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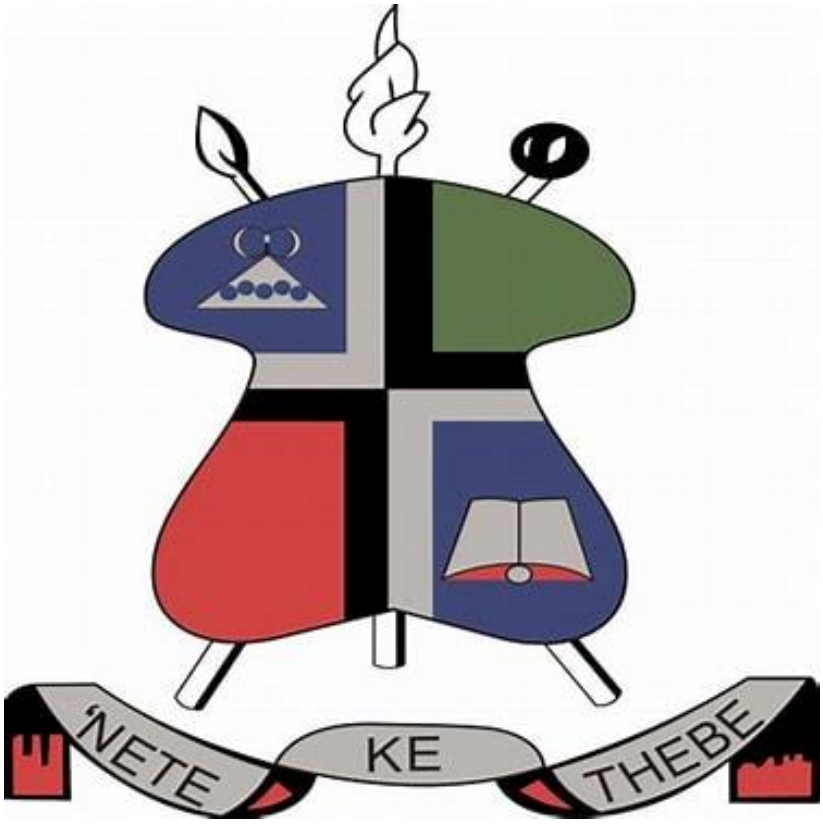

EXPLORING PERCEIVED FACTORS OF NURSE MIDWIVES REGARDING POSTPARTUM DEPRESSION IN QUTHING HOSPITAL, LESOTHO

BY

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DECLARATION

I, confirm that this (exploring perceived factors of nurse-midwives regarding postpartum depression in Quthing District Lesotho, a descriptive qualitative study), study is my work, and all sources used have been reflected and acknowledged in the references. The study is submitted for the degree of Master of Nursing Science (Advanced Midwifery).

I confirm that this study has not been submitted for any other professional qualification.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS

ACOG : American College of Obstetrics and Gynecologists

CBT : Cognitive Behavioral Therapy

CDC : Center for Disease Control and Prevention

DSM-5 : Diagnostic and Statistical Manual of Mental Disorders (DDSM–5

EPDS : Edinburgh Postnatal Depression Scale

EBR : Evidence Based Research

GP : General Practitioner

HIV : Human Immunodeficiency Virus

IPT : Interpersonal Psychotherapy

LANC : Lesotho Ante-Natal Care

LOR : Lesotho Obstetric Record

IRB : Institutional Review Board

MCH : Mother and Child Health

MoH : Ministry of Health

NUL : The National University of Lesotho

PPD : Postpartum Depression

PMH : Perinatal Mental Health

SOP : Standard Operating Procedure

USA : United States of America

USPSTF : United States Preventive Services Task Force

VCP : Videoconferencing Psychotherapy

WLHIV : Women living with HIV

ABSTRACT

Background: Despite the increasing awareness of Postpartum Depression (PPD) worldwide, health providers continue to ignore the impact of PPD on the mother and child during the postnatal period. Nurse-midwives are the first care providers and have contact with women during pregnancy and after birth. They must be able to identify women at risk and those who already have PPD and educate women and their relatives about PPD and risk factors.

Purpose: The purpose of this study was to explore perceived factors of nurse midwives regarding PPD in Quthing District.

Methodology: This study used a qualitative, descriptive, explorative, and contextual design. Data collection was conducted through individual interviews and data saturation was reached on the ninth participant. An audio - recorder was used to record interviews from purposefully selected participants. The study participants were nurse-midwives working at Quthing Hospital in the Quthing District. The data organization was done, followed by transcribing the audio data into text, and lastly thematic data analysis.

Results: Thematic analysis of the data resulted in themes and sub-themes. The six themes which emerged from the study findings are empowerment, stigma, screening /assessment of PPD, family support, lack of resources and home visits. Participants had different perceived factors regarding PPD at Quthing District.

Conclusion: The nurses-midwives' perceived factors regarding PPD were expressions of empowerment, stigma, screening /assessment of PPD, family support, lack of resources and home visits. The research findings have significant implications for decision-makers and policymakers to solve problems in maternal mental health service provision. Nurse-midwives perceived that they could be better supported to carry out their important work by having access to continued education, training, and mentorship regarding PPD.

Keywords: Nurse-midwives, Postpartum depression and Perceptions

CHAPTER 1

INTRODUCTION

1.1. Introduction and Background

Maternal care during the postpartum period is crucial to both the mother and child's physical, emotional and psychological well-being (Saharoy et al., 2023). Lopez-Gonzalez and Kopparapu (2022) asserted that maternal care encompasses various aspects such as providing a nurturing and supporting environment, establishing healthy routines, promoting breastfeeding, and addressing the mother's mental health needs. However, Postpartum Depression (PPD) is a common social health problem that affects not only the mother and newborn but extends to other family members as well in various aspects of their lives (Alshikh et al., 2021). PPD is defined as a major depressive episode within four (4) weeks of delivery and is characterized by the presence of nine symptoms of depression, which appear almost every day and interfere with the mother's daily activities (Mughal et al., 2022). The DSM-5 revealed that PPD occurs when a woman experiences five or more of the following symptoms: depressed mood which can be feeling sad or hopeless, lowered ability to experience pleasure in activities previously enjoyed, significant weight loss and gain not influenced by diet, insomnia or hypersomnia, increased or decreased speed of movement, low energy in most days, feeling of guilt, difficulty in concentration and suicidal thoughts or harming the baby (Poreddi et al., 2021).

Globally, more than 300 million people suffer from depression (4.4% of the world's population) (World Health Organization 2017) with an increase of 18.4% having been reported in the number of people with depression between 2005 and 2015 (Hernández et al., 2020.) Moreover, the WHO (2017) further reports that PPD is one of the world's increasing epidemics and affects approximately 11% - 42% of women globally in the postpartum period. In addition, PPD is explained as a debilitating mental disorder with a prevalence between 5% and 60.8% worldwide (Ghaedrahmati et al., 2017). The United States Center for Disease Control and Prevention (CDC) stated the prevalence rate of PPD was 13% and this does not lessen the nurse-midwives' responsibilities to prevent the effects of PPD through health education, screening and referral (Alba, 2021).

Slomian et al. (2019) stated that PPD is a serious mental health problem. Saharoy et al. (2023) indicated that PPD can result in diminished quality of life, hindering bonding with the infant and challenges in fulfilling essential maternal care responsibilities. In addition, PPD can adversely affect the mother's mental health and elevate the risk of enduring mental health disorders (Slomian et al., 2019). Furthermore, Saharoy et al. (2023) conveyed that for infants, being exposed to a mother experiencing PPD, could harm their emotional, cognitive and social development. This is in line with Murray and Cooper (1997) cited in Mundorf et al. (2022), who asserted that disrupted regular infant engagements reduce the infant's cognitive, social and emotional development with profound effects on an adulthood onset. Misri et al. (2006) cited in Slomian et al. (2019), stated that the risks to children of untreated depressed mothers (compared to mothers without PPD) included problems such as poor cognitive functioning, behavioral inhibition, emotional maladjustment, violent behaviour, externalizing disorders, psychiatric and medical disorders in adolescents.

Screening of PPD is an essential aspect of comprehensive postnatal care and involves the systematic evaluation of the new mother's mental health status to identify those experiencing PPD (Saharoy et al., 2023). Ahlqvist-Bjorkroth et al. (2019) reported that screening for PPD, coupled with a family-centered intervention decreased depressive symptoms among mothers of very preterm infants and improved the lives of many mothers as well as their infants. Nurse-midwives have an opportunity to improve the lives of infants and mothers through screening mothers for PPD and this emphasizes the need to screen mothers, not only early in the postpartum period, but also throughout the infant's first year of life (Chambers, Denne & On Behalf of the Pediatric Policy Council, 2019). Universal screening for PPD is crucial for early detection, interventions and support for women (Brann et al., 2021).

Psychotherapeutic interventions such as Cognitive Behavioral Therapy (CBT) and interpersonal therapy have effectively treated PPD and are interventions designed to address the specific challenges and symptoms experienced by mothers during the postpartum period (Stamou et al., 2021). Saharoy et al. (2023) from study done in London asserted that CBT is widely utilized as an approach that identifies and modifies negative patterns of behavior and beliefs that contribute to developing and maintaining PPD. Van Lieshout et al. (2022) stated that, with limited formal psychotherapy training, nurse-midwives were capable of delivering effective group CBT for PPD clients, that lead to clinically significant improvements in PPD and improved mother-infant

bonding. Dennis et al. (2020) also stated that nurse-midwives were able to deliver CBT to PPD clients successfully by telephone. Amani et al. (2021) detailed that a peer-delivered group CBT for PPD effectively treats symptoms of PPD and anxiety and may lead to improvements in the mother-infant relationship. This intervention is an effective and potentially accessible treatment that meets the needs and wants of mothers with PPD (Amani et al., 2021). Women treated with telephonic Interpersonal Psychotherapy (IPT) had significantly lower levels of anxiety at all follow-up time points, and nurse-delivered telephonic IPT was an effective treatment for diverse urban and rural women with PPD and increased treatment accessibility (Dennis et al., 2020).

Home visit programs are designed to provide personalized support and guidance to mothers in the comfort of their own homes, where nurses visit mothers regularly to provide education, emotional support, and practical assistance (Saharoy et al., 2023). Home visit programs can play an important role in identifying maternal depression, making successful referrals, and alleviating symptoms (Tandon et al., 2020). Moreover, Ammerman, et al. (2010) cited in Tandon et al (2020), stated that due to high rates of postpartum depression found among home visits clients, as well as the significant number of women at risk for PPD, home visit model developers and researchers have identified addressing PPD as a critically needed and highly effective enhancement to home visit programs. Women must attend a postpartum checkup, but due to funding limitations, home visitation programs are generally targeted towards families with particular risk factors including low socio-economic status, young parents, parents previously engaged in the child welfare system, and parents with multiple births close together (Molina et al., 2020). However, another study showed that during home visiting, when mothers with depression are referred to mental health treatment and begin services, depression severity decreases (Peacock-Chambers et al., 2022).

The study, conducted by Arifin et al. (2021) in Malaysia, found that nurses reported to have a lack of knowledge of PPD, with 50% of nurses confused about PPD and postnatal blues. Moreover, the same study indicated that nurse-midwives reported to recognize their role in the care and treatment of the women with PPD, and many agreed on limited resources within the health system and poor understanding of PPD among women (Arifin et al., 2021). The study, done on nurses in Nigeria by Diorgu (2019), showed that PPD exists in their environment but is often missed or masked as the symptoms of malaria, even though it is the most common complication of childbirth, and has adverse effects on the mother, the newborn, as well as the

family unit. Moreover, Diorgu (2019) stated that nurses screening for depression may not recognize that malaria and typhoid can be manifestations of depression. Nurse- midwives reported implications for nursing practices to an increased need for re-orientation on the signs and symptoms of PPD in relation to the African context (Diorgu, 2019). Similarly, in Northwestern Nigeria, nurses viewed PPD as a condition that needs screening to improve the detection rate and lead to early initiation of treatment (Mohammed-Durosinlorun et al., 2022).

A study done in Malawi estimated PPD prevalence in perinatal WLHIV to be 10.7%-14.2% and regional Sub-Saharan studies suggest that the prevalence of post-natal depression in WLHIV is much higher (Kulisewa et al., 2022). Furthermore, another study done in Durban, South Africa, showed that nurse–midwives also reported a lack of availability of referral pathways where there should be registered psychologists, medical officers, or registered mental health nurses (Maphumulo & Bhengu, 2019). The occurrence of PPD rates varies from one region to another depending on the socioeconomic status and other determinants of health (Mughal et al., 2022). Therefore, in Lesotho, there is no evidence-based research regarding perceptions of nurse-midwives on PPD. From the researcher's work experience, there are no PPD screening tools and women are discharged with undiagnosed PPD. Currently, there are no referral Standard Operating Procedures (SOPs) or policies for women with PPD, hence why the study aimed to explore the perceptions of nurse-midwives regarding PPD at Quthing Hospital, Lesotho.

1.2. Problem statement

PPD is classified as one of the major psychological disorders that affect the mother and the baby, underdiagnosed and remains the most common complications of childbirth and the most common perinatal psychiatric disorder, with women at the greatest risk during their first postpartum year (Gurun et al., 2019).

The Lesotho Ante-Natal Care (LANC) Guidelines (Ministry of Health, Lesotho, 2020) recommended that a pregnant woman has to have eight (8) focused visits of which the initial visit occurs before or at 12 weeks of gestational age and subsequently at 20, 26, 30, 34, 36, 38 and 40 weeks. Currently, the Lesotho Post Natal Care (PNC) registers with its SOPs have no information on mental health nor routine screenings done and no standard PPD screening tool available, or attached to the Lesotho Obstetric Record book (LOR), to support nursing practices.

Therefore, women are discharged without being diagnosed or screened for PPD. From the researcher's work experience, there are no clear referral pathways for women with complications post-delivery. For example, should they need counselling post-delivery, there are no psychiatric nurses or psychologists placed in hospitals in the Quthing District. There is a lack of Evidence-Based Research (EBR) regarding nurse-midwives' perceptions of PPD in Lesotho, hence there was a need to explore nurse- midwives' perceptions regarding PPD in the Quthing Hospital, Lesotho.

1.3. Aim of the study

The aim of this study was to explore the perceived factors of nurse-midwives regarding PPD in Quthing Hospital, Lesotho.

1.4. Objectives

- To explore and describe the perceptions of nurse-midwives regarding PPD at Quthing Hospital, Lesotho

- To describe factors that influences the management of PPD at Quthing Hospital, Lesotho.

1.5. Research questions

- What are the perceptions of nurse-midwives regarding PPD at Quthing Hospital, Lesotho?
- What are the perceptions of nurse-midwives regarding the management of PPD at Quthing Hospital, Lesotho?
- What are the factors that influence the management of PPD at Quthing Hospital, Lesotho?

1.6. Significance of the study

- **Nursing research:** Nursing research is important to improve nurses' knowledge and to guide and improve nursing practice. This study is important as it will help develop new ideas and screening tools for PPD and its associated risk factors and develop new treatments and care, new policies, and building awareness of PPD in society.
- **Nursing education:** From the research findings, nurse educators and nurse supervisors can use the results to review the curriculum and contribute to module development and structure nursing education programs to address PPD. The findings will further help in the development of policies, procedures, assessment and documentation tools.
- **Nursing practice:** Having the knowledge of PPD and its associated risk factors will help nurse-midwives to identify women at risk, diagnose those that show symptoms, and treat them accordingly or do referrals where needed, as they are the ones who are involved in caring for mothers postpartum. This study will help nursing practice by the development of PPD screening tools to help improve women's health and avoid PPD-related deaths and complications, as well as improve nurse-midwives' practice in PPD and associated risks.
- **Community nursing**

  Community health nursing is rapidly growing that aims to improve the health and well-being of individuals in a certain geographic area. Community nurses are instrumental in maintaining the health of a community and advocating for the needs of its citizens (Alabama Department of Public Health, 2021). Therefore, this study will create awareness of PPD and its symptoms, referral pathways, and management in the community settings.
- **Nursing policy**

  Policy in nursing determines much of what nurses do on a daily basis, which means it is important for nurses to engage in policy making so that they understand their own practice. This study will help to facilitate equitable access to all perinatal mental health services and interventions, policy making and standardized clinical guidelines regarding

PPD, funding and service delivery frameworks as a response to nursing practice regarding PPD.

1.7. Definition of concepts

Nurse-midwives

Nurse-midwives are nurses who practice or provide obstetrical care including prenatal, intrapartum, postpartum, and newborn care as well as indicating the relevance of quality care to women in the delivery process (Oliveira et al., 2019). In this study, registered nurse- midwives are nurses that are trained to carry out midwifery practice, from antepartum to postpartum care.

Postpartum depression

Postpartum depression is defined as a major depressive episode with the onset of pregnancy or within four weeks of delivery, with at least five major depressive symptoms (Mughal et al., 2022). In this study, nurse-midwives' perceptions regarding PPD were explored and described. According to this study, nurse-midwives defined PPD as the rarely reported condition which has limited supporting tools and they further explained that PPD affects mostly teen mothers or teenage pregnancies and the grand-multiparity above the age of 45 years.

Perceptions

Perceptions are how something is regarded and understood, or an opinion or belief often held by many people and based on how they are interpreted (Cook, 2021). In this study, the nurse-midwives' opinions or thoughts regarding PPD were explored. According to this study, nurse-midwives explained their perceptions regarding PPD as a condition that has limited screening tools and a lack of information for nurse-midwives concerning management and diagnosis.

1.8. Scope of the study

This study was conducted at Quthing District to explore the perceived factors of nurse-midwives regarding PPD. The nature of the inquiry itself posed a challenge for bias as participants were purposefully selected from nurse-midwives currently working in maternity wards.

1.9. Conclusion

In this chapter, it is shown that PPD affects almost 10-15% of women worldwide and screening is recommended by clinical guidelines (Kang et al., 2019), as explained in the introduction. The background, problem statement, purpose of the study with research objectives and research questions, significance of the study and definition of concepts were discussed in this chapter. Hence, perceptions of nurse-midwives regarding PPD is important, especially in Lesotho to rule out gaps and promote patient care in maternal mental health.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

A literature review shares the written summary of journal articles, books, and other documents that describe the past and current state of the information on the research topic (Creswell et al., 2020). Polit and Beck (2020) explained a literature review as a summary of the state of evidence on the research problem and it tells readers the current knowledge on the topic and lights up the significance of the new study. The literature in this chapter is organized by headings and subheadings and was collected from Google Scholar journal articles, Science Direct articles and books, and government publications. Therefore, the collected information will portray the nurse-midwives' perceptions regarding PPD and its associated risk factors from other studies and related studies done previously.

2.2. Perceived factor of nurse-midwives regarding PPD

The sub heading below is a perceived factor explained by nurse-midwives regarding PPD as a condition that has limited screening tools and a lack of information for nurse-midwives concerning management and diagnosis**.**

2.2. 1. Nurse-midwives' knowledge and skills regarding PPD.

Early PPD diagnosis is difficult as the condition is usually not recorded and is often not detected by nurse-midwives in the postnatal period, hence it is recommended that obstetric providers examine patients at least once in the perinatal period for symptoms of depression and anxiety using a standardized tool and additional screening during the postpartum period (American College of Obstetricians and Gynaecologists [ACOG] Committee Opinion, 2018). Among the seven standardized screening tools that ACOG (2018) recommended, which are used worldwide, the Edinburgh Postnatal Depression Scale (EPDS) is easy to use, consumes less time, and includes sensitive and specific information needed for screening (El-Den et al., 2022). In a study done in Sri Lanka, it was viewed that nurse-midwives had limited skills regarding PPD and the

majority had knowledge deficits regarding risk factors and PPD detection using EPDS (Kumarasinghe et al., 2022).

Ng'oma et al. (2019) stated that nurse-midwives perceived PPD as a condition that is not recognized in time, hence a gap in early diagnosis and treatment due to the short time they stay in postnatal wards. The other study found that of 108 nurse-midwives' participants, 50.6% of them know general information about PPD risk factors (81,3%), symptoms(71.3%), and complications (63.9%) , and perceived that limited time and unavailable resources hamper their ability to assist women accordingly (Kang et al., 2019). Another study revealed that nurse-midwives understanding of PPD was superficial in more than half of the midwives and nurses participating in the study, hence resulting in the need to develop and implement training programs for the prevention of PPD among medical personnel (Nechaeva et al., 2021).

Another study argued that midwives and student midwives can provide mental healthcare with positive outcomes in terms of both physical and mental health outcomes for women, evidenced by counselling interventions (Coates & Foureur, 2019). In a study done in Australia, nurse-midwives were found to be less likely to detect mental health problems, determined the need for further evaluation and perceived the EPDS as a non-useful tool (Hamideh et al., 2018). Carroll et al. (2018) mentioned that nurse-midwives provided care to women with perinatal depression in their clinical practice but perceived that their skills to manage PPD was limited, and further explained their lack of skill in opening a discussion on issues like sexual abuse, intimate partner violence, and providing information to women's partners or families. Similarly, Bina et al. (2019) reported that nurse-midwives' knowledge and confidence are important factors in the provision of adequate support in perinatal care. Nurse-midwives' knowledge about PPD and their willingness to provide education to women was found to have a positive impact on the women's mental health in the postnatal wards and findings suggest that nurse-midwives are more likely to educate women about PPD when they are more knowledgeable of the condition (Lewis, 2020).

2.3. Factors influencing PPD

Clinical diagnosis of PPD was significantly associated with the mothers' perceived social support by the husband or partner, family, and friends, HIV positive status of the women, babies who cried excessively, women with complications in pregnancy, and rural residence (Atuhaire et

al., 2021). The study done in Ethiopia identified a lack of social support as a risk factor for PPD (Wubetu et al., 2020). Women who experienced postpartum hemorrhage are more likely to present with fatigue, reduced cognitive ability, and emotional disturbances. Consequently, the breastfeeding pattern may be disturbed hence, their babies may cry excessively, and therefore women presenting with these conditions are at risk of PPD (Atuhaire et al., 2021). Caropreso et al. (2020) reported that pre-eclampsia has been shown as a risk factor for PPD, because women suffering from hypertension have high levels of serotonin in the blood and decreased serotonin levels in the brain, causing brain function disturbances, therefore leading to PPD accompanied by physical morbidity after birth. O'Connor et al. (2019) reported that low socioeconomic status, lack of social support, and bearing children during adolescence have been associated with a greater risk of developing PPD.

2.4. Perceived factors of nurse-midwives regarding the management of PPD

PPD can significantly negatively affect a mother's mental health, functioning, and quality of life (Saharoy et al., 2023). By identifying and addressing the condition, healthcare providers can help alleviate distress, provide support, and guide affected mothers toward appropriate treatment options (Hutchens & Kearney, 2020). Therefore, the subheadings below are what nurse-midwives revealed in different literatures that addressing PPD is essential for promoting the overall wellbeing of mothers.

2.4.1. Nurse-midwives training and professional development

Kumarasinghe et al. (2022) perceived that periodic training on PPD should be developed for health professionals and especially nurse-midwives who are the first point of contact with pregnant women during the antenatal, labor, and postnatal periods to improve the existing knowledge and practice regarding PPD.

2.4.2. Collaboration with other partners

Collaboration of multidisciplinary efforts among nurses, physicians, social workers, and mental health providers are very vital to a successful implementation of patient care as to improve women's quality of life with PPD and plan for smooth communicated referrals (Alba, 2021). Correspondingly, nurse-midwives perceived that PPD would be easily accepted if there is a collaboration among all stakeholders whether in a community or hospital-based and

interventions need to be implemented within the existing healthcare delivery system (Ng'oma et al., 2019).

2.4.3. Health education, screening, assessment, and counselling women in postnatal care regarding PPD management

PPD screening integration into primary care and treatment is a growing concern worldwide and many countries have developed and implemented routine screening for PPD, using a screening tool called EPDS (Skoog et al., 2022). EPDS is a self-report using a 10-item Likert-scale . EPDS is commonly used as a depression measuring tool in perinatal care, where a value of 10 or higher indicates that women might have depression (Brooke et al., 2020). Similarly, Skoog et al. (2022) explained EPDS as the world's most commonly employed screening instrument, used in connection with a clinical interview to screen for symptoms of PPD. Universal screening for PPD can increase rates of referral and service utilization, and result in improved maternal health as well as engaging the woman with appropriate support services (Reilly et al., 2020). Arefadib et al. (2021) reported that 50% of cases are missed when routine PPD screening is not done, where only one in ten women suffering from PPD will receive mental health care.

In another study, nurse-midwives perceived screening for PPD and referring depressed mothers for further assessment as part of their job responsibilities and believed that screening does not consume much time (Kang et al., 2019). Moreover, Kang et al. (2019) further explained that 64.8% of nurse-midwives were confident in recognizing PPD, and 51% of them were confident in counselling mothers with PPD and overall had positive beliefs towards their role in PPD treatment. Alba (2021) reported that health education, which includes hormonal changes in pregnancy after delivery and preparations for discharge, was found to be the initial source of information and has been shown to reduce EPDS scores, hence providing essential knowledge to mothers as well as open dialogue about stigma being vital throughout care.

Counselling-based interventions can be effective in preventing PPD using CBT and IPT approaches (O'Connor et al., 2019). The US Preventive Services Task Force (USPSTF) found convincing evidence that counselling interventions, such as CBT and IPT, are effective in preventing PPD, and women with a history of depression would benefit from counselling interventions as they are at increased risk (Curry et al., 2019). The ability of the nurse-midwives to provide postpartum patients with appropriate education regarding the risk factors and

symptoms of PPD and the importance of timely reporting, may lead to the early identification and treatment of PPD (Lewis, 2020). Additionally, adequate patient education regarding PPD increases an individual's knowledge about PPD and promotes better communication between the patient and provider (Lewis, 2020).

Nursing assessment involves gathering both objective and subjective data on family history, surgical history, medical history, and psychosocial history to evaluate the patient's health state with multiple risk factors (Toney-Butler & Unison-Pace, 2022). Nurse-midwives assessment, identification of symptoms and clinical manifestations of major depression, family history, and personal history of depression, should be well-documented as well as financial constraints and care of the child should be noted (Alba, 2021). Additionally, using screening tools objectively to assess women with PPD and actively listening to mothers' perceptions and expectations of parenthood, including any expressions of anxiety, and evaluating women's risk of PPD, is crucial (Alba, 2021).

2.5. Factors influencing nurse-midwives management of PPD

Improving access to mental health services is crucial in addressing the needs of mothers experiencing PPD and it is important to integrate mental health services into the standard postpartum care framework.

2.5.1. Organizational barriers

In the study by Coates and Foureur (2019), nurse-midwives have reported a range of organizational barriers, specifically heavy workloads, lack of time, lack of privacy and strict schedules, as hindering their ability to incorporate PPD into their practice. Higgins et al. (2018) reported that nurse-midwives are positioned to detect PPD early, but evidence showed that they are reluctant to discuss mental health issues with women during pregnancy and in the postnatal period. Nurse-midwives mentioned barriers such as lack of perinatal mental health services, absence of care pathways, heavy workload, and lack of time and privacy as organizational barriers to their daily work (Bayrampour et al., 2018). This is also supported by Arefadib et al. (2021), that nurse midwives viewed their roles in managing PPD to be influenced by the presence or absence of policies and guidelines in the health care system.

Nurse-midwives are well positioned to prevent, recognize and treat emotional disturbances during pregnancy and postpartum, but the provision of effective care has been reported to be burdened by the system, which includes lack of resources, lack of time, and unfamiliarity with screening instruments (Kumarasinghe et al., 2022). Arefadib et al. (2022) viewed that nurse-midwives practicing in communities with greater socio-economic advantage were significantly 95 % more likely to conduct mental health assessment and screening % , than nurses in disadvantaged communities where adherence to PPD screening and assessment is inconsistent due to unavailable guidelines and support to equip assessment and screening.

2.5.2. Referral power and limited mental health facilities

Nurse-midwives reported that after identifying a woman with PPD, their first step was to refer the woman to the General Doctor, as the mental health facilities and psychologists require a referral from the Doctor only. They do not get reports of the outcome of the referred woman and proper follow-up on the client (Arefadib et al., 2022). Lewis (2020) stated that Clinical Directors formulated an educational program for perinatal nursing staff based on the incidence and prevalence of PPD and issues surrounding stigma associated with PPD. Nurse-midwives were empowered to fulfil their role as primary care providers by providing health promotion, wellness education, and referrals to mental health specialists, thereby promoting the complete care of patients (Malcolm et al., 2019).

2.6. Conclusion

This chapter described the literature on perceptions of nurse-midwives regarding PPD and factors influencing management of PPD as well as management strategies that nurse-midwives use to manage PPD. The following chapter will focus on the methodology of the research.

CHAPTER 3

METHODOLOGY

3.1. Introduction

In the previous chapter, the literature review of the study was presented. In this chapter, the research design and methods are discussed in detail. The research design and methodology employed, direct the researcher in planning and implementing the study in a way that is most likely to achieve the intended goal. It is a blueprint for conducting the study (Gray, Grove and Sutherland, 2016).

3.2. Research methodology

Research methodology refers to the practical part of how the research is to be done and addresses or answers the research questions and how the researcher systematically designs a study to ensure valid and reliable results that address the research aims and objectives (Mukherjee, 2019). The methodology focused on what data to collect and what data to ignore, whom to collect data from, which sampling design, how to collect it, which data collection methods and the way to analyse the data, and which data analysis methods is used (Mukherjee, 2019). Sileyew (2019) stated that research methodology is the path through which researchers formulate their problems and objectives and present their results from the data obtained during the research study period. It encompasses the theoretical and philosophical underpinnings of the research, the research design, data collection methods, data analysis techniques, and the overall framework within which the research is conducted (Chun et al., 2019). The methodology of research provides a framework for how research was planned, conducted, and analysed and it guided researchers in making decisions about the most appropriate methods to use in their research. Research methodology shows the path through which researchers develop their problems and objectives and present their results from the data obtained during the study period (Sileyew, 2019). The research design, research paradigm, and approach, study setting, population, sample and sampling procedure employed for selecting participants, data collection, data collection process, reliability, the validity of the instrument and research rigor, data analysis, as well as ethical consideration, is discussed in the following sections.

3.3. Research paradigms

A research paradigm describes a worldview or a general perspective on the complexities of the real world (Polit & Beck, 2020). There are two nursing research paradigms, which are the positivist paradigm also known as logical positivism, which is mostly allied with the quantitative research method, while the other one, the naturalistic paradigm or constructive paradigm is mostly associated with qualitative research (Brink et al., 2018). In this study, a constructive paradigm was used as the researcher interacted with the respondents and in the belief that there are multiple realities from the respondents and the assumption that knowledge is maximized when the distance between the inquirer and the participant in the study is minimized (Polit & Beck, 2020). According to Brink et al. (2018), constructivism paradigm integrates human interest into the study and assumes that access to reality is through social structures like language, consciousness, and shared meaning, hence data collection was done from nurse-midwives with different realities and analysed.

3.4. Research design

The research design of a study influences the strategies that the researchers adopt to answer research questions and their hypotheses, and to develop a rich understanding of the phenomenon as it exists, and as it is constructed by respondents in their context (Polit & Beck, 2020). Hence this study used a qualitative, descriptive, explorative, and contextual design. Qualitative research design is defined as a type of research methodology that focuses on exploring and understanding complex phenomena and the meanings attributed to them by individuals or groups (Jain, 2023). In a qualitative study, a researcher seeks an in-depth description of the issue of interest in the study, hence this process requires a sufficient level of trust based on the high level of participants' disclosure (Creswell et al., 2020). This design is committed to examining events or experiences in their natural state and allowing a comprehensive presentation of a phenomenon in the everyday language of participants (Polit & Beck, 2020). In this study, the researcher explored and described the perceptions of nurse-midwives regarding PPD and the factors that influence nurse-midwives' management of PPD.

3.4.1. Qualitative descriptive design

Qualitative descriptive studies are not embedded in a disciplinary tradition. Such these studies may be referred to as qualitative studies, naturalistic inquiries, or as qualitative content analyses (Polit & Beck 2010). It is also very useful to perform a qualitative descriptive study prior to developing an intervention. Hence this study used a qualitative descriptive study as the researcher wanted to get an in-depth understanding of the perceptions of nurse-midwives regarding PPD.

3.4.2. Qualitative explorative design

Exploratory research is appropriate in situations where there is limited existing knowledge or understanding of a topic, and where the goal is to generate insights and ideas that can guide further research (Mohammed-Durosinlorun et al., 2022). In qualitative research, questions often begin with an open-ended approach to allow for the discovery of new insights and patterns. Therefore, this study used an explorative design by interviewing nurse-midwives using an open-ended approach to explore the perceptions regarding PPD, its management and factors contributing to its management.

3.4.3. Qualitative contextual design

Contextual research design is part of field study methods and used when exploring the context of usage of a product or service, or the cultural context, and applied when users' tasks are involving other people, which need to be observed to fully understand users' needs and goals (Duda et al., 2020). In this study, the researcher explored the in-depth understanding of nurse-midwives' perceptions regarding PPD within their social and workplace contexts, as these factors shape individuals' experiences.

3.5. Research approach

Research approaches refer to the systematic and structured ways that researchers use to conduct research, and they differ in terms of their underlying logic and methods of inquiry (Mohammed-Durosinlorun et al., 2022). The inductive approach was used in this study by starting with the collection and analysis of data, followed by an explanation based on the themes that emerged from the data. The goal of this approach was to explore perceptions of nurse-midwives and to generate new input on PPD.

3.6 Research setting

The reseach study was conducted at Quthing Hospital , a government funded healthcare facility situated in the southernmost district of Lesotho, known as Quthing. This hospital is strategically located within the town of Moyeni which serves as the largest town in the district and functions as a constituency in its own right. The total number of nurse-midwives assigned in maternity ward was 2, they covered the triage, intrapartum, postpartum, and newborn services as needed. The average number of births each month was 900.This chosen location provided a significant context for research conduct in the study.

3.7. Study population

The study population is the entire group of interest that have the same characteristics which are important to the study (Polit & Beck, 2020). Study population is a group considered for a study or statistical reasoning that is not limited to the human population only and has a set of aspects that have something in common (Villegas, 2023). In this study, the population was all registered nurse-midwives working at Quthing Hospital irrespective of working experiences.

3.8. Sampling method

The sampling method that was used is non-probability sampling in which the researcher selected the elements by non-random methods, at which every element did not have a chance to be selected or included (Polit & Beck, 2020). The sample is the specific group of individuals that data was collected from (Brink et al., 2018). This study's purposive sampling method was used due to data sources that are rich in information.

3.8.1. Sampling techniques

Sampling involves the selection of a portion of the population to represent the population under study (McCombes, 2023). This study used a purposive sampling technique because it is based on the belief that the researcher’s knowledge about the population could be used to handpick sample members (Polit & Beck, 2020). The researcher decided to purposely select people who were judged to be particularly knowledgeable about the issues of the study. The criteria for selection included nurse-midwives who had two or more years of experience as a midwife and employed full time, managing patients with PPD at a large tertiary care facility in Lesotho. These

participants, representing both genders, were chosen because they were expected to provide valuable insights into the topic under study. The sampling technique utilized was non-probability, purposive sampling in which the participants were selected due to their knowledge of the research topic.

3.8.2. Sample size determination

Polit and Beck (2020) define the sample size as the portion of the population selected by the researcher to represent the entire population, so that the inferences can be made. Three participants were recruited for the pilot study and were not considered as the final sample size. In a qualitative study, the sample size is usually determined by the information needed, therefore a guiding principle called data saturation is used (Polit & Beck, 2020). In this study, the data saturation was reached from 9 registered nurse-midwives working at Quthing Hospital maternity ward irrespective of working experiences.

Saturation means the sampling of data until there is no new information shared by participants, and qualitative studies aim to uncover multiple realities and discover meaning, not to generalize to the target population (Guest et al., 2020). Data saturation was reached on the ninth participant, where no new information emerged.

3.8.3. Inclusion and exclusion criteria

Researchers identify characteristics that delimit the population through eligibility criteria (Polit & Beck, 2020). The criteria to establish whether a person qualifies to be a member of the populations the inclusion criteria and or whether one should be excluded are the exclusion criteria.

3.8.3.1. Inclusion criteria

In these criteria, all participants have the same characteristics and have information on the study. Therefore, participants were all nurse-midwives working in the hospital, irrespective of their work experiences and who were in the midwifery practice, which were nurse- midwives in the maternity ward and Mother and Child Health Unit (MCH).

3.8.3.2. Exclusion criteria

Exclusion criteria are the participants that do not have characteristics to qualify for the study or to be part of the respondents in the study (Polit & Beck, 2020). In this study, all registered nurses without midwifery qualifications were excluded, together with registered nurse midwives who do not work in the maternity ward and MCH.

3.9. Data collection process

Data collection is the precise systematic gathering of information relevant to the research purpose or the specific objectives (Barrett & Twycross, 2018). In this study, the researchers set a goal of data collection with the aim to produce data that was of exceptional quality, because every decision the researchers made about data collection methods and procedures could affect the quality of the data (Polit & Beck, 2020). Hence, the overall plan for gathering and recording data was developed. Data collection used the interview guide as a tool to collect data (Annexure F). The Nursing Manager of the hospital under study introduced the researcher to the study population, then the researcher introduced herself and explained the study to the participants and who were eligible to participate. The researcher explained how the interview would be conducted and the purpose of the study as well as the participants' willingness to take part in the researcher. Written consent was obtained from all the participants before the commencement of the interviews. Participants were also informed that all the information shared will be confidential, and only the participant and interviewer, together with the supervisor will have access to the responses.

The Nursing Officer (NO) in the maternity ward allocated a private room for the researcher to conduct the interviews, to ensure the privacy of the participants and the door in that room was labelled "Do not disturb, interviews in progress", to avoid distractions during the process. The interviews lasted for approximately 45 to 60 minutes. During the interviews, the researcher provided a feel-free environment that was non-judgmental to participants, so that they could openly discuss information including private thoughts and feelings. The other principle was allowing participants to flow in conversation which led participants to provide all necessary information. The researcher paid attention while keeping eye contact with the participants,

aiming to gather all necessary information from the participants. The researcher in this study, collected data from the eligible respondents and simultaneously observed respondents to understand them in their natural settings, concerning the issues of the study (Creswell et al., 2020).

3.9.1. Interviews

In this qualitative study, the researcher collected data from nurse-midwives in Quthing Hospital. An interview guide was employed as the tool for collecting data with the support of a device (audio - recorder). The researcher verbally sought permission from the participants before each interview to audio record the interviews. The interview guide collects data that address research questions of the study (Creswell et al., 2020). The development of this interview guide was based on the goal, objectives and research questions of the study (Creswell et al., 2020).

The interview questions comprised of the following:

- What are the perceptions of nurse-midwives regarding PPD?
- Have you ever identified a woman with PPD?
- What are the perceptions of nurse-midwives regarding the management of PPD?
- What are the contributing factors that influence the management of PPD?

Semi structured interviews were conducted in English in the allocated private spaces, which was marked “Do not disturb, interviews in progress”, and lasted for about 45-60 minutes each. The interviews outlined the general form of questions that the interviewer wanted to cover and allowed the interviewer to adapt to the sequencing and wording of the question for each interview (Barrett & Twycross, 2018). Interviews were audio - recorded and transcribed by the researcher at the end of each day of interviews. Participants were interviewed until data saturation was achieved and no new information was uncovered (Malterud et al., 2016; Polit & Beck, 2020; Brink et al., 2018). According to Brink et al. (2018), data saturation occurs when additional sampling yields no new information, only redundancy of data already collected.

3.10. Data analysis

Qualitative data were derived from narrative materials, such as transcripts from audio-recorded interviews or participant observers' field notes (Polit & Beck, 2017). That means, it is the analysis of non-numeric words. The researcher used a six-phase guide for conducting analysis (Braun & Clarke, 2006 cited in Maguire & Delahunt, 2017). In the first phase, the researcher became familiar with the data by reading and re-reading the transcripts. The researcher then generated initial codes, which is the second phase of the guide. Data was organized in a meaningful and systematic way by coding. This reduces lots of data into small chunks of meaning, whereby each segment of data, which was relevant to or captured something interesting about research question, was coded.

Open coding was used by researcher, meaning that the researcher did not have pre-set codes, but developed and modified the codes while working through the coding process. Coding was done on each transcript separately. Each transcript was coded, looking at each segment of the text that seemed to be relevant to or specifically address the research questions. At the end, codes were compared, discussed and modified before moving on to the rest of the transcripts. As the researcher worked through them, new codes were generated. The researcher initially worked through hardcopies of the transcripts with pens and highlighters. The researcher then searched for themes. In this case, the codes were examined and collated into initial themes. Then the codes were organized into broader themes that were aligned and specific to the research questions. The themes were descriptive in nature. All the codes fitted into one or more themes. The researcher reviewed themes, modified and developed the preliminary themes that were identified, such as individual counselling, therapeutic communication and de-escalation techniques. The data associated with each theme were read and considered on whether the data really did support it. Then the researcher thought about whether the themes work in the context of the entire data set, for example, psychological strategy. The researcher then defined themes and the aim was to identify the essence of what each theme was about, what was the theme saying, how does the themes relate to each other? This was done by drawing a final thematic map that illustrates the relationship between the themes. All analysed data were interpreted, justified, and supported by relevant literature as well as consensus seeking discussions with the co-facilitator.

Data analysis is further explained as the practice in which raw data is well-organized and brought to order so that useful information can be extracted from it. The process of organizing data is the

key to understanding what the data does and does not contain (Islam, 2020). In qualitative data analysis, the researchers are interested in solving the problem, influencing change, and identifying relevant primary themes, so the process entailed reading transcripts, examining the data patterns, and developing themes (Bhandari, 2023). In this study, the process of transcribing, coding and identifying relevant themes was done from the interviews. Clarke and Braun's (2013) Thematic Analysis model was used in the identification of themes within qualitative data. This chapter presents the findings of data collection and analysis that was done in Quthing Hospital. The study aimed to explore perceived factors of nurse midwives regarding PPD in Quthing Hospital and the objectives of the study were as follows.

3.11. Ethical considerations

Brink et al. (2018) stated that ethical considerations are crucial in any research and aims to protect the rights of participants, avoid any harm to the participants and maintain honesty in the research. Ethical considerations in research are a set of principles that guide research designs and practices. Scientists and researchers always adhere to a certain code of conduct when collecting data (Bhandari, 2023). Researchers, designing and conducting studies using human data, should consider the values and principles of ethical conduct (Kaewkungwal & Adam, 2019). The researcher carried out the study that involved human subjects and therefore the ethical principles of informed consent, respect for participants, beneficence, anonymity and confidentiality were taken into consideration in this study. According to Kang & Hwang (2021), the crucial ethical concerns that should be considered while carrying out qualitative research are anonymity, confidentiality and informed consent.

3.11.1. The permission to carry out the study from The National University of Lesotho - IRB and MOH

The permission to conduct the study was obtained from the Research Ethics Committee of the National University of Lesotho(NUL), an ethical clearance certificate (Protocol reference number: NUL/MNS/2023/01) and ethical approval letter from the Ministry of Health (MoH), Lesotho (Reference number: ID166-2023), as well as the approval letter from the hospital in Quthing District.

3.11.2. Informed consent form

Informed consent means that participants have adequate information about the study, comprehend the information and have the power of free choices, enabling them to consent or decline participation voluntarily (Polit & Beck,2014). The informed consent was obtained from the participants after the details of the study had been explained to them and the objectives of the study in the language they understand. The participants were issued the document outlining the details of the study to read. The time to ask questions and addressing the participants' concerns was allowed. The consent to utilize the audio recorder during the interview process was asked from the participants. They were told that their participation in the study is voluntary and they were not coerced to partake in the study and even after signing the consent form, they could still withdraw from the study at any time.

3.11.3. The principle of respect for participants

Respect for participants is the recognition that people who take part in the study are independent and free individuals (Beck & Polit,2014). The participants voluntarily take part in the study and they ought to be treated as autonomous (Beck & Polit, 2014). Their choice whether to participate or withdraw from the study should be respected. This is a qualitative study and the relationship between the researcher and the participants have to be professional and the participants should know that the researcher is not a stranger or a visitor but the insider in the research process. The participants should be respected in all manner of contact as they are the source of information required for the study and their information they provide should be kept confidential and anonymous (Beck& Polit,2014). The participants were explained that the relationship of the researcher and participants was not be exploited. The participants were told to report any contact they thought it was inappropriate by the researcher to the Hospital Manager Nursing Services until all stakeholders involved were aware of the matter and corrective measures be taken accordingly.

3.11.4. The principle of beneficence

Beneficence refers to actions aimed at benefiting others without inflicting any harm (Beck & Polit 2014). The participants were protected with the decision they made regarding the study. No harm was imposed to the participants during the study process. The researcher explained to the

participants that there were no benefits for participating in the study and they were free to withdraw any time if they were uncomfortable.

3.11.5. The principle of anonymity and confidentiality

Participant's anonymity means that participants' identity is unknown to the researcher. Participants' confidentiality means that participants' identity is known to the researcher but data was de-identified and identity kept confidential (Kang & Hwang 2021). In the study anonymity and confidentiality of the participants will be protected by not revealing their names, instead codes or numbers were to be utilized so that no one links them to the information they provided to respect their anonymity. The participants were told that all the information provided was kept confidential and only the researcher was to have access to the information. The information would not be utilized against them. The researcher conducted the interviews in the private unit where no other people entered and which was written, "no disturbance" on the door to ensure privacy. The participants were informed that audio recording was to be erased once the data is transcribed.

3.12. Measures to ensure trustworthiness

Trustworthiness refers to the degree of confidence in the data, interpretation, and methods used to ensure the quality of the study (Polit & Beck, 2020). Trustworthiness has five components: credibility, dependability, confirmability, transferability, and authenticity.

3.12.1. Credibility

Credibility is defined as a measure of the integrity and quality of a qualitative study and it shows confidence that the data is true (Polit & Beck, 2020). Nowell et al. (2017) indicated that the credibility of the study is determined when core-researchers or readers are antagonized with the experience they can recognize. The researcher engaged deeply with the participants and built rapport during the interview sessions. The information provided was verified by asking similar questions with all participants to see if their information was truthfully reflected. Hence, observing the participants during the interactive sessions enhanced the credibility of the study and during the entire process, the researcher remained aware of her personal views and biases.

3.12.2. Dependability

Nowell et al. (2017) indicated that to achieve dependability, researchers can confirm that the research process is logical, traceable, and documented. Korstjens and Moser (2018) asserted that researchers need to check whether the analysis process correlates with the acknowledged standards for a particular design. It answers questions such as, would the study findings be repeated if the inquiry were replicated with the same participants in the same context (Polit & Beck, 2020). Dependability was enhanced by the researcher's description of the steps taken and supported them with literature reviews providing a clear understanding and describing every step before it was taken. Both the researcher and the research supervisor managed the whole process.

3.12.3. Confirmability

Confirmability is defined as whether the data that is presented and interpreted is a true reflection of the information presented by the participants (Polit & Beck, 2020). Consequently, Carnevale et al. (2016) posited that confirmability refers to the assertion that data is collected and analyzed in a neutral manner, whereby the researcher's potential distortion of informant accounts is reduced. The findings reflect the participants' voices and conditions of the inquiry, not the researcher's biases, motivations, or perspective (Polit & Beck, 2020). Confirmability established that the data represented the information that the participants provided and that the interpretations were not clouded with the researcher's expectations. During coding, the researcher and the supervisor served as co-coders to ensure that coded data was a true representation of the participants' data.

3.12.4. Transferability

Mandal (2018) stated that transferability refers to whether the findings attained from the analysis can be applied to other settings and contexts, and this acts as a check for the external validity of the findings. According to Nowell et al. (2017), the researcher may not recognize the sites that may request to transfer the findings, however, the researcher's mandate is to offer thick descriptions, so that those who seek to transfer the results to their site can judge transferability. Transferability is defined as whether the findings can be made applicable in other settings or other groups, and it is the responsibility of the investigator to provide sufficient descriptive data, so that consumers can evaluate the applicability of the data to other contexts (Polit & Beck,

2020). The researcher described the research process and data analysis in detail so that others can follow a similar research process in a similar context.

3.13. Data management

Data analysis in a qualitative study needs an understanding of how to make sense of texts and images so that the research questions are answered (Creswell et al., 2020). Similarly, Polit and Beck (2020) explained that qualitative data are derived from narrative materials, such as transcripts from audio-recorded interviews or participant observers' field notes. The data was and will continue to be, stored in a safe locked area in the Department of Nursing, to which only the researcher and the supervisor could access. Following the NUL policy in data management of research, the data will be maintained in the proper way and then will be destroyed by burning after five years. The findings will be published in the form of journal articles and a report will be compiled and submitted to the Faculty of Health Sciences, Department of Nursing and the University Library.

3.14. Conclusion

In conclusion, this chapter described the research method that was used, qualitative descriptive, explorative, and contextual design were explained with the rationale for their use. The qualitative, exploratory, descriptive, contextual research design was adopted. The qualitative design was applied as the researcher sought to describe and interpret the subjective, meaningful world of participants. An explorative design was applied to enable interaction with participants to be easier. Therefore, the next chapter will focus on presentation and analysis of the main findings.

CHAPTER 4

PRESENTATION OF FINDINGS

4.1. Introduction

The chapter focuses on presentation of results and description of participants in the study. The study aimed to get an in-depth understanding of the perceived factors of nurse-midwives regarding PPD in the Quthing Hospital, Lesotho.

4.2. Socio-demographic profile

Table 1 below shows the socio-demographic profile of participants in the study. The participants in the study were recruited in their own time, as they agreed to take part in the study. A total of nine participants were interviewed, of which were all female nurse-midwives working in Quthing Hospital Maternity Unit as full-time employees. The age range was from 30 years to 42 years. The educational level was participants holding a Diploma in Nursing and Midwifery with working experience ranging from 4 to 13 years. The Bachelor of Sciences (BSc) degree in Nursing and Midwifery participant's years of experience ranged from 6 years to 15 years.

Table 1: Socio-demographic profile

Participant Number	Gender	Years of experience	Qualification	Ward in which they work	Age
P1	Female	12	Degree	Maternity	37
P2	Female	8	Diploma	Maternity	36
P3	Female	8	Diploma	Maternity	35
P4	Female	6	Degree	Maternity	30
P5	Female	4	Diploma	Maternity	32
P6	Female	15	Degree	Maternity	42
P7	Female	13	Diploma	MCH	38
P8	Female	8	Degree	MCH	36
P9	Female	8	Degree	MCH	35

4.3. Themes and sub-themes

The table below describes the findings from the interviews that were done in English. The results of this study were organized into six thematic clusters with 13 sub-themes emerging from them: (1) Empowerment, the causes included three sub-themes that were a deficiency in skills related to PPD management, a lack of information and training programs addressing PPD; (2) Stigma that emerged from two sub-themes namely age as a high-risk factor and a self-perceived stigma (3) Screening/ Assessment of PPD with two sub-themes being lack of screening and lack of SOPs; (4) Family support with two sub-themes being health education for family members, Counselling to family members(5) Lack of Resources with four sub-themes being lack of policies and guidelines**,** lack of reporting tools, lack of information in the registers and shortage of staff (6) Home visits with two sub themes being community engagement (Village health worker involvement) and lack of clear follow-up channels for clients that experienced PPD and funding mechanisms. The researcher searched for themes, reviewed and defined them and wrote them up (Maguire & Delahunt, 2017). The summary of themes and sub-themes are reflected in

Table 2.

Table 2: Themes and sub-themes

THEMES	SUB-THEMES
1. Empowerment	1.1 Lack of skills in the management of PPD 1.2 Lack of training conducted on PPD 1.3 Continuous Professional Development
2. Stigma	2.1 Age as high-risk factor 2.2 Self-perceived stigma
3. Screening/ Assessment of PPD	3.1 Lack of screening tools (Screening tools and SOPs) 3.2 Lack of SOPS
4. Family support	4.1 Health education for family members 4.2. Counselling to family members
5. Lack of resources	5.1 Lack of policies and guidelines 5.2 Lack of reporting tools 5.3 Lack of information in the registers 5.4 Shortage of staff
6. Home visits	6.1 Community engagement (Village health worker involvement) 6.2 Lack of clear follow up channels for clients that experience PPD and funding mechanisms.

4.3.1. Theme 1: Empowerment.

The gathered data clearly shows that the participants recognized the effectiveness of empowering midwives in the management of patients with PPD. The perception of empowerment is influenced by factors such as the perceived significance of the work, the level of competence, self-determination, and the impact of their actions. Additionally, the structures established within the workplace to promote empowerment play a significant role. This phenomenon can be elucidated as empowerment within the workplace offering opportunities for learning and personal growth through access to information, supportive environments, and the development of knowledge and skills (Doherty et al., 2020). Within this overarching theme, three sub-themes emerged, including a deficiency in skills related to PPD management, a lack of information and training programs addressing PPD, and a focus on continuous professional development through case studies.

4.3.1.1. Sub-theme 1.1: Lack of skills in the management of PPD

Participants elucidated that a deficiency in skills is perceived as a significant obstacle in the effective management of PPD. This lack of skills can be described as pertaining to tasks or responsibilities that necessitate specialized training and expertise.

> *"We do not have the skills to assess PPD and we just rely on the discharge plan."* ***(Individual interview, Participant 2****).*
>
> *"I just wish we could be capacitated with the management of PPD so that we gain skills."* ***(Individual interview, Participant 3).***
>
> *"I think we lack skills in the management of PPD in general especially involving children."* ***(Individual interview, Participant 4).***

4.3.1.2. Sub-theme 1.2: Lack of training conducted on PPD

Participants detailed the strategies that can be employed to equip nurses with information regarding PPD. The absence of information is characterized by a lack of knowledge or educational resources. This is substantiated by the admission of nurses and healthcare professionals who acknowledged that their insufficient understanding of the importance of PPD hindered their ability to educate mothers about PPD symptoms and risk factors.

> *"I just want workshops on rare conditions that affects women post-delivery, and more reporting for such conditions and workshops for nurses.".* ***(Individual interviewer, Participant 3).***
>
> *"…. workshops normally are to update us on the prevalence and the magnitude of the conditions as well as their management…."* ***(Individual interview, Participant 2, Female).***
>
> *"I think we can have more training on PPD management and have public/ community campaigns, so that people are aware of such conditions."* ***(Individual interview, Participant 5).***

4.3.1.3. Sub-theme 1.3: Continuing Professional Development (CPD) case studies

Nurse-midwives perceived case presentations as an integral aspect of their professional development, offering an opportunity to enhance their proficiency in managing PPD. Continuous Professional Development (CPD) is elucidated as a means for nurses and midwives to consistently refresh and augment their expertise and competencies (El Najm, 2020). It serves to bolster evidence-based practices and, in the broader context, ensures their capability to meet the evolving needs of patients and maintain the quality-of-service delivery within the ever-changing landscape of clinical practice (El Najm, 2020).

> *"We do case presentations as part of our professional development, so I think if we focus on cases like PPD, we can do better in its management, again ownership of work can help a lot."* ***(Individual interview, Participant 3)***
>
> *"…we need to do presentations on our case studies to improve management of PPD…"* ***(Individual interview, Participant 7).***
>
> *"……. sometimes we share information with all staff by having a case presentation, I think it's because PPD is rare…."* ***(Individual interview, Participant 8).***

4.3.2. Theme 2: Stigma

Participants emphasized the importance of addressing the negative perceptions surrounding maternal mental health issues and stressed the necessity of raising awareness about PPD to facilitate postpartum women in accessing essential healthcare services. Maternal mental health stigma refers to the adverse attitudes or stereotypes associated with an individual or a group concerning their mental health characteristics (Dubrieucq et al., 2021). It involves social disapproval directed towards individuals or groups primarily based on their mental health attributes, with a particular focus on PPD (Dubrieucq et al., 2021)**.** This theme has two sub-themes that are explained as follows:

4.3.2.1 Sub-theme 2.1: Age as high-risk factor

Participants also elucidated the role of stigma in potentially exacerbating PPD among women, citing factors such as age, particularly teenage motherhood, and grand-multi parity as contributors to PPD. Adolescent mothers often confront stigma related to their pregnancies,

which heightens their vulnerability to depression. Additionally, pregnancies occurring at age 45 or older were identified as high-risk for PPD.

> *"In our society, teenage pregnancy is forbidden, and when a teenager is pregnant, everyone around wants to know who is the father, and that is depressing to the woman given their different circumstances."* ***(Individual interview, Participant 3).***
>
> *"PPD causes poor growth of the baby especially in teenage mothers, they struggle to bond and feed their babies."* ***(Individual interview, Participant 4).***
>
> *"Most of the time, women with signs and symptoms of PPD are teenage pregnancies or older age pregnancies mostly above 45 years."* ***(Individual interview, Participant 6).***

4.3.2.2 Sub-theme 2. 2: Self-perceived stigma

Participants also uncovered that women occasionally experience self-perceived stigma, which could potentially increase their susceptibility to PPD. Self-perceived stigma is characterized by instances where individuals with a mental health condition hold negative thoughts or beliefs about themselves due to their mental illness (Sun et al., 2022).

> *"The thing is women sometimes are afraid of societal pressure and want to act normal to almost everything."* ***(Individual interview, Participant 1).***
>
> *"I think women struggle to express how they feel because they feel like society will judge them." (****Individual interview, Participant 3).***
>
> *"In our society, mental health is being stigmatized, so women do not report how they feel in fear of stigma like people will say they are not in their right mind."* ***(Individual interview, Participant 6).***

4.3.3. Theme 3: Screening/ Assessment of PPD

Participants strongly emphasized the essential integration of routine PPD screenings into antenatal and postnatal registers, recognizing its potential to significantly enhance the holistic well-being of mothers and infants within the context of maternal healthcare.

4.3.3.1 Sub-theme 3.1: Lack of screening tools

Nurse-midwives perceived that the lack of screening tools in their daily work created a gap in identifying women with PPD. They considered a screening tool as useful and necessary for universal screening and interventions aimed at improving PPD screening practices were seen as addressing not only knowledge but also strategies to change nurses' beliefs.

> *"Post-delivery, we focus more on physical care than psychological care, depression screening is very rare, so we have to improve that one and concentrate more on women's mental health, especially postpartum."* ***(Individual interview, Participant 1).***

> *"We can identify a woman with signs and symptoms of PPD but to diagnose it as PPD is a problem because we lack screening tools for diagnosis"* ***(Individual interview, Participant 2).***

> "*If we have a standardized tool in our facility to screen for women for PPD during antenatal care rather than identifying the problem post-delivery most cases can be attended to in time."* ***(Individual interview, Participant 5).***

4.3.3.2 Sub-theme 3.2: Lack of Standard Operating Procedures

Participants viewed that, if the hospital had the SOP's, they would all assess the mothers the same way in their post-natal period, utilizing the same method or procedure stated by the hospital. They acknowledged that lack of SOP's prevented them from identifying the postpartum depressed mothers.

> *"We, we (pause), the hospital does not have the same standards that we can all use or which can force us to assess the mothers in their postpartum period to assess whether they are developing postpartum depression"* **(Individual interview, Participant 1).**

> *"I believe, the hospital management have to come up with specific procedure to use in our maternity ward, that describes the activities necessary to assess the woman after delivery so*

that this women, cannot walk out of maternity ward with Postpartum Depression, the hospital has to enforce those laws" **(Individual interview, Participant 8).**

"The hospital management need to develop or come up with the procedure that all midwives need to use after the women delivered, as a rule or law that all midwives need to use that certain procedure, to check for postpartum depression in the mothers who just delivered. (pause)" **(Individual interview, Participant 4).**

4.3.4 Theme 4: Family support

Participants emphasized the significance of involving the family in the care of women following delivery and the necessity of informing caregivers and spouses about PPD. This approach was believed to contribute to heightened family awareness and the sustained provision of care for the women. Within this overarching theme, two sub-themes are elaborated upon below.

4.3.4.1. Sub-theme 4.1: Health education for family members

Nurse-midwives elucidated their discharge plan with regard to PPD diagnosis and treatment, emphasizing the importance of timely communication and the inclusion of family health education pertaining to PPD. Notably, family members with a higher level of education and prior exposure to women experiencing PPD exhibited positive attitudes towards the condition. Therefore, imparting health education to family members was considered an imperative aspect of the discharge plan.

"We do health education for family members during their discharge from the hospital about PPD." ***(Individual interview, Participant 3).***

"In cases like this, we try to help women identify the problem or stressors and involve the family member or spouse if in need" ***(Individual interview, Participant 5).***

"There is health education during a woman's discharge involving the spouse or relative whom the woman is comfortable with." ***(Individual interview, Participant 6).***

4.3.4.2. Sub-theme 4.2: Counselling to family members

Nurse-midwives perceived that they need to support the family of mothers diagnosed with PPD where the family members will express their concerns and the nurse midwives will find better ways to cope with their feelings and solve their problems. They viewed counselling to family members very crucial.

> "*The postpartum depressed mother's family need psychological support also when we, as midwives need to talk to them regarding how they will assist and take care of the mother, they also need continuous support*" **(Individual interview, Participant 2)**

> "*The support of the whole family is very crucial, before the postpartum depressed mother is discharged and after discharge because the family can be the trigger of Postpartum depression, so they need to be educated and counselled on the condition of the mother*" **(Individual interview, Participant 9).**

> "*Support of the family, especially the husband the in-laws, as to take care of the postpartum mother after discharge, they need us to talk to them and do family counselling to them regarding the predisposing factors to PPD and its management*" **(Individual interview, Participant 3).**

4.3.5. Theme 5: Lack of resources

Nurse-midwives expounded upon the structural challenges encountered in the management of PPD. They elucidated that key documents such as the Labor and Obstetric Register (LOR), Antenatal Care (ANC) register, and Postnatal Care (PNC) register lacked dedicated sections for maternal mental health assessment, thereby constraining the effective management of PPD. Furthermore, they reported a reliance on individual clinical assessments due to the absence of comprehensive guidelines provided by the government or the healthcare institution. Empirical evidence from hospitals has demonstrated that insufficient staffing and resources in healthcare settings are associated with a greater likelihood of nurses being unable to complete essential patient care tasks (Butler et al., 2019).

4.3.5.1. Sub-theme 5 1: Lack of policies and guidelines

Participants articulated a challenge within healthcare policy concerning the provision of PPD services. Specifically, this challenge was attributed to the absence of screening tools, management guidelines, and standardized reporting protocols for PPD cases. Nurse-midwives perceived that the lack of clinical guidelines hindered their ability to effectively diagnose and treat the high prevalence of PPD, leading to cases often going underdiagnosed and untreated.

> "*I think one major thing is there are no policies or guidelines on PPD, even the antenatal registers, postnatal register, and Lesotho Obstetric Record book has limited data on PPD screening and management."* ***(Individual interview, Participant 1).***

> *"We lack job aids and screening tools for proper management of PPD."* ***(Individual interview, Participant 3).***

> *"…suppose we have a proper guiding tool and policies to manage PPD, no woman would be missed even if identification can be scored earlier."* ***(Individual interview, Participant 9).***

4.3.5.2. Sub-theme 5.2: Lack of reporting tools

Nurse-midwives detailed how the absence of reporting tools impacts the documentation of PPD cases, potentially leading to an underestimation of the condition's severity. This challenge is compounded by the complexity of accurately assessing the true scope of the problem, which may be influenced by varying risk factors between the antenatal and postnatal periods, as well as the lack of uniform data collection protocols and procedures.

> *"PPD cases are not reported in a proper way like other complications that have a specific tool to record their existence, its reporting we be on patient's booklet and file but as for the reporting purpose, no…… it is not there."* ***(Individual interview, Participant 3).***

> *"I think if we have proper management of PPD, and reporting of such cases, no woman will go unseen, errr… you see reports gives a clear picture of the existence of a certain*

condition, so conditions like PPD are not reported." ***(Individual interview, Participant 4).***

"Sources of data to the District Health Information System (DHIS2) are the registers, so our registers report nothing on PPD, which is why there is no data captured on PPD." ***(Individual interview, Participant 8).***

4.3.5.3. Sub-theme 5.3: Lack of information in the registers

Nurse-midwives elaborated on how the scarcity of information significantly impacts the diagnosis, management, and reporting of PPD. The dearth of comprehensive information poses a substantial challenge in accurately identifying, effectively managing, and properly documenting cases of PPD.

"Post-delivery management is more guided by the postnatal examination in the LOR and postnatal care register, so there is no information on maternal mental health, but the focus will be on women who show signs and symptoms of depression." ***(Individual interview, Participant 2).***

"Updated registers can assist nurse-midwives in the proper management of PPD and assist to identify the women in danger." ***(Individual interview, Participant 5).***

"Nurse-midwives must be involved when SOPs and registers are being done because it's us the working people who see gaps." ***(Individual interview, Participant 9).***

4.3.5.4. Sub-theme 5. 4: Shortage of staff

Participants provided insights into how the shortage of staff resources exerts a detrimental influence on the management of PPD. The inadequacy in staffing levels was highlighted as a significant factor hampering the effective handling of PPD cases, thereby impeding the provision of optimal care.

"I think if our maternity ward can be well staffed, our allocation may put nurse-midwives in the delivery room, others in antenatal care while others in post-natal care. In that way, complications can be easily identified." ***(Individual interview, Participant 1).***

"You know like now we are only two for the whole ward, from labor ward to postnatal ward, our limited time to patients makes it difficult to focus more on other conditions, we just focus on emergency cases." ***(Individual interview, Participant 3).***

"We need maternity ward to be capacitated with enough nurse-midwives so that our duty allocation is focused, nurses and also, we need onsite training on PPD or workshops. In other conditions, there are workshops regularly but for depression." ***(Individual interview, Participant 8).***

4.3.6. Theme 6: Home visits

Nurse-midwives elaborated on one of the foremost challenges they encounter in their practice as the lack of prioritization of PPD as a serious condition. Consequently, they often contend with limited time and resources allocated for supporting women dealing with PPD, making it a particularly demanding aspect of their roles.

4.3.6.1. Sub-theme 6.1: Community engagement (Village health worker involvement)

Participants highlighted the potential efficacy of initiatives such as funded home visitation programs and accessible health follow-ups in facilitating the timely delivery of maternal mental health services. They underscored the importance of connecting women with suitable healthcare providers at the community level, including the utilization of Village Healthcare Workers.

"*Post-delivery, we spent a short time with women, so even the identified ones get lost, it's like we can have home visits to continue with management and link the woman with village health care workers."* ***(Individual interview, Participant 2).***

"Village healthcare workers can do follow-ups at the community level and refer to the hospital if complications arise." ***(Individual interview, Participant 3).***

"Help the community to form support groups involving village health care workers at the community level for awareness of PPD." ***(Individual interview, Participant 4).***

4.3.6.2. Sub-theme 6.2: Lack of clear follow-up channels for clients that experienced PPD and funding mechanisms

Within this sub-theme, participants provided a comprehensive account of the structural impediments they encountered when following up with clients affected by PPD. Notably, they emphasized the absence of clearly defined client home visitation programs, which would have facilitated ongoing support. Furthermore, the insufficiency of funding allocated to address the needs of PPD clients emerged as a significant barrier to comprehensive care.

> *"Maternal mental health awareness and home visits integration in our outreaches can bring a better outcome for PPD."* ***(Individual interview, Participant 3).***
>
> *"After clients are discharged from the hospital, they go home as to what happens after that we do not know, we lack clear follow-up channels for clients."* ***(Individual interview, Participant 7).***
>
> *"A serious staff allocation in the maternity ward, we need more nurses and workshops on PPD and also, it's like we can have a funded home visit program to ease follow up of identified women with PPD, I think they get lost."* ***(Individual interview, Participant 8).***

4.4. Conclusion

Based on the above-mentioned themes, nurse-midwives suggested recommendations for future measures which include nurses' empowerment, emphasis on stigma related to PPD, the availability of resources (which included counselling approach, community mental health, self-reported screening tools, research, registers, and reporting tools), health education, and proper guidelines and SOP's. Lastly, nurse-midwives recommended that family support and nurses' home visit could benefit their care for patients with PPD.

CHAPTER 5

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

The chapter presents a discussion of the results and the conclusion, recommendations and limitations of the study, which aimed to explore perceptions of nurse midwives regarding postpartum depression in Quthing Hospital, Lesotho. The discussion was guided by the objectives of the study; to explore the perceptions of nurse-midwives regarding PPD at Quthing Hospital, Lesotho, to describe perceptions of nurse-midwives regarding management of PPD at Quthing Hospital, Lesotho, and to describe factors that influence the management of PPD at Quthing Hospital, Lesotho.

5.2. Discussion of the results

5.2.1 Socio-demographic data

The present study was carried out on nine nurse-midwives who were full time workers at the Quthing Hospital and all the participants were females. This may be due to the fact that nursing is a profession dominated by women and their age range was from 30 years to 42 years (Rathobei et al., 2021). The current study revealed that more participants were nurses with a Diploma in General Nursing with Midwifery. However, in a similar study conducted by Al-Salhee et al. (2019) among nurse-midwives, it was found that majority had a Diploma in General Nursing with Midwifery. Majority of the participants had working experience ranging from 4 to 15 years. This is in line with the study conducted by Dzomeku et al. (2023) where the majority of participants had working experience ranging between 4 and 26 years.

5.2.2. Theme 1: Empowerment

The study revealed clarity on the matters concerning the empowerment of nurse-midwives regarding the effective management of patients with PPD. For the proper management of PPD, participants perceived that empowerment means access to information, support, resources, and opportunities to training could help in developing skills to promote positive changes in the management of PPD. The theme consists of three sub themes which are lack of skills in the

management of PPD, lack of training conducted on PPD and continuous professional development. Nurses-midwives are responsible for the management of care (Andrade et al., 2019), and a trusted source of information for pregnant women for advice and support (Walker et al., 2020). This is evidenced by another study by Gottlieb et al. (2021), who found that work is influenced by perceived meaning, competence, self-determination and impact, and by workplace structures that are put in place to promote empowerment. Empowerment of nurse-midwives contributes to greater professional satisfaction, decreased burnout rates, and increased autonomy and organizational commitment, as well as a positive impact on the patient's safety and quality of care in the health services (Eskandari et al., 2017). Additionally, empowerment influences nurse-midwives directly on nursing dimensions, and it plays an important role in nurse-midwives' satisfaction and enhances the provision of high-quality patient care (Bawafaa et al., 2015 cited in Saleh et al., 2022).

5.2.2.1. Sub-theme 1.1: Lack of skills in the management of PPD

Lack of skills in the management of PPD was described by participants as a perceived barrier to effective management of PPD. They viewed the lack of skills as a hindering factor to effectively diagnosing, managing, and caring for patients with PPD. At the organizational level, more guidance and training should be provided to ensure that midwives and nurses have clear pathways to assist in decision-making and that they have the necessary skills, knowledge, confidence and cultural competence to deal with women with PPD (Makhmutova, 2020). Over 50% of respondents indicated practical barriers which were a lack of knowledge to discuss mental health problems with women (52.9%), lack of skills, in particular, skills to respond to mental health problems (47.7%) and women's fears of insulting and suffering (Higgins et al., 2018; Makhmutovam 2020.)

5.2.2.2. Sub-theme 1.2: Lack of training conducted on PPD

Lack of training conducted on PPD was described by participants as a barrier to management of PPD. They further explained that PPD could be a common complication that carries many barriers to providing adequate and timely treatment and they perceived that health education is a step toward ending barriers. In recent years, enhancing the psychological knowledge and skills of clinical nurses and midwives has been found to reduce the symptoms of depression in the perinatal period (Wang et al., 2021). Although previous research demonstrated psychological

interventions provided by nurses and midwives are (Wang et al., 2021). Some studies revealed that such interventions have not achieved significant results due to limited content of nurse-midwives.

5.2.2.3. Sub- theme 1.3: Continuous Professional Development

The results further showed that nurses have opportunities to learn and grow professionally, within the work environment, that is, continuing professional development. Leal et al. (2019) described similar results in their study that, reinforcing the opportunity to learn and grow at work implies the use of personal skills and promoting a sense of self-efficacy and autonomy.

5.3. Theme 2: Stigma

Participants highlighted that the negative attitude towards maternal mental issues needs to be considered and awareness of PPD was needed to enable postpartum women to attend the required healthcare needs. Maternal mental health stigma is a negative attitude or idea about a mental health feature of a person or group of people and relates to social disapproval of the person or group based on the mental health features, and mostly PPD (Oliveira, 2019)**.** The United Kingdom (UK) study showed that psychological interventions provided by nurse-midwives have positive clinical effects on reducing PPD symptoms, contribute to reducing the stigma of depression in women, and encouraging them to seek medical assistance (Wang et al., 2021).

5.3.1. Sub-theme 2.1: Age as a high-risk factor

Participants revealed that age is a high-risk factor for PPD and mentioned that teenage mothers and multi-grand parity (age of 45 and above) to be high risk for PPD. The identification of agents posing and elevating the risk of developing PPD in mothers have been the subject of extensive research and among factors having a positive correlation with the development of PPD was age (Usmani et al., 2021). This is evidenced by the study conducted by Alsayed et al. (2021), that showed PPD risk is associated with maternal age, but also how this risk is modified by depression history, that is, among women with no history of depression. Young mothers had an increased risk for PPD compared with mothers aged 25 to 29 years. Findings showed an increased risk with advanced maternal age (>35 years) compared with mothers aged 25 to 29

year. Another study, by Bradshaw et al. (2022), also found that women aged 40 and older with twin pregnancies reported significantly higher rates of PPD compared to younger women with twins and this highlighted the need for screening in this population.

5.3.2. Sub-theme 2.2: Self-perceived stigma

In addition, participants revealed self-perceived stigma as a high risk for PPD. Self-perceived stigma is described as, when a person with a mental health condition had negative thoughts or beliefs about themselves based on that mental illness (Olivine, 2022). Participants revealed that women with PPD are always withdrawn from others and do not want to engage in any activity, hence, nurse-midwives observed self-stigmatization post-delivery. Perceived and experienced stigma-including from mental health providers-predicted self-stigma, which supports the need to develop anti-stigma campaigns and recovery-oriented practices (Dubreucq et al., 2021).

5.4. Theme 3: Screening/ assessment of PPD

Results of this study showed that routine screening for PPD did not exist in maternity wards due to unavailability of screening manuals and limited skills by nurse-midwives, which become a challenge for nursing diagnosis of PPD. Abercrombie (2023) showed that early identification of PPD leads to the best outcomes for postpartum mothers and increases referrals to case management. This is further supported by the study conducted by Tonya (2023), that showed that nurses lack of knowledge and skills to use screening tools and resulted in an educational intervention to provide nursing staff with education on PPD. Further educational interventions included appropriate screening practices for perinatal nursing staff to increase knowledge, attitude, and skill to improve routine screening using the Edinburgh Postnatal Screening tool (Tonya, 2023).

5.4.1. Sub-theme 3.1: Lack of screening tools (Screening tools and SOPs)

It was discovered that lack of screening tools, SOPs or policy to support PPD care and management have more impact as patient's conditions go unnoticed. This is evidenced by the study that stated that the development of correct policies, along with the coordination between providing services and timely delivery of services, based on need and with proper access can ensure the appropriate implementation of the screening program and eventually reduce PPD (Asgarlou et al., 2021).

5.4.2. Sub-theme 3.2: Lack of Standard Operating Procedures

Participants viewed that, if the hospital had the SOP's, they would all assess the mothers the same way in their post-natal period, utilizing the same method or procedure stated by the hospital. They acknowledged that lack of SOP's prevented them from identifying the postpartum depressed mothers. This is in line with the study conducted by Almutairi et al., (2023) which assert that policies and procedures must be updated on a regular basis so as to reflect the latest evidence-based practice. As Jannati et al. (2021) underscore, the absence of timely diagnosis, treatment and procedures for PPD carries multifaceted consequences, encompassing a diminished quality of life, strained maternal relationships, hindered infant growth and development, marital discord, and even the emergence of suicidal ideation.

5.5. Theme 4: Family support

It was found that participants have strategies to support women and their family members regarding PPD, with the use of a health education strategy as their discharge plan. This finding is supported by a study done by Liu et al. (2022), which found that the use of mobile health applications extends their understanding of the integrative effects of mindfulness and perceived social support on the reduction of postpartum depressive symptoms and suggests clinical potentials in the treatment of postpartum depressive symptoms. This is also supported by a study done in Iran, which found that it is necessary to implement social and behavioral interventions to educate families and friends for necessary support for mothers, as well as cultural interventions in order to modify the morbidity of men to reduce PPD (Jahromi et al., 2019).

5.5.1. Sub-theme 4.1: Health education for family members

Nurse-midwives explained their discharge plan regarding PPD diagnoses and treatment in a timely manner which involves family health education regarding PPD. This is supported by a study that stated that family members who have a good level of education and have come across women with PPD, hold positive attitudes toward PPD, hence health education to family members is important (Poreddi et al., 2021). The study by Lewis (2020) also described that the patient education framework was utilized by nursing professional development practitioners to develop staff education programs to improve patient education in various clinical settings as nurses in the hospital setting have prolonged contact with new mothers and are in a vital position to provide

PPD patient education. Notably, family members with a higher level of education and prior exposure to women experiencing PPD exhibited positive attitudes towards the condition. Therefore, imparting health education to family members was considered an imperative aspect of the discharge plan.

5.5.2. Sub-theme 4.2: Counselling to family members

Nurse-midwives perceived that they need to support the family of mothers diagnosed with PPD, where the family members will express their concerns and the nurse midwives will find better ways to cope with their feelings and solve their problems. They viewed counselling to family members very crucial.

5.6. Theme 5: Lack of resources

Findings in this study further continued to reveal that nurse-midwives experience structural challenges in their line of duty. They showed that there is limited information in the registers, the LOR, a lack of reporting tools, a lack of policies and guidelines as well as a shortage of staff to support PPD and its management. The result further explained that lack of information in the registers is limiting patient management as midwives use their own clinical assessment without the help of basic guidelines. In line with the present study results, another study found that the weakness of governmental structures is a leading cause of the inaccessibility of mental health facilities and service (Carbonell et al., 2020). The evidence further continues to reveal that governmental structures bring challenges to nurse-midwives. Similarly, the findings of Arefadib et al. (2022) indicated that the scarcity of appropriate mental health referral options, including acute mental health services, was a challenge.

5.6.1. Sub-theme 5.1: Lack of policies and guidelines

The study results showed a challenge to healthcare policy in providing PPD services. This challenge is a lack of screening tools regarding management guidelines and reporting of PPD cases. This is in line with another study stating that policymakers should work towards improving insurance coverage for mental health services, including coverage for therapy sessions and medications, and also reducing the financial burden, of which more mothers can afford the necessary treatments without hesitation (Saharoy et al., 2023). Another study reported that

patients being cared for with guideline-adherent treatments improved to a greater degree and more quickly than those patients who used standard treatment (Setkowski et al., 2021).

5.6.2. Sub-theme 5.2: Lack of reporting tools

Nurse-midwives explained how the lack of reporting tools impact on reporting existence of PPD, hence the severity of the condition is missed. Reporting tools cover the workflows and keep people in the loop (Bouchard, 2023).

5.6.3. Sub-theme 5.3: Lack of information in the registers

Nurse-midwives explained how limited information affects PPD diagnosis management and reporting. This is evidenced by the introduction of routine mental health guidelines and a standardized questionnaire to help guide the assessment of women to be part of routine antenatal and postnatal contact, and nurses to be included in the formulation of registers (McCauley et al., 2022).

5.6.4. Sub-theme 5.4: Shortage of staff

Participants explained how the shortage of staff has a negative impact on the management of PPD. Nurse-midwives, in the study by Dominiek and Maralyn (2018), reported a range of organizational barriers, specifically heavy workloads, lack of time, lack of privacy, and strict schedules, that hinder their ability to incorporate PPD into their practice. Another study identified time constraints and understaffing as provider- and system-level barriers to inadequate screening of PPD in the obstetrical setting (Bayrampour et al., 2018 cited in Castello, 2021).

5.7. Theme 6: Home visits

The study also found that home visits and community campaigns may help in better management of PPD, as it will contribute to awareness in the community at large. This is supported by a study that found that women diagnosed with depression refused treatment and did not accept their illness. According to the experiences of nurse-midwives in the study, solving the problem requires cultural promotion and training surrounding mental health issues to better combat the conditions (Jannati et al., 2021). The study results also revealed that one of the most challenging aspects that nurse-midwives face was that PPD is not prioritized as a serious condition, hence they have limited time to support women with PPD. This is supported by another study that

revealed home visit programs play an important role in identifying maternal depression, making successful referrals, and alleviating symptoms (Tandon et al., 2020).

5.7.1. Sub-theme 6.1: Community engagement (Village health worker involvement).

The study revealed that measures, like funded home visit plans and the availability of health follow-ups could help women receive timely maternal mental health services and to link woman with appropriate healthcare workers at the community level, like the use of village healthcare workers. This is supported by a study stating that home visitation is an evidence-based strategy in which families are engaged in their homes or communities by trained personnel. It is reported that in the hospital, families are generally receptive to an early nurse home visit, particularly if they have previously experienced home visiting (Handler et al., 2019).

5.7.2. Sub-theme 6.2: Lack of clear follow-up channels for clients that experienced PPD and funding mechanisms

The results of this study revealed structural challenges regarding the follow-up of PPD clients.It was evident that there were no clear client home visit programs and funding to support PPD clients. This is evidenced by a study, which found that for women referred for perinatal mental health treatment, those who were offered home visits or appointments that were co-located with their postpartum visit, were four times more likely to access care hence this proves a need for home visits for women who had PPD and those at risk (Bina et al., 2019). In their study done in the UK, Ford et al. (2019) found that 42% of women who screened positive for PPD did not see their General Doctor for support, citing the logistical challenges of attending the appointment as a primary reason. Post-screening home-visitation programs could then be used to bring PPD care to a site of the parenting population. It cannot be overstated that screening for PPD is only useful in conjunction with a plan for active referral and treatment in the case of a positive screen. Therefore, these studies have shown that the provision of follow-ups, community campaigns, and nurse home visits are significant for increasing a patient’s motivation to seek treatment for PPD.

5.8. Conclusion

The research findings have a significant implication for decision-makers and policymakers to solve problems in the maternal mental health service provision. They also indicated a need for best-practice guidelines to support a uniform approach to PPD screening and also revealed systemic barriers that impede equitable PPD screening irrespective of nurse-midwives level of education or experience. Nurse midwives' perceived factors regarding their education on PPD were an expression of lack of nurse midwives' empowerment, inadequate human and material resources and stigma. The perceptions regarding their education on PPD was apparent among all nurse midwives who took part in the study.

5.9. Recommendations

Efforts have already been made at the community level to provide health services, but mental health services are limited. Solving these problems require the accurate identification, appropriate decision-making and further research. The results from this study can guide educators and experts in the provision of more effective mental health services to mothers and improve nursing services. Further research is crucial including other districts of Lesotho, using both qualitative and quantitative research approaches. Another recommendation is of capacitation of nurse midwives through the continuous professional development to enhance their competencies on PPD assessment, diagnosis and its management.

Nurse-midwives can be better supported to carry out their important work by having access to continued education, training, and mentorship regarding PPD, as well as the EPDS, which is the most globally used tool to screen PPD. The application of the Edinburgh Postnatal Depression Scale (EPDS) is simple and a rapid scale and should be disseminated in the health network. It is ideal for use in the clinical routine by professionals who are not specialized in the area of mental health, to track mothers who present with depressive symptoms and as a tool to identify woman at risk and those already in need for help.

Additionally, there is an urgent need to improve LOR with the PPD screening section, and the way in which hospitals (both private and public) communicate and share information. These efforts are likely to promote a multidisciplinary approach to supporting better health and well-being outcomes for women and their families.

5.10. Limitations

The interruption of the interview sessions by the healthcare providers despite the note showing that the interview is in progress was noted as a limitation to the study The study was conducted in one hospital in the country therefore, the results cannot be generalized. Despite these limitations, this study offers valuable insights into the perceptions of nurse-midwives regarding PPD in Quthing Hospital.

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CHAPTER 6: MANUSCRIPTS

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MANUSCRIPT TO REVIEW

Perceived factors of nurse midwives regarding Post-Partum Depression at a Large Tertiary Care Facility in Lesotho

[information redacted to maintain the integrity of the review process]

Abstract

Background: Effective postpartum maternal care is essential for the overall well-being of both the mother and her child. Postpartum depression (PPD) is a pervasive issue with profound implications for maternal health. However, a significant research gap exists concerning the perspectives of nurse-midwives on PPD within the context of Lesotho.

Aim: This study aimed to explore perceived factors of nurse midwives regarding their education about PPD at a Large Tertiary Care Facility in Lesotho.

Setting: The study unfolded at Quthing Hospital, a government-funded healthcare facility situated in Lesotho's southernmost district, Quthing. The hospital's strategic location within the town of Moyeni, the district's largest town, flanked by the Holy Trinity Anglican Church and the Lesotho Correctional Services facility, contextualizes the research.

Methods: Employing a constructivist paradigm, the research adopted qualitative, exploratory, descriptive, and contextual approaches. Nine nurse-midwives participated in individual interviews.

Results: Thematic analysis of the data resulted in three themes. These were; lack of nurse-midwifery empowerment, inadequate human and material resources, and stigma. Participants had negative perceptions regarding PPD.

Conclusion: Nurse-midwives at a Large Tertiary Care Facility, perceive PPD through a multifaceted lens. Insights underscored the complexity of PPD and its ramifications for maternal care.

Contribution: This study provides invaluable perspectives from nurse-midwives within a specific Lesotho context, laying the foundation for strategies to enhance PPD management and maternal mental healthcare.

Keywords: Perceptions, nurse, midwives, post-partum depression, maternity ward

Introduction

Maternal care during postpartum is crucial to both the mother and child's physical, emotional, and psychological well-being (Saharoy et al., 2023). Lopez-Gonzolez and Kappasapu (2023) asserted that maternal care encompasses various aspects, such as providing a nurturing, supportive environment and establishing health routines. However, postpartum depression (PPD) is a common social health problem and affects the mother and newborn baby (Alshikh et al., 2021). PPD has negative effects on the growth and development of the child and the mother-infant relationship, which can lead to infant mortality (Gebregziabher et al., 2020). Furthermore, Farias-Antuneze et al. (2018) stated that PPD can have immediate and long term effects on the behavior and cognition of the infant, with consequences that can endure through adolescence. Additionally, Magdalena et al. (2020) highlighted that in-patient midwives play a pivotal role in robust screening for PPD, since women with PPD commonly deny experiencing symptoms of depression and refuse professional assistance. Early detection and treatment of PPD immediately after infant birth in the maternity ward is of clinical importance (Yang et al., 2022). It is recommended that all patients be screened with a validated instrument, and diagnostic and management services available for those who screen positive (WHO, 2022). Therefore, the perceptions of nurse-midwives regarding screening, diagnosis and management of PPD is crucial for successful preparedness in carrying out crucial PPD interventions (Bina et al., 2019)

According to the DSM V diagnostic criteria, PPD is a major depressive episode with the onset during pregnancy or within four weeks of birth and is characterized by the presence of nine symptoms of depression that appear almost every day and interfere with the mother's daily activities (Kettunen 2019). Furthermore, Lackie et al. (2021) asserted that PPD is a major public health concern for childbearing women as it occurs within the first four weeks post-delivery, which is a critical time for both the mother-infant relationship and the mother's health. Saharoy et al. (2023) indicated that PPD can result in diminished quality of life, hindered bonding with the infant, and challenges in fulfilling essential maternal care responsibilities. Furthermore, Slomanian et al. (2019) stated that PPD can adversely affect the mother's mental health and

elevate the risk of enduring mental health disorders. Finally, PPD contributes to maternal death rates because of potential suicide (Chin et al., 2022).

Consequently, Alba (2019) asserted that hospitalization of pregnant women gives nurse-midwives the chance to educate mothers on PPD and other mood disorders; hence, the perception of nurse-midwives regarding PPD education is crucial. In addition, research has found that three brief home-based visits using counseling techniques were effective at accelerating the recovery rate for women suffering from PPD (Anokye et al., 2018), and where nurse-midwives regularly come in contact with postpartum women, there was a willingness to screen for PPD (Bina et al. 2019). However, poor pre-service education by nursing colleges affects the development of essential maternal mental health competencies (Hussein et al., 2023). There are also barriers to PPD screening by nurse midwives including lack of time and training (Mohammed-Durosinlorun et al 2022). Nurse midwives have expressed concern about the time it takes to assess women with PPD, particularly where there was a heavy workload with large patient numbers and limited time with patients (Abrahams et al. 2019). While nurse-midwives curricula typically include content related to screening and management of PPD (Davidson, 2013), there is a paucity of research regarding how nurse-midwives perceive PPD education – both screening and management, particularly in low resource settings.

Problem statement

PPD is classified as one of the major psychological disorders that affect the mother and her baby. Frequently underdiagnosed, it remains the most common complication of childbirth and the most common perinatal psychiatric disorder, with women at the greatest risk during their first postpartum year (Gurun et al., 2019). The Lesotho Ante-Natal Care (LANC) Guidelines (Ministry of Health, Lesotho, 2020) recommend that a pregnant woman have eight focused visits of which the initial visit occurs before or at 12 weeks gestational age and subsequent visits at 20, 26, 30, 34, 36, 38 and 40 weeks. Currently, the Lesotho Post Natal Care (PNC) Standard Operating Procedures (SOP's) have no information on mental health nor routine screenings that should be done. These SOPs do not recommend a PPD screening tool; when done, PPD screening results are not attached to the Obstetric Record book (LOR). Therefore, women are discharged without being screened, diagnosed, or managed for PPD when present. At Quthing

district, there is only one government hospital fully funded by the government. From the researcher's work experience, there are no clear treatment and referral pathways for women with PPD following birth.

Purpose of the study

To explore the perceived factors of nurse midwives regarding their education about PPD at a Large Tertiary Care Facility in Lesotho.

Research Design

This study adapted a qualitative, explorative, descriptive, and contextual design. The constructivist paradigm was considered suitable for this study because it was seen as the most relevant avenue to explore and describe participants' perceptions regarding PPD. Furthermore, the constructivist paradigm was used as the researcher interacted with the participants with the belief that there are multiple realities of participants and with the assumption that knowledge is maximized when the distance between the inquirer and the participant in the study is minimized (Polit & Beck, 2020). According to Brink et al. (2018), the constructivist paradigm integrates human interest into the study and assumes that access to reality is through social structures like language, consciousness, and shared meaning. Hence, data collection was focused on different realities experienced by participants.

Furthermore, the researcher's belief was aligned with the constructivist viewpoint that the social world is constantly changing and is continually constructed by participants. Therefore, the researcher recognized that the individual's perception of meaning, and effect on experience can differ. Consequently, the belief was that nurse-midwifes needed to participate in the interview to some extent to better understand and express their viewpoints and add their experiences.

Research setting

The research study was conducted at Quthing Hospital, a government-funded healthcare facility situated in the southernmost district of Lesotho, known as Quthing. This hospital is strategically located within the town of Moyeni, which serves as the largest town in the district and functions as a constituency in its own right. The total number of nurse-midwives assigned in martenity ward was 12; they covered triage, intrapartum, postpartum, and newborn services, as needed.

The average number of births each month was 900. This chosen location provided a significant context for the research conducted in the study.

Participants

All nurse-midwives working on maternity ward (N=12) were invited to participate. The Nursing Manager of the hospital under study introduced the research facilitator to the study participants, then the research facilitator introduced herself and explained the study to the participants and who were eligible to participate verbally. invited to participate. In this research, nurse-midwives who met the inclusion criteria were selected as participants (n=9). The selection of the sample was done using non-probability purposive sampling, specifically targeting nurse-midwives who met the eligibility criteria. The criteria for selection included nurse-midwives who had two or more years of experience as a midwife and employed full time, managing patients with PPD at a large tertiary care facility in Lesotho. These participants, representing both genders, were chosen because they were expected to provide valuable insights into the topic under study.

Ethical Consideration

Before conducting the research, ethical considerations were rigorously observed. Ethical clearance for the study was granted by the Ministry of Health in Lesotho [ID [information redacted to maintain the integrity of the review process]] and the [information redacted to maintain the integrity of the review process]. All procedures followed the ethical principles outlined in the Belmont report, including principles of beneficence, human dignity, and justice. Beneficence aimed to benefit both individual participants and society as a whole. Anonymity was assured through the use of codes during the interviews, ensuring that participants' names remained undisclosed. Confidentiality was maintained by ensuring that participants' names remained undisclosed, and the transcripts documents were encrypted to secure the information provided. The principle of respect was upheld by providing participants with information about the study and their right to freely choose to participate and the right to withdraw without bias. Written informed consent was obtained from those who voluntarily agreed to participate, signifying their autonomy and respect for their rights.

Participants were also assured that their participation would not result in harm, although emotional support if needed. A debriefing session, conducted by an experienced healthcare worker in counseling, was offered to address any emotional concerns that participants might have had after the interviews. In summary, participants were fully informed about the study, their rights, and the voluntary nature of their participation, and their signed consent was obtained before the research commenced.

Data Collection

Participants were individually interviewed to provide them with a unique opportunity to express themselves in a manner rarely available in their everyday lives. These participants were directly involved in the care of post-partum depressed patients. The data collection process took place between August 27th, 2023, and September 5th, 2023, with individual interviews conducted by the research facilitator who was a nurse-midwife working at the facility. The researcher requested the facilitator to collect data to eliminate bias since the researcher was a nurse-midwife employed on the unit in question. The interviews were conducted in the Sesotho language as it was the common language of communication among the participants working within the hospital setting. Each interview occurred in a private room during lunch time, typically lasted between 45 to 60 minutes and were audio-recorded.

The primary semi-structured questions were: 1. What are your perceptions regarding how PPD is addressed at the facility? 2. What are your thoughts about how PPD is managed where the patients screens positive? 3. How did your educational program prepare you for screening, diagnosing and treating PPD?" Interviews continued until data saturation was reached, meaning that no new information emerged. The researcher collected insights from the perspective of the participant, employing open-ended questions to elicit responses. Table 1 details the primary research questions and prompts.

Table 1: Primary Research Questions

Questions	
Primary	**Probes**
What are the nurse-midwives' perceptions regarding postpartum depression (PPD)?	• How do nurse midwives understand postpartum depression in their clinical practice? • What specific signs or symptoms of postpartum depression do nurse midwives consider most significant or concerning? • In what ways do nurse-midwives believe postpartum depression affects the overall well-being of both the mother and the newborn?
What are their perspectives on the management strategies for PPD?	• How do nurse midwives currently approach the management of postpartum depression in their clinical practice? • Are there specific challenges or barriers that nurse midwives face when implementing management strategies for postpartum depression? • How do nurse midwives involve and educate the family in the management of postpartum depression cases?
How do they emotionally respond to	• Are there instances where nurse

the management of PPD?	midwives find it difficult to maintain professional boundaries due to the emotional nature of postpartum depression management? • Do nurse midwives feel adequately prepared or supported in terms of their own emotional well-being when managing postpartum depression cases?

Data Analysis

Data analysis happened shortly after data collection began. All interviews were transcribed verbatim and coded by the research facilitator. The research facilitator took field notes on all responses from participants. When assessing data, Maguire and Delahunt's (2017) theme analysis method was adopted. The steps in the method included; Step 1: Becoming familiar with the data, whereby the researcher gained familiarity with the data through reading and re-reading the transcripts of all individual interviews. Step 2: Generating initial codes was conducted by generating the first codes from each participant. Coding, which lowers large amounts of data into small pieces of meaning, was then utilized to organize the data in a meaningful and systematic manner, with each segment of data that was related to or captured anything noteworthy about the issue being coded. Each transcript was coded thematically based on every text section that appeared to directly answer the study topic (the supervisor re-read the section and re-considered if the code should be applied).

New codes were generated as the researcher progressed through interview transcription. Step 3: Search for themes, was done by reviewing the codes and complying them into a topic and sorted into bigger themes that appeared to answer the study questions specifically. Step 4: Review Themes and step 5: Define themes was conducted by analyzing to sought to determine what each topic was about, what it was expressing and how it related to other themes. Whereas, step 6: Write up, was accomplished by constructing a final thematic map that demonstrated the

relationship between themes (Maguire & Delahunt, 2017), as in figure 1. All the results were interpreted, backed and justified by the relevant literature and consensus-seeking discussions with the researcher's supervisor who was an expert in the field of research. Data were kept in a locked area accessible only to the researcher and direct research supervisor.

Results

Demographics

A total of nine participants were interviewed. The age range was from 30 years to 42 years. Majority had educational preparation with a Diploma in Nursing and Midwifery with midwifery clinical experience ranging from 3 to 13 years, whereas one had the Degree in Nursing and Midwifery participants' years of experience of 15 years. See Table 2 for participant demographics and assigned participant number.

Themes and Subthemes

Three themes were identified on analysis with eight sub-themes. The themes were; 1. Lack of nurse midwifery empowerment with the following sub-themes, management of skills for PPD and continual professional development on training; 2. Inadequate human and material resources with the resulting sub-themes, shortage of nurse midwives, shortage of guidelines, recording and reporting tools and poor follow-up mechanisms; 3. Stigma with the subsequent sub-themes, self-perceived stigma, stigma attached to PPD (Community) and need to empower the family.

Table 2: Demographic profile of participants (N=9)

Gender	Participant Number	Years of Midwifery Experience	Highest level of Education
Female	1	12	Degree in nursing and midwifery
Female	2	8	Diploma in nursing and midwifery
Female	3	8	Diploma in nursing and midwifery
Female	4	7	Degree in nursing and midwifery
Female	5	4	Diploma in nursing and midwifery
Female	6	15	Diploma in nursing and midwifery
Male	7	4	Diploma in nursing and midwifery
Male	8	3	Diploma in nursing and midwifery
Male	9	3	Diploma in nursing and midwifery

Table 2: Themes and sub-themes

Themes	Sub-Themes
1. Lack of nurse midwifery empowerment	• Management of skills for PPD • Continual professional development on training
2. Inadequate human and material resources	• Shortage of nurse midwives • Shortage of guidelines, recording and reporting tools • Poor follow-up mechanisms
3. Stigma	• Self-perceived stigma • Stigma attached to PPD (Community) • A need to empower family

Theme 1: Lack of Nurse-Midwifery empowerment

Participants perceived empowerment of nurse-midwives as vital in the effective management of PPD. Nurse midwives felt they had inadequate information in their basic educational programme and that they do not get the continuing professional development trainings regarding PPD in their clinical areas which jeopardizes the quality of PPD treatment. Participants reflected lack of nurse midwives' empowerment, which includes management skills of PPD and Continual Professional Development.

Sub-theme 1: Management skills for PPD

Nurse-midwives explained lack of skills as perceived barrier in effective management of PPD. A skill was reflected by participants as competency or abilities to perform management of PPD. All participants viewed lacking assessment skills, diagnosing skills, psychotherapy skills such as talk therapy, support and empathetic skills in managing PPD as one reported:

> *"We do not have skills to assess and manage PPD, we just rely on the discharge plan for the patient"* **(Participant 2, female, 8 years of experience)**

This is in line with the study conducted in Srilanka, where nurse-midwives reported to have limited skills regarding PPD and majority had knowledge deficits regarding risk factors and PPD detection using EPDS (Kumarasinghe et al., 2022). However, Coates and Foureur (2019) argued that midwives and student midwives can provide mental healthcare with positive outcomes in terms of both physical and mental health outcomes for women, evidenced by counselling intervention.

Sub-theme 2: Continual professional development on training

Nurse midwifes viewed continuous professional development regarding PPD as crucial. Continuous Professional Development is in-service training that are hold by the management to

nurse midwives to help develop and improve their PPD management skills which can be through refresher courses. Participants reported that Continual professional development enable nurse-midwives to continually update and renew their knowledge and skills regarding PPD. Most of the participants viewed lack of trainings on PPD management in their clinical setting:

> *"We do case presentation as part of our professional development, so think if we focus on cases like PPD, we can do better in its management, and again ownership of work can help a lot"* **(Participant 3, female, 8 years' experience)**

This is in line with the study conducted by Brughaet et al. (2016), cited by Wang et al. (2022) which revealed that nurse midwives perceived training in psychological nursing strategies to be crucial and complementary to their initial professional knowledge. In addition, Kwon et al. (2007), cited in Lee et al. (2019) stated that in nursing organizations, empowerment leads to positive changes in the attitudes and behaviors of organizational members by increasing the capacity of nurse midwives and spreading their power into nursing organizations.

Theme 2: Inadequate human and material resources

Nurse-midwives explained structural challenges around PPD management. They explained that the Lesotho Obstetric Record, Antenatal care register and Post-natal care register have no section for maternal mental health assessment and proper management of PPD was incomplete, which limits the care needed. Participants also viewed shortage of nurse midwives in maternity ward jeopardizes the quality of care provided to the newly delivered mother.

Sub-theme 1: Shortage of nurse-midwives

Majority of participants explained that shortage of nurse midwives has negative impact on management of PPD. Participants reported few number of nurse midwives allocated in maternity ward with high number of deliveries and post-deliveries to manage which increase their work loads and temper with provision of quality care:

> *"I think if our maternity ward can be well staffed, our allocation may put nurse-midwives in the delivery room, other in antenatal care while other in post-natal care. In that way,*

complication can be easily identified, as it is now, there is shortage of nurse midwives" **(Participant 1, female, 12 years of experience)**

This is in similar with the study conducted by Bayrampour et al. (2018), cited in Castello, (2021), which understaffing as provider- and system-level barriers to inadequate screening of PPD in the obstetrical setting. This is also in line with the study conducted by Setebe and Kiwara (2022) which reported that the barriers for nurse midwives' performance included inadequate staffing level and increased workloads.

Sub-theme 2: Shortage of guidelines, recording and reporting tools

The majority of nurse midwives expressed a challenge of guidelines, recording and reporting tools in providing PPD. Participants viewed guidelines as crucial in providing clinical decisions regarding PPD assessment and management and rules of operation. Nurse midwives also reported lack of screening and reporting tools for PPD cases. Nurse midwives explained lack of information written on registers of women with PPD and how lack of reporting tool impact on reporting existence of PPD, hence the severity of the condition is missed:

"I think one major thing is there are no policies or guidelines on management of PPD, even the antenatal registers, post-natal and Lesotho Obstetric record book has limited data on PPD screening, recording or reporting and its management" **(Participant 1, female, 12 years of experience)**

McCauley et al. (2022) stated that the introduction of routine mental health guidelines and a standardized questionnaire help guide the assessment of women to be part of routine antenatal and postnatal contact, and nurses to be included in the formulation of registers (McCauley et al., 2022).

Sub-theme 3: Poor follow-up mechanisms

Participants perceived that one of the most challenging aspects of nurse midwives is the fact that PPD is not prioritized as a serious condition. They reported limited time to support women with PPD and poor follow-ups when the PPD woman is discharged which affects the management of PPD:

> *"Post-delivery, we spend a short time with the women, so even the identified ones get lost, it's like we can have home visits to continue with management and link the women with village health care workers"* **(Participant 2, female, 8 years of experience)**

> The study conducted in the UK, by Ford et al. (2019) found that 42% of women who screened positive for PPD did not see their General Doctor for support, citing the logistical challenges of attending the appointment as a primary reason.

Theme 3: Stigma

Nurse midwives highlighted that negative attitude towards maternal mental issues need to be considered and awareness of PPD was needed to enable post-partum women to attend the required healthcare needs. Participants perceived stigma as a negative attitude or idea a of a person or a group of people and relates to social disapproval of the person or group based on many factors such as teenage pregnancy which may lead one to suffer from PPD. The participants viewed stigma comprising of self-perceived stigma, stigma attached to PPD (community) and a need to empower the family:

Sub-theme 1: Self-Perceived Stigma

Nurse midwives perceived that young women sometimes have a perceived stigma which may contribute to their chances of developing PPD. Self-perceived stigma was viewed by participants as a person's recognition that the community or society hold prejudice and will discriminate against them because of many factors such as teenage pregnancy or unwanted marriage.

"I think young women or girls already judge themselves that they felt pregnant at an early age or before marriage, which lead them to struggle to express how they feel" **(Participant 3, female, 8 years of experience)**

This is consistent with Dubrieucq et al. (2021) who conveyed that perceived and experienced stigma-including from mental health providers-predicted self-stigma, may lead one to develop mental illness and there is need to develop anti-stigma campaigns and recovery-oriented practices (Dubreucq et al., 2021). In addition, the study conducted by Sakina et al. (2022) revealed that majority of the participants did not share about their deteriorating health and symptoms with anyone because they thought that their social and cultural setting is such that people might not understand and they presented various justifications about it.

Sub-theme 2: Stigma attached to PPD (Community)

Participants explained how community stigma may contribute to the young woman having PPD. Adolescents mothers frequently encounter pregnancy-related stigma from the community members which increases their risk for PPD as well as age 45 pregnancies were explained as high risk for post-partum depression:

"In our society, teenage pregnancy is forbidden and when a teenager is pregnant, everyone around wants to know who is the father and that is depressing to the woman given their different circumstances" **(Participant 3, female, 8 years of experience)**

This study is in agreement with the study conducted in Ethiopia by Monaghan et al., (2021) where women were socially expected to be strong and symptoms of depression like sadness and crying were regarded as weakness and religious sin.

It is reported that in the hospital, families are generally receptive to an early nurse home visit, particularly if they have previously experienced home visiting (Handler et al., 2019).

Sub-theme 3: A need to empower family

Participants explained the importance of family involvement into the care of the woman post-delivery and the need to inform caregivers and spouses about PPD, which would lead to increased family awareness and continue with care of the woman. Nurse-midwives also explained their discharge plan regarding PPD diagnosed and treatment in a timely manner, which involves family health education regarding PPD.

"*We do health education for family members during discharge of a PPD woman from the hospital about PPD*" (**Participant 3, female, 8 years of experience)**

This is supported by a study that stated that family members who have a good level of education and have come across women with PPD, hold positive attitudes toward PPD, hence health education to family members is important (Poreddi et al., 2021).

Discussion

The results of this study revealed clarity on nurse midwives' perception regarding post-partum depression. Participants perceived lack of nurse midwives' empowerment in managing patients with PPD, where they highlighted that empowerment of nurse midwives could provide them with mental health nursing skills necessary to identify early signs of PPD and its management. This aligns with the work of Almutairi et al. (2023), where participants held that nurse midwives' empowerment through education can help them to provide mental care to postpartum women based on their needs and intervene to prevent further deterioration. Additionally, Jannati et al. (2021) assert that the healthcare system needs healthcare providers who are experts in mental health to diagnose and treat women with PPD.

Nurse-midwives perceived inadequate human and material resources crucial in management of PPD. They shed light on lack of screening tools and emphasized the need to address this gap, highlighting the importance of tools and interventions to improve PPD screening practices. This aligns with the recommendation that early screening for depression, starting during pregnancy, is pivotal in identifying the risk of PPD at an earlier stage, facilitating timely interventions that can

span the entire postpartum period (Almutairi et al., 2023). As Jannati et al. (2021) underscore, the absence of timely diagnosis and treatment for PPD carries multifaceted consequences, encompassing a diminished quality of life, strained maternal relationships, hindered infant growth and development, marital discord, and even the emergence of suicidal ideation.

In the current study, nurse-midwives highlighted the challenges surrounding the management of PPD, including lack of healthcare policies and guidelines, reporting tools, information in the registers, and staff shortages, all of which impact the identification and management of PPD in healthcare settings. This is in line with the study conducted by Almutairi et al., (2023) which assert that policies and procedures must be updated on a regular basis so as to reflect the latest evidence-based practice.

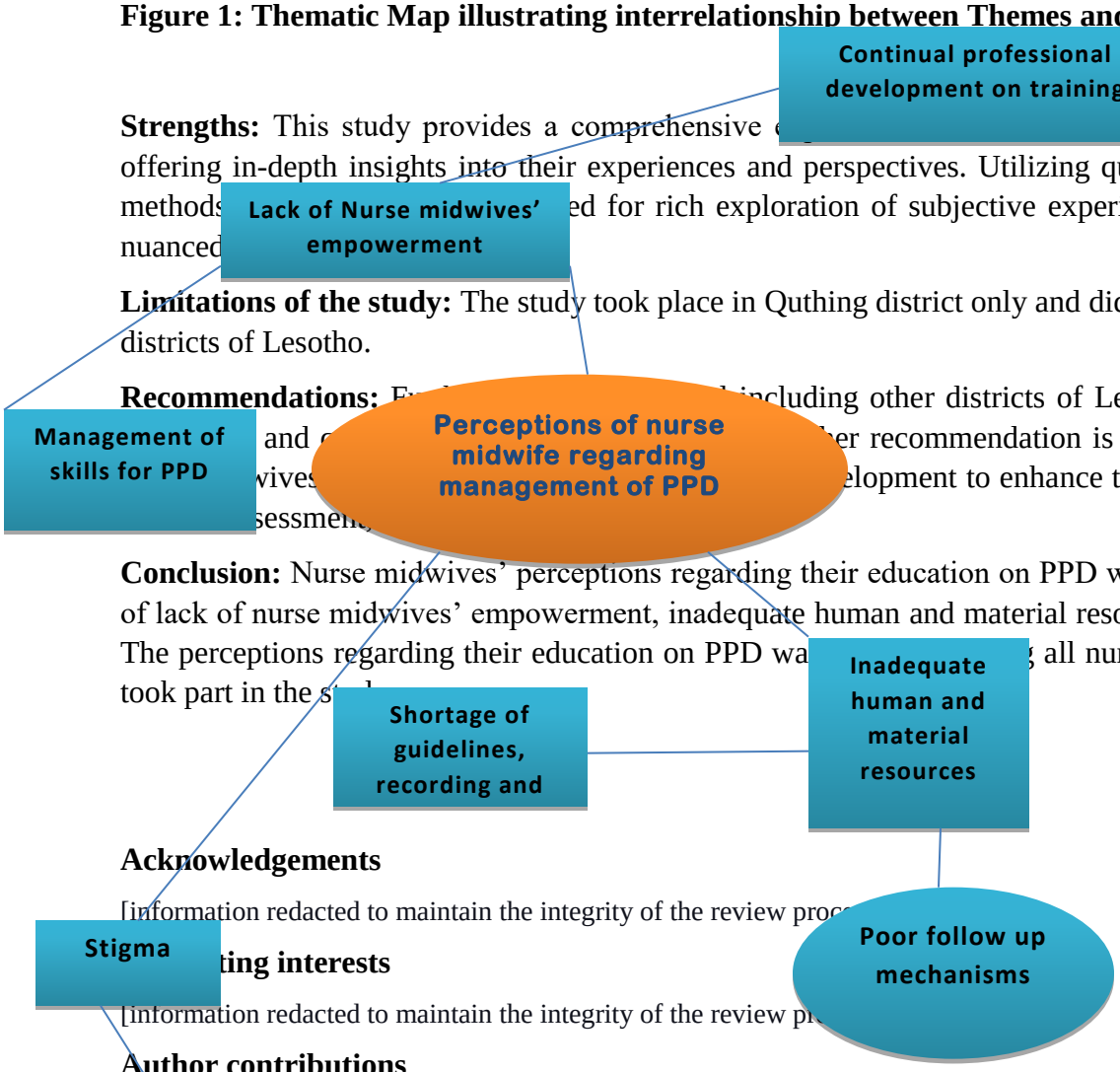
Furthermore, participants showed the perceived challenge of poor follow up mechanisms, particularly with regard to community engagement involving village health workers, to identify maternal depression, facilitate successful referrals, and alleviate PPD symptoms. This aligns with the findings from by Kallem et al. (2019), where a very low rate of home visits for postpartum mothers to screen for PPD was uncovered. Similarly, most of the nurses in the study of Almutairi et al., (2023) stated that postpartum women who are at risk of or have depression need to be followed up and monitored utilizing home visits which focus on maternal mental health. It was indicated that due to the risk of PPD developing at any time, home care should be considered a solution for following up on the mental health status of postpartum women.

In summary, participants shed light on the significant role of stigma, with a focus on the need to empower family and the influence of self-perceived stigma, in predisposing clients to PPD. Similarly, participants in the research by Almutairi et al. (2023) emphasized that feelings of guilt and stigma deter postpartum women from seeking help for depression. They recommended addressing negative attitudes toward mental health and raising awareness to facilitate timely healthcare access for postpartum women.

Moreover, participants in the current study emphasized the significance of empowering families in post-delivery care for women and underscored the importance of educating caregivers and spouses about PPD to enhance family awareness and the continuity of care for women. This

tally, with the findings from the study by Lee et al. (2023) where social support (from family and significant others) was significantly associated with PPD. Consequently, the participants from the work of Almutairi et al., (2023) suggested including family members in women's health education content so they understand PPD and can be supportive.

Figure 1: Thematic Map illustrating interrelationship between Themes and sub-themes



Strengths: This study provides a comprehensive e ' perceptions, offering in-depth insights into their experiences and perspectives. Utilizing qualitative research methods ed for rich exploration of subjective experiences, enabling a nuanced

Limitations of the study: The study took place in Quthing district only and did not include other districts of Lesotho.

Recommendations: F including other districts of Lesotho, using both and er recommendation is of capacitation of wives elopment to enhance their competencies sessmen

Conclusion: Nurse midwives' perceptions regarding their education on PPD were an expression of lack of nurse midwives' empowerment, inadequate human and material resources and stigma. The perceptions regarding their education on PPD wa all nurse midwives who took part in the s

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Disclaimer

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Ethical Considerations

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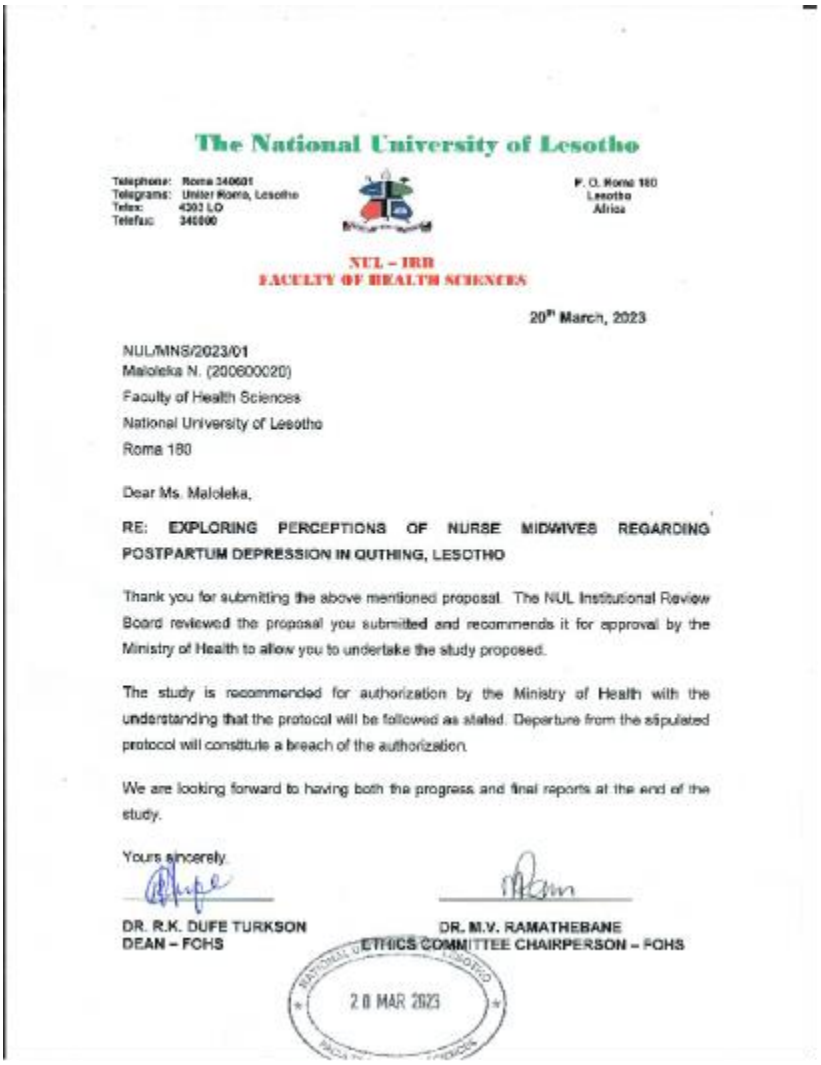
ANNEXURES

Annexure A: Ethical Approval (NUL)



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NUL – IRB
FACULTY OF HEALTH SCIENCES

20th March, 2023

NUL/MNS/2023/01
Maloleka N. (200600020)
Faculty of Health Sciences
National University of Lesotho
Roma 180

Dear Ms. Maloleka,

RE: EXPLORING PERCEPTIONS OF NURSE MIDWIVES REGARDING POSTPARTUM DEPRESSION IN QUTHING, LESOTHO

Thank you for submitting the above mentioned proposal. The NUL Institutional Review Board reviewed the proposal you submitted and recommends it for approval by the Ministry of Health to allow you to undertake the study proposed.

The study is recommended for authorization by the Ministry of Health with the understanding that the protocol will be followed as stated. Departure from the stipulated protocol will constitute a breach of the authorization.

We are looking forward to having both the progress and final reports at the end of the study.

Yours sincerely,

DR. R.K. DUFE TURKSON
DEAN – FOHS

DR. M.V. RAMATHEBANE
ETHICS COMMITTEE CHAIRPERSON – FOHS

20 MAR 2023

Annexure B: Ministry of Health approval

LESOTHO

Ministry of Health
P.O. Box 514
Maseru 100

July 12, 2023

DR. ROSE DUFE-TURKSON
Dean FOHS
NUL

Dear Dr. Dufe-Turkson

Re: APPROVAL OF 22 UNDERGRADUATE STUDENT RESEARCH PROTOCOLS FROM NUL LOCAL IRB (LIST ATTACHED)

Thank you for submitting the above mentioned undergraduate student protocols that have been reviewed and recommended approval by the local Institutional Review Board (l-IRB) of the NUL. As requested, the Ministry of Health, Research and Ethics Committee hereby approves the studies. **The registration numbers at the RCU are from ID 145-2023 to ID 166-2023.** The ID number, the title of the proposal and student names are herewith attached as recorded in our office. We would like to suggest disseminating a copy of this letter and the list to respective student for his/her reference.

We are looking forward to have final reports at the end of these studies.

Sincerely,

DR. NYANE LETSIE
Director General Health Services

DR. LIMPHO MAILE
Member of National Health Research
Ethics Committee (NH-REC)

Annexure C: Quthing Hospital approval letter

QUTHING GOVERNMENT HOSPITAL
P.O BOX 3
QUTHING 700
27/3/2023

The National University of Lesotho
P.O.BOX ROMA 180
LESOTHO
Africa

Dear Sir/Madam

APPROVAL LETTER TO COLLECT DATA AT QUTHING HOSPITAL

This is approval from Quthing Government Hospital to allow Ntsehiseng Maloleka to collect data for the study titled EXPLORING PERCEPTIONS OF NURSE MIDWIVES REGARDING POSTPARTUM DEPRESSION IN QUTHING DISTRICT, LESOTHO. Start date for data collection is 27/3/2023 and expected to end on the 31/7/2023.

Yours faithfully

GOVERNMENT HOSPITAL
MANAGER HOSPITAL NURSING
SERVICES QUTHING
Mmantsebeng Thaele
28-03-2023
P.O. BOX 3
QUTHING 700, LESOTHO

Annexure D: Information given to participants

My name is Ntsehiseng Maloleka, I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwife. The title of the study is Exploring Perceptions of Nurse Midwives regarding postpartum depression in Quthing District. In this study, your participation is completely voluntary, feel free to opt out of the study and all the information shared will be confidential, only you and my supervisor are going to know your responses. If you agree to take part in the study here is a copy of an information sheet that explains the reasons for the study and we can go through it right now if you like, attached is the consent form for the participant to sign so that the information from the interview can be used in the study and remember there are no incentives provided for being a respondent in the study.

Annexure E: Informed Consent form

Title of the study: Exploring Perceived factors of Nurse-midwives regarding postpartum depression in Quthing District.

Dear Participant

You are humbly requested to take part in the research on exploring perceptions of nurse-midwives regarding postpartum depression in Quthing Hospital, Quthing Lesotho. As a participant in this study, it is very important to understand what the study is all about, be free to ask questions in areas that you do not understand, and in case you are not comfortable being a participant, you are free to withdraw from the study. The study was about nurse-midwives' perceptions regarding PPD, its associated risk factors, and screening tools to identify women at risk. There is an interview guide consisting of 4 main questions and space provided for answering questions, read the question carefully before providing the answers, and you are highly requested to respond sincerely and to work independently.

There are no incentives to be provided to respondents nor payment from them as participants, the participants are purposely chosen due to the valuable information they have for the study.

Confidentiality, the data obtained from the study will be stored on the personal computer of the researcher and to be used for the improvement and implementation of Standard operating procedures and policy makings. Participants will be given code numbers to restore their confidentiality. When the study is complete, the data will be analyzed and during report writing, no participant names will be mentioned in any publication.

By filling the form, it was a permission to use your answers for the aim described above, Thank you for your cooperation.

Participant signature…….

Date……..

Annexure F: Sample of interview questions

RESEARCH TOPIC: EXPLORING PERCEIVED FACTORS OF NURSE-MIDWIVES REGARDING POSTPARTUM DEPRESSION IN QUTHING DISTRICT.

THE NATIONAL UNIVERSITY OF LESOTHO

FACULTY OF HEALTH SCIENCES

DEPARTMENT OF NURSING

RESEARCH INSTRUCTIONS

Please read questions carefully before answering

Use a black pen to answers in questions

Write answers on the space provided

Use block letters to answer questions

SECTION A: DEMOGRAPHIC DATA

GENDER	MALE FEMALE OTHER
DATE OF BIRTH	DD/M/YY
AGE	
MARITAL STATUS	SINGLE MARRIED DIVORCED
EDUCATIONAL QUALIFICATION	
YEARS OF WORKING EXPERIENCE	

SECTION B: PERCEIVED FACTORS OF NURSE-MIDWIVES KNOWLEDGE REGARDING PPD.

1. Can you please describe nurse-midwives' perceptions regarding PPD?
2. Have you ever identified a woman with postpartum depression?
3. Can you describe nurse-midwives' management of postpartum depression?
4. Can you describe factors that influence management of postpartum depression?

TABLE 3. Themes, sub-themes, and codes

The table below shows themes sub-themes and codes that emerged from the

data analysis

Table of Analysis

Theme 1 **Empowerment** **Sub-theme1:** Lack of PPD skills in the management of PPD **Codes:** - We do not have the skills to assess PPD and we just rely on the discharge plan. -I just wish we could be capacitated with management of PPD so that we gain skills. - I think we lack skills in the management of	**Theme 2** **Stigma around PPD** **Sub-theme 1:** Age as high-risk factor **Codes:**-Most of the time, women with signs and symptoms of PPD are teenage pregnancies or older age pregnancies mostly above 45 years. -PPD causes poor growth of the baby especially in teenage mothers, they struggle to bond and feed their babies. -In our society, teenage pregnancy is forbidden, and when	**Theme 3**: **Screening/ Assessment of PPD** **Sub-theme1:** Lack of screening tools (Screening tools and SOPs) **Codes:** -If we have a standardized tool in our facility to screen women for PPD during Antenatal care rather than identifying the problem post-delivery most cases can be attended to in time. -We can identify a woman with signs and symptoms of PPD but to diagnose it as PPD is a problem because we lack

Annexure G: Themes

THEMES
1. **Empowerment**
2. **Stigma**
3. **Screening/ Assessment of PPD**
4. **Family Support**
5. **Lack of resources**
6. **Home visits**

Annexure H :Sample of transcripts

Transcripts

Participant: 01

Good afternoon, Sister, my name is Ntseiseng Maloleka, I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwife. The name of title of the study is Exploring Perceptions of Nurse Midwives regarding postpartum depression in Quthing District. In this study, your participation is completely voluntary, feel free to opt out of the study and all the information shared will be confidential, only you and my supervisor are going to know your responses.

Respondent: Ok Sister

If you agree to take part in the study here is a copy of an information sheet that explains the reasons for the study and we can go through it right now if you like, attached is the consent form for the participant to sign so that the information from the interview can be used in the study and remember there are no incentives provided for being a respondent in the study.

Respondent: It's ok Sister. (signs the consent form).

Interviewer: Now, like we agreed before we started, I am going to be tape-recording our discussion so that information can be clear later on when I am transcribing. Nobody will be able to recognize your voice, and your words will be written onto paper without your name on it. Is that all right with you?

Respondent: Hmmm... rubbing hands together….. Okay, we can start.

Interviewer: Can you share with me your perceptions regarding postpartum depression?

Respondent: Hmm… okay postpartum depression is a serious condition and it’s there.

Interviewer: Can you elaborate more on your answer, please?

Respondent: I think…. women ignore signs and symptoms and just think it is normal after birth while others may feel afraid to disclose the way they feel.

Interviewer: Why would the woman feel afraid to disclose the way they feel, can u elaborate on that, please?

Respondent: Er..... the thing is women sometimes are afraid of societal pressure and want to act normal to almost everything

Interviewer: Can you elaborate more on societal pressure?

Respondent: (smiling)…Normally after birth, a woman is expected to be happy and if she feels abnormal or experiences the symptoms of PPD it is not always easy for her to disclose.

Interviewer: Have you ever identified a woman with PPD?

Respondent: (Frowning face) Mmmm... not really.

Interviewer: Can you clarify on not really, what do u mean?

Respondent: I think, sister… as much as this condition is serious there are no job aids at all to help nurses to diagnose PPD.

Interviewer: Can you describe nurse-midwives management regarding PPD?

Respondent: I think er, PPD management is limited to those identified because I think we lack skills to manage it.

Interviewer: Can you elaborate more on the limited management?

Respondent: Hmmm,…(clearing throat) …deep breath, the thing is, we are not doing enough regarding PPD, even if we have a case, there are no registers to document such a case.

Interviewer: Can you elaborate more on that, please?

Respondent: Post-delivery, we focus more on physical examination care than psychological care and determine how the woman feels after delivery because our registers have no section for maternal mental abnormalities.

Interviewer: Can you share with me why limiting psychological care on the woman post-delivery?

Respondent: We do not have the skills to assess PPD and we just rely on the discharge plan.

Interviewer: Can you elaborate on the discharge plan?

Respondent: Er…. We do health education on discharge for women identified and those at risk to develop PPD including their available family members if the woman is comfortable with it.

Interviewer: Can you describe factors that influence the management of PPD?

Participant: Er…. I think the lack of information from women about PPD is hindering the better and early management of PPD.

Interviewer: Can you elaborate on that, please?

Respondent: Women sometimes ignore the signs and symptoms of PPD because mostly they do not know them.

Interviewer: Can you elaborate more on providers' factors that influence the management of PPD

Respondent: Hmm, I think one major thing is there are no job aids or tools to manage PPD, and even our registers and LOR have no data on PPD management, and our management is so limited.

Interviewer: Any other factor you may add that influences the management of PPD?

Respondent: Shortage of staff

Interviewer: Please elaborate more on the shortage of staff.

Respondent: Hmmm, I think if our maternity ward can be well staffed, our allocation may put nurse-midwives in the delivery room, others in antenatal care while others in post-natal care. In that way, complications can be easily identified.

Interviewer: Can you share anything from the interview?

Respondent: Hmmm, am good.

Interviewer: Thank you for your time.

Participant 2:

Good afternoon, Sister, my name is Ntseiseng Maloleka, I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwife. The name of title of the study is Exploring Perceptions of Nurse Midwives regarding postpartum

depression in Quthing District. In this study, your participation is completely voluntary, feel free to opt out of the study and all the information shared will be confidential, only you and my supervisor are going to know your responses.

Respondent: Ok (nodding the head).

If you agree to take part in the study here is a copy of an information sheet that explains the reasons for the study and we can go through it right now if you like, attached is the consent form for the participant to sign so that the information from the interview can be used in the study and remember there are no incentives provided for being a respondent in the study.

Respondent: It's ok Sister. (signs the consent form).

Interviewer: Now, like we agreed before we started, I am going to be tape-recording our discussion so that information can be clear later on when I am transcribing. Nobody will be able to recognize your voice, and your words will be written onto paper without your name on it. Is that all right with you?

Respondent: Ok, am good.

Interviewer: Interviewer: Can you share with me your perceptions regarding postpartum depression?

Respondent: Err… hmm…what can I say, postpartum depression is an existing condition, I think.

Interviewer: Can u elaborate more on your response, please?

Respondent: I think we confuse it with postpartum blues.

Interviewer: Can you elaborate more on why are you saying you confuse it with postpartum blues?

Respondent: Hmm, sometimes… especially the first-time mothers and adolescent mothers' tent to sleep facing away from the baby, and we just think, it is just a reality shock that indeed she has a baby, it will pass in not time.

Interviewer: What do you do when realizing this problem?

Respondent: Err…we normally try to help mothers bond with the baby and if you ask how they feel, others do not explain how they feel.

Interviewer: Why do you think they cannot explain how they feel?

Respondent: Hmm…. I think they assume it is normal and err..., I think they do not know the signs and symptoms of depression, so it is difficult for them to report how they feel.

Interviewer: Have you ever identified a woman with postpartum depression?

Respondent: Err..., hmm., Yes, I think we do. Yes, we do, it is just that we are not sure when to say it is a PPD because we do not have a set standard to say it is a PPD like you know…(smiling).

Interviewer: Can you elaborate more on the set standard to identify a woman with PPD?

Respondent: We can identify a woman with symptoms of depression but to diagnose it as PPD is a problem because we do not have a screening tool for diagnosis.

Interviewer: You are talking about set standards and screening tools; can you elaborate more on what you mean by the two?

Respondent: Hmm… what can I say. Ha-ha…(laughs)… can I make an example?

Interviewer: Yes, if it will help you explain more about screening tools and set standards.

Respondent: Err..., you see if a woman has a postpartum hemorrhage (PPH), we do have an algorithm to identify PPH and its management, so I think something like that can help. Yes, (nodding her head) it is a screening tool.

Interviewer: Can you describe nurse-midwives' management of PPD?

Respondent: Err..., I think nurse-midwives do not treat PPD well.

Interviewer: Can you elaborate more on your response, please?

Respondent: Hmm… post-delivery, the focus is more on obstetric complications than the mental well-being of the woman.

Interviewer: Can you explain why more focus on obstetric complications than the mental well-being of the woman?

Respondent: Hmm., what can I say… the thing is… post-delivery management is more guided by the postnatal examination in the LOR and postnatal care register, so there is no information on maternal mental health, but the focus will be on women who show signs and symptoms of depression.

Interviewer: What do you do to women who show signs of depression?

Respondent: Err.. this is difficult for nurse-midwives because we treat signs and symptoms and refer to MO for further management, maybe ...err..,if there was a guiding tool for management of PPD.

Interviewer: Can you elaborate on why you need a guiding tool to manage PPD?

Respondent: Hmmm, I think women will get a proper diagnosis and management, especially in mental health guiding tool just proper management for women.

Interviewer: Can you describe factors that influence the management of PPD?

Respondent: Ha-ha-ha, err…, what can I say...(smiling) Workshops on conditions like PPD can help a lot.

Interviewer: Can you elaborate more on how workshops can help a lot?

Respondent: Hmm… the purpose of the workshops normally is to update us on the prevalence and the magnitude of the conditions as well as their management you know. Hmm..you know…again ownership of our work can help a lot.

Interviewer: Can you elaborate more on ownership of work

Respondent: Sometimes we do case presentations, so I think if we can focus on cases like PPD we can do better in its management and being part of our professional development.

Interviewer: Can you explain other factors if any that influence management of PPD?

Respondent: Post-delivery, we spent a short time with the woman, so ah… even the identified get lost, it's like we can have home visits to continue with management and link the woman with the proper health care workers based in the facility like Village healthcare worker (VHW).

Interviewer: Can you elaborate more on why you propose to link the woman with a Village healthcare worker?

Respondent: After delivery, a woman is cared for by their loved ones at home, then spouses and family members may be involved the in care, and maybe VHW can assist the family with a PPD patient.

Interviewer: Can you elaborate on how you will involve the VHW and family members the in management of the woman?

Respondent: Hmm., you know….Err.., use of health education will assist in bringing awareness and the impact of the condition to the woman and the baby …yah.

Interviewer: Can you elaborate more on how the VHW will assist in in care of the women with PPD?

Respondent: VHW can do follow ups at community level and refer to the hospital if complications arise.

Interviewer: In one of your responses, you mentioned that the LOR is guiding the general management in the postpartum period, can you elaborate on its influence on PPD?

Respondent: Hmmm. not the LOR only when it comes to PPD, this has to start at ANC visits, only that our ANC register, the LOR as well and PNC registers lack information on PPD.

Interviewer: Can you elaborate on why PPD information is important in the registers and how registers influence this condition?

Respondent: Err..., the thing is…ha-ha-ha (laughing) when there is a guiding tool or information on the register, it is easy to do and a routine.

Interviewer: Can you elaborate more on the influence of registers in PPD management?

Respondent: Hmm… with no proper uniform guideline, err.., there is no proper uniform management of PPD, surely some cases are missed.

Interviewer: Thank you for your time, do you want to say something regarding our interview?

Respondent: Hmm., I just wish we could be capacitated with management of PPD so that we can gain skills.

Interviewer: Thank you, sister.

Participant 3:

Good afternoon Sister, my name is Ntseiseng Maloleka, I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwife. The name of title of the study is Exploring Perceptions of Nurse Midwives regarding postpartum depression in Quthing District. In this study, your participation is completely voluntary, feel free to opt out of the study and all the information shared will be confidential, only you and my supervisor are going to know your responses.

Respondent: Ok Sister I understand.

If you agree to take part in the study here is a copy of an information sheet that explains the reasons for the study and we can go through it right now if you like, attached is the consent form for the participant to sign so that the information from the interview can be used in the study and remember there are no incentives provided for being a respondent in the study.

Respondent: It's ok Sister. (signs the consent form).

Interviewer: Now, like we agreed before we started, I am going to be tape-recording our discussion so that information can be clear later on when I am transcribing. Nobody will be able to recognize your voice, and your words will be written onto paper without your name on it. Is that all right with you?

Respondent: Yes it is fine with me.

Interviewer: Can you share with me your perceptions regarding postpartum depression?

Respondent: OK… err. what can I say…since working in the maternity ward, I think PPD is not much.

Interviewer: Can you elaborate more, what do u mean by not much?

Respondent: Err… a few teen mothers or first-time mothers do show signs of depression, maybe because some are not ready to become parents I think cases are limited.

Interviewer: Can you elaborate on cases are limited?

Respondent: PPD cases are not reported in a proper way like other complications that have a specific tool to record their existence, its reporting we be on patient's bukana and file but as for the reporting purpose, no….. it is not there.

Interviewer: Can you elaborate more on why you are saying they are not ready to become parents?

Respondent: Err…, hmm. It is because …I think probably because of the age they are young, and they struggle to express how they feel.

Interviewer: Can you elaborate on the age factor, why is their age a problem?

Respondent: Hmm…, most of the time in teen pregnancy, everyone around wants to know who the father of the baby is…. while others do not even understand the pregnancy itself…. really how will she feel after delivery?

Interviewer: Can you elaborate on what you mean?

Respondent: Ha-ha-ha… I think they struggle to express how they feel because they feel like society will judge them.

Interviewer: Can you elaborate on societal judgement?

Respondent: Err…. After delivery a woman is expected to be happy, and failing that, they do not understand that it is possible to feel way they do. They are afraid to tell how they feel if not a happy mood.

Interviewer: Have you ever identified a woman with PPD?

Respondent: Hmmm, I can't say …you know

Interviewer: Can you elaborate more on that, please?

Respondent: Hmmm. The thing is we spend a short time with women after delivery maybe symptoms become severe when discharged…. I think they go away… I don't know.

Interviewer: Can you describe nurse-midwives' management of PPD?

Respondent: Hmmm…..., I swear we do not treat PPD well at all.

Interviewer: Can you elaborate more on that, please?

Respondent: Hmmm, we lack screening tools, we lack job aids to proper management of PPD.

Interviewer: Can you elaborate on how job aids and screening tools aid in the management of PPD?

Respondent: … (keeping silence). You know…what can I say sister… when there is a proper guide to the management of a condition, believe me, a few will be missed, but now (nodding her head) … I doubt

Interviewer: Besides the lack of tools, can you describe nurse midwives' management of PPD?

Respondent: Err., you know in identified patients, we just treat signs and in severe cases, sometimes we call the MO and sometimes we call social support officer….and keep her longer for further review.

Interviewer: Can you explain factors that influence management of PPD?

Respondent: Hmm.., I think we are short-staffed.

Interviewer: Can you elaborate more on that?

Respondent: Err… you know like now we are only two for the whole ward, from labor ward to postnatal ward, our limited time to patients makes it difficult to focus more on other conditions, we just focus on emergency cases.

Interviewer: Can you explain other factors that influence that influence management of PPD?

Respondent: Hmm… I think health education on PPD during ANC up to PNC can help mothers know about the condition and easy to report it as well as their loved ones.

Interviewer: Can u elaborate on education for their loved ones?

Respondent: Err... sister, there is the integration of health services in our community outreach programs, I think to ..err. including Maternal mental health awareness in our outreaches can bring a better outcome for PPD.

Interviewer: Thank you.

Participant 4:

Good afternoon Sister, my name is Ntseiseng Maloleka, and I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwife. The name of the title of the study is Exploring Perceptions of Nurse Midwives regarding postpartum depression in Quthing District. In this study, your participation is completely voluntary, feel free

to opt out of the study and all the information shared will be confidential, only you and my supervisor are going to know your responses.

Respondent: Ok Sister.

If you agree to take part in the study here is a copy of an information sheet that explains the reasons for the study and we can go through it right now if you like, attached is the consent form for the participant to sign so that the information from the interview can be used in the study and remember there are no incentives provided for being a respondent in the study.

Respondent: It's ok Sister. (signs the consent form).

Interviewer: Now, like we agreed before we started, I am going to be tape-recording our discussion so that information can be clear later on when I am transcribing. Nobody will be able to recognize your voice, and your words will be written onto paper without your name on it. Is that all right with you?

Respondent: It is ok with me.

Interviewer: Can you share with me your perceptions regarding postpartum depression?

Respondent: Hmm…(Silence)…hag (clamps hands) …I think PPD can affect the cognitive development of the baby and increase err… chances of mental illness.

Interviewer: Can you elaborate on your response, please?

Respondent: Hmmm...you know.... mothers who have PPD do not provide a playing interaction with their infants, they show no interest in the baby and self.

Interviewer: Can you elaborate on why it is a problem for mothers who show no interest in infant interaction?

Respondent: Err....this less interaction between mother and infants will impair the baby's learning and development because children learn through play.

Interviewer: Have you ever identified a woman with PPD?

Respondent: Yes …yes...(nodding her head)… we once had that lady who showed symptoms of PPD, and she was a teenage lady.

Interviewer: Can you explain what did you do after discovering the problem?

Respondent: Hhhh… the infant had developed jaundice and we identified that there was poor growth of the baby.

Interviewer: Err… we tried to help in bonding first and did the health education...we also help mother to have own stimulus to her baby, she started crying first but later she started talking to the baby.

Interviewer: Can you tell if what was the course of her cry?

Respondent: Yah…yes we did try to ask the problem, but she could not give a clear answer, she just said…. "I DO NOT KNOW."

Interviewer: Can you describe nurse-midwives' management of PPD?

Respondent: I think we lack skills in the management of PPD in general especially involving children.

Interviewer: Can you explain your response, please?

Respondent: Children who do not receive er…. stimulus, delay achieving developmental milestones and are likely to have behavioral problems.

Interviewer: Can you describe other management strategies done by nurses for PPD.

Respondent: Hmmm, we just do health education you know…. to avoid factors around mental health and depression.

Interviewer: Can you explain the factors that influence the management of PPD?

Respondent: I think women come in already at risk of PPD, it's like we can have community campaigns to build awareness of PPD to people.

Interviewer: Can you explain why community awareness of PPD?

Respondent: The biggest support group is the community support group involving village health workers at the community level.

Interviewer: Can you explain why you are saying women come in already at risk of PPD?

Respondent: I think if we have proper management of PPD, and reporting of such cases, no woman will go unseen, errr… you see reports gives a clear picture of the existence of a certain condition, so conditions like PPD are not reported.

Interviewer: Can you elaborate more on your response please?

Respondent: Hmmm… Proper management and treatment of PPD can reduce chances of depression in coming pregnancies.

Interviewer: Can you share anything regarding our interview?

Respondent: I just want workshops on rare conditions that affects women post-delivery, and more reporting for such conditions and workshops for nurses.

Interviewer: Thank you.

Participant 5:

Good afternoon Sister, my name is Ntseiseng Maloleka, and I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwife. The name of the title of the study is Exploring Perceptions of Nurse Midwives regarding postpartum depression in Quthing District. In this study, your participation is completely voluntary, feel free to opt out of the study and all the information shared will be confidential, only you and my supervisor are going to know your responses.

Respondent: Ok Sister.

If you agree to take part in the study here is a copy of an information sheet that explains the reasons for the study and we can go through it right now if you like, attached is the consent form for the participant to sign so that the information from the interview can be used in the study and remember there are no incentives provided for being a respondent in the study.

Respondent: It's ok Sister. (signs the consent form).

Interviewer: Now, like we agreed before we started, I am going to be tape-recording our discussion so that information can be clear later on when I am transcribing. Nobody will be able to recognize your voice, and your words will be written onto paper without your name on it. Is that all right with you?

Participant: Yes, I am ok.

Interviewer: Can you share with me your perceptions regarding postpartum depression?

Respondent: In most cases, PPD affects mother baby bonding.

Interviewer: Can you elaborate your response please.

Respondent: Err… mother baby bonding is very important because, during bond, especially in breastfeeding, it is the time when the baby is playing. You know and discovering life around, errr… so in depressed mothers this physical and emotional activity are impaired.

Interviewer: Can you elaborate more on why is bonding and breastfeeding is important in regard to PPD.

Respondent: Ahmm…. If the baby is not feeding well and not feeling secure in the mother's hands, their brain development will not be healthy.

Interviewer: Can you describe nurse-midwives' management of PPD?

Respondent: In cases like this, we to try help the woman identify the problem and involve family members/spouses in health education.

Interviewer: Can you explain more, please?

Respondent: H… er.. You know sister, we try to help the woman breastfeed the baby and give support under the supervision of the nurse.

Interviewer: Can you explain the factors that influence the management of PPD?

Respondent: Women with PPD struggle to comply with postnatal care rules, they are withdrawn from others and from nurse-midwives.

Interviewer: Can you explain why women are withdrawn from others?

Respondent: They feel like they will be stigmatized, they do not want others to realize their problem.

Interviewer: Can you elaborate more on factors that influence management?

Respondent: I think we can have more training on PPD management and have public/ community campaigns, so that people are aware of such conditions.

Interviewer: Can you share with me anything regarding this interview?

Respondent: Hmm… I think if we have a standardized tool in our facility to screen women for PPD at ANC contacts can improve management of PPD.

Participant 6:

Good afternoon Sister, my name is Ntseiseng Maloleka, and I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwife. The name of the title of the study is Exploring Perceptions of Nurse Midwives regarding postpartum depression in Quthing District. In this study, your participation is completely voluntary, feel free to opt out of the study and all the information shared will be confidential, only you and my supervisor are going to know your responses.

Respondent: Ok Sister.

If you agree to take part in the study here is a copy of an information sheet that explains the reasons for the study and we can go through it right now if you like, attached is the consent form for the participant to sign so that the information from the interview can be used in the study and remember there are no incentives provided for being a respondent in the study.

Respondent: It's ok Sister. (signs the consent form).

Interviewer: Now, like we agreed before we started, I am going to be tape-recording our discussion so that information can be clear later on when I am transcribing. Nobody will be able to recognize your voice, and your words will be written onto paper without your name on it. Is that all right with you?

Participant: Yes, I am good.

Interviewer: Can you share with me your perceptions regarding postpartum depression?

Respondent: PPD sometimes …..(silence)… err. PPD most of the time is delayed being seen or diagnosed, but it is a serious condition that needs attention.

Interviewer: Can you explain more on your response please?

Respondent: Ah… most of the time women with signs and symptoms of PPD are teenage mothers or grand-multi-parity above 45 years.

Interviewer: Can you explain if you discovered any relationships on the age mentioned.

Respondent: I think both ages groups do not accept that they have a baby, and you will find that one is afraid to face women in the same ward.

Interviewer: Can you explain on why they feel afraid?

Respondent: They think people will call them unpleasant names, due to their current life situation. They even fail to bond with their babies, it's like the baby is the course of her problems.

Interviewer: Can you explain more about the age factor, please?

Respondent: Hmm… you see, sometimes the older ones have a tendency to pretend like they never delivered at all.

Interviewer: Can you explain why this may be happening?

Respondent: In our society, mental health is being stigmatized, so women do not report how they feel in fear of stigma…. People will say they are not in their right mind.

Interviewer: Can you describe nurse-midwives' management of PPD?

Respondent: We monitor their daily routine and observe their feeding pattern and we do health education, yah ……it helps because women sometimes start to show interest in their babies.

Interviewer: Can you elaborate more on management?

Respondent: Ahmm…. We involve family members in a conducive environment to help women using a health education strategy

Interviewer: Can you explain factors that influence the management of PPD?

Respondent: I think if we can have job aids like posters, just look at our walls, there are posters of other conditions, this ease management and health education.

Interviewer: Do you want to share anything with me?

Respondent: I think we need policies on client follow up discharge, especially for women who experienced PPD.

Participant 7:

Good afternoon Sister, my name is Ntseiseng Maloleka, and I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwife. The name of the title of the study is Exploring Perceptions of Nurse Midwives regarding postpartum

depression in Quthing District. In this study, your participation is completely voluntary, feel free to opt out of the study and all the information shared will be confidential, only you and my supervisor are going to know your responses.

Respondent: Ok Sister.

If you agree to take part in the study here is a copy of an information sheet that explains the reasons for the study and we can go through it right now if you like, attached is the consent form for the participant to sign so that the information from the interview can be used in the study and remember there are no incentives provided for being a respondent in the study.

Respondent: It's ok Sister. (signs the consent form).

Interviewer: Now, like we agreed before we started, I am going to be tape-recording our discussion so that information can be clear later on when I am transcribing. Nobody will be able to recognize your voice, and your words will be written onto paper without your name on it. Is that all right with you?

Respondent: Yes, it is fine with me.

Interviewer: Can you share with me your perceptions regarding postpartum depression?

Respondent: Most of the time, err… you will find that babies from PPD mothers have some delayed developmental milestones.

Interviewer: Can you explain your response, please?

Respondent: …(silence)… Hmm, mother-child interaction is important, and it determines the cause of social, emotional, and cognitive development.

Interviewer: Can you elaborate more on mother and child bonding in regard to PPD?

Respondent: Babies born in depressed mothers show less interest in play, less vocalization and always look tired….(Laughing) I remember the other lady who had PPD, when we meet at postnatal care in mother and child health(MCH), we thought that the baby was mute, only to discover that due to her mother's condition, the baby was not mute but her mother never speaks to the baby.

Interviewer: In cases like that one what do you do?

Respondent: Err…. we create support groups for identified women to help them deal with signs and symptoms of depression.

Interviewer: Can you elaborate more on your support groups?

Respondent: Sometimes they collapse even before they take long because we are short staffed, you will find that workload inhibits time to deal with mental health issues, mostly we refer.

Interviewer: Can you describe nurse-midwives' management of PPD?

Respondent: Hmmm…. I think we do not do good job on that.

Interviewer: Can you elaborate more on your answer?

Respondent: We lack proper guidelines and policies to help nurse-midwives manage PPD.

Interviewer: Can you explain factors that influence management of PPD?

Respondent: Err… I think we need training; we need to do presentations on our case studies to improve management of PPD, ….(silence)…...we need policies on client follow up.

Interviewer: Can you elaborate on why you need policies for clients follow up?

Respondent: Hmmm…. After clients are discharged from the hospital, they go home as to what happens after that we do not know, we lack clear follow up channels to clients follow up.

Interviewer: Do you want to share anything with me?

Respondent: I think PPD need funding for client follow ups.

Participant 8:

Good afternoon Sister, my name is Ntseiseng Maloleka, and I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwife. The name of the title of the study is Exploring Perceptions of Nurse Midwives regarding postpartum depression in Quthing District. In this study, your participation is completely voluntary, feel free to opt out of the study and all the information shared will be confidential, only you and my supervisor are going to know your responses.

Respondent: Ok Sister.

If you agree to take part in the study here is a copy of an information sheet that explains the reasons for the study and we can go through it right now if you like, attached is the consent form for the participant to sign so that the information from the interview can be used in the study and remember there are no incentives provided for being a respondent in the study.

Respondent: It's ok Sister. (signs the consent form).

Interviewer: Now, like we agreed before we started, I am going to be tape-recording our discussion so that information can be clear later on when I am transcribing. Nobody will be able to recognize your voice, and your words will be written onto paper without your name on it. Is that all right with you?

Respondent: Am good.

Interviewer: Can you share with me your perceptions regarding postpartum depression?

Respondent: OK… no man...postpartum depression is something that is there but only needs research to see its magnitude…. I think.

Interviewer: Can you elaborate on that, please?

Respondent: Err… I think PPD is underreported…. hmm… it is underdiagnosed, and women go home without being seen.

Interviewer: Can you elaborate more on your response, please?

Respondent: Err… source data to DHIS2 are the registers, so our registers report nothing on PPD.

Interviewer: Can you elaborate more on why you are saying it is underdiagnosed?

Respondent: …. (silence)…Sister, I have never seen any tool to diagnose PPD there will be a few symptoms in a few days thereafter a woman is discharged and whether the condition progresses or subsides at home…rolling eyes…we don't know. That is why I am saying I think women go unseen.

Interviewer: Can you elaborate on why do you think women go unseen?

Respondent: Hmmm... what can I say … we do not have a standard tool to diagnose PPD and we cannot rely on individual discretion to identify PPD.

Interviewer: Have u ever identified a woman with PPD?

Respondent: Hmm… I do not remember.

Interviewer: Can you describe nurse-midwives management of PPD?

Respondent: I think PPD management is limited.

Interviewer: Can you elaborate more on limited management?

Respondent: The thing is….heg…diagnosis is a problem, so we use one's own discretion to manage the identified symptoms.

Interviewer: Can you elaborate more on using own discretion to manage PPD?

Respondent: The LOR has limited information to guide on management of PPD, that is why it is difficult to manage PPD.

Interviewer: Can you elaborate what do you do to the women identified to have PPD or you suspect they have PPD?

Respondent: We..err… treat the symptoms, we do the health education to women and relatives if a woman is comfortable with and sometimes we share information with all staff by having a case presentation, I think it's because PPD is rare.

Interviewer: Can you explain what you would like to happen to identified women with PPD?

Respondent: Hmmm.. …(smiling) .err ..I think if we have clear follow-up visits for women, many complications would be avoided.

Interviewer: Can you explain factors that influence the management of PPD?

Respondent: The registers must be updated so that more focus can be switched to other serious conditions like PPD.

Interviewer: Can you elaborate more on your response?

Respondent: Updated registers can assist nurse-midwives in the proper management of PPD and assist women in danger.

Interviewer: Can you explain other factors that can influence the management of PPD?

Respondent: I think..err… unavailability of resources like screening tools, management guidelines, and human resources can impact negatively of management of PPD.

Interviewer: Can you elaborate more on human resources?

Respondent: We need maternity ward to be capacitated with enough nurse-midwives so that our duty allocation is focused, nurses and also we need onsite training on PPD or workshops. In other conditions, there are workshops regularly but for Depression, ah… it is a history to tell(ha-ha-ha).

Interviewer: Can you elaborate more on focused duty allocation?

Respondent: Hmm, I think if we have allocated nurses in labor ward, others in PNC section, one's work will be focused on allocated section and may be easy to identify abnormalities for women.

Interviewer: Can you explain on how you are allocated now?

Respondent: Err… sister the thing is …..like now we are only two from antenatal care, labor ward and postnatal care, anything can happen while one is busy in labor and that is a problem, in fact it's a huge gap, PPD clients are missed.

Interviewer: Can u add anything on the interview?

Respondent: A serious staff allocation in maternity ward, we need more nurses and workshops on PPD and also, it's like we can have a funded home visit program to ease follow up of identified women with PPD, I think they get lost.

Participant 9:

Good afternoon Sister, my name is Ntseiseng Maloleka, and I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwife. The name of the title of the study is Exploring Perceptions of Nurse Midwives regarding postpartum depression in Quthing District. In this study, your participation is completely voluntary, feel free to opt out of the study and all the information shared will be confidential, only you and my supervisor are going to know your responses.

Respondent: OK.

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Respondent: It's ok Sister. (signs the consent form).

Interviewer: Now, like we agreed before we started, I am going to be tape-recording our discussion so that information can be clear later on when I am transcribing. Nobody will be able to recognize your voice, and your words will be written onto paper without your name on it. Is that all right with you?

Good afternoon Sister, my name is Ntseiseng Maloleka, I am a student at the National University of Lesotho doing my final year in MSc in Nursing Science Advanced Midwifery. I am collecting data on the topic we just read and all the conversations during this interview will be recorded but your name will not appear in the results of the study.

Respondent: OK. (nodding her head)

If you agree to take part in the study please sign the consent form so that we start and remember there are no incentives provided for being a respondent in the study.

Respondent: OK Sister.

Interviewer: Can you share with me your perceptions regarding postpartum depression?

Respondent: Hmmm…ah… that is a very rare condition.

Interviewer: Can u elaborate more on very rare conditions, what do u mean?

Respondent: hmmm…(silence) what can I say…. I do not even remember having a woman with PPD, just that even if it's there we do not recognize it.

Interviewer: Can you elaborate on why do you not recognize PPD?

Respondent: Hmm… err… it is just that since it does not happen very often, I think we delay seeing symptoms even when it is there. You know we are not used to seeing it.

Interviewer: Can u elaborate on why do you think you delay seeing symptoms?

Respondent: Hmm… you know… sister I think if we had err … screening tool for this thing, surely it would not be missed, (ha-ha-ha) Maybe it is not even rare like am saying just that we fail to see it in time.

Interviewer: Have you ever identified a woman with PPD?

Respondent: I don't remember…hmmm, no.

Interviewer: Can you describe nurse-midwives management of PPD?

Respondent: Ohm… err... I think we do not manage PPD well …like I do not think we do good when it comes to PPD management.

Interviewer: Can you share with me, why are you saying you do not treat PPD well.

Respondent: Err… (silence)…. PPD management needs a proper diagnosis first like if we need tools to diagnose it well before we can say to clients I think you have a certain problem.

Interviewer: For the suspected clients what do you do?

Respondent: We do health education to help women identify how they feel and talk to the suspected women in separate rooms.

Interviewer: From talking with the woman in a separate room, what do you or how do you manage the women?

Respondent: We refer a woman to a Medical Doctor for further management.

Interviewer: Can you explain the factors that influence the management of PPD?

Respondent: I think we lack skills to manage PPD properly as well as guidelines.

Interviewer: Can you elaborate more on your response?

Respondent: Err… the thing is …hmm if we have ...suppose we have a proper guiding tool and policies to manage PPD, no woman would be missed even identification can be scored earlier.

Interviewer: Can you elaborate more on what do you mean by scoring PPD earlier?

Respondent: I think if we have a screening scale, PPD can be seen early and be treated early.

Interviewer: Besides the guiding tools, can you share other factors that influence the management of PPD?

Respondent: Err… like I said, PPD is a rare condition, I think if it was reported like other complications post-delivery, its management would be considered, like nurses would be taken to workshops for PPD management.

Interviewer: Can you add anything or share anything from our interview?

Respondent: Nurse-midwives must be involved when SOP's and registers are being done, because it's us the working people who see gaps.

Interviewer: Thank you.

Annexure I : Editing certificate

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This is to certify that the above dissertation/thesis has been proofread and edited for English language grammar, punctuation, spelling, writing style, clarity, sentence structure and layout. The logical presentation of ideas and the structure of the paper were also checked during the editing process. Neither the research content nor the author's intentions were altered in any way during the editing process.

I am a freelance editor specialising in proofreading and editing academic documents. All amendments were tracked with the Microsoft Word "Track Changes" feature and the document was returned to the author. The author has the option of accepting or rejecting each change individually. The author remains responsible for the correct application of the changes in the text and references. I wish the author all the best.

4 December 2023

Dr Nellie Naranjee **DATE**