effective tool to aid in relaxation, particularly prior to and during breastfeeding (Procacci, 2005). Music use may also be more widely acceptable for mothers who have concerns about continued breastfeeding (Friedman et al., 2010).

Relaxation techniques, including the use of music, have also been found to reduce anxiety (Kemper & Danhauer, 2005). Some women with PND also experience heightened anxiety, which may lead to intrusive parenting (Field, 2010; Milgrom, Ericksen, McCarthy, & Gemmill, 2006). Regardless of whether the PND presents in withdrawn or intrusive parenting, there is a reported lack of physical contact, vocal stimulation, and a delayed response to baby’s cues (Field, 2010; Friedman et al.,
However, the use of music may assist in enhancing relaxation for the mother, and include the baby by presenting opportunities for touch, vocal stimulation, and responding to baby’s cues (Abad & Edwards, 2004).

### 5.5.2 Sleeping and settling baby

Sleeping and settling of baby is often a challenge for mothers. This was also the case for the mothers who took part in this study. As highlighted in chapter four section four, one mother was given instruction on using music to help calm and soothe her baby. She reported that this was effective for her baby as well as providing relaxation for herself – she continues to use the music she was given by the music therapist. Lullabies are an ancient and culturally universal method of providing comfort and bonding experiences between mother and baby (Friedman et al., 2010). The use of lullabies to calm and sedate babies while facilitating maternal relaxation has been well documented (Arnon et al., 2006; Collins & Kuck, 1991; MacKinley & Baker, 2005; Shoemark & Hanson-Abromeit, 2015).

In an Australian study conducted by (Baker & Mackinlay, 2006), it was found that although personal singing is in decline and being replaced by pre-recorded music, lullabies are an effective method of calming and settling baby while promoting relaxation in mothers. Although the mothers in Baker and Mackinlay’s (2006) study were not depressed, another study in the United States conducted by (Friedman et al., 2010) specifically included mothers who had been diagnosed with mental illnesses either during or after pregnancy. It was concluded that within this cohort, singing lullabies was effective in calming and settling baby, promoting maternal relaxation, and giving opportunities for attachment and bonding by enabling the mother to respond to baby’s cues (Friedman et al., 2010).

Some mothers noted a decrease in music use in order to keep a quiet place for the baby to sleep. However, it has been noted that there is considerable noise generated by the mother’s body while a baby is in the womb. A baby’s hearing is typically developed by the 24th week in utero, which allows an understanding of rhythm and the baby is comforted by it (Liu, Gujjula, Thanigai, & Kuo, 2008).
Therefore, while noise should not be excessive, appropriate music may be conducive to sleep, growth and development of the baby (Liu et al., 2008).

5.5.3 Reduce depressive mood

The women who took part in this study all agreed that listening to various types of preferred music reduced feelings of depression. It was noted that music choice was diverse, reflecting the age and likes and dislikes of the individual mothers. For some, it was heavy mental and rock and roll, for others, it was country, or soothing music. These findings are consistent with a study which determined that two of the top five reasons for music use relate to mood management; specifically:

that people use music both as a means to cope with, and alleviate negative feelings (e.g., anxiety, loneliness, stress, etc.), as well as a way for individuals to create and optimize a positive mood (e.g. to relax).

(Lonsdale & North, 2011, p. 111)

This same study goes on to reveal that listening to music is utilised the most to regulate mood, as music is employed to “optimize positive mood as well as to alleviate negative feelings” (Lonsdale & North, 2011, p. 116).

5.6 Conclusion

The chapter has discussed the results from chapter four in relation to the lived experience of women living in the north and northwest of Tasmania, and the perspectives of HCPs regarding the positives and challenges concerning service provision in rural and regional Tasmania. It has highlighted the principal findings and provided explanations where applicable. It has also compared these findings with those of previous research and theories within the relevant literature.

The following chapter is the conclusion of the thesis. It will provide a summary of the research findings and highlight the significance of the study in terms of its contributions to and implications for research and the actions required to improve service provision for women experiencing PND in rural and remote Tasmania. It will
detail the personal experiences and development of the researcher associated with the study. Lastly, it will discuss future directions for research.
Chapter 6: Conclusion

6.1 Introduction
The previous chapters have addressed the background, theoretical approaches and data collection methods, results, and discussion relating to the aims and objectives of the research study. This chapter, as the concluding chapter, gives a reflective perspective regarding the research process, its findings and their significance. There is also a brief discussion focussing on the personal development and achievements of the researcher. In addition, the chapter discusses the strengths and limitations of the study, and future directions for research concerning PND and the use of music as a form of treatment. Lastly, the chapter provides a number of recommendations to support women with PND in rural and remote areas of Tasmania and the HCPs who care for them.

6.2 Research achievements
There were four primary achievements from the current research. These achievements were centred on the research findings, the significance of the research, dissemination of new knowledge, and personal development through the research process. These achievements are discussed, in detail, below.

6.2.1 The research findings
The aim of the research was to examine the perspectives and issues concerning rural Tasmanian women with PND where access to services is limited or non-existent, and particularly, what role music plays in relieving PND. As outlined in chapters four and five, the perspectives were highly individualised and unique across both participant groups. However, there were a number of recurring themes. These themes highlighted the issues and challenges faced by the women as they seek help as well as the challenges faced by the HCPs who strive to care for these women. These issues included screening and diagnosis, referrals, services,
treatments, and music as self-coping. A synopsis of each of these factors is provided below.

6.2.1.1 Screening and diagnosis
There were many challenges faced by HCPs regarding screening and diagnosis. Questions regarding who is the most qualified and most adept at screening, when and where screening should take place, and to whom women should be sent for diagnosis were all common concerns for HCPs. Although it was felt that CHNs were more aware of the women on a holistic level and more adept at screening, a GP or psychiatrist is required to provide an official diagnosis. Conversely, the GPs felt that because they did not have adequate training, established rapport, and a holistic perspective of the woman; they were at a disadvantage when pertaining to diagnosis.

From the women’s perspective, screening was sporadic in the antenatal period and was dependent on the circumstances of where the screening took place, as to whether it even happened. In the postnatal period, screening was more common in the early postnatal period, but rarely occurred after the initial six to eight week postpartum visit. Referral for diagnosis was even more sporadic and dependent on several factors, including who had undertaken the screening and to whom the women had been referred for diagnosis.

Although there were very few concerns among the participants in regards to screening, there were periods of suspicion, fear and lying. Women admitted to lying during screening to appease HCPs, to keep up appearances, or because of suspicion and fear related to stigma. Mental health stigma was the underlying cause for those who admitted to lying on the EPDS as they did not want anyone to know that they were ‘not coping’. Suspicion and fear was often due to a lack of understanding as to why the screening was taking place and what would be done with the information provided. Suspicion was also shown to be prevalent between HCPs who may have misgivings regarding the accuracy of the screening test answers provided. This was found to be true among those who presented answers that revealed uncharacteristically low or high EPDS scores. Even between HCPs there
has been some scepticism within the referral process when such scores were presented as a possible indication of PND.

6.2.1.2 Referral processes
Beyond screening and diagnosis, there was a perceived of a lack of action after the screening. Women who screened high on the EPDS were not always referred on to the GP for diagnosis. At times, they were sent to the local parenting centres for assistance with issues such as sleeping and settling baby or breastfeeding. However, there were mixed reports about the help women received at the parenting centres. None of the women interviewed were referred to a GP by their CHN or parenting centre. The women saw the GP of their own accord, where no formal screening was recognised by the women. The GPs provided pharmacological treatment or referred them on to other services, such as psychologists or psychiatrists, or a combination of these two treatments.

Generic services, such as playgroups or mothers groups, were recommended to women. These groups, although good for socialisation and proficient at providing physical and social support, were not able to provide specific PND care that was required by the women. These quasi-services were often recommended due to the lengthy time between a referral and the first appointment to health services where specific treatments could be received. These delays were often due to a lack of specialist services in Tasmania, particularly in the most remote locations.

Timely referrals were particularly problematic. For many CHNs, it was unlikely to be able to organise an urgent appointment with the woman’s GP. Conversely, GPs often struggled to access timely psychological services to address the needs of the woman. In order to more easily navigate through this complex health labyrinth, the perinatal mental health co-ordinator was found to be particularly helpful. These positions, however, are part of the National Perinatal Depression Initiative with fixed term funding and their future is unknown.

Personal and professional views regarding the reality and authenticity of PND were often another challenge among the women and the HCPs. Some GPs, for example,
were known as being PND friendly where others were not. This presented an ethical conundrum for some CHNs when needing to refer women to a GP. It was identified that the personal and professional views of the GP regarding PND often had a direct link to the support that was afforded to the woman.

6.2.1.3 Services
The other challenge highlighted was the lack of specialist services for women with PND in Tasmania. It was suggested that this was because those within the mental health industry did not view PND as a ‘massive illness’, therefore, little attention was given to those who experienced it and who would require treatment. In addition, when treatment options had been identified for women experiencing PND; other challenges arose, such as long waiting lists, location issues, and cost.

Location of the services was also an issue for those who lack private transportation or live in the most rural and remote areas of Tasmania. For example, a mental health specialist may only visit remote areas of Tasmania once per month and may not specialise in perinatal mental health. Further, specialist in-patient services are only available in a private hospital in the capital city. This limits the admittance of women who do not have private health care cover or who do not have the financial ability to self-fund, thus, restricts the admittance of women from middle and low-income brackets. Other treatment costs may also include travel, child care, time away from work and possible missed wages.

6.2.1.4 Treatments received
Though there are various treatment options available, they are typically limited to traditional treatments, including medication and counselling. Half of the women who participated in the study received only medication treatments. All of them ceased breastfeeding due to uncertainty about the safety of continued breastfeeding while on medication and reported subsequent feelings of guilt, which further impacted their mental health. Each of the women also reported side effects that impacted on their ability to parent to varying degrees.
The women who received counselling as a sole form of treatment felt the treatment was effective; however it failed to provide any practical support and was very costly. The women who received in-patient care at the mother and baby unit in the capital city reported satisfaction with the care they received. However, they expressed concern for those women who did not have the option to receive commensurate care. Treatment and care at the mother and baby unit included counselling, medication, ECT, music therapy, early parenting skills, and practical support.

6.2.1.5 Music as self-coping

When discussing the use of music, each of the HCPs and women related personal experiences regarding the use of music for a variety of purposes and identified the impact, to some degree, that music had on mood. Music was found to be easy to use and an effective treatment of anxiety and depression, particularly among a number of women, who also reported its helpfulness for calming their babies. Some of the HCPs had had professional experiences with music as therapy and highlighted its benefits.

Although the HCPs indicated that they would consider the use of music as therapy in the future, they had some concerns about the therapeutic use of music. These concerns pertained to a lack of knowledge and evidence base with women experiencing PND; music being culturally or therapeutically appropriate; having adequate access to registered music therapists who are affordable, accessible and acceptable; and the stigma around music as a therapy. Within the HCP interviews, it was noted that most of the HCPs were unaware of the existing evidence base surrounding the use of music as a therapy within health care, particularly of its use with depression and anxiety.

At the time of this study, there were 10 practising registered music therapists in Tasmania, the majority of whom were located in rural and remote areas. Further, many of them already used technology to access clients who may not be able to have face-to-face contact. However, the challenge remains that although registered music therapists are allied health professionals, many health industries and
statutory bodies in Tasmania do not recognise them. This highlights how education regarding music therapy among other HCPs as well as the general public could help to eliminate many of these concerns and provide further legitimacy to, and recognition of, this profession. Music therapy has the capacity to utilise culturally appropriate music in ways that are therapeutically effective.

6.2.2 Significance of the research

The study’s findings contribute knowledge to three areas of research, including conceptual significance, theoretical significance, and contextual significance. The study provides understanding of the lived experiences of rural Tasmanian women with PND, and the issues and challenges faced by the HCPs who attempt to care for them. This study also contributes to an understanding of the use of music to relieve PND symptoms.

6.2.2.1 Conceptual significance

Theory starts from conceptualising ideas and issues arising from real life. Conceptually, this research is about the use of music as a possible treatment option for women with PND. It conceptualises a need for further research into the efficacy and appropriateness of music as an alternative option for women in the postnatal period either as a preventative measure or as a treatment option. Further investigation concerning music use may have been made within the study; however, it was identified that there were more pressing issues concerning the challenges that health services were encountering at the time of the study. These issues were due to changes brought about by greater health austerity and the substantial shift and reduction in service provision within the primary health care context, which occurred throughout the study period.

6.2.2.2 Theoretical significance

There have been relatively few studies relating to the effects of music among those experiencing PND. However, both the use of music as therapy, and PND, are well-researched fields individually. As such, this study is theoretically significant – it examines both the fields of health care and music therapy together. However, its
scope is limited. It is hoped that this research could make a modest contribution to the exploration of music therapy in mental health. This is one of the most challenging as well as useful and promising, research advancements. This approach examined both fields of study using a feminist perspective. Consequently, it has provided an understanding of PND that is juxtaposed to gender and the powerful medical model of health and disease. This theory allows a more developed understanding of the complexities concerning PND, the services that are available to women, their use of complimentary approaches and by what means the current approaches can be improved for rural communities.

6.2.2.3 Contextual significance
The most significant finding within the research was that existing health services are ill equipped to meet the needs of rural Tasmanian women in the postnatal period. There is a severe lack of funding and focus on women within the postnatal period, with a greater shift toward general practice providing care in the postnatal period. Yet many HCPs, particularly GPs, are ill equipped to provide this care because of a lack of training, competing demands or interests, poor inter-professional trust, and an inability to build rapport, trust or remove subjective views within the health care interaction. There is a need to address the fundamental issues around trust, access, stigma, professional education, and public, professional and political recognition of PND before music, as a complementary therapy, may be introduced within the Tasmanian health care context.

6.3 Personal development
Due to the personal nature of this section, personal pronouns are used purposefully as this section is a reflection of personal development through the research process. For me, the research journey has been just that, a journey. The word ‘journey’ is a noun, the act of travelling from one place to another. ‘Journey’ may also be used as a verb; to travel somewhere. Throughout the past two years, I have literally travelled to many locations throughout the north and northwest areas of Tasmania to meet women and HCPs and to hear their stories and experiences. I saw them in their own environment. I saw women with their children. I saw doctors and
midwives in their offices. I covered many hundreds of kilometres, but this was the easy part of the journey. The real journey for me has been in the gaining of insights and understanding of PND and its effects on these women and their families, its complexities in diagnosis, and the challenges with various types of treatments.

When I began, I started just as many other graduate students do, with a desk, a laptop and the idea that I can change the world. However, as I come to the end of this particular journey, I realise that the process of change is gradual and individual. The world may not have changed, but I have. There have been many changes over the past two years and the following outlines just a few of them.

- I have seen an advancement of my skills in networking, data analysis, analytical writing, document preparation, and understanding of issues regarding intellectual property and authorship, as well as the importance of ethical considerations in research settings. These skills have been developed through working with supervisors and advisors and participating in the Graduate Certificate of Research courses run through the Graduate Research Office, University of Tasmania. I also participated in many Graduate Research Student support program workshops, which were held by the Centre for Rural Health, School of Health Sciences, University of Tasmania, which also contributed to these advancements.

- I am now able to competently and confidently prepare and deliver oral presentations to specialists and general audiences. I have developed strategies to manage critical questions and have the knowledge and confidence to defend methods, outcomes and the interpretation of research. These skills have been gained by attending, actively participating and presenting in seminars and conferences. They were further developed through participation in a public speaking course as part of the Graduate Certificate of Research.

- I have had the great opportunity to use and transfer the skills gained throughout my graduate research study period to other projects and
achievements. I was involved in a grant funded research project at the University of Tasmania. I was an integral member in the project as I contributed in and developed a research proposal for a grant project entitled “Rock-a-by Baby: An online education program for mother and infant health and well-being”, which sought to enhance the wellbeing of mothers with PND and their infants through the use of music and lullabies in a way that is easily accessible, low-cost and sustainable in the long term. The grant funding awarded for this project totalled $15,528.00.

- I was able to further develop my oral presentation skills and communication skills with the media by participating in television and radio presentations. This has largely been due to advertisement and consumer interest in the grant funded project “Rock-a-by Baby: An online education program for mother and infant health and well-being” as well as my Masters study.

- Lastly, I was able to continue to develop my oral presentation and networking skills while I was a committee member on the Perinatal Professional Network-North. The purpose of the network was to maintain collaborative partnerships between professionals in the north area of Tasmania, who work with women experiencing depression and anxiety in the antenatal period and postnatal year, and their families. I was invited to sit on the committee as a university and consumer representative.

This study has explored the current body of knowledge concerning PND and music as therapy. It has also contributed to personal change and professional development. Participating in and being an integral part of other research activities and committees, whose design it is to assist in identifying, testing, and implementing change, has given me the opportunity to demonstrate my newly found skills.

The greatest outcomes of this journey, however, have been twofold: firstly, a greater understanding of my own personal experiences and challenges with PND and its treatment limitations; and secondly, raising four incredible young children
and supporting my husband who was, at the time this research was undertaken, completing his own postgraduate research degree. Looking back, I realise that I have changed the world, if only just my world.

6.4 Research strengths

There were a number of strengths identified within this study. Currently, there is a gap in the literature regarding music as a treatment option for women with PND. To date, there has been no identified literature that specifically examines the use of music as a treatment for PND. In order for this future research to occur, a foundation must be laid. This research lays the groundwork by identifying the perceptions of PND and its treatments by HCPs and women with PND who live and work in rural and remote areas. Further, the existing research in regards to PND in rural areas has largely focused on the incidence rather than the experiences of the women and their families (Griepsma et al., 1994; Probst et al., 2006; Villegas et al., 2011).

In addition to the identified gaps, the strength of the research is the use of its qualitative approach to give a voice to those who would otherwise not be heard. By using in-depth interviews, the women were given the opportunity to freely share their story. Many of the women expressed a sense of relief and satisfaction at the conclusion of the interviews. One woman after sharing a particularly personal recount of events leading up to her diagnosis stated:

*I have never shared that with anyone, not even my husband or doctor or anyone. It's just not something that you tell people. But it feels so good to finally be able to talk about it. It's like taking the skeleton out of the closet. I don't have to worry about it anymore. (Woman 2)*

Despite some of the CHNs concerns that the women they care for would be too vulnerable or fragile to share their experiences, most of the women were glad to have the opportunity to talk about what they had been through. From the perspective of the researcher, this feeling of relief was also apparent. For example in my reflective journal I wrote:
We were talking about some pretty intense stuff, suicide, thoughts of hurting the baby, and dreams of just running away from it all. But it was just like talking to a friend. I wasn’t sure how the women would react to the questions since some of them are pretty personal. They have all been great though! It’s been so...comfortable and quite relaxed. (Reflective Journal, May 2014)

The qualitative approach has also given a voice to HCPs who would otherwise not speak out regarding the current model of care due to fear of retribution. For these HCPs, the interviews provided the forum to share their experiences in dealing with women with PND and the lack of suitable services. Frustration, anger, disappointment, and concern were expressed by many of the HCPs. One HCP stated:

The [local parenting centre] used to be so good. There were groups for mums, and dads; women could stay overnight, or all day to get some help, especially with sleeping and settling; there were PND groups and just about everything. There was some child care so mums could have appointments with the counsellor. All of that has changed now. We are so limited and it just keeps getting worse. I fear that they are just looking for a reason to close it down. Then where will the mums go? (HCP 21)

Largely due to the experiences with the interviews and the connectivity that occurred, many of the HCPs and the women have maintained contact with the researcher. For the HCPs, this ongoing connection has been to enquire about music therapy groups that may be offered around the state, the results of the study, provide information regarding changes that are taking place, as well as some of their own personal experiences with music and parenthood. For the women, I have had news of subsequent pregnancies, enrolments in music therapy groups, and the implementation and effects of music in their routines with their children.
6.5 Research limitations

At the Masters’ level, this study may be seen as a research exploration with some limitations. Most notably, the focus of the research had unexpectedly shifted from an emphasis on the use and value of music among women with PND, to identifying that existing health services are ill equipped to meet the needs of rural Tasmanian women in the postnatal period. Although the use of music was discussed, many women and HCP voiced that adequate and fundamental health services were first required to meet the most basic needs of women. As such, without fundamental services meeting the needs of women, complementary and alternative approaches, such as music and music therapy, were of lesser priority.

Additional limitations were largely in relation to the recruitment and participation of HCPs and women with PND who resided in rural and remote Tasmania. These limitations are further outlined below.

6.5.1 Recruitment of HCPs

The recruitment of HCPs was quite an arduous task. In order to recruit the CHNs, the research aim and objectives were presented at team meetings in the north and northwest areas. These meetings were quite successful as the CHNs had the opportunity to ask questions and voice concerns about their participation as well as the participation of the women who were in their care. This opportunity prompted a high rate of participation. Many of the CHNs expressed gratitude for conducting this study as they felt that there is still much to be understood about PND and the rural Tasmanian experience. Further, as CHNs, they were not typically asked their opinions about service options or ways to improve on the services where they were working.

The recruitment of GPs was more difficult. Each GP practice was sent a letter of invitation outlining the research aims and objectives. To this, there was no response after a period of two weeks. Therefore, each GP practice was telephoned to inquire about receipt of the study information. All but one practice confirmed receipt of the invitation, however, at this point, were disinterested in participation.
It should be noted that the researcher was never given the opportunity to speak directly to the GPs themselves. Only three GPs expressed interest in participation and meeting times were scheduled. Of the three GPs, only two interviews were conducted. When the researcher arrived at the third GP’s scheduled meeting place at the appointed time, the practice nurse reported that the GP would be going back to Hobart and did not view the matter as important. Despite the letters of invitation, telephone communication and advertisement of the study on the Tasmanian Medicare Local website and other media outlets, participation from GPs was extremely low. Therefore, the insights provided from GP data are limited. 

As with GPs, recruitment of psychologists and particularly psychiatrists was also difficult and resulted in low participation rates. The same processes were used to recruit psychologists, psychiatrists and social workers. The same barriers were encountered with recruiting the psychiatrists as the GPs. When telephoned, the practice nurses would indicate a lack of interest in the research or indicated that PND was not a focus of the practice. Again, the researcher was never able to speak directly with the psychiatrist. The one participating psychiatrist was recruited through a meeting held with professionals who had a personal or professional interest in PND. Although her interview was brief, some valuable information was shared. However, again, due to the low participation rates, the psychiatrist perspective in this study is limited. Although it was slightly easier to recruit psychologists and social workers, there were similar challenges to the GPs and psychiatrists. This then presents a limited perspective of the experiences of caring for women with PND from the perspective of psychologists and social workers, which in turn limits the insightfulness of the information that has been presented. Despite the limited HCP participation, particularly in the northwest area, the information about the study and seeking an audience with various HCPs was consistent.
6.5.2 Recruitment of women

In recruiting women, it was found that although HCPs were asked to post the study information flyers in a public place such as a waiting area, in order to assist in the dissemination of the study information to the public, this did not always occur.

I noticed that the flyers were not up at some of the child health centres and parenting centres. I asked about this and was told that they didn’t feel that some of the women who might agree to participate should due to their vulnerability. There were also concerns from some of the CHNs that women would be sharing very personal and private information in the interviews. I don’t know if the flyers will go up but I offered more copies and they said they still had them. (Reflective journal, April 2014)

I went back to one of the child health centre for [child’s name] appointment and noticed that the flyers still aren’t up. I can’t interview women who don’t know about the study and they won’t know about the study if the flyers aren’t up. They are keeping the women from being able to make up their own mind about participating. (Reflective journal, July 2014)

Further, there was little representation from women in the northwest area or particularly remote areas of Tasmania. This may be due to the challenges with information dissemination in these areas. However, it may also be due to fear of identification. The following experience may suggest the latter.

I met someone who has a sister-in-law who lives on the west coast who is currently seeing a counsellor for PND. He said he would talk to her and see if she would be interested in participating in the study. I have had such a hard time getting anyone from the west coast to speak to me. (Reflective journal, March 2014)

I just called [name] to find out if he had contacted his sister-in-law. He said that she was not interested. He thinks she might be worried about someone finding out about the PND. She was worried about having the university car at her house. (Reflective journal, April 2014)
I contacted [name] again and he said that she was just too afraid that people would ask questions. She just doesn’t want anyone to know about the depression stuff. It’s just too small of a town. (Reflective journal, April 2014)

Finally, in contrast to much published research, most of the participants were educated, middle-income, Caucasian women who were either married or in a de facto relationship. This may be due to many reasons. Research participation may not be viewed as important to those from low SES backgrounds as it does not meet their immediate needs. For example, I wrote the following:

I was at [name of centre] and I was able to talk to quite a few mums. Most of them shared their experiences with PND and were quite happy to share with several of us sitting around a table. When I asked if they would be interviewed they all declined. One woman said that it wouldn’t change anything, so why bother. I tried to explain to her that if enough people will tell their story then it might not change things for her but it might change things for her daughter or other women. She was quite dismissive. (Reflective journal, August 2014)

Participation may also be hindered by suspicion of the researcher.

It was interesting that so many wanted to know what I was going to do with the stuff that they told me in the interviews if they agreed to it. From talking to the centre director, I know that some of these women have been seen by social workers, child protective services, counsellors. One woman asked me why I was even here at [name of centre]. She said “we are not a bunch of rats that you can just study all the time... F___ off.” I feel bad for them. They must get so many who come, they tell them very personal information, and then leave and never to know what has happened with all the things that they have said. (Reflective journal, August 2014)

6.6 Future research directions

In addition to the strengths and limitations of this study, commonly expected at the Masters’ level, a number of recommendations for future research have been
highlighted. These future research opportunities have become apparent throughout the research process and have been highlighted through various means, including continued examination and review of the literature as well as from issues identified within the study. Some of the future research directions include:

- Undertaking clinical trials of music therapy for the treatment of PND. Despite PND's similar symptomology and documented response to antidepressant medications, which are typically administered to those who experience major depression at other times, there are other factors that must be considered. As most women prefer not to take medication during the perinatal period due to the uncertain risk to the baby, other treatments options need to be researched further. Music therapy may be a viable option as it can be conducted without risk of harm to the mother or baby, and may in fact be of potential benefit to both. This research would contribute substantially to providing an evidence base for the therapeutic use of music as sought by HCPs who are largely guided by the medical model.

- Developing a greater understanding of HCPs perceptions regarding the use of complementary and alternative therapies, including music therapy. In order to determine the acceptability of the use of complementary and alternative therapies for PND, including music therapy, more research is required. HCPs are typically guided by the medical model, which largely identifies symptoms as having a biological cause. This is not always the case with PND. Therefore, biological treatments may not be the best form of treatment for all women with PND.

- Undertaking a longitudinal study that implements music therapy into treatment options for women with PND in rural areas and documents long-term effects on mother as well as baby.
Lastly, further research is required in order to understand stigma and the perceptions of depression in the postnatal period, and how education may eliminate the stigmatisation of PND.

6.7 Recommendations

This study has focused on the lived experiences of rural Tasmanian women with PND and the use of music to aid these women in a reduction of PND symptoms. It also presented HCPs’ perspective of PND and its treatment options. As a part of this study, several recommendations are provided. Despite many of these recommendations echoing those of others who have separately studied PND, music as therapy, or service issues in rural and remote locations, these recommendations are based solely on the outcomes of this study and are outlined below.

6.7.1 Recommendation 1: Education

To have continued and current education available to all HCPs who may have contact with women with PND and their families as PND is the most common complication of childbirth. Within this study education was highlighted as a need for all HCPs in order for effective screening and diagnosis to occur throughout the antenatal period and first postpartum year by the CHNs as well as GPs. In order to encourage the HCPs to attend these education sessions, incentives, such as continued professional development points, may be appropriate.

As was highlighted in the study, education is also needed for women and their partners, as well as education for the general public regarding the risk factors, symptoms, and treatment options. There is a need to increase education regarding treatment options, including the use of music as therapy. Information regarding music therapy access needs to be more readily available to HCPs. This information could be made available through continued and up to date education processes and the perinatal mental health co-ordinator.
6.7.2 Recommendation 2: Patient participation in decision making

For more than half of the women who participated in this study, treatment options were not discussed with the woman or her partner. The treatment method was determined by the GP with little or no input from the woman regarding her treatment preferences. Women and their partners should be included, in the health care process to determine the best treatment options as individuals and families. This approach to care, that incorporates women’s specific needs, may empower the woman to make health decisions, while the health care professionals assist the woman or family unit through this health care decision making process.

6.7.3 Recommendation 3: Technology enhanced health care

As highlighted within this study, access to specialist mental health services is very limited for those who reside in rural and remote areas. The utilisation of existing technologies such as Internet, phone and telemedicine, may assist in overcoming geographic differences and barriers. Further, there is a need for greater general access to HCPs, such as GPs and perinatal mental health co-ordinators in rural and remote areas.

6.7.4 Recommendation 4: In-patient care

There is a need for a mother and baby unit in the north of the state for greater access to appropriate, affordable and acceptable in-patient care. This would reduce the waiting time for women to receive care at the only existing mother and baby unit in Tasmania, located in the south. It is recognised that this is dependent upon health funding, which is currently being reduced in this time of austerity. Despite this limitation, there is a need to be able to access appropriate, affordable and acceptable in-patient care regardless of socioeconomic background or private health cover.

6.7.5 Recommendation 5: Enhance existing family services

There is a need to improve the use of existing parenting centres in order to provide appropriate support and care for families. Suggested uses of the parenting centres...
include day stay services, father groups in the evenings, parenting classes, sleeping and settling classes, music therapy groups to promote attachment and bonding, PND groups, and so forth. If these supports are in place, the need for in-patient care for some women may be reduced.

6.8 Conclusion

Previous PND research has focused on the incidence and prevalence of PND in rural and urban communities; the effectiveness and acceptability of traditional treatment methods; and more recently, the experiences of women with PND. However, this study identified that the paucity of general health care and specialist mental health care services plays an integral part in the woman’s, and her family’s experience of PND in rural and remote Tasmania. Although music as therapy was largely viewed as an acceptable treatment option for women, there is a need to address the fundamental issues around trust, access, stigma, and professional education. This fundamental shift must include public, professional and political recognition of PND before music, as a complementary therapy, may be introduced within the Tasmanian health care context.

In the current austere climate, the future of PND services remains unknown at best, and bleak at worst. However, if research focussing on PND and music therapy continues, then it can be further legitimised within public spheres and on political agendas. Such research may include clinical trials and longitudinal studies regarding music as therapy for PND, HCPs perceptions of CAM therapy for PND, and research to understand the stigma that is attached to PND and its treatments. The results of such research may then have both a political impact on policy, and the powerful medical model that currently guides the perceptions, treatments and services availability for PND.

In addition to further research, appropriate and timely PND service accessibility, acceptability and affordability, including education, for all antenatal and postnatal women, is warranted. Recommendations regarding these challenges have been addressed within the chapter and include a mother and baby unit in the north of
Tasmania, utilising already existing services and technologies, and providing education regarding PND for women and their partners as well as HCPs. Regardless of the current financial climate, the rates of clinically diagnosed PND remain steady and women and their families will continue to need access to appropriate mental health services within an acceptable timeframe.

At the conclusion of this study it is evident that its greatest significance lies in the researcher’s personal development. It has provided understanding of PND, music therapy and the issues and challenges that rural Tasmanian women and their HCPs face. It has allowed women’s lived experiences to be further understood. Overcoming the highs and lows of the research journey over the past two years has been an empowering experience. These experiences have instilled great inspiration for opening new research windows in the future, as the researcher is optimistic that personally, this is not the end of a research journey but a stepping-stone into a new one.
References


Humphreys, J. S. (2009). Key considerations in delivering appropriate and accessible health care for rural and remote populations: Discussant overview.


Appendix A: Ethics approval letters

5 December 2013

Dr Heather Bridgman
University Department of Rural Health
Locked Bag 1372

Student Researcher: Melissa Terry

Sent via email

Dear Dr Bridgman

Re: FULL ETHICS APPLICATION APPROVAL
Ethics Ref: H0013624 - Exploring the role of Music in rural Tasmanian women with postnatal depression

We are pleased to advise that the Tasmania Social Sciences Human Research Ethics Committee approved the above project on 4 December 2013.

This approval constitutes ethical clearance by the Tasmania Social Sciences Human Research Ethics Committee. The decision and authority to commence the associated research may be dependent on factors beyond the remit of the ethics review process. For example, your research may need ethics clearance from other organisations or review by your research governance coordinator or Head of Department. It is your responsibility to find out if the approval of other bodies or authorities is required. It is recommended that the proposed research should not commence until you have satisfied these requirements.

Please note that this approval is for four years and is conditional upon receipt of an annual Progress Report. Ethics approval for this project will lapse if a Progress Report is not submitted.

The following conditions apply to this approval. Failure to abide by these conditions may result in suspension or discontinuation of approval.

1. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval, to ensure the project is conducted as approved by the Ethics Committee, and to notify the Committee if any investigators are added to, or cease involvement with, the project.
2. **Complaints:** If any complaints are received or ethical issues arise during the course of the project, investigators should advise the Executive Officer of the Ethics Committee on 03 6226 7478 or human.ethics@utas.edu.au.

3. **Incidents or adverse events:** Investigators should notify the Ethics Committee immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

4. **Amendments to Project:** Modifications to the project must not proceed until approval is obtained from the Ethics Committee. Please submit an Amendment Form (available on our website) to notify the Ethics Committee of the proposed modifications.

5. **Annual Report:** Continued approval for this project is dependent on the submission of a Progress Report by the anniversary date of your approval. You will be sent a courtesy reminder closer to this date. **Failure to submit a Progress Report will mean that ethics approval for this project will lapse.**

6. **Final Report:** A Final Report and a copy of any published material arising from the project, either in full or abstract, must be provided at the end of the project.

Yours sincerely,

Katherine Shaw
Ethics Officer
Tasmania Social Sciences HREC
23 June 2014

Dr Quynh Le
Centre for Rural Health
Locked Bag 1372

Sent via email

Dear Dr Le

Re: APPROVAL FOR AMENDMENT TO CURRENT PROJECT
Ethics Ref: H0913624 - Exploring the role of Music in rural Tasmanian women with postnatal depression

- To change the Chief Investigator on the project from Heather Bridgman to Quynh Le.
- Revised Attachments to reflect this change: 1 Information Sheet for third parties, 2 Sample email to third party, 3 Information Sheet for interview participants, 4 Information sheet for in-depth interview participants, 10 and 10b Advertisements.

We are pleased to advise that the Chair of the Tasmania Social Sciences Human Research Ethics Committee approved the Amendment to the above project on 19 June 2014.

Yours sincerely

Katherine Shaw
Executive Officer
Tasmania Social Sciences HREC
Appendix B: Classification and symptoms of depression

Table B 1: *Classification and symptoms of depression*

<table>
<thead>
<tr>
<th>Type</th>
<th>Classification</th>
<th>Symptoms</th>
</tr>
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</table>
| Neurotic (exogenous)  | Major depressive disorder            | **Five out of the nine symptoms must be present; Symptoms are sustained and impair the person’s usual function. Symptoms are experienced for most of the day on most days for at least two weeks:**  
- low mood;  
- markedly diminished interest and pleasure;  
- reduced energy or fatigue;  
- disturbed sleep (insomnia or hypersomnia);  
- agitation or slowed down speech or movement;  
- disturbed appetite (may be increased or decreased, and may be accompanied by significant weight loss or weight gain);  
- feelings of guilt or worthlessness;  
- reduced concentration;  
- recurrent thoughts of death or suicidal ideas. |
| OR Psychotic (endogenous)* | Dysthymic disorder                  | Two of these symptoms must be experienced for most of the day, for more days than not, for at least two years:  
- disturbed sleep (insomnia or hypersomnia);  
- poor concentration or difficulty making decisions;  
- reduced energy or fatigue;  
- disturbed appetite (may be increased or decreased);  
- feelings of hopelessness or pessimism;  
- low self-esteem. |
<p>| Sub threshold or subclinical |                                 | A potential rather than formal diagnosis where the person has:                                                                                                                                     |</p>
<table>
<thead>
<tr>
<th>Type</th>
<th>Classification</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>depression</td>
<td></td>
<td>- two to four depressive symptoms including depressed mood or loss of interest or pleasure;</td>
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<tr>
<td></td>
<td></td>
<td>- lasts for two weeks but not more than 2 years.</td>
</tr>
<tr>
<td>Mixed anxiety and depressive</td>
<td>Diagnosis is based on the presence of symptoms of anxiety and depression, but neither is clearly predominant.</td>
<td>Neither type of symptom is present to the extent that justifies a diagnosis if considered separately. Symptoms should be present for at least 4 weeks and result in significant distress or functional impairment. Typical symptoms are:</td>
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<tr>
<td>disorder</td>
<td></td>
<td>ANXIETY</td>
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<tr>
<td></td>
<td></td>
<td>- persistent nervousness</td>
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<td></td>
<td></td>
<td>- palpitations, chest pain, dizziness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- irritability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- fearful anticipation</td>
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<tr>
<td></td>
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<td>- excessive alertness</td>
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<tr>
<td></td>
<td></td>
<td>DEPRESSION</td>
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<tr>
<td></td>
<td></td>
<td>- sleep disturbance</td>
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<td></td>
<td></td>
<td>- fatigue or low energy</td>
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<td></td>
<td></td>
<td>- hopelessness or pessimism</td>
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<td></td>
<td></td>
<td>- poor concentration</td>
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<td></td>
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<td>- low self-esteem or feelings of worthlessness</td>
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<tr>
<td>Adjustment disorder</td>
<td>An emotional or behavioural response to a stressful event (not including bereavement); characterized by marked distress or clearly reduced social functioning; effects may persist beyond a 6 month period and may include one or a combination of:</td>
<td>- depressed mood;</td>
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<tr>
<td></td>
<td></td>
<td>- anxiety or worry.</td>
</tr>
<tr>
<td>Type</td>
<td>Classification</td>
<td>Symptoms</td>
</tr>
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<td>----------------------------------</td>
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| Bipolar disorder                 | Distinct period of abnormally and persistently elevated or irritable mood, lasting at least one week; mood change is severe enough to disrupt normal activities; several of the following are present:  
  - inflated self-esteem or grandiosity;  
  - decreased requirements for sleep;  
  - racing thoughts or flight of ideas;  
  - reduced attention or distractibility;  
  - increased talkativeness;  
  - increased activity levels or agitation; and  
  - increased involvement in activities that have a risk of adverse consequences (sexual relationships, business ventures, spending sprees, etc.).  
  Depressive episodes are very common but not regarded as essential for diagnosis. |
| Seasonal affective disorder (SAD) | Depression recurrences follow a seasonal pattern:  
  - depressive episodes occur repeatedly at a particular time of the year;  
  - remissions between episodes occur at a particular time of the year;  
  - two major depressive episodes must have occurred exhibiting this seasonal pattern during the past two years, with no non-seasonal episodes in this period; and  
  - seasonal depressive episodes outnumber other depressive episodes during the person’s lifetime.  
  Typically occurs in the winter months and characterized by decreased activity and reduced energy; withdrawal from social activity, combined with atypical depressive symptoms such as increased sleep and food cravings. |
<p>| Postnatal (Postpartum) depression | Not a separate mood disorder from major depression. However, onset of the depressive episode must be within the first year after giving birth, typically within the first four weeks. Diagnosis of depressive disorder with postnatal onset requires the presence and duration of the depression symptoms and consequent impairment described for major depressive disorder. |</p>
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<tr>
<th>Sub Classification</th>
<th>Sub symptoms</th>
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<tr>
<td>Single episode or recurrent</td>
<td>50% people who have an initial depressive episode with have further episodes. Each episode of depression increases the risks for additional episodes. People with a history of depression have been found to have an average of five to nine episodes during their lifetime.</td>
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<td>Chronic depression</td>
<td>Minimum two year history of meeting the symptom threshold for a major depressive episode</td>
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<td>Severity</td>
<td>Severity is clarified from the number and intensity of symptoms</td>
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<td>- Mild: few, if any, symptoms above the five necessary for diagnosis; symptoms result in only minor impairment of function</td>
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<td>- Moderate: symptoms and functional impairment are between the mild and severe categorizations</td>
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<td>- Severe: involves most of the symptoms; symptoms markedly interfere with the person’s functioning.</td>
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<tr>
<td>Melancholic features</td>
<td>Severe presentation of pervasive and extreme loss of interest or pleasure with a complete or near-complete lack of reactivity of mood to positive events. Sleep is disturbed; psychomotor retardation or agitation is likely to be pronounced; significant weight loss; excessive or inappropriate guilt.</td>
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<tr>
<td>Psychotic features</td>
<td>Experience abnormal perceptions (hallucinations) or beliefs (delusions); particularly associated with feelings of worthlessness or guilt and may share the themes of self-deprecation and blame; hallucinations and/or delusions interfere with the person’s ability to make sound judgements and puts themselves or others at risk of harm.</td>
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Appendix C: Edinburgh Postnatal Depression Scale (EPDS)

EDINBURG POSTNATAL DEPRESSION SCALE (EPDS)
J.L. Cox, J.M. Holden, R. Sagovsky
Department of Psychiatry, University of Edinburgh

Name: ________________________________________________________________

Address: ___________________________________________________________________

Baby’s Age: ___________________________________________________________________

As you have recently had a baby, we would like to know how you are feeling. Please UNDERLINE which comes closest to how you have felt IN THE PAST 7 DAYS, not just how you feel today.

Here is an example, already completed.
I have felt happy:

Yes, all the time.
Yes, most of the time.
No, not very often.
No, not at all.

This would mean, “I have felt happy most of the time” during the past week. Please complete the other questions in the same way.

In the Past 7 Days:

1. I have been able to laugh and see the funny side of things as much as I always could.

   0 – As much as I always could
   1 – Not quite so much now.
   2 – Definitely not so much now
3 – Not at all

2. I have looked forward with enjoyment to things.
   0 – As much as I ever did
   1 – Rather less than I used to
   2 – Definitely less than I used to
   3 – Hardly at all

3. I have blamed myself unnecessarily when things went wrong.
   3 – Yes, most of the time.
   2 – Yes, some of the time
   1 – Not very often
   0 – No, never

4. I have been anxious or worried for no good reasons.
   0 – No, not at all.
   1 – Hardly, ever
   2 – Yes, sometimes
   3 – Yes, very often

5. I have felt scared or panicky for no very good reason.
   3 – Yes, quite a lot
   2 – Yes, sometimes
   1 – No, not much
   0 – No, not at all

6. Things have been getting on top of me.
   3 – Yes, most of the time I haven’t been able to cope at all
   2 – Yes, sometimes I haven’t been coping as well as usual
   1 – No, most of the time I have coped quite well
   0 – No, I have been coping as well as ever

7. I have been so unhappy that I have had difficulty sleeping
   3 – Yes, most of the time
   2 – Yes, sometimes
   1 – Not very often
   0 – No, not at all

8. I have felt sad or miserable
   3 – Yes, most of the time
9. I have been so unhappy that I have been crying
   3-Yes, most of the time
   2-Yes, quite often
   1-Only occasionally
   0-No, not at all

10. The thought of harming myself has occurred to me.
    3-Yes, quite often
    2-Sometimes
    1-Hardly ever
    0-Never

**Edinburgh Postnatal Depression Scale (EPDS) [Cox, Holden & Sagovsky 1987]**

The EPDS is a self-rated questionnaire that has been used in Europe and Australia for over 10 years to screen women for PPD. It asks women to rate how they have been feeling in the last 7 days and consists of 10 short statements of common depressive symptoms with 4 choices per statement. Each statement is rated on a scale of 0 – 3 with possible total scores ranging from 0 – 30.

To administer the test you give the woman a pen and the questionnaire and ask her to answer the questions in relation to the past 7 days. The questionnaire should only take a few minutes to complete.

Scoring the questionnaire should only take a couple of minutes with practice.
Questions 3, 5, 6, 7, 8, 9 and 10 are scored: statement 1 = 3 points, statement 2 = 2 points, statement 3 = 1 point and statement 4 = 0 points.

A cut-off score of 12.5 has been shown to detect major depression and a woman who meets this threshold can be further assessed. Asking a woman to complete such a questionnaire not only makes her stop and think about how she has been feeling but also indicates a willingness on the part of the person giving the questionnaire to listen to how she is feeling.
Appendix D: Uses of music and music therapy across the lifespan

Table D 2: Uses of music and music therapy across the lifespan.

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<th>Age Group</th>
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<td>Neonates and infants</td>
<td>(Arnon et al., 2006)</td>
<td>Music stimulation has been shown to provide significant benefits to preterm infants. We hypothesized that live music therapy was more beneficial than recorded music and might improve physiological and behavioural parameters of stable preterm infants in the neonatal intensive care unit.</td>
<td>Thirty-one stable infants randomly received live music, recorded music, and no music therapy over 3 consecutive days. A control of the environment noise level was imposed. Each therapy was delivered for 30 minutes. Inclusion criteria were postconceptual age ≥ 32 weeks, weight ≥ 1,500 g, hearing confirmed by distortion product otoacoustic emissions (DPOAEs), and no active illness or documentation of hyper-responsiveness to the music. Heart rate, respiratory rate, oxygen saturation, and a behavioural assessment were recorded, every 5 minutes, before, during, and after therapy, allowing 30 minutes for each interval. The infant’s state was given a numerical score as follows: 1,</td>
<td>Live music therapy had no significant effect on physiological and behavioural parameters during the 30-minute therapy; however, at the 30-minute interval after the therapy ended, it significantly reduced heart rate (150 ± 3.3 beats/min before therapy vs 127 ± 6.5 beats/min after therapy) and improved the behavioural score (3.1 ± 0.8 before therapy vs 1.3 ± 0.6 after therapy, p &lt; 0.001). Recorded music and no music therapies had no significant effect on any of the tested parameters during all intervals. Both medical personnel and parents preferred live music therapy to recorded music and no music therapies; however, parents considered live music therapy significantly more effective than the other</td>
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<td>(Bargiel, 2004)</td>
<td>This study considers the impact of lullabies and play songs, as well as parental singing in general. The theoretical considerations presented concern the elaboration of a program of early intervention in music therapy for infants whose attachment development appears to be at risk.</td>
<td>deep sleep; 2, light sleep; 3, drowsy; 4, quiet awake or alert; 5, actively awake and aroused; 6, highly aroused, upset, or crying; and 7, prolonged respiratory pause &gt; 8 seconds. The volume range of both music therapies was from 55 to 70 dB. Parents and medical personnel completed a brief questionnaire indicating the effect of the three therapies.</td>
<td>The program provides for one or two initial evaluation sessions with the parent-child dyad that will lead to a complete initial music therapy assessment. The dyadic modality is preferable to that of a group, at least initially, in order to minimize the sonorous level of the environment and to facilitate the detailed observation of the baby by the parent and the therapist. However, a second stage may be offered in the form of an open support group for maintaining the musical repertoire of the parents and their motivation to use this medium by sharing their results with others. Taking count of that which represents the temporal dimension in the life of a baby, we propose biweekly sessions for ten weeks for therapies.</td>
<td>Compared with recorded music or no music therapy, live music therapy is associated with a reduced heart rate and a deeper sleep at 30 minutes after therapy in stable preterm infants. Both recorded and no music therapies had no significant effect on the tested physiological and behavioural parameters.</td>
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Without pretending to have a miracle cure, we pose the hypothesis that such an intervention with the infant and his or her parents might help the infant to develop minimal intra-psychic structures that could lead to the development of a secure attachment founded on an object bond. By inscribing this in a non-invasive and non-medicalised philosophy, we reckon that intervention through parental singing can facilitate the alliance of work with the parent or parents entirely to their own benefit on their own terms for regulating their own affect, as well as acting at a very fundamental level in the prevention of mental health problems and within the familial and societal nucleus. It is very evident that only experiment will testify to
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<td>(Shenfield et al., 2003)</td>
<td>To determine if maternal singing modulates the arousal of pre-linguistic infants.</td>
<td>We examined the effect of maternal singing on the arousal levels of healthy, non-distressed infants. Mothers sang to their 6-month-old infants for 10 minutes, after which they continued interacting for another 10 minutes. To estimate infant arousal, we gathered saliva samples from infants immediately before the mothers began singing and 20 minutes later.</td>
<td>Laboratory analyses of the saliva samples revealed that salivary cortisol levels converged from baseline to post-test periods. Specifically, infants with lower baseline levels exhibited modest cortisol increases in response to maternal singing; those with higher baseline levels exhibited modest reductions. This convergence of arousal levels was confirmed by reduced variability in cortisol values from baseline to post-test. These findings are consistent with the view that maternal singing modulates the arousal of pre-linguistic infants.</td>
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<td>Children</td>
<td>(Abad &amp; Edwards, 2004)</td>
<td><em>Sing &amp; Grow</em> aimed to strengthen parent-child relationships through increasing interactions and assisting parents to bond with their children, within a structured and therapeutic environment that was fun, non-threatening, and responsive to the needs of both the parent and child.</td>
<td>Face-to-face interactions, hand-over-hand facilitation, and coactive use of instruments were used to increase interactions and play during sessions. A range of interactive, nurturing, stimulating, and developmental music activities provided the framework for parents to interact and play with their children. Parents were actively encouraged to sit on the floor in circle formation with their child sitting in their lap or close by, and participate in each section of the session. Sessions generally followed a structured format that included a hello song, action and nursery songs, movement songs and games, instrumental play, quiet music, and then a goodbye song.</td>
<td>The comments from participants highlighted above showed that it was not only the music therapy group leader who was noting the observable changes in parental interaction. Participants expressed how they had learned new skills, and also indicated gratitude for the assistance they received.</td>
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<td>(Abad &amp; Williams, 2007)</td>
<td>The <em>Sing &amp; Grow</em> music therapy project is designed as an early intervention for high risk parents of infants and young children (0-3 years).</td>
<td><em>Sing &amp; Grow</em> programs are 10 week, group interventions delivered by qualified music therapists, where music and song are used as non-threatening, enjoyable media for engaging with parents and young children. Inter-active music-based activities are employed as a means for the following: encouraging parents to connect with and take pleasure from their children; teaching parents</td>
<td>Sixty-three programs were completed with 683 families. Data indicated that the programs were successful in reaching a variety of client groups including: single parents; young parents; low SES; a parent or child with a disability; families with a history of domestic violence or abuse; referred with parenting or attachment problems; and Indigenous or non-English speaking.</td>
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<td>(Nilsson et al., 2009)</td>
<td>To test whether postoperative music listening reduces morphine consumption and influence pain, distress, and anxiety after day surgery and to</td>
<td>Numbers of participants who required analgesics, individual doses, objective pain scores (Face, Legs, Activity, Cry, Consolability [FLACC]), vital signs, and administration of anti-emetics were documented during postoperative recovery stay. Self-reported</td>
<td>Reports from parents who completed end-of-program questionnaires also revealed high levels of parent satisfaction (100% enjoyment; 94% would like to participate again); a positive perception of the program’s impact on parent-child relationships (70% reported feeling closer to their child); and a translation of activities to the home setting (87% used music for behaviour management purposes at home). Observations documented by the music therapists indicated that the program was a useful treatment intervention for increasing parent-child interactions and co-facilitated play experiences. Attending children were observed to generally participate more frequently and actively in activities that encouraged cognitive, physical, and social development over the course of each program conducted. Data were recorded from 80 children aged 7–16. Forty participants were randomized to music medicine and another 40 participants to a control group. We found evidence that children in the music group received less morphine in the postoperative care unit, 1/40 compared to...</td>
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specific skills for fostering their children's behavioural, social, and communication skills; promoting positive parenting behaviours; and enhancing parents' sense of parenting competence and mental health. Specific parenting strategies that are modelled include the following: the use of praise and positive reinforcement; nonverbal communication through eye contact, smiling, and physical affection; direct teaching through modelling and hand-over-hand facilitation of gross and fine motor skills; the use of simple verbal instructions; setting boundaries for children; and using music and song for engaging, soothing, or calming children.
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<td>Adolescents</td>
<td>(Abad, 2003)</td>
<td>Given the potentially complex scenario faced by adolescents diagnosed with cancer, music may offer creative and age-appropriate opportunities to meet their developmental needs, as well as address social and emotional needs arising from having a life-threatening illness.</td>
<td>Three music therapy techniques are particularly pertinent to the unique developmental, social, emotional, and musical needs of adolescents being treated for cancer, including (a) song parody or lyric substitution and performance, (b) music relaxation and imagery, and (c) instrument learning. Relevant literature and case studies extend understanding about how these techniques can significantly help adolescents receiving treatment in paediatric oncology wards.</td>
<td>Case studies in this article illustrate how music therapy can help adolescents to establish their independence and identity, practice new found control over themselves and their environment, feel empowered and experience mastery, express their thoughts and feelings, improve in self-esteem, and perceive less pain and anxiety.</td>
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<td>(Field et al., 1998)</td>
<td>The present study investigated the effects of</td>
<td>Fourteen chronically depressed female adolescents listened to rock music for a 23-</td>
<td>No group differences or changes were noted for observed or reported mood state. However,</td>
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<td>music on mood state and right frontal EEG activation associated with chronic depression.</td>
<td>minute session. These adolescents were compared with a control sample of chronically depressed female adolescents who were simply asked to sit and relax their minds and their muscles for the same time period. EEG was recorded during baseline, music, and post-music for three minutes each, and saliva samples were collected before and after the session to determine the effects of the music on stress hormone (cortisol) levels.</td>
<td>cortisol levels decreased and relative right frontal activation was significantly attenuated during and after the music procedure. It was concluded that music had positive effects on the physiological and biochemical measures even though observed and self-reported mood did not change.</td>
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<td>Adults</td>
<td>(Baker &amp; Mackinlay, 2005)</td>
<td>This study explored how singing lullabies to babies impacts on first-time mothers' perceived coping and experience of mothering.</td>
<td>Eighteen first-time mothers participated in a six-week lullaby intervention program. Data comprised of detailed diaries kept by the mothers over the six weeks in addition to semi-structured interviews with the mothers, pre and post-intervention.</td>
<td>Results suggest that lullabies benefit mothers by relaxing and calming them, distracting them from other stressful thoughts, enhancing their experience of the bedtime task and enhancing their perception that they are good mothers. Results indicate that mothers’ experience of the bedtime task and her transition to motherhood may be enhanced through singing lullabies to their babies at bedtime.</td>
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<td>(Baker &amp; Mackinlay, 2006)</td>
<td>The study aimed to establish whether mothers found an education session on lullaby singing beneficial for them and their babies as well as</td>
<td>Twenty first-time mothers were provided with examples of lullabies and asked to sing lullabies to their babies at bedtime at least four times per week over a six-week period. Data contained in interviews and in diaries</td>
<td>Results indicate that mothers sing a broad range of lullabies utilising a repertoire of between five and seven lullabies. Reasons for selecting lullabies varied between the different mothers and for different lullabies but most</td>
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<td>reporting what lullabies were sung and why.</td>
<td>kept by the mothers were used to evaluate the value of the education session, the range of lullabies sung and their frequency of use, and to gain insight into mothers' thinking when choosing lullabies.</td>
<td>frequently, selections were based on the perception that they were quietening, calming or relaxing for their babies. Selections were also based on whether mothers knew the lullabies and were confident to sing them. The education session was evaluated with mothers reporting on how singing lullabies facilitated a deeper understanding of their babies' responses, and enhanced their own feelings associated with motherhood. Recommendations are made as to the type and context of future education sessions.</td>
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<td>(Browning, 2000)</td>
<td>The therapeutic use of music is an effective strategy in pain management, and its many physiological benefits seem to make it an ideal adjunct to any techniques aimed at the relief of pain and stress in childbirth.</td>
<td>Eleven women who attended childbirth education classes in Brantford, Ontario, Canada, volunteered to participate in a music therapy exercise. During pregnancy each participant selected preferred music, listened to it daily, and received instruction about focused listening. Within 72 hours after birth they were interviewed about their use of music as a coping strategy during labour.</td>
<td>Women selected the combination of music and labour support as a helpful coping strategy during labour. All women used the music during labour to help distract them from the pain or their current situation.</td>
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The purpose of this research was to determine the effects of mothers' singing on their adjustment to and bonding with their new infants as well as use of music in the home environment in the first 2 weeks after their infants' birth. Preterm mothers were assessed for coping with their infants' NICU stay, and premature infants' length of hospitalization was evaluated. Fifty-four full-term infants and mothers and 20 premature infants and 16 mothers were randomly assigned to experimental or control conditions. Mothers in both experimental groups were recorded singing songs of their choice for use at home. Recordings of each preterm mother's voice were played 20 minutes per day, 3 to 5 times per week, at a time when she was not able to visit her infant in the NICU. All full-term and preterm mothers in experimental and control groups completed a post-test survey 2 weeks after infants were discharged.

Comparisons revealed that experimental preterm and full-term mothers indicated less adjustment to their baby and lifestyle changes and less bonding compared to control mothers, though this difference was not significant. Preterm and full-term experimental mothers reported the greatest number of postpartum medical complications, which might explain their poor adjustment and bonding scores. There was a significant difference between mothers' value of music, with preterm experimental valuing music more. Preterm and full-term experimental mothers used music with and sang to infants more compared to preterm and full-term control mothers, but not to a significant degree. Preterm mothers reported a mean score of 4.75 (with a 5 indicating that they strongly agreed) for the following item: knowing my infant listened to my singing helped me to cope with my infant’s stay in the NICU. Furthermore, preterm infants who listened to the CD recording of their mothers' singing left the hospital an average of 2 days sooner than those in the control group, though this difference was not significant.
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<td>(Chan et al., 2011)</td>
<td>We aim to review trials of the effectiveness of music listening in reducing depressive symptoms in adults, and identify areas requiring further study.</td>
<td>We systematically search 9 databases and reviewed 17 studies included randomized controlled and quasi-experimental trails of music listening in reducing depressive symptoms in adults. The Joanna Briggs Institute-Meta Analysis of Statistics Assessment and Review Instrument was used for quality assessment of included studies.</td>
<td>Music listening over a period of time helps to reduce depressive symptoms in the adult population. Daily intervention does not seem to be superior over weekly intervention and it is recommended that music listening session be conducted repeatedly over a time span of more than 3 weeks to allow an accumulative effect to occur. All types of music can be used as listening material, depending on the preferences of the listener. So, it is recommended that the listeners are given choices over the kind of music which they listen to. There is a need to conduct more studies, which replicate the designs used in the existing studies that met the inclusion criteria, on the level of efficacy of music listening on the reduction of depressive symptoms for a more accurate meta-analysis of the findings and reflect with greater accuracy the significant effects that music has on the level of depressive symptoms.</td>
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<td>(Chang et al., 2008)</td>
<td>The purpose of this study was to examine the effects of music therapy on stress, anxiety and depression in</td>
<td>Two hundred and thirty-six pregnant women were randomly assigned to music therapy (n = 116) and control (n = 120) groups. The music therapy group received two weeks of music</td>
<td>In a paired t-test, the music therapy group showed significant decrease in PSS, S-STAI and EPDS after two weeks. The control group only showed a significant decrease in PSS after two</td>
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<td>Taiwanese pregnant women.</td>
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<td>Background. The value of music therapy is slowly being realized by nurses in various clinical areas, including obstetrics. Previous studies have demonstrated a high prevalence of psychological stress during pregnancy. Few studies have examined the effects of music therapy on reducing psychological stress during pregnancy. Design. A randomized experimental study design was developed and implemented.</td>
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<td>The control group received only general prenatal care. Psychological health was assessed using three self-report measures: Perceived Stress Scale (PSS), State Scale of the State-Trait Anxiety Inventory (S-STAI) and Edinburgh Postnatal Depression Scale (EPDS).</td>
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<td>(Creighton, Atherton, &amp; Kitamura, 2013)</td>
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<td>The findings reveal that the mothers' experience of singing interactions primarily impacted the pleasure in proximity, need gratification and tolerance/acceptance constructs. The mothers' experience of non-singing interactions primarily impacted the pleasure in proximity, need gratification and acceptance constructs. The findings can be used to encourage pregnant women to use this cost-effective method of music in their daily life to reduce their stress, anxiety and depression. Further research is needed to test the long-term benefits.</td>
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<td>The aim of this study was to examine how the experience of singing play songs and lullabies contributes to early mother-infant attachment.</td>
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<td>A total of twenty-three healthy mother-infant dyads were recruited. Twelve were interviewed about their subjective experience of singing interactions. Eleven were interviewed about their subjective experience of non-singing play interactions. The interviews were transcribed and analysed</td>
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This controlled trial provides preliminary evidence that two-week music therapy during pregnancy provides quantifiable psychological benefits. Relevance to clinical practice. The findings can be used to encourage pregnant women to use this cost-effective method of music in their daily life to reduce their stress, anxiety and depression. Further research is needed to test the long-term benefits.
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<td>(de l’Etoile, 2012)</td>
<td>This study explored responses to infant-directed (ID) singing in infants of mothers with and without depressive symptoms under two conditions: mother sings to infant, and stranger sings to infant.</td>
<td>Sixteen, 3–9-month-old infants of mothers with depression were matched by age and gender to sixteen infants of mothers without depression. Infant gaze responses toward each singer were coded from video and ranged from most negative to most positive, in the order of roaming, averted, neutral, intermittent and sustained.</td>
<td>Mothers’ depression status had no effect on infant gaze response toward ID singing from mother or stranger. During ID singing from mother, infants displayed high levels of either neutral or sustained gaze. In response to ID singing from strangers, infants demonstrated sustained gazes more than any other gaze type. Infants also showed significantly more roaming and neutral gaze toward mother than stranger, and used significantly more averted and sustained gaze with stranger than mother.</td>
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<td>(de l’Etoile &amp; Leider, 2011)</td>
<td>The purpose of this study was to explore the relationship between mothers’ depressive symptoms and the acoustic parameters of infant-directed (ID) singing.</td>
<td>Participants included 80 mothers and their 3- to 9-month-old infants. A digital recording was made of each mother’s voice while singing to her infant.</td>
<td>Findings indicate that infants of depressed mothers did not display a depressed interaction style with their mother or with a stranger during ID singing. Additionally, infants in both groups appeared capable of discriminating their mother from a stranger. ID singing appears to enhance face-to-face interaction such that infants can experience self-regulation, even when mothers have depression. Findings support the idea of combining ID singing and interaction coaching as a therapeutic intervention for mothers with depression and their infants.</td>
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Extraction and analyses of vocal data revealed a main effect of tempo, meaning that as mothers reported more depressive symptoms, they tended to sing faster to their infants.

Additionally, an interaction effect indicated that mothers with depressive symptoms were more likely to sing with tonal key clarity to their male infants. These findings suggest that as mothers experience depressive symptoms, their ID singing may lack the sensitivity and emotional expression that infants need for affect.
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<td>(Erkkilä et al., 2011)</td>
<td>To determine the efficacy of music therapy added to standard care compared with standard care only in the treatment of depression among working-age people.</td>
<td>Participants (n = 79) with an ICD–10 diagnosis of depression were randomised to receive individual music therapy plus standard care (20 bi-weekly sessions) or standard care only, and followed up at baseline, at 3 months (after intervention) and at 6 months. Clinical measures included depression, anxiety, general functioning, quality of life and alexithymia.</td>
<td>Participants receiving music therapy plus standard care showed greater improvement than those receiving standard care only in depression symptoms (mean difference 4.65, 95% CI 0.59 to 8.70), anxiety symptoms (1.82, 95% CI 0.09 to 3.55) and general functioning (–4.58, 95% CI –8.93 to –0.24) at 3-month follow-up. The response rate was significantly higher for the music therapy plus standard care group than for the standard care only group (odds ratio 2.96, 95% CI 1.01 to 9.02).</td>
<td>Individual music therapy combined with standard care is effective for depression among working-age people with depression. The results of this study along with the previous research indicate that music therapy with its specific qualities is a valuable enhancement to established treatment practices.</td>
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<td>(Kushnir, Friedman, Ehrenfeld, &amp; Kushnir, 2012)</td>
<td>Listening to music has a stress-reducing effect in surgical procedures. The effects of listening to music immediately before a caesarean section have not been studied. The objective of this study was to assess the effects of listening to selected music while waiting for a caesarean section on emotional reactions, on cognitive appraisal of the threat of surgery, and on stress-related physiological reactions.</td>
<td>A total of 60 healthy women waiting alone to undergo an elective caesarean section for medical reasons only were randomly assigned either to an experimental or a control group. An hour before surgery they reported mood, and threat perception. Vital signs were assessed by a nurse. The experimental group listened to preselected favourite music for 40 minutes, and the control group waited for the operation without music. At the end of this period, all participants responded to a questionnaire assessing mood and threat perception, and the nurse measured vital signs.</td>
<td>Women who listened to music before a caesarean section had a significant increase in positive emotions and a significant decline in negative emotions and perceived threat of the situation when compared with women in the control group, who exhibited a decline in positive emotions, an increase in the perceived threat of the situation, and had no change in negative emotions. Women who listened to music also exhibited a significant reduction in systolic blood pressure compared with a significant increase in diastolic blood pressure and respiratory rate in the control group. Listening to favourite music immediately before a caesarean section may be a cost-effective, emotion-focused coping strategy.</td>
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<td>(Lai et al., 2006)</td>
<td>The purpose of this randomized controlled trial was to investigate the influences of music during kangaroo care (KC) on maternal anxiety and preterm infants’ responses. There are no experimental studies that explore the</td>
<td>Purposive sampling was used to recruit 30 hospitalized preterm infants body weight 1500 gm and over, gestational age 37 weeks and lower from two NICUs. Mother–infant dyads were randomly assigned to the treatment and the control group using permuted block randomization stratified on gender. There were 15 mother–infant dyads in each group. Subjects in the treatment</td>
<td>The results revealed that there were no significant differences between the two groups on infants’ physiologic responses and the values were all in the normal range. However, infants in the treatment group had more occurrence of quiet sleep states and less crying ($p &lt; 0.05 – 0.01$). Music during KC also resulted in significantly lower maternal anxiety in the treatment group ($p &lt; 0.01$). Maternal state</td>
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<td>influences of combination of music and KC on psychophysiological responses in mother–infant dyads.</td>
<td>dyads listened to their choice of a lullaby music during KC for 60 min/section/day for three consecutive days. Control dyads received routine incubator care. Using a repeated measures design with a pre-test and three post-tests, the responses of treatment dyads including maternal anxiety and infants’ physiologic responses (heart rate, respiratory rate, and O2 saturation) as well as behavioural state were measured.</td>
<td>anxiety improved daily, indicating a cumulative dose effect. The findings provide evidence for the use of music during KC as an empirically-based intervention for behavioural state stability and maternal anxiety in mother–infant dyads.</td>
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<td>(MacKinley &amp; Baker, 2005)</td>
<td>As active song singing is known to decrease feelings of fatigue, anger, tension, and confusion in nonclinical mothers, it may follow that when mothers sing to their infants there is a corresponding change in their own feelings, moods, and perceptions of coping.</td>
<td>A pilot study conducted with eighteen first-time mothers and their babies called Sing, Soothe, and Sleep. The project evaluated the effects of a six-week singing program on mothers and whether singing lullabies to infants helps mothers cope with the demands of motherhood and whether it positively affects their mood and mental health. Further, the pilot study examined whether singing enables mothers to experience more pleasure with their babies during bedtime and their experiences of motherhood overall. Data collected throughout the six-week</td>
<td>This study has shown that in using lullaby singing to put their babies to sleep mothers experienced a decrease in anxiety and stress and an increase in feelings of success, empowerment, and control. The results of this study suggest that lullaby singing has the potential to be used as a preventative measure in what could otherwise become a spiralling cycle of negative feelings leading to the potential for postnatal depression and mother-infant detachment.</td>
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<td>(Milligan et al., 2003)</td>
<td>We explored the relationship between vocal expressiveness in song and maternal attachment representation.</td>
<td>Mothers (N = 36), classified as Autonomous, Dismissing, or Preoccupied, sang a play song of their choice in their 6-month-old infants' presence and absence. Raters (N = 50) who were naive to maternal attachment classifications listened to excerpts of each song rendition and rated mothers' emotional involvement.</td>
<td>Mothers, regardless of their attachment classification, sang more expressively in their infants' presence than otherwise. Unique patterns of vocal expressiveness were associated with different maternal attachment classifications, but only under conditions of infant distress. Unlike Autonomous and Preoccupied mothers, who sang less playfully to distressed than to non-distressed infants, the playfulness of Dismissing mothers' performances was unrelated to infant affect.</td>
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These findings support the hypothesis that maternal attachment influences the nature of emotive vocal communication, but only under conditions of infant.

(Nicholson, Berthelsen, Abad, Williams, & Bradley, 2008)  
The effectiveness of a 10-week group music therapy program for marginalized parents and their children aged 0–5 years was examined.  
Musical activities were used to promote positive parent–child relationships and children’s behavioural, communicative and social development. Participants were 358 parents and children from families facing social disadvantage, young parents or parents of a child with a disability.  
Significant improvements were found for therapist-observed parent and child behaviours, and parent-reported irritable parenting, educational activities in the home, parent mental health and child communication and social play skills. This study provides evidence of the potential effectiveness of music therapy for early intervention.

(Procelli, 2005)  
This study examined the effects of music therapy and relaxation techniques with first time mothers who were breastfeeding.  
Dependent variables were behaviour state of the mother during breastfeeding, behaviour state of the infant during breastfeeding, the mother’s self-reported perception of anxiety and relaxation during breastfeeding, and the mother’s perception of breastfeeding and her use of music one week post discharge. Subjects were sixty (N=60) women who had chosen breastfeeding as their preferred feeding method for their infant. Between 24-48 hours after giving birth to their infant, subjects were randomly assigned to either an experimental group (N=30) who received Results showed a statistically significant difference between the behaviour-state of the mothers during their breastfeeding attempt. The experimental group displayed significantly less anxiety-related behaviours and more behaviour associated with relaxation and comfort. There was no significant difference between the behaviour-state of the infants during breastfeeding. Data from self-report surveys revealed that mothers in the experimental music group reported feeling significantly more relaxed and less anxious after breastfeeding in the hospital then did the
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<td>(Robb, 1999)</td>
<td>Mother-infant communication that satisfies both partners exhibits various musical elements. In mothers suffering from postnatal depression, qualities of rhythmic attunement, reciprocity, and overall satisfaction with the interaction all decline.</td>
<td>Music therapy prior to breastfeeding or a no music control group (N=30).</td>
<td>No significant difference was found between groups based on mothers’ perceptions of breastfeeding one week post hospital discharge. Additional data were collected for further analysis and implications are discussed.</td>
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<td>Based on a case study, a detailed acoustic analysis is provided of the vocal interactions between a depressed mother and her infant at eight weeks and six months of age, and these are compared with the same analysis of a healthy dyad at matching ages.</td>
<td></td>
<td>Results showed the depressed mother to produce quieter, lower-pitched vocalizations, punctuated by longer pauses. Disruption was also evident in the depressed mother’s turn-taking behaviour. Matching of pitch, low arousal, less “joining in” and negative mood states in the infant of the depressed mother suggested corresponding low affect in the baby. These characteristics of the depressed dyad’s communication improved as clinical symptoms declined. Both dyads showed periodicity in timing of interactions, but this was considerably slower and less coordinated in the depressed pair. The control dyad produced more evidence of reciprocal, happy communication with regular timing and “singing” voice quality. These results present preliminary evidence of the importance of objectively defined features of communicative musicality in healthy, reciprocal</td>
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<td>(Tornel et al., 2003)</td>
<td>This study attempted to achieve specific effects with different kinds of music in mother with different kinds of depressive symptoms. Including intrusive versus withdrawn interaction styles and intrusive versus withdrawn scores on the Behaviour Inhibition and Behaviour Activation System Scale (BIS/BAS).</td>
<td>The EEG patterns of 48 intrusive and withdrawn mothers with depressive symptoms were assessed following a 20-minute music session to determine if the music had mood-altering effects. Half the mothers listened to classical music while half listened to rock music.</td>
<td>Intrusive mothers were expected to have more positive responses and more symmetrical EEG following the calming classical music, while withdrawn mothers were expected to have a more positive response and symmetrical EEG following the energizing rock music. Although more positive EEGs were noted for rock music in both groups, only the withdrawn mothers showed a significant change in EEG toward symmetry following rock music, and only the intrusive mothers showed a decrease in cortisol levels following the rock music. Their State Anxiety Inventory (STAI) anxiety levels also decreased, while the Profile of Mood States (POMS) depressed mood levels decreased significantly for all four groups following music.</td>
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<td>(Tseng et al., 2010)</td>
<td>This Taiwan study investigated what effect listening to specially selected, relaxing music at home, on a self-regulated</td>
<td>A randomised clinical trial. Seventy-seven postpartum women were randomly assigned to an experimental group (n = 37) and a control group (n = 40). The experimental group listened to</td>
<td>After controlling the pre-test scores and educational level of mothers, which was a significant covariate, there were no significant differences in the post-test levels of perceived stress and state anxiety between the two</td>
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<td>basis, had on the perceived stress and state anxiety of postpartum women.</td>
<td>music at home for at least 30 minutes a day over two weeks and received regular postpartum care. The women in the control group received regular postpartum care only. The Perceived Stress Scale and State Anxiety Inventory were used to measure outcomes.</td>
<td>groups. This study does not provide evidence that preselected designer music reduced stress and anxiety levels among postpartum women. Despite the absence of significant findings, there are lessons that professionals may find useful. It is recommended that future studies take more account of the stress factors that postpartum women are unable to control when they are listening to music at home.</td>
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<tr>
<td>Elderly</td>
<td>(Chan et al., 2009)</td>
<td>The aim of this study was to determine the effect of music on depression levels in elderly people.</td>
<td>A randomized controlled study was conducted with 47 elderly people (23 using music and 24 controls) who completed the study after being recruited in Hong Kong.</td>
<td>Blood pressure, heart rate (HR), respiratory rate (RR), and depression level variables were collected. In the music group, there were statistically-significant decreases in depression scores ($P &lt; 0.001$) and blood pressure ($P = 0.001$), HR ($P &lt; 0.001$), and RR ($P &lt; 0.001$) after 1 month. The implication is that nurses may utilize music as an effective nursing intervention for patients with depressive symptoms in the community setting.</td>
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Appendix E: Semi-structured interview question guide

Semi-structured Interview Question Guide (HCP)

Introduction:
Hello, my name is Melissa Terry. I am a graduate research student at the University of Tasmania with the University Department of Rural Health. Thank you for taking the time to meet with me today. I would like to talk to you today about your experiences with women who have postnatal depression, specifically in regards to your role as a Health Care Provider. The interview should take 30-60 minutes. I will be taping the session because I don’t want to miss any of your comments. I will also be taking notes during the session. All responses will be kept confidential. This means that your interview responses will only be shared within the research team. We will ensure that any information we include in our reports do not identify you. Remember, that you may end the interview or withdraw at any time.

Section I:
1. Tell me about your work in regards to Postnatal Depression (PND).
2. You have had many experiences in seeing women with PND; will you please share an example?
   • Use of screening tool? When, where?
   • How do you know when to screen? Any other times?
   • What has your experience been with screening?
   • How do women respond to being screened?
3. What happens after screening?
   • You?
   • Woman?

CLARIFY information given.

Section II:
3. What are your experiences of how women with PND are managed/supported?
   • How do you view your role?
   • Other than GP/Psychologist what other services are available?
4. What service options are there for women with mild to moderate PND?
   • Services for severe PND?
   • Are there any services that you recommend?
5. Do you have any ideas or recommendations to improve services for PND?
   • Education?
- Diagnosis?
- Support?

**CLARIFY information given.**

**Section III:**
6. Do you use music in your life? How?
   - Frequency, genre, circumstances?
   - If no, others use of music?
7. Does music impact on your daily life? How?
8. Does music impact on your mood? Can you share an example of how music has impacted your mood?
   - Positively?
   - Negatively?
   - If no, impact on others?
   - Have you ever recommended music as a mood enhancer?
9. Does music ever come up when talking to women about PND?
10. The current literature shows that research has been done and has shown positive results for music use for those in cardiac care, neonates and their parents (aids in bonding and attachment, growth and development), post-operative care, as well as those with dementia and Alzheimer’s. Would you recommend the use of music for your patients to relieve stress, anxiety or depressive moods associated with PND?

**CLARIFY information given.**

**Closing:**
Thank you for participating in the interview. Your input is greatly appreciated.

11. Is there anything further that any of you would like to add?

If there is anything further that you might like to add you are more than welcome to contact me. Also, I will be providing a transcript of this interview for you to view and edit, if you wish.

If you know of anyone who may like to also participate, our contact information is available and you are more than welcome to share it with them. We would like to have as much involvement in this research as possible.

Again, thank you for your time and participation.
## Appendix F: Research instrument guide

### Table F 1: Research instrument guide

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<thead>
<tr>
<th>Qualitative Method</th>
<th>Description</th>
<th>Advantages</th>
<th>Limitations</th>
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<tr>
<td><strong>Focus Group</strong></td>
<td>Interview with a small group of people on a specific topic; typically several groups are used to get a variety of perspectives.</td>
<td>• Can obtain information from several people at a time regarding perceptions, thoughts, feelings, and impressions;</td>
<td>• Number of questions asked and time is restrictive;</td>
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<td>• Interaction between participants may enhance the data;</td>
<td>• Management of interviews can be challenging;</td>
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<td>• Tend to be enjoyable to participants;</td>
<td>• Controversial and highly personal issues are poor topics for focus groups;</td>
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<td>• Identification of major themes;</td>
<td>• Confidentiality cannot be assured;</td>
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<td>• Flexible.</td>
<td>• Generally takes place outside the natural setting where social interactions normally occur;</td>
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<td>• Not generalizable.</td>
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<td><strong>Case Study</strong></td>
<td>A story about something unique, special or interesting—can be about individuals, organizations, programs, neighbourhoods or the like; gives the story about what happened to bring “it” about; asks what happened when, to whom, and with what consequences in</td>
<td>• Use of multiple data collection methods possible (i.e. interview, survey, document review, observation);</td>
<td>• Can be very lengthy;</td>
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<td>• Provides detailed, holistic information;</td>
<td>• Care must be taken for validity and reliability in data collection;</td>
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<td>• Good for sensitive or highly</td>
<td>• Not generalizable.</td>
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<td>Qualitative Method</td>
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<td><strong>In-depth Interview</strong></td>
<td>Intensive individual interview with a small number of participants to explore their perspectives on a particular idea, program, or situation</td>
<td>• Good for exploring issues in depth; detailed information about a person’s thoughts or behaviours; • Provide context to other data; • Offers a “larger picture”; • Generally conducted in relaxed atmosphere; • Should be used in place of focus groups if the subject of study is sensitive or highly personal.</td>
<td>• Time intensive; • Not generalizable.</td>
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<td><strong>Oral History</strong></td>
<td>Collects memories and personal commentaries of historical significance through recorded interviews; first person narratives</td>
<td>• Based on eye-witness accounts or personal experiences; • Typically used for historical events.</td>
<td>• Identification of sources can be difficult and time consuming; • Information may be obscured by bias or time frame.</td>
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<td><strong>Ethnography</strong></td>
<td>Asks “what is the culture of the group”; typically uses participant observation and intensive fieldwork.</td>
<td>• Provides a cultural perspective.</td>
<td>• Researcher must become part of the “culture” or group.</td>
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<td><strong>Narratives</strong></td>
<td>Person’s retelling of an incident or happening in his/her life.</td>
<td>• May have a therapeutic impact • Good for situations that are sensitive in nature.</td>
<td>• Person may give information that is unrelated to the research; there is no pre-determined content.</td>
</tr>
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</table>
Appendix G: In-depth interview question guide

In-depth Interview Question Guide (women)

*In-depth interviews may occur up to three (3) times with each participant over a period of three weeks.

Hello, my name is Melissa Terry. I am a graduate research student at the University of Tasmania with the University Department of Rural Health. Thank you for taking the time to meet with me today.

I would like to talk to you about your experiences as a rural Tasmanian woman with postnatal depression.

The interview should take 60-90 minutes. However, if we run out of time there is an option of making a follow-up appointment(s). I will be taping the session because I don’t want to miss any of your comments. I will also be taking notes during the session. Further, I may need to clarify what has been said in order to make sure I understand what you are telling me.

Because of the nature of the topic it is expected that you may experience a range of feelings and emotions. This is perfectly normal; however, if it becomes too much we can suspend or terminate the interview.

All responses will be kept confidential. This means that your interview responses will only be shared within the research team. We will ensure that any information we include in our reports do not identify you. Remember, you do not have to talk about anything you don’t want to and you may end the interview or withdraw at any time.

Section I (Focused Life History)

Background:

1. Please briefly tell me about yourself. (i.e., family, marriage, work, pregnancy, etc.)

2. What was it like/ how did it feel to be expecting a baby?
   - What expectations did you have about parenthood during your pregnancy?
   - Did you ever think about depression before/after the birth of your baby?
- Did your midwife, obstetrician or antenatal class ever discuss depression during your pregnancy? After the birth of your baby?

- Did you feel that some of the things you were experiencing were a normal part of early parenthood?

3. How do you think the media views women with PND? How does this affect you?

4. How did you feel telling your partner, family and friends about how you were feeling? Why/How long did it take to tell them?

CLARIFY the information given.

Section II (Details of the Experience)

Postnatal Depression:

1. How much do you think your mood and the way you were feeling affected your motivation to seek help?
   - How much do you think the depression itself contributed to your way of dealing with the problem?
   - Do you think your symptoms made it harder for you to seek help?
   - If others had recognised your problems would this have made a difference?

2. Describe some of the treatment options you sought to help you with your mood.
   - What was appealing about these options?
   - What did you think they would involve?

3. When were you diagnosed? By whom?

Please tell me about your experience regarding your diagnosis of PND?
- Symptoms?
- Method of Diagnosis?
- Treatment options?
   - What barriers were there to getting treatment/support you want?
   - Do you think it would be easier to seek treatment if someone came to see you in your home?
   - Did you try to access help for yourself through a service for your baby? (i.e. GP visit for baby or FCHN visit for baby)
   - What services do you know of that are available to women with PND?

4. Is there one type of treatment/support you prefer over another? Why?
• For the treatment/support you do like, what is it about them that make them appealing? For the treatment/support you dislike, what is it about them that you dislike?

5. Is there anything further that you feel may have helped?

6. Would you rather access information about postnatal depression from someone in person, from the internet or from a written brochure? Other methods?

**CLARIFY the information given.**

**Section III**

**Music:**

1. Do you use music in your life? How?
   • Frequency, genre, circumstances?
   • If no, use of music in others?

2. Does music have influence in your daily life? How?

3. Has music impacted your mood? Can you share an example of how? Others?
   • Positively?
   • Negatively?
   • Have you ever used music as a mood enhancer?

4. Currently research is showing positive results for music use for those in cardiac care, neonates and their parents (aids in bonding and attachment, growth and development), post-operative care, as well as those with dementia and Alzheimer’s. Would you consider the use of music to relieve stress, anxiety or depression?

**CLARIFY the information given.**

**Closing:**

Thank you for participating in the interview. Your input is greatly appreciated. We have talked about a difficult experience and that may have raised issues for you. Are you ok? Remember to tap into your regular supports. We have also provided a leaflet with a list of options available to support you.

5. Is there anything further that you would like to add?

If there is anything further that you might like to add you are more than welcome to contact me. Also, I will be providing a transcript of this interview for you to view and edit, if you wish. If you decide to withdraw from the study, please contact us within 28 days in order to withdraw all information collected.
If you know of anyone who may like to also participate, our contact information is available and you are more than welcome to share it with them. We would like to have as much involvement in this research as possible.

If you wish to enter the lucky draw please fill out the form and mail it to us in the envelope provided. The draw will be held on _____ (to be confirmed). We will contact you if you have won and the prize ($100 gift card/store voucher) will be mailed to you.

Again, thank you for your time and participation.
Appendix H: PND support services information leaflet

Symptoms of PND
- Loss of control when usually able to manage
- Inability to do household tasks
- Tearfulness for no apparent reason
- Overwhelming feeling of anxiety
- Poor appetite or overeating
- Fear or being alone
- Obsessional thoughts or activities
- Suicidal thoughts, plans, or actions
- Poor self-image
- Inability to think clearly or find the right words
- Exhaustion or over-concern about lack of sleep
- Depressed mood
- Loss of sexual interest
- Fear of social contact
- Exaggerated fears about health and safety of self, baby or partner.
Where to go for help

Postnatal depression is the most common ‘complication’ following childbirth. One in seven women will experience some level of PND however, many go undiagnosed.

PND usually occurs between four and six weeks after delivery however, it may be diagnosed anytime within three years of giving birth.

PND may last for weeks, months or even years if left untreated.

What do I do now?

If you have experienced many of these symptoms most of the time for a period of longer than two weeks you may be experiencing PND. For further information or support please contact any of the following:

• Your General Practitioner
• Your local Child and Family Health Nurse
• Parenting Line 1300 808 178
• PANDA (Post and Antenatal Depression Association)
  Helpline 1300 726 306
• Mental Health Services
  Helpline 1800 332 368
• Beyond Blue 1300 224 636
• Walker House Parenting Centre
  Contact: Angela Beswick – perinatal mental health coordinator
  (03) 63266188
• Parenting Centre – North West
  (03) 6434 6201
• Lifeline 13 11 14

• Headspace (for mums aged less than 25 years)
  Launceston area (03) 6335 3100
  Devonport area (03) 6424 2144

WEBSITES

• www.headspace.org.au
• www.beyondblue.org.au
• www.panda.org.au
• www.findapsychologist.org.au