UNIVERSITY OF THE WESTERN CAPE
FACULTY OF COMMUNITY HEALTH SCIENCE

RESEARCH REPORT

DEVELOPMENT OF A MODEL FOR NURSING MANAGEMENT OF POSTPARTUM DEPRESSION IN EDO STATE, NIGERIA

Thesis submitted in fulfilment of the requirements for the degree Doctor of Philosophy in the School of Nursing, Faculty of Community & Health Sciences University of the Western Cape.

Student name: Felicia Ehobhayi Amiegheme

Student number: 3179865

Department: School of Nursing

Supervisor: Professor F.M. Daniels

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KEYWORDS

Donabedian Model

Model development

Nursing management

Postpartum depression

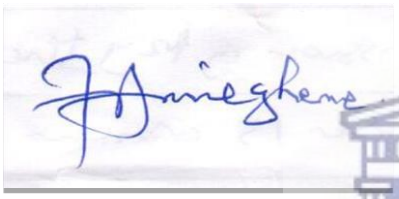
Professional nurses

DECLARATION

I, Felicia Ehobhayi Amiegheme, declare that the dissertation entitled: "Development of a model for nursing management of postpartum depression in the Edo State, Nigeria." is my own work and has not been submitted for any other degree or examination at any other university other than the University of the Western Cape. All the sources I have used or quoted have been indicated and acknowledged by complete references.

Felicia Ehobhayi Amiegheme

Date: November 2022



Signed: _____

Amiegheme Felicia

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DEDICATION

This work is dedicated to God Almighty, the healer, the way shower, the prophet, the teacher, the provider, and all in all.

ABSTRACT

Background: Postpartum depression (PPD) is a disease that has been increasingly plaguing women in recent times. The incidence of PPD is high in Edo state, Nigeria. The researcher's personal clinical experience was that women who had episodes of PPD are usually provided conventional postnatal care with other women going through puerperium.

A review of the policy statement of the Nigerian Federal Ministry of Health Sentinel records (2011) shows that there are no national nursing care guidelines for PPD. Consequently, this research study developed a model based on the findings of this study.

Purpose of the study: The purpose of this study was to develop a model for the nursing management of PPD in Edo State, Nigeria.

Methods: This study employed a qualitative, descriptive, and theory-generating research design. The study was implemented in three phases. Focus group discussions, in-depth interviews, and document reviews were conducted. The interviews were audio recorded, and notes were taken; the recordings were transcribed, and the transcripts were imported into the Atlas ti 7 software package for the data to be examined and coded. Inductive data analysis was conducted.

Participants were selected through purposive sampling. The sample included professional nurses, medical social workers, clinical psychologists, and patients discharged after having been treated for PPD. An expert group reviewed the model. The Donabedian quality of care model used in this study includes three domains: structure, process, and outcome, representing the three types of information collected to conclude the PPD care provided.

Ethics approval to conduct the study was duly obtained from all relevant authorities. Protocol relating to ethics was observed throughout the study.

The development of the model was guided by concept synthesis, statement synthesis, and theory synthesis, according to theory development by Walker and Avant (2014).

Results: A total of 7 concepts were identified from the concluding statements generated from the data across data sources and included: adequate structure, competent patient-centred holistic care; conducive healthcare environment; adequate knowledge; patients' satisfaction, and improved health. The model is presented in graphic form, and it is hoped that the successful implementation of this model would improve the nursing care of patients with PPD.

Recommendations: The finding from this study propose recommendations, based on the implementation of the model, for nursing education, nursing practice, and research. The researcher hopes implementing these recommendations will reverse the current challenges and improve the nursing care of patients with PPD.

Conclusion: Health education to the patient and her relatives, a friendlier hospital environment through improved infrastructure, interprofessional health care, a change of attitude of the caregivers, and the use of the model might bridge the gap and significantly improve the management of PPD in Edo state.

LIST OF ABBREVIATIONS

ANC	Ante natal care
BNSc	Bachelor of Nursing Science
CES-D	Centre for Epidemiological Studies Depression Scale
CIS	Clinical interview schedule
DACL	Depression Adjective Checklist
FGD	Focus Group Discussion
HADS	Hospital Anxiety and Depression Scale
HOD	Head of Department
NMCN	Nursing and Midwifery Council of Nigeria
PCC	Patient-centred Care
PDSS	Postpartum Depression Screening Scale
PN	Professional Nurse
PNC	Postnatal Clinic
PPD	Postpartum Depression
RM	Registered Midwife
RN	Registered Nurse
RPN	Registered Psychiatry Nurse
SARDS	Schedule of Affective Disorders and Schizophrenia
WHO	World Health Organization
ZSDS	Zung Self-Rating Depression Scale

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CHAPTER ONE

ORIENTATION TO THE STUDY

1.1 INTRODUCTION AND BACKGROUND

The birth of a baby is usually greeted with joy, happiness, and merriment by families in most parts of the world. In some cultures, the mother and baby are given special attention for the first six weeks after delivery. However, this period is characterised by physical, hormonal, and psychological changes for the mother returning to her pre-gravid state. A woman is more likely to suffer from postpartum depression (PPD) if her ability to go about her day-to-day life is significantly impaired. For numerous reasons, many mothers with PPD do not tell others about their feelings (Adeyemo, Oluwole, Kanma-Okafor, Azuka & Odeyemi, 2020). However, in some cases, family, friends, and partners notice signs and symptoms of PPD at an early stage. Good medical/nursing care and the need for mental health stability are among the main reasons why people seek health care, which suggests that investigation into good mental health nursing is vital to pursue (Boddy, Gordon, MacCallum & McGuinness, 2017).

According to World Health Organization (2014), Postpartum depression is a common yet severe condition that negatively impacts the quality of life of women of all cultural and demographic backgrounds. PPD is a depressive episode that starts within the first four weeks of postpartum and is often non-psychotic. In Africa, the incidence rate is estimated at between 10% and 32% (Afolayan, Onasoga, Rejuaro, Yusuf & Onuabueke, 2016).

However, PPD presents a challenge in all parts of the world (Afolayan et al., 2016) and is one of the increasing epidemics, affecting approximately 11 - 42 % of postpartum women globally, indicating that PPD is a significant public health concern for childbearing women.

The sudden onset of depression can affect a person's ability to function, leaving the individual and family members ill-prepared to deal with the resulting challenges. Despite the progress made in the past to avert or diminish the occurrence of PPD, its incidence is still on the rise. This rise may be due to poor awareness of PPD risk factors, lack of a model for the nursing management of PPD, or poor healthcare facilities in an unstable/recessed economy (Mughal, Azhar & Siddiqui, 2022). Postpartum depression can be significantly decreased by early detection and timely intervention, which can avoid untold suffering and save millions of lives (Mughal et al., 2022). In the 2017 World Health Day news release, the World Health Organization (WHO) estimated that over 300 million people are now living with depression, with a significant increase of more than 18% between 2005 and 2015. Depression is currently ranked second among the ten leading causes of the global disease burden and has a global prevalence of as high as 60%. PPD is a serious public concern as it affects about 13% of women who give birth, with a predictable occurrence of 9.4 - 12.7% during gestation and up to 21.9% during the first year postpartum (Miller & Rollnick, 2012). A review of existing literature in chapter 2 of this study explains why PPD nursing care management has not improved to meet global and institutional guidelines. A few reasons mentioned and investigated include health personnel's attitudes, lack of knowledge of patients and their families regarding PPD, and the dearth of a holistic approach to nursing management.

Nursing care for PPD patients is multifaceted and complex. Issues concerning the perceptions of health institutions, patients, and health personnel are some of the contributing factors. These issues may result from a lack of evaluation and documentation policies and criteria or tools for PPD evaluation in healthcare settings (McCaffery & Pasero, 2019). Recognizing these barriers has aided in improving PPD management in some hospitals, where specific institutional barriers are being addressed (Hansotte, Payne & Babich, 2017).

The effective management of PPD is not necessarily dependent on developing new techniques but requires the institution to utilize existing expertise and resources efficiently. An enabling environment is needed to meet the objective of adequate care for patients with PPD (Howard & Khalifeh, 2020).

According to Amankwaa (2016), African American women showed a significantly increased risk of PPD. However, this does not consider the multifaceted and intricate nature of PPD, necessitating a research design that can explore the various aspects, allowing for a better understanding of the comprehensive nursing care management required for PPD. Thus, this study embraces the psychiatric, obstetric, psychological, social, and nursing care dimensions in managing PPD, which do not seem to have been addressed by previous nursing studies within Edo State, Nigeria. Comprehending the comprehensive factors involved in evidence-based nursing management necessitates employing a methodology that allows for multiple methods. The qualitative methodology allows for the inductive clinical guideline development process, which is applied in this study.

In recent years, the quality-of-care framework, which is patient-centred care, has received increased recognition and is now considered an indispensable goal of a high-quality healthcare system. The approach calls for the service provider and the care recipient to work in a respectful and collaborative relationship (Kazak, Nash, Hiroto & Kaslow, 2017). A multi-dimensional conceptualization reveals how structural, interpersonal, and clinical attributes affect the patient's experience. The suggested agenda seeks to identify obstacles and obstacles to PPD care and techniques for making healthcare more patient-centred (Kakimowicz, Stirling, & Duddle, 2015).

In the quality care framework, Donabedian (2005) opined that care structure influences care processes and that both influence care outcomes. The structure's core constituents are the outcomes

of person-centred nursing, including involvement in care, patient satisfaction, a therapeutic environment, and a sense of well-being. This study set the context for utilizing the Donabedian quality care framework to explore the nursing management of patients within PPD. This study intends to develop a model to enhance nursing management by involving the appropriate hospital stakeholders. The comprehensive view derived from the Donabedian quality care framework exploration, together with the review of broader literature, led to the creation of a practical clinical guideline for nursing care management of PPD.

1.2 PROBLEM STATEMENT

The WHO (2021) estimates that 3.8% of the world's population suffers from depression. According to Gelaye, Rondon, Araya, and Williams (2016), the rate and severity of depression increase daily despite improved knowledge, technology, and approaches to managing depression. In Africa, depression is estimated to be between 10 and 32% (Afolayan et al., 2016).

The incidence of PPD in Nigeria was reported as 10.7% in Calabar, 14.6% in Ife, 23% in Lagos, 18.6% in Akure, and 27.2% in Edo. In Western Nigeria, a prevalence of 14.6% was reported; in Mid-western Nigeria, the reported incidence was 27.2%, and a study carried out in a hospital in South-eastern Nigeria reported an incidence of 33.3% (Ikeako, Onoh, Ezegwui, & Ezeonu, 2014). The incidence of PPD in Edo State is among the highest in Nigeria.

Despite the prevalence of PPD and its detrimental effects on maternal and infant health, hospital management of PPD patients often falls short. Studies have found that healthcare providers may not be adequately trained to identify and manage PPD (Earls, Yogman, Mattson, & Rafferty, 2019; Oser, Best, & Maurer, 2019). Moreover, even when PPD is identified, referral to mental health professionals or appropriate treatment may not occur, leading to untreated or undertreated PPD

(Russo, Santucci, & Harrison, 2020). Additionally, a lack of resources or support services for PPD patients may exacerbate the issue, with many hospitals not providing adequate follow-up care or support for patients after discharge (Russo et al., 2020; Straub, Adams, Kim, & Silver, 2020). Furthermore, the stigma associated with mental health disorders, especially in certain cultures or communities, may discourage PPD patients from seeking help or disclosing their symptoms to healthcare providers (Straub et al., 2020). These issues highlight the urgent need to improve hospital management of PPD patients and provide better care and support for this vulnerable population.

An audit of the Nigerian Federal-Ministry-of-Information (2012)'s policy statement shows no national models or policy statements to guide the nursing care of patients with PPD in Nigeria. The lack of a model often results in ineffectual nursing management because nurses lack consistency and focus on evidence-based nursing decisions relating to managing patients with PPD. In addition, patients with PPD are nursed symptomatically in health institutions and are not diagnosed early. This could result in patients spending more extended periods in the hospital than necessary (Afolayan et al., 2016). As a registered nurse at the University of Benin Teaching Hospital (UBTH), I observed that these patients are usually nursed with other post-natal mothers in the maternity ward. PPD patients in the maternity wards were seen to exhibit behaviours typically associated with depression which might present as incessant and unnecessary crying, refusal to pick up the crying baby who needs the mother's attention, or even refusal to breastfeed the hungry baby. Further literature reviews in this study indicates a dearth of studies exploring the use of evidence-based models for managing PPD patients and the application of the Donabedian quality care framework in exploring factors influencing the nursing management of patients with PPD.

The researcher believes that, given the lack of these guiding frameworks and the issues she observed from the experiences of nurses managing PPD patients, nurses will benefit from a model that aids the identification and management of PPD to ensure positive patient outcomes and a decrease in the incidence of PPD. Hence, the researcher developed a model to facilitate appropriate care for patients with PPD in Edo State, Nigeria.

1.3 PURPOSE OF STUDY

The purpose of this study was to develop a model for the nursing management of PPD in Edo State, Nigeria.

1.4 RESEARCH OBJECTIVES

The objectives of the study were:

- To explore the knowledge of professional nurses regarding nursing care for patients with PPD.
- To establish the experiences of medical social workers, clinical psychologists, and patients who have recovered from PPD regarding the nursing care practices and their effectiveness in managing patients with PPD.
- To determine the nursing care of patients with PPD through the review of documents.
- To develop a model for professional nurses to manage PPD based on the study's findings.

1.5 SIGNIFICANCE OF STUDY

The study would significantly contribute to the body of knowledge regarding the nursing management of PPD and contribute to the realisation of the goal of Edo State Health to provide quality

patient care. Including health professionals such as clinical psychologists and medical social workers caring for patients with PPD in the study provides a comprehensive understanding of managing patients with PPD. Furthermore, including diverse health professionals and other key stakeholders provided a comprehensive approach to developing the model in this study. As a further step to this research, state policy for the management of PPD could emerge based on developing an evidence-based model. The comprehensive research approach adopted in this study could also encourage future studies in Edo state to address previous challenges to the nursing management of patients with PPD. The results will influence nursing education and practice for both private and government sectors.

Nurses from similar health institutions and states could also adopt the model developed in this study to manage PPD effectively. Adopting the model for use by professional nurses would contribute to positive patient outcomes. Maternal mental health morbidity will decrease through improved nursing care of patients with PPD. Patients in the community with predisposing factors to PPD can be diagnosed early during the antenatal period, especially in the last trimester of pregnancy. Mental health nursing care can commence immediately to reduce complications for the mother, baby, and the entire family.

1.6 STUDY SITE

This study was conducted in Edo State, Nigeria. The state is located in the South-South Geo-Political Zone of Nigeria. The study was carried out in four hospitals in Edo State, Nigeria, where patients with postpartum depression are treated. For the sake of maintaining anonymity and confidentiality, the hospitals have been code-named Hospital A, Hospital B, Hospital C and Hospital

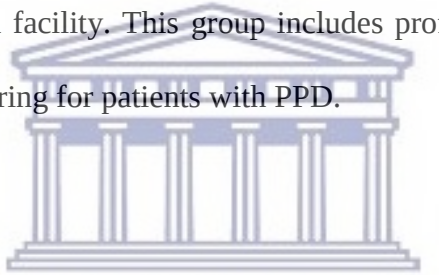
D. These hospitals were selected because they have a high number of patients and potential diversity in study participants, patients, and experts in the field of study.

1.7 CLARIFICATION OF CONCEPTS

The following concepts are defined for use in this study:

1.7.1 Health Care Professionals

These individuals provide promotive, preventive, curative, and rehabilitative healthcare services systematically to individuals, families, or communities (WHO, 2018). In this study, health care professionals are persons who, based on their academic qualifications, are employed to provide healthcare to patients at a health facility. This group includes professional nurses, clinical psychologists, and social workers caring for patients with PPD.



1.7.2 Medical Social Worker

A medical social worker is a person who works in a hospital and is responsible for offering counselling to patients and their families, ensuring that discharged patients will receive appropriate care in the community (Collins English Dictionary, 2018). In Nigeria, social workers working in health institutions are also known as medical social workers. In this study, medical social workers are involved with the patients' health education, individual counselling, and support to patients with PPD.

1.7.3 Model

The model developed from this study's findings will represent core elements or concepts for managing PPD in Edo State, Nigeria. These concepts include recommendations intended to optimize patient care and advocate how nurses can cost-effectively care for patients with PPD.

1.7.4 Multi-disciplinary team

A multi-disciplinary team is a group of health care workers who are members of different disciplines, such as Psychiatrists, Social workers, etc. Each provides specific services to the patient. The team members independently treat various patient issues, focusing on the issues in which they specialise (Health-Service-Executive-HSE: Annual Report and Financial Statements, 2017). In this study, a multidisciplinary team refers to health-care professionals providing specialised care to patients with PPD. The team comprises nurses, medical social workers, clinical psychologists, etc.

1.7.5 Postpartum

This is the period just after childbirth (Oxford English Dictionary, *2019).* The end of the postpartum period is less well defined, it is the six to eight weeks after birth. However, the American College of Obstetricians and Gynaecologists (2018) considers postpartum care to extend up to 12 weeks after birth. This is the definition and period used in this study.

1.7.6 Postpartum Depression

This is defined as a depressive episode that is non-psychotic, beginning in the period of postpartum, which is six weeks following childbirth (American-Psychiatric-Association, 2018). This definition is used as defined above in this study.

1.7.7 Professional Nurses

Registered nurses work with individuals, families, groups, and communities, assessing their mental health needs. They assess, diagnose and treat individuals and families with psychiatric disorders or the potential for such disorders, using their full scope of therapeutic skills, including medication prescription and psychotherapy administration. Professional nurses offer primary care services to the psychiatric-mental health population (American-Psychiatric-Association, 2018). In this study, professional nurses refer to licensed nurses in Nigeria who have passed the nursing certificate examination and are thereby certified to care for mentally ill patients, including patients with PPD.

1.7.8 Puerperium

This refers to a period of about six weeks following childbirth when the reproductive organs return to their normal state (Collins English Dictionary, 2018) and is referred to accordingly in this study.

1.8 PARADIGMATIC PERSPECTIVES

A paradigm is a set of thoughts, virtues, processes, and presumptions that establish a pattern of observing actuality. There are two major philosophical assumptions: epistemological and ontological assumptions.

Scotland (2012) states that “every paradigm is based on ontological and epistemological assumptions.” This can be seen in the methodology and methods that underpin particular research. Scotland (2012) further states that any methodology a researcher decides to use is determined by the reason for the data, where the data will come from, and when and how the data is collected and analysed. According to Grix (2019), two researchers investigating a similar hypothesis can take a different approach to research because they hold different ontological and epistemological positions. This study employs interpretive paradigm principles, which are defined by the purpose of the study, the theory of knowledge, the essence of reality (ontology), and the relationship between the researcher and the subject being studied.

1.8.1 Ontological assumption

The ontological assumption concerns knowledge about the nature of the world. There are two dominant positions in ontological assumptions: realism and idealism. According to realism, our beliefs or understanding have no connection to external reality. In contrast, idealism asserts that our comprehension and beliefs depend entirely on external reality (Ritchie & Spencer, 2013).

This study takes a realism-based ontological stance. This research has multiple realities because it depends on how a person interprets his or her surroundings and uses words to describe them. The ontological stance of this study is predicated on the following presumptions:

- The expectations of nurses during clinical care and in the ward influence how they view PPD and their attitude toward its management.
- The viewpoint of nurses on how PPD patients ought to behave during clinical care informs nurses' attitudes toward patients.

- The perceptions of nurses on how a model for the nursing management of PPD should impact care in clinical settings.

1.8.2 Epistemological assumption

The subjective theory is focused on what a person knows. Inductive reasoning and deductive thinking are the two dominant epistemological assumptions. This study's epistemological position is founded on inductive logic and subjectivism (Grix, 2019). There are different levels and types of information based on individual experiences and a model for the nursing management of PPD. This explains why the researcher included individuals directly involved in mental health nursing at the selected hospitals. The epistemological stance of this study is predicated on the following presumptions:

- The nurses' expertise in managing PPD influences their impression of what they anticipate from a model.
- Nurses' perspectives are impacted by their clinical experience based on their understanding of the nursing world and patient interactions.

1.8.3 The role of theory and interpretivism

The concepts in the quality of care outlined in Donabedian (1980) guided this study. Donabedian Model proposes three domains to assess the quality of care in clinical practice. These include structure, process, and outcome. Each of the three domains represents information that may be collected to draw inferences about the quality of care in a given system. The following assumptions supported the Donabedian Model:

Structure: This consists of the physical facility, equipment, and human resources, as well as characteristics of the organization, such as staff training which regulates how patients and providers in a healthcare system behave. Aiken and Buchan (2012) state that a supportive clinical environment will enhance patient outcomes. The structures in the facility also determine the average quality of care within a facility or system. The structure used for the care of patients with PPD should gain the patients' trust in the healthcare providers' ability to help alleviate the depression and provide good quality care, as well as create a curative and lively atmosphere to alleviate depression.

Process: Process refers to the sum of all actions necessary for the care given to a patient with PPD. This includes preventive care, diagnosis, treatment, and patient education. However, it may be extended to include actions taken by patients or their families. It is comparable to the extent of quality care offered as the process contains all the requirements for efficient healthcare delivery. Patients should be admitted into the ward after diagnosis and receive appropriate and effective care. Classification of processes can be grouped into how care is delivered, including interpersonal and technical processes, which encapsulate how care is provided. Mental health care providers should communicate full and unprejudiced health information to patients using appropriate techniques (Froiland, Oros, Smith & Hirchert, 2012). Nurses should ensure that patients receive appropriate, accurate, and complete information on PPD services to efficiently take part in decision-making relating to their care. Patients' beliefs, cultural backgrounds, values, and knowledge are incorporated into the formulation and provision of care, and patients' preferences should be ensured. Professional nurses and all other health care practitioners caring for patients with PPD should collaborate in caring for the patient. The process could be modified through a change in the standard protocol of determining when care is needed and who is responsible for each step in providing the necessary and effective nursing care for postpartum depression patients.

Outcome: This covers all aspects of PPD care, such as shifts in health status, attitudes, or awareness, in addition to improved patient care and well-being. Because improving patients' health is the main goal of care, outcomes are often regarded as one of the essential quality measures. As the framework's core element, outcome refers to effective, patient-centred care outcomes and is obtained through various methods ranging from questionnaires to interviews. Patients and family members can provide feedback on the care they receive (Tishelonan, Ingela & Wilder, 2012).

1.9 RESEARCH METHOD

This research study used a qualitative approach in addition to an exploratory descriptive and theory generative design. The research design encompasses the steps required to link conceptual research problems with the empirical outcome, including data collection and analysis to ensure the findings' validity (Burns & Grove, 2017). Qualitative research methods such as in-depth interviews and focus group discussions were used to elicit responses from the participants. Phase one findings were employed to create the model for phase two of the study. Walker and Avant's (2004) theory-generating design was used in guiding model development. In this study, the research methods used are explained comprehensively in Chapter 3.

1.10 DATA ANALYSIS

Themes were identified from the data collected during this study using the inductive thematic approach as the guiding framework. The steps for analyzing data from in-depth interviews and focus group discussions were outlined by Fouche and De Vos (2015). In Chapter 3, the data analysis process is described in detail.

1.11 OUTLINE OF THE THESIS

The chapter outline of the thesis is as follows:

Chapter 1: This chapter introduces and contextualizes the thesis, including the history of PPD. It also discusses the problem statement, purpose, research objectives, significance of the study, clarification of concepts used in the study, and the paradigmatic perspectives.

Chapter 2: This chapter discusses the theoretical and conceptual framework, covering aspects relating to the prevalence, incidence, causes, signs, and symptoms of PPD and the assessment tool for PPD. The second part examines literature on the development of a model and the rationale for the development of a model. The chapter also discusses the Donabedian quality of health care model, which served as the theoretical framework for the study's two phases.

Chapter 3: This chapter describes the study's research methods and describes the researcher's underlying and conceptual issues. It describes the study's context, methods of data collection, and ethical concerns. The data analysis method is discussed, as well as the coding process and data management principles used.

Chapter 4: This chapter's core is the presentation of findings and discussion. The chapter discusses findings that function as variables for the model, defining the model's scope and constraints. The interpretation of the expert reviewers' remarks is presented in the second section. The chapter concludes with the model developed for the nursing management of PPD in Nigeria's Edo state.

Chapter 5: This chapter presents the study's significant findings with regard to the wider body of knowledge. The chapter goes over the procedures for evaluating the model. The chapter also recognises the model's assumptions, explanation, guideline operations, and validation.

Chapter 6: This chapter summarizes the research concisely and clearly. The chapter discusses the study's implications for nursing practice and education and potential avenues for future studies in this field. It also defines the study's constraints and presents its conclusion and recommendations.

1.12 SUMMARY

This chapter provides an orientation to the study and clearly highlights the problem statement, purpose, research objectives, significance of the study, clarification of concepts used, and paradigmatic perspectives. Chapter two presents the theoretical frameworks used in the study and a review of the literature on the topic.

CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

Chapter two presents the literature review which was conducted, relevant to the research topic, and comprises both empirical and theoretical literature. The chapter also presents the theoretical framework which was used to guide this study. Concepts in the quality-of-care model by Donabedian (1980) concepts were relevant for research in post-partum depression and in developing a model for the nursing managing of post-partum depression in Edo state, Nigeria.

2.2 LITERATURE REVIEW

A literature review is a comprehensive summary of previous research on a topic. A literature review surveys scholarly articles, books, and other sources relevant to a particular area of research. The purpose of a literature review is to identify scholarly and other works in the field, acknowledge existing theories and points of view, recognise hypotheses in the field of research, justify the research, clear misconception, highlight flaws in the research, and illustrate how the subject has been previously studied (Andruss, 2022). This section describes postpartum depression with reference to its classification, risk factors, and gaps in the nursing management of postpartum depression.

Several sources were consulted in the collection of literature for this review. Online databases such as PubMed, Medline, Medscape, Psych Info, CINAHL cumulative index of Nursing and Allied health literature, plus an Embase for studies published, were accessed via the university's online library. Initial search words used included: model, model development, Donabedian model, postpartum depression, and professional nurses. A review of the references in the articles found

through the search strategies was also used to identify additional articles. Full-text articles were retrieved from the EBSCO host and the University of Benin Medical Complex Library. Some articles were also obtained from other online sources that offered free full-text articles.

2.2.1. Concept of postpartum depression

Postpartum depression meets the criteria of the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) for depression, with an incidence rate of 11 to 42% varying from one population to another. Only 20% of women who experience symptoms of PPD report those symptoms to their healthcare providers (Anokye, Acheampong. Obeng, Budu-Ainnoson, & Akwasi, 2018). Symptoms of PPD are often minimized by both mothers and care providers, as usual, natural consequences of childbirth.

Postpartum depression is a mood disorder affecting mothers yearly in developed and developing countries (Beck, 2011). Josephat, Ikenna and Elias (2016) stated, "It was estimated that in about 1 to 2 per 1,000, postpartum depression results in postpartum psychosis. In the United States, postpartum depression occurs in about 8 per 100,000 births. Postpartum depression has also been seen as a temporary depression afflicts about 15 percent of women following childbirth. It is more intense and long-lasting than the "baby blues," which affect about 50% of new mothers" (Rai, Pathak & Sharma, 2015).

Baby blues is a common, benign, transitory condition that occurs in the first few days after delivery, with incidence ranging from 30 – 80 %. It typically starts 3-4 days after delivery and peaks on the fourth to fifth day (Josephat et al., 2016). It is characterized by crying, confusion, anxiety, mood changes, fatigue, insomnia, and dysphoria. Postpartum depression is highly indicated when severe symptoms have lasted over two weeks.

The incidence of postpartum depression is 5 to 7 % in the first three months, suggesting that postpartum women have rates of significant depression similar to those in the general population. However, specific risk factors significantly increase rates of postpartum depression for a subset of women (Raisanen, Lehto, Nielsen, Geissler, Kramer & Heinonen, 2013). The most potent risk factor is a history of postpartum depression with a previous pregnancy. Women with gestational diabetes who give birth to multiples may also be at higher risk of postpartum depression. Women at a greater risk of developing postpartum depression may have a history of marital conflicts, stressful life events, depression, and a lack of a supportive environment. The prevalence rates may be greater among socially disadvantaged groups of women.

The onset of postpartum depression usually occurs within 12 weeks of delivery. It consists of symptoms such as depressed mood, markedly diminished interest or pleasure, decreased appetite, psychomotor agitation or retardation, fatigue, guilt, insomnia, and suicidal ideation (American-Psychiatric-Association, 2018).

According to Wassef, Nguyen and St-Andre (2019), decreased thyroid hormone levels after delivery can also cause symptoms of depression, such as weight gain, sleep problems, fatigue, and irritability. At a time usually marked by excitement and celebration, the onset of postpartum depression can disrupt a woman's life. It may hurt the child's development and relationships with other family members. Despite significant efforts to screen and treat postpartum depression, many affected women remain undetected.

2.2.2 Prevalence of postpartum depression worldwide

The prevalence of PPD has been challenging to determine because of the difference in criteria for the time of onset used by the DSM-V and the one used by most epidemiological studies. Prevalence

has also been difficult to establish because of underreporting by mothers themselves (Tungchama, Obindo, Arminya'u, Maigar' & Davou, 2018).

The prevalence of PPD varies worldwide, and Sulyman, Aminu, Ayanda and Dattijo (2021) argued that the differences in studied populations and methodologies might be responsible for the variation. In the United States, PPD prevalence is between 10% and 20%, while in Germany, prevalence rates of 7%–16% have been reported (Tungchama et al., 2018). The variation in the prevalence rates of PPD in both the United States and Germany was attributed to under diagnosis and under treatment of the condition in clinical practice (Tungchama et al., 2018). Several studies on PPD in developing countries also showed varying prevalence rates. A meta-analysis by Ramasubramaniam, Madhavanprabhakaran, Renganathan, and Raman (2014) stated that 17 studies on the prevalence rates of PPD among 9132 Arab women showed that the minimum and maximum prevalence rates of PPD range from 10% and 80%, respectively (Ramasubramaniam et al., 2014). Reports from the North and South American subcontinent also reported wide estimates within countries and across the continent. It stated that the prevalence rate of PPD was the lowest in Barbados (16.0%) and the highest in Guyana (Tungchama et al., 2018).

The prevalence of PPD in South and East Asia ranges between 12.7 and 17.3 % in China, 22.35 % in Indonesia, between 13.5 and 73.7 % in Taiwan, 0.5–6.8 % in Singapore, 16.8 % in Thailand, 33 % in Vietnam, 4.9 % in Nepal, 3.9–9.8 % in Malaysia, 22 % in Jordan and between 11 and 32.4 % in India (Anokye et al., 2018; Olympia, Aikaterini & Maria, 2015), with severe consequences not only for the mother, but also the child, his/her development, and the whole family system (Bassi, Falautano, Cilia, Goretti, & Grobberio, 2016). In Africa, a wide range of prevalence rates has been reported in various studies. A 7% prevalence rate was reported in Uganda, and 33% was reported in Zimbabwe (Parsons, Young, Rochat, Kringelbach & Stein, 2012).

In Nigeria, the prevalence rates of PPD vary from region to region and within the same region. A prevalence rate of 44.4% was reported in Jos, 23% was reported in Lagos, 25.7% was reported in Uyo, 10.7% was reported in Nnewi, and 15% was reported in Edo State (Tungchama et al., 2018). The study on the prevalence of postpartum depression in Enugu, southeast Nigeria, is 22.9%, comparable to that obtained in African continents. This study has shown that postpartum depression does exist in our environment. The prevalence of 22.9% obtained in this is much lower than the prevalence of 43% obtained in Uganda but similar to the prevalence estimates of 18.3% seen in African as a region. Findings from developed countries on the African continent, such as South Africa, have found prevalence rates of depressive symptoms of 34.7% among women in Nigeria from 5% to 25% (Josephat et al., 2016).

2.2.3 Classifications of postpartum mood disorders

Based on their severity, postpartum mood disorders are classified into three categories (Rasaily, Indra, & Thapa, 2017). The onset, duration, and prevalence of the three types of affective postpartum disorders are shown in Table 2.1 below.

Table 2.1: Postpartum Mood Disorders: Summary of Onset, Duration and Treatment

Disorders	Prevalence	Onset	Duration	Treatment
Blues	30% – 75%	Between 3 to 4 days	Hours to days	Other than reassurance, no treatment is required
Postpartum Depression	10% – 15%	Within 6 weeks	Weeks- months	Treatment is usually needed
Postpartum Psychosis	0.1% – 0.2%	Within 2 weeks	Weeks – months	Hospitalization is normally required

Postpartum Blues: Also known as “baby blues.” According to some studies, it is a precursor to postpartum depression. It is a transitory mood of postpartum disorder that is identified through

depressive signs and symptoms that are milder. It is also a less austere form that lasts for a few days, may span up to a couple of weeks after giving birth, and affects about 50-80% of new mothers (Josephat et al., 2016).

The significant difference between postpartum depression and postpartum blues is that the blues do not interfere with maternal role functioning and last for a short time, making the blues a self-limiting disorder that does not require treatment (O'Hara & Wisner, 2014).

Postpartum Depression usually appears within the first six weeks after giving birth, and most cases require treatment. This is more severe, causing a great deal of problems for the mother. Left untreated, it often results in crying, guilt, inadequacy, and detachment from the baby (Jones & Shakespeare, 2014).

Postpartum Psychosis: Sometimes erroneously referred to as postpartum depression. It is the most severe and uncommon form of postnatal mood disorder. The clinical start is fast, with symptoms appearing as early as 48 to 72 hours post-birth, with most episodes occurring within the first two weeks following birth (Brockington, 2017). Research shows that biochemical and genetic risk factors for puerperal psychosis exist (O'Hara & Wisner, 2014). New moms experiencing psychotic or depressed symptoms risk hurting their children through neglect, technical ineptitude, command hallucinations, or delusions. Infanticide is rare, occurring in 3 in 50,000 births (Suri & Lori, 2012). Mothers with postpartum psychotic illnesses, on the other hand, commit a substantial rate of infanticide. As a result, delusions, confusion, and hallucination (Di Florio, Gordon-Smith, Forty, Kosorok, Fraser, Bethell, Craddock & Jones, 2018). It is thought that delusional guilt about the personal inability to care for or love the child precipitates 'altruistic' infanticide, and 62% of mothers who kill their babies commit suicide. Postpartum psychosis affects less than 2 women per 1,000 births, occurring during the first three months following delivery (O'Hara & Wisner, 2014).

2.2.4 Causes of postpartum depression

Hormonal changes, genetics, and major life events have been hypothesized as potential causes, yet the major cause of postpartum depression is not well understood. Hormonal changes may play a role, as suggested by evidence; hormones that have been studied include progesterone, cortisol, thyroid hormone, oestrogen, and testosterone. Also frequently hypothesized to cause postpartum depression are profound lifestyle changes brought about by caring for the infant (Schiller, Meltzer-Brody & Rubinow, 2015).

2.2.5 Risk factors for postpartum depression

Several factors have been suggested to increase the risk of postpartum depression, although the causes of postpartum depression are not understood. The most important risk factors identified were a history of depression before and/or during pregnancy, anxiety during pregnancy, low socio-oeconomic status, stressful life events, poor marital relationship, and lack of social support by family, friends, and/or the partner as cited by Shrivastava (2015) and Sifa, Kahoko, Hitoshi, Masamitsu and Etongola (2017).

Fisher, de Mello, Vikram, Atif, Thach, Sara, and Wendy (2012) found that women with low socio-oeconomic status with insufficient health insurance and reduced access to health care in combination with low social and emotional support from spouse and relatives experienced disadvantages that may lead to stress and PPD following delivery. Not surprisingly, women with fewer resources indicate a higher level of postpartum depression and stress than those with more financial resources. Women with fewer resources may be more likely to have unintended pregnancies, increasing the risk of postpartum depression (Stuart, 2014). Rates of postpartum depression have

been shown to decrease as income increases. Contrastingly, some factors almost certainly contribute to the cause of postpartum depression, such as lack of social support (Stuart, 2014).

Alkins, Ahmed, and Adzimah (2014) argued that several factors within a woman's social environment increase the risk of her developing postnatal depression. The most important of these is the quality of her social ties, whether her social or intimate relationships. There is considerable evidence that a poor-quality marital relationship is a robust predictor of postnatal depression (Alkins et al., 2014). Women with poor social support networks, particularly in providing emotional support, also have an increased risk of developing postnatal depression (Olympia et al., 2015). It should be noted that many women will shift their social network after childbirth, so when they have a new baby, they do not have the same access to their social network. This may increase their vulnerability to postnatal depression (Olympia et al., 2015).

According to Pawar. Kumar, Vikram, Sembiah and Rajawat (2022), the female gender, low education, and poverty were strongly associated with common mental disorders.

Cultural factors such as confinement experience are significant risk factors for postnatal depression. The traditional practice of confining women to the home for one month or more after delivery, these women are assisted in doing household tasks, eat only certain foods, and perform rituals, such as avoiding wind and exercise and not washing their hair, etc (Norhayati, Hazlina, Asrenee, & Emilin, 2015). On the contrary, the postpartum confinement period is believed to be associated with less likelihood of experiencing postpartum depression among Taiwanese women (Norhayati et al., 2015). Women in Taiwan describing their experiences during the PPD period highlighted feelings of stress, social isolation and entrapment in a situation where they felt they had to struggle constantly to maintain their physical integrity (Olympia et al., 2015).

Psychological factors associated with increased incidence of postpartum depression include stressful life events during pregnancy. According to Fatemeh, Zargar, and Baramond (2016), prenatal stress increases the risk for PPD. Stress is a common trigger for depression in general, with 85% of depressed patients citing stress as contributing to their depression. Social support is often found to protect against the effects of stress, with most studies finding either a main effect or a buffering effect of support on mental health. Correspondingly, greater support is associated with a lower risk for PPD (Fatemeh, Zargar & Baramond, 2016).

Studies have shown a correlation between a mother's race and postpartum depression. Asians have the lowest at 11.5%, while the rates of Americans, Indians, Caucasians, and Hispanic women also fell. African mothers have been shown to have the highest risk of postpartum depression at 25% (Norhayati et al., 2015).

These variables are considered to be associated with postpartum depression. This association does not imply that these factors are coincidental; rather, they might be driven by a third component. Formula feeding, a history of depression, and cigarette smoking have all been found to have cumulative effects (Dubey, Gupta, Bhasin, Muthal & Rathore, 2012).

2.2.6 Measures used in the detection of postpartum depression

In order to promote methodological comparisons between studies and to provide a clear understanding of the different measures, various measures used in the determination of postpartum depression are duly presented. Clinician-rated measures, structured interviews, and self-report questionnaires are the tools used to assess depression symptomatology.

Clinician-Rated Scales: The Hamilton Rating Scale for Depression and the Montgomery-Asberg Depression Rating Scale are the two most frequently reported tools for measuring and validating clinical judgment and providing duration and severity ratings.

Standardized Interviews: To establish a diagnosis of postpartum depression, numerous standardized interviews are used. Researchers often employ these tools to achieve a thorough and trustworthy diagnosis based on demanding criteria. Their application is limited to qualified clinicians or researchers of the DSM or ICD diagnostic systems, and clinical judgment is needed to assess whether the replies supplied by participants fit the diagnostic criteria. These tools are time-consuming and costly and unsuitable for regular clinical practice.

Self-Report Questionnaires, e.g., Edinburgh Postnatal Depression Scale (EPDS): The EPDS is a ten-item self-report measure created primarily to test for postpartum depression (Cox, Holden & Sagovsky, 2016). Each item is rated on a 4-point scale (from 0-3) for a total score of 0-30. The past tense items contain questions about maternal sentiments in the last 7 days, such as depression, anhedonia, guilt, worry, and suicidal thoughts. One advantage of this measure is that it excludes somatic symptoms like sleeplessness and appetite problems that may normally occur in postpartum women. The EPDS is usually given as a pencil-and-paper test. However, the EPDS does not give a measure of severity for women who score over 18, and those who score 14 to 16 can be classed as having serious depression. The EPDS is the most often used tool in postpartum depression research and population-based screening. Other tools include:

- Hospital Anxiety and Depression Scale (HADS)
- Centre for Epidemiological Studies Depression Scale (CES-D)
- Depression Adjective Checklist (DACL)

- Postpartum Depression Screening Scale (PDSS): This is a 35-item Likert-type response scale with seven aspects, each with five items: dimensions consist of loss of self, guilt, anxiety/insecurity, emotional liability, sleeping or eating disturbances, cognitive impairment, shame and contemplating harming oneself (Pereira, Araújo, Azevedo, Marques, Soares, Cabaços, Marques, Pereira, Pato, & Macedo, 2022).
- Zung Self-Rating Depression Scale (ZSDS) Schedule of Affective Disorders and Schizophrenia (SARDS)
- Structured Clinical Interview for DSM-V (SCID)
- A standard psychiatric interview (SPI) is a semi-structured interview used in community surveys. It is often referred to as a clinical interview schedule (CIS). The SPI is a brief standardized interview comprising questions to elicit the presence or the absence of 10 identified mental symptoms.
- The Present State Examination (PSE) is a semi-structured interview that identifies whether or not specific mental symptoms have occurred in the preceding four weeks (Jørgensen, Freund, Bøye, Jordet, Andersen & Kjølbye, 2013).

2.2.7 Screening

One of the most popular and studied screening tools for postpartum depression is the Edinburgh Postnatal Depression Scale (EPDS). The EPDS is standardized, reliable, and cost-effective (Rochat, Mark, Marie-Louise & Alan, 2013). Screening for postpartum depression may minimize pregnancy and baby morbidity, improve quality of life, and improve child health outcomes (Rochat, Mark, Marie-Louise & Alan, 2013).

The American Academy of Paediatrics in the US recommends that paediatricians screen mothers for postpartum depression at 1-month, 2-month, and 4-month visits (Earls et al., 2019). However, many providers do not consistently provide screening and appropriate follow-up.

Assessment and screening should occur pre-pregnancy during the intrapartum period, at 4 - 6 weeks postpartum or the 2-month well-child exam, and within the 12 months postpartum (Patel, Bailey, Jabeen, Ali, Barker & Osiezagha, 2012). There are many tools available to screen for depressive symptoms; while three were explicitly for postpartum depression (BPDS, EPDS, and PDSS), five of the tools looked at depression in general. Screening and assessment of postpartum depression should include a clinical interview to assess the patient's risk factors, past medical and social history, and birth history. Routine clinical evaluation includes generic questions and does not usually include questions regard mood, appetite, sleep, or other symptoms experienced by women with postpartum depression (O'Hara & Wisner, 2014).

The gold standard for assessing postpartum depression is clinical assessment, which has limitations (O'Hara & Wisner, 2014). The most significant setback is the time allotted for a provider to engage a patient, observe, ask questions, and perform assessments needed for the expected appointment. Psychiatric diagnosis was made using the modified non-patient version of structured clinical interview DSM-III-R (SCID-NP). In a study done in Nigeria with 876 women recruited at 6 weeks postpartum and 900 matched non-postpartum women who were administered Beck's Depressive Inventory (BDI) and translated local version of EPDS. In the analysis, the post-partum women had higher EPDS and BDS scores than the non-postpartum women. Using BDS and EPDS screening tools, rather than just routine clinical evaluation, we can more positively identify women with postpartum depression (Adeyemo et al, 2020).

The researcher conducted a review of multiple screening tools to identify specific questioning skills that could be incorporated into a single comprehensive questionnaire. With the guidance of the supervisor, they combined the identified questioning skills and developed an investigative tool that was subsequently used in the study to conduct in-depth interviews with the participants. The process allowed for the identification of relevant information and a deeper understanding of the topic under investigation.

2.2.8 Treatment

If the cause of postpartum depression can be established, treatment may involve a mix of therapy. Several treatment options exist for postpartum depression, and treatment should be aimed accordingly. Research strongly suggests screening for postpartum depression among racial and ethnic minority women because depressive disorders are often underestimated in such populations (Egger, Liy, Scanola & Magill, 2012). As a result, a woman with postpartum depression may seek a second opinion if she does not feel she is being taken seriously or is being recommended a treatment plan with which she is uncomfortable. Fewer than 40% of depressed mothers seek help (Liu, Ding, Belouali, Bai, Raja, & Kharrazi, 2022), and estimates show that only 13% of women exhibiting signs of postpartum depression are under a physician's care. However, the condition is easily treatable (Vanderkruit, Allen, Say & Cohen, 2017).

There is a need for the treatment of postpartum depression to be approached from a holistic, family-focused point of view by an interdisciplinary professional team (Letourneau, Dennis, Benzies, Duffet-Leger & Stewart, 2012). Holistic care includes promoting thoughts and actions that improve mental and physical health and educating women about the disorder and treatment options. Ways in which physical and mental health can be improved include partaking in a healthy diet,

avoiding alcohol and caffeine, and helping women strategize on how to have adequate sleep and exercise.

A systematic meta-analysis review was carried out to assess the efficacy of pharmacologic and psychological interventions as treatments (Sockol, Epperson & Barber, 2013). With regards treatment of patients who had experienced major depressive episodes, outcomes of patients managed using Interpersonal psychotherapy (IPT) and Cognitive behavioural therapy (CBT) did not appear to differ significantly (Lemmens, van Bronswijk, Peeters, Arntz, Roefs, Hollon, DeRubeis, & Huibers, 2020).

2.2.8.1 Pharmacological Therapy

The decision to give antidepressants drug must be balanced between the mother's well-being and foetal safety because many depressive episodes occur during the childbearing stage. A woman is at high risk of relapse if she just recovered from depression after being treated with antidepressants and becomes pregnant again (Howard, Molyneaux, Dennis, Stein & Milgrom, 2014). Depression during pregnancy is associated with poor nutrition, higher preterm birth, pre-eclampsia, spontaneous abortion, and inadequate prenatal care.

Evidence suggesting that selective serotonin reuptake inhibitors (SSRIs) are an effective treatment for postpartum depression exists. Because it is based on a small number of trials and patients, it is unclear which antidepressants are most beneficial for treating postpartum depression and who might benefit from antidepressants over non-pharmacotherapy; therefore, the quality of such evidence remains unclear. In a recent study, O'Hara, Pearlstein, Stuart, Long, Mills and Zlotnick (2019) discovered that adding Sertraline, an SSRI, to psychotherapy did not provide any additional benefit.

Physicians should begin with the lowest effective dose and observe infant behaviour for unlikely but potential side effects because antidepressant medications are secreted into breast milk. The clinical recommendation for administering any antidepressant medications is prior to the infant's sleep time to minimize exposure to peak drug concentrations and immediately after breastfeeding (Larsen, Hassan, Lyhne, Aaen, Ritter & Nielsen, 2015).

Until complete remission is achieved, women who are sensitive to antidepressant side effects should be initiated at half the recommended dose for four days and then steadily increased by small increments as tolerated by the body. Generally, in women treated for postpartum depression with antidepressants, an acute response is achieved after an initial response of 6 – 8 weeks, when symptoms are reduced by 50%. To prevent relapse, the same dose should be continued for 6 months (Larsen et al., 2015).

In administering antidepressants, the paediatrician's involvement is recommended, as with any medication taken by lactating mothers. He or she can observe the infant for any adverse side effects, such as changes in sleeping or feeding patterns, irritability, and sedation (Gordon & Melvin, 2014).

It is essential to document all maternal use of alcohol, tobacco, herbal remedies, drugs, and medications and to encourage the discontinuation of any environmental and nonessential exposures to reduce infant exposure when treating postpartum depressed mothers.

2.2.8.2 Non-pharmacological therapy

Non-pharmacologically, postpartum depression can be treated through alternative therapy, prescription drugs, or psychotherapy. The initial approach is psychosocial therapy for mild to severe

symptoms. For some women, no prescribed medicine is acceptable; instead, they may opt for alternative therapies. Because they want a treatment with the fewest adverse effects and want to attempt every option available, women often choose alternative therapy. Light therapy, massage therapy, acupuncture, and herbal therapy are all alternative therapies (Studd, 2015).

2.2.9 Prevention of Postpartum Depression

Molyneaux, Howard, McGeown, Karia and Trevillion (2014) discovered that psychosocial or psychological intervention after childbirth helped reduce the risk of postnatal depression. Telephone-based peer support, interpersonal psychotherapy, and home visits constitute these interventions. As depressed moms frequently remark, "lack of support" and "feeling alienated" contributed to their depression. Therefore, support can be perceived as an important part of prevention.

Although adequate exercise and diet play a role in avoiding postpartum depression, being aware of the risk factors is an important element of prevention. The medical community can play an important role in detecting and treating postpartum depression. Their physicians should screen women to determine their risk for acquiring postpartum depression. Several interventions have been proposed for postpartum depression (Molyneaux et al., 2014), Cognitive-behavioural therapy, interpersonal psychotherapy (Miniati, 2014), and peer support (Weissman, 2013).

Preventive methods are divided into the following categories:

2.2.9.1 Pharmacological interventions

Because of their favourable adverse effect profiles and relative safety in overdose compared with tricyclic antidepressants, selective serotonin reuptake inhibitors have become the mainstay of treatment for moderate to severe postpartum depression.

2.2.9.2 Psychological interventions

Interpersonal psychotherapy (IPT) is a manual-based and time-limited psychotherapeutic approach within an interpersonal context (Weissman, 2013).

The technique aims to solve current rather than past interpersonal issues; it does not explore underlying personality characteristics or unconscious motivations contributing to interpersonal problems.

An acute treatment which generally consists of three phases is IPT:

- To establish the framework for treatment, diagnostic assessment, psychiatric/social history (including social functioning and close relationships, as well as mutual expectations), and their linkage between the four interpersonal areas are used.
- The quest for policies that are precise to the selected interpersonal area of difficulty.
- Consolidation and encouragement to recognize therapeutic gains and development of techniques for the countering and identification of symptoms of depression against subsequent future episodes (Weissman, 2013).

Through IPT sessions, women can become aware of how these conflicts are caused by maladaptive processes such as dependency or hostility, thereby modifying their coping styles in adaptive ways. First, grief is associated with the death of a loved one; a mother who has experienced a miscarriage, stillbirth, or infant death may show strong grief reactions such as sadness, anguish, and anger (Kersting & Wagner, 2012). Grief over the lost foetus may be treated by exploring the mother's wishes, expectations, and fantasies about the baby. It is not uncommon for the mother to blame herself for the death of the foetus; IPT helps women become aware of their grief reactions so they can experience a normal grieving process.

Second, role transition refers to a significant change of role status experienced as a loss by the individual. Adaptation to physical changes and altered relationships with the spouse, other children, co-workers, or significant other, pregnancy, and postpartum depression can be framed as a dynamic transitory role (Weissman, 2013).

Third, an interpersonal dispute is a condition in which a non-reciprocal expectation exists between the patient and at least one significant other people about their relationship (Markowitz & Klerman, 2012).

Lastly, interpersonal disputes indicate a substantial lack of social skills, resulting in problems initiating and sustaining relationships; pregnant women with interpersonal disputes often have inadequate social support or may lack affection towards foetuses and neonates (Kokobu, Okano & Sugiyama, 2012).

The goals of IPT are to allow women to learn how to successfully reduce excessive expectations while elevating a women's self-awareness concerning problems and overcoming maladaptive communication styles (Weissman, 2013).

Cognitive Behavioural Therapy (CBT) is based on the idea that how an individual interprets an experience influence how they behave both behaviourally and emotionally. CBT assists the individual in the correction and identification of beliefs that are erroneous and systematic distortions in information processing to enhance coping efforts and hope of reducing stress (Ruggiero, Spada, Caselli, & Sassaroli, 2021).

Alternative therapy: This includes herbal therapy, acupuncture, hormonal therapy, light therapy, and massage therapy (Delingianndis, Nancy & Freeman, 2014).

Hormonal therapy: Recent trials with hormonal therapy have concluded that estradiol administration significantly reduces depression scores during the first month of postpartum. Clinical risks,

including deep venous thrombosis, endometrial hyperplasia, and inhibition of lactation, preclude evidence of safety and efficacy is proven (Studd, 2015).

Light therapy: This may be considered an alternative therapy for postpartum depression because it acts on the brain's dysfunction of 5-hydroxy-tryptophan (Delingianndis et al., 2014). It is proven to be an effective, attractive treatment for seasoned affective disorder and non-seasonal depression. However, its actual efficacy for postpartum depression is unknown.

A study of light therapy (Delingianndis et al., 2014) stated that one of their limitations was the competition of time used for therapy and the time needed to care for infants, creating a small sample size. Unfortunately, due to the sample size, design problems, and inconsistent dose and time of therapy, little is known about the true efficacy of light therapy in postpartum women (Abdulraheem & Amodu, 2015).

Massage therapy: This has been shown to relax muscles, reduce pain perception, decrease stress and anxiety, and aid digestion, circulation, and excretion in postpartum depression (Fields, 2013).

Social support and Psycho-educational interventions

Many interventions have targeted postnatal mothers because of the consequences of maternal depression on an infant's development. Interaction coaching techniques aim to enhance the quality of mother-infant interactions. Also, home visit intervention and social support have successfully improved depressed mothers' moods and attitudes. Interventions are focused on altering the mother's mood state.

2.2.10 Nursing management of postpartum depression

Nurses' involvement in the care of postpartum depression is in three major parts: prevention, screening, and management (Sockol et al., 2013).

Nursing interventions for preventing postpartum depression are implemented during the hospital stay and after discharge. During a hospital stay, if the mother exhibits any warning signs of post-partum depression, such as irritability, the nurse lets the mother know that she can consult with the nursing staff at any time, even for matters she may consider trivial. The nurse implements this intervention soon after delivery and communicates it constantly (at least once daily). The nurse educates the patient about postpartum depression and performs the screening using the Edinburgh Postnatal Depression Scale (EPDS) and nursing interviews. Preventive care after discharge is only applicable to high-risk mothers. This involves a home visit or a follow-up phone call placed by the case manager to assess patient status, reinforce earlier interventions and provide support as needed (Sockol et al., 2013).

Screening to confirm a diagnosis for postpartum depression is well established, involving interviews and rating scales such as the EPDS. The responses and results from the screening aid the diagnosis of postpartum depression and help to determine the line of management to be implemented by the nurse (Segre, Orenge-Aguayo, & Siewert, 2016).

The nursing management of people with postpartum depression is not clearly defined but seems to revolve around counselling. According to Earls, Gerri, and Jason (2019) & Earls, Yogman, Mattson and Rafferty (2019), nursing management should be based on the level of risk or severity of postpartum depression. They classified the management of postpartum depression based on the patient's score on the Edinburgh Postnatal Depression Scale (EPDS), the assessment time, and the presence or absence of suicidal/homicidal thoughts. The management is as follows:

- Suicidal/homicidal thoughts: Irrespective of the time of assessment and the patient's EPDS score, the patient must not be left alone. The nurse should refer the patient to the closest

emergency department for psychiatric or suicidal evaluation. He/she should also support the patient and encourage the family members to be involved in care.

- No suicidal or homicidal thoughts (Day 2 to 3 postpartum; before discharge)
  - EPDS score of 0 to 5: The nurse should educate the client about the causes and symptoms of postpartum depression. The nurse rescreens the patient at the 6weeks postpartum visit.
  - EPDS score of 5 to 10: When managing patients with EPDS scores of between 0 and 5, patients should be given a blank copy of EPDS and encouraged to report back to the hospital if it exceeds10.
  - EPDS score above 10: When managing patients with EPDS scores of between 5 and 10, a clinical interview is conducted to confirm the diagnosis of postpartum depression based on DSM-V diagnostic criteria. Pharmacologic and non-pharmacologic management is initiated. If the obstetrician is not comfortable treating the patient or if it goes against hospital policies, the patient is referred to a psychiatrist for consultation. Follow-up and rescreening are set at 4 weeks, but before then, the case manager/nurse manager should place a follow-up phone call to the patient at 5 to 7 days postpartum.
- No suicidal or homicidal thoughts (6 weeks to 1 year postpartum)
  - EPDS score less than or equal to 11: The nurse should utilize nursing judgment skills and exercise caution, especially with a cut-off score. The nurse should educate the client about the causes and symptoms of postpartum depression. The patient should be given a blank copy of the EPDS and encouraged to report to the hospital if the score exceeds 11. The nurse gives psychological support to the patient and encourages the family to be involved in care. The nurse reinforces self-care in the patient.

- EPDS score above 11: In addition to managing a patient with an EPDS score at or below 11, a clinical interview is conducted to confirm the diagnosis of postpartum depression based on DSM-V diagnostic criteria. Pharmacologic and non-pharmacologic management is initiated. If the obstetrician is not comfortable treating the patient or if it goes against hospital policies, the patient is referred to a psychiatrist for consultation. The nurse assists the patient by setting up an appointment with mental health services immediately or within 2 to 3 days. The nurse encourages the family members to be involved in the care and provides psychological support for the patient. Follow-up and rescreening are set at 4 weeks, but before then, the case manager/nurse manager should place a follow-up phone call to the patient at 5 to 7 days postpartum.

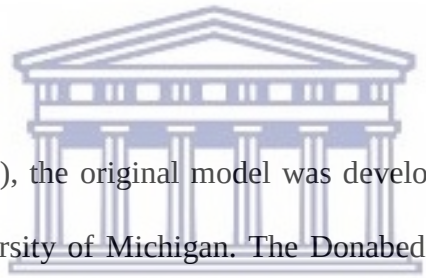
2.3 CONCEPTUAL FRAMEWORK

Polit and Beck (2017) define a conceptual framework as "the notions inside a conceptual model that give significance to a study". A conceptual framework represents a network of interlinked concepts that foster an in-depth understanding of a phenomenon (Michael, Martinkova, McFarland, Wright, Cliff, Modell & Wenderoth, 2017). The interlinked concepts in a conceptual framework support one another, represent their various phenomena, and help in providing a broader understanding of underlying ideology (Martinkova, McFarland, Wright, Cliff, Modell & Wenderoth, 2017). Although a conceptual framework denotes the linking of concepts, it is also a construct of consistent concepts that adequately play their roles and are interlinked with each other (Eizenberg & Jabareen, 2017). Hence, a conceptual framework enables researchers to properly organise and implement interrelated concepts regarding a phenomenon (Ravitch & Riggan, 2016). Donatti, Wild, and Hareedran (2016) refer to conceptual models in health education research as

diagrams of proposed causal linkages among a set of concepts related to a particular public health problem.

The research method is guided by the mixture of these principles gleaned from the literature. A conceptual model can guide our choice of what to measure and how to measure it and provide a context for interpreting the findings. According to this research, a conceptual framework directs and organizes all aspects of the research, from the research questions to the data collecting and findings presentation and provides a framework for evaluating the study results (Miles & Huberman, 2014; Regoniel, 2015).

Different models of care quality have been created, and each model's assertions have a unique perspective on quality. Donabedian writes the most well-liked.



2.3.1 Donabedian Model

According to Donabedian (1980), the original model was developed by a physician and health services researcher at the University of Michigan. The Donabedian Model continues to be the dominant paradigm for assessing the quality of health. The Donabedian Model is a conceptual framework for analysing healthcare services and assessing the standard of treatment. The model states that three categories—" structure," "process" and "outcomes,"—can be used to gather data regarding the quality of treatment. Structure describes the healthcare environment, including personnel, resources, funding, and hospital facilities. Outcome refers to the effects of healthcare on the health status of patients and populations, and process denotes the transactions between patients and providers throughout the delivery of healthcare (Gardner, Penny, Dawn & Wittkowski, 2013).

2.3.1.2 Framework of the Donabedian Model

According to Donabedian (1980), the structure of care influences its processes, which in turn influences its results. The primary building block of the framework is outcomes, which are the results of operational, patient-focused nursing and include engagement in care, wellness, fostering a therapeutic environment, and patient satisfaction.

Structure, procedure, and the result are the three components of the Donabedian model that may be used to evaluate the quality of treatment, according to his 1980 essay titled "Evaluating the Quality of Medical Care". The concept of quality and techniques for its evaluation, also known as investigations in quality assessment and monitoring, was published by Donabedian in 1980. It included a more detailed explanation of the structure-process-outcome paradigm. The Donabedian approach was widely adopted, and the evaluation of medical care quality became one of the 20th century's most often referenced publications in the field of public health. Donabedian said that the classifications should not be misconstrued for quality attributes and that they are instead the sorts of information that may be acquired to determine if the quality of treatment is poor, fair, or sound. He stated that to draw inferences about quality, there must be a known link between the three categories, and that relationship is more likely than certain. These boxes represent three types of information that may be collected to draw inferences about the quality of care in a given system. Moreover, the model is most often represented by a chain of three boxes containing structure, process, and outcome connected by unidirectional arrows in that order (Donabedian, 2003).

The pictorial representation displayed below represents the relationship between the constructs of the framework.

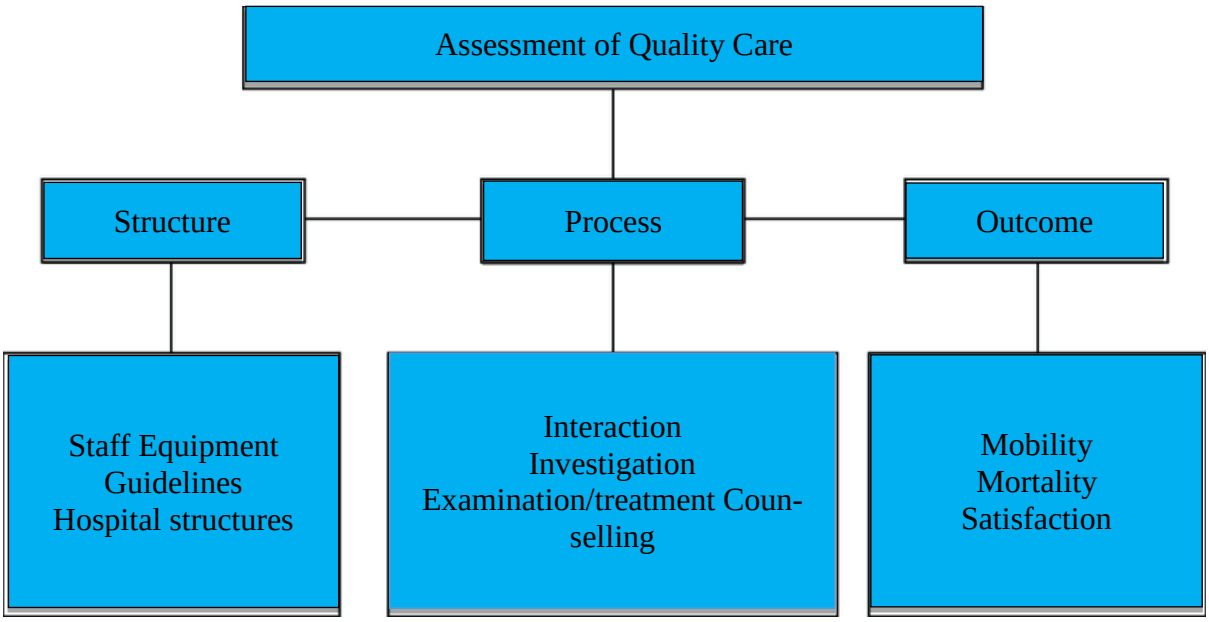


Fig 2.1: Constructs of the framework of the Donabedian Model

https://www.researchgate.net/publication/279499157_Improving_quality_of_perinatal_care_through_clinical_audit_a_study_from_a_tertiary_hospital_in_Dar_es_Salaam_Tanzania/figures?lo=1

- Structure

The structure is often easy to observe and measure and may cause problems identified in the process. All factors that influence the context in which care is delivered embody structure. This includes the physical facility, equipment, human resources, and organizational characteristics such as staff training and payment methods. These measure the average quality of care within a facility or system and control how providers and patients in a healthcare system act (Dimick, Riyan, Krinsky & Maurer, 2016).

- Process

The sum of all actions that make up healthcare refers to the process. These generally consist of patient diagnosis, treatment, education, and preventive care but may be extended to contain actions

taken by the patients and their respective families. Because process contains all acts of healthcare delivery, the measurement of the process is nearly equivalent to the quality of care, according to Donabedian. Information about process can be obtained from medical records, interviews with patients and practitioners, or direct observations of healthcare visits. Processes can be further classified as technical processes, how care is delivered, or interpersonal processes, which all encompass how care is delivered (Dimick et al, 2016).

- Outcome

All the effects of healthcare on patients or populations, including changes to behaviour, knowledge, health status, health-related quality of life, and patient satisfaction, make-up outcomes. Because the main objective of healthcare is to improve patient health, outcomes are occasionally seen as the most important quality indicators. However, it might not be easy to measure outcomes that are solely healthcare-related effectively. As results may take some time to become apparent, large sample populations, modifications by case mix, and long-term follow-ups are necessary to make links between outcomes and procedure. The model may address problems with either a broad or a tight scope because it does not include an explicit definition of excellent care. According to Donabedian (2005), each of the three domains has benefits and drawbacks that call for scientific researchers to make connections between them to establish a link between them that is fundamentally useful for comprehending systems and architecting experiments and interventions (Donabedian, 2005).

2.3.1.3 Critique of the Donabedian model of quality care framework

Some researchers have suggested potential limitations, and, in some cases, adaptations of the model have been proposed. The Donabedian Model remains a guiding model in health services

research. It has previously been said that the sequential order of structure, process, and outcome has limited usefulness for understanding how the three domains to impact and interact with one another. As a result, some have criticized this paradigm as overly linear (Harvey, Abujudeh, Hassanzadeh, Arah, Rosenthal, & Thrall, 2016).

The model does not consider antecedent features, which are crucial for assessing the quality of care (e.g., patient characteristics and environmental variables). Environmental elements include the patients' culture, socioeconomic, political, individual, physical, and health-related features (Berwick & Fox, 2016). Patient determinants include genetics, socio-demographics, health behaviours, beliefs and attitudes, and preferences, according to Berwick and Fox (2016). These aspects are essential to properly comprehend the efficacy of new tactics or adjustments within the treatment process.

2.3.1.4 Application of the Donabedian Model to the Care of Postpartum Depression (PPD)

Donabedian designed his quality-of-care framework to be adaptable to various medical environments. For this study, the Donabedian paradigm of high-quality care was modified. The model's three ideas apply to this investigation. The modified version of the postpartum depression model is detailed in detail below.

Structure

This comprises the organization inside medical institutions where postpartum depression patients are treated. The building structure is first. The following essential elements must be considered to assess a building structure intended to deliver services accurately: the physical aspect, the surrounding area and sanitation, and the number of rooms and beds (Donabedian, 2005; Berwick & Fox, 2016).

The building structure should have a separate consulting room(s) and a separate room for each patient to ensure privacy and reduce stigmatization. In general, the room capacity should be appropriate for the flow of clients, and the building construction should be sufficiently roomy. To treat postpartum depression, it is essential to treat women with dignity (Windau-Melmer, 2013). There are three of them: (i) staff classifications and credentials, (ii) staff-patient ratio, and (iii) staff competencies. These staffing factors greatly influence how well patients with post-partum depression are treated.

Additionally, staff workload and the population of available health workers to clients (the staff-patients ratio) are other variables that might affect the standard of service. When addressing the issue of providing postpartum depression patients with high-quality treatment, it is important to consider the staff's skills and competencies, which are the results of their academic and professional training. Some of the factors mentioned above have connections to one another. The staff-patient ratio, for instance, is connected to patient satisfaction and staff burden.

According to Berwick and Fox's (2016) explanation of the Donabedian Model, we may focus on providing postpartum depression patients with the best nursing care possible if the framework is sound.

Process:

These frequently include services for follow-up care, preventative care, and the identification and treatment of postpartum depression. The process also includes how care is delivered to the patient with post-partum depression (technical process) and the method by which care is delivered (interpersonal process) (Donabedian, 2003). However, in the study setting, there is no documented process. Thus, the need to develop a model for the nursing management of postpartum depression, to provide a framework for a high standard of maternity care.

Outcome

The outcome helps the health personnel to input optimal care to the patient. Because the main objective of healthcare is to improve patient health, outcomes are sometimes viewed as the most important quality indicators. The outcome is the framework's central component and results from practical, patient-centred nursing. Owing to the flexibility and applicability of the Donabedian model (Naranjo and Viswanatha 2011), Donabedian model was used in this research, focusing on the development of a model for nursing management of patients with postpartum depression in Edo state, Nigeria.

2.3.2 Dickoff conception of practice theory in nursing

Dickoff, James and Wiedenbach (1968) developed this conception of practice theory in nursing. They identified concepts classified as elements for theory development.

These concepts are:

1. Agents- Who will be liable for performing the activity when the concept of practice is developed.
2. Recipients - Those who will take part in the activity.
3. Procedure -This refers to the guidelines and protocols of the activity.
4. Dynamics -What is the source of the energy for the activity.
5. Context - In what place is the activity going to be performed.
6. Terminus - The end point of the activity.

2.3.2.1 Critiques of the theory

Beckstrand (1980) asserted that conception of a practice theory by Dickoff, James and Wiedenbach developed in 1968 is roughly equivalent to a plan of action. He argued that the theory has shown

to be nothing more than examples of established forms of knowledge. Collins and Fielder (1984) critiqued that the theory can be borrowed from the existing body of scientific and ethical knowledge.

2.3.2.2 Benefits of the theory to this study

Despite the critiques, it's one of the earliest conceptions of practice theory in nursing practice. The theory will be used for concepts classification before the development of this nursing model.

2.4 EMPIRICAL STUDIES

Kerna, Nwokorie, Chidi, Odugbemi, and Uju (2020), opined that postpartum depression (PPD) could result in insomnia, crying spells, thoughts of harming the baby, poor concentration, and depressed mood. It is estimated that 10 -15% of women suffer from some form of PPD, mild, moderate, or severe. PPD disrupts the normal and healthy bonding between mother and new born and has detrimental effects on relationships within the family and community. It is challenging to diagnose and effectively treat PPD promptly and accurately; PPD is considered under-diagnosed. Alternative and complementary medicine approaches are being used to treat or ameliorate the symptoms of PPD. Still, with the advances in diagnosis and treatment, much more needs to be done regarding the early identification of risk factors, prevention, and the management and treatment of postpartum depression.

Lara-Cinisomo, Girdler, Grewen, and Meltzer-Brody (2016), offered a conceptual framework that identifies risk factors of postpartum depression (PPD) in immigrant and U.S.A -born Latinas in the United States by focusing on psychosocial and neuroendocrine factors. They argue that the biological aetiology of PPD, which comprises complex stressors, jointly increases the risk of PPD

in immigrant and U.S. A-born Latinas in the United States. Using the literature reviewed on psychosocial and physiological risk factors associated with PPD, they developed a conceptual model for Latinas that implicated that studies should examine endocrine functions and evaluate prospectively the impact psychosocial stressors identified on the development of PPD. They opined that the conceptual framework would allow reporting the primary and indirect effects of psychosocial risk factors and biomarkers on PPD in foreign- and U.S.-born postpartum Latinas.

Jidong, Husain, Ike, Murshed, Pwajok, Roche, Karick, Dagona, Karuri, Francis, Mwankon, and Nyam (2021), conducted a systematic review of maternal mental health and child well-being in Nigeria and developed a conceptual model that is culturally appropriate for distressed mothers with identified maternal mental health concerns. With a developed conceptual model, they concluded that culturally appropriate and evidence-based psychological interventions for maternal mental health problems would benefit Nigerian indigenous mothers.

In their research, Sara and Jaya (2016) opined that postnatal depression (PND) is a common disorder that can be profoundly disabling for affected mothers and their infants. A conceptual framework was developed to propose recommendations to help women with PND. The researchers found that interventions involving cognitive behavioural therapy and problem-solving can improve outcomes for PND. Implementation challenges included: dependence on specific cadres of health workers; motivation and capacity of delivery agents for additional responsibilities; high level of supervision required, and lack of structures and mechanisms to ensure fidelity.

Gresh, Cohen, Anderson, and Glass (2021) evaluated the content of postpartum care and models of delivery of care throughout the African continent. The theoretical framework developed by the World Health Organization: Maternal Morbidity Working Group for healthcare interventions to

address maternal morbidity was used for data analysis and to synthesize the results for presentation. The results from this review indicate the need to address gaps in postpartum care services throughout the African continent to reduce maternal morbidity. This indicates the lack of standardized postpartum care and the need to provide quality services for women and families.

Postpartum care is an area that is often neglected in maternal health. The results from this review indicate significant gaps in postpartum care, most notably a lack of collaboration between healthcare professionals in the patient's care and a rights-based approach to care. Hence, in this study, the researcher proposed the development of a model for the nursing management of patients with postpartum depression in Edo state of Nigeria.

2.5 SUMMARY

The literature review has consulted English peer-reviewed papers as far back as 2010. Databases included PubMed, CINAHL, EBSCO Scopus, psych info, ProQuest, and the Dissertations of those examined. Depression is an important public health issue that affects men and women equally during the years of childbirth. Within this report, according to standardized diagnostic criteria with onset within 1 year of childbirth, postpartum depression is defined as an episode of non-psychotic depression. Although prevalence rates may be even greater among socially disadvantaged women, postpartum depression is a serious and complex disorder affecting approximately one in seven new mothers in the United States (Earls et al., 2019). Maternal postpartum depression has considerable consequences. The onset of postpartum depression can disrupt a woman's life at a time usually marked by excitement and celebration. The following threatening elements have repeatedly been found to be reliable predictors of postpartum depression: A lack of social support, a history of

sadness, depression and anxiety brought on by pregnancy, and stressful life events. Modest indicators of postpartum depression are maternal neuroticism, difficult infant temperament, low self-esteem, and childcare stress. Low socioeconomic position, including poverty and obstetric and pregnancy difficulties, negative cognitive attributions, being single and married, and bad relationships with partners are small indicators.

In Western nations, there was no correlation between maternal age, education level, parity, child's gender, or ethnicity. Although postpartum depression is a serious health problem for many women from many cultures, it frequently goes undetected in terms of prevention and identification. Even though several methods have been developed to identify depressed symptomatology in women who have just given birth, developing a postpartum depression screening program needs careful thought.

From the extensive literature review from the conceptual, empirical and theoretical frameworks, the following decisions have to be made:

1. According to Anokye, Acheampong, Obeng, Budu-Ainnosun, and Akwasi (2018), in light of the current perspectives presented in the DSM V and EDPS diagnostic tools for nursing management of postpartum depression, it is necessary to investigate the level of knowledge among professional nurses concerning the nursing care of patients with postpartum depression.
2. Based on empirical studies conducted by Kerna, Nwokorie, Chidi, Odugbemi, and Uju (2020), which indicate a current incidence rate of 10-15% for postpartum depression in Nigeria, there is a need to investigate the nursing care practices and their effectiveness in managing patients with postpartum depression by exploring the experiences of medical

social workers, clinical psychologists, and patients who have recovered from postpartum depression.

3. Gresh, Cohen, Anderson, and Glass (2021) evaluated the contents of postpartum depression and the models of care delivery across the African continent. They discovered that there is no standardized postpartum depression care, indicating the need to address the gaps in postpartum care services to reduce maternal mental morbidity. As a result, there is a necessity to develop a nursing care model for the management of postpartum depression based on the study findings, utilizing the Donabedian model.

Long-lasting effects on the child are mostly brought about by exposure to postpartum depression or recurring bouts of mother depression that endure for an extended time. The possible negative impact of postpartum depression on the mother-infant bond and child development emphasizes the need for early detection and efficient treatment approaches. There are few studies of public health treatments to lessen or stop postpartum depression's effects on these outcomes. The outcomes of therapies, including interactive coaching, group interventions, massage therapy, and home visits, have only been studied in a small number of low-quality research.

Despite the vast literature available, there is no model for managing postpartum depression in Edo state, Nigeria. Developed countries, mainly Western Europe and North America, are some of the few carrying out postpartum depression research. It is vital to know that while analysis addressing culturally diverse immigrant populations is absent, limited research has been conducted to determine the prevalence and risk factors for postpartum depression in less developed countries. Because child delivery and the postpartum period are conceptualized and experienced differently among different cultures, this is a severe limitation. How structural, interpersonal, and clinical

aspects of patient care may jointly affect the patient's experience is shown through a multi-dimensional view of patient care. Identification of difficulties and challenges to postpartum depression care and techniques in which care could be more patient-focused is imperative.

The Donabedian Model served as the conceptual framework for the current study's data gathering and analysis. This model's strength and suitability were established for this research's purpose.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter three explains the methodology used in each study phase to achieve the research goals. A researcher's step-by-step approach to reaching a logical conclusion in a research study is known as the research methodology (Creswell, 2013). It is comprehensive because it describes the tools or research methods used in a study and explains why each method was chosen based on suitability. It also clarifies the philosophical presumptions that the researcher used to determine the research design, methodology, and strategy (Creswell, 2013). The philosophical presuppositions and paradigms that underpin this study are discussed in this chapter.

3.2 RESEARCH APPROACH

According to Creswell (2013), a research approach is a strategy or process that specifies how to perform a study, from research design and data collecting through data analysis. Typically, there are two main research methods: qualitative and quantitative (Flick, 2015). Creswell (2013) adds a third mixed-and-multiple technique to the mix.

This study used the qualitative method and an exploratory descriptive, theory generative design. The qualitative approach is best used in cases where we want to assess subjective data from different individual viewpoints of an occurring social phenomenon (Creswell, 2013).

3.2.1 Qualitative approach characteristics and application to study

According to Denzin and Giardina (2016), a qualitative approach is used to give a phenomenon meaning based on the meaning ascribed to it by participants and takes place in its natural setting. In this study, a qualitative research method was used. The study's primary goals were to investigate the role of nursing care in PPD management. When the research was being conducted, Edo state, Nigeria, had no models for the nursing management of PPD. When information regarding phenomena or concepts is scarce, a qualitative technique is used (Holloway & Galvin, 2016).

The qualities of a qualitative approach, as described by Pernecky (2016), are presented below, and they serve as justification for using a qualitative research methodology for this study.

3.2.2 Qualitative design strategies

- Naturalistic inquiry investigates a phenomenon in its natural setting without modifying or changing the study's conclusions. The researcher examined the nursing care provided by each hospital that took part in the study to manage PPD. The researcher visited each hospital that was used in the study.
- Emergent design flexibility - refers to a researcher's capacity to adjust to novel situations as the study's events develop to maximize outcomes. When the researcher realized that getting many nurses to participate in focus group discussion, as earlier design, was not feasible due to the high workload of the nurses, the researcher adopted flexibility in this study. As a result, the researcher had to switch some data collection to in-depth interviews with nurses and discharged patients.
- Purposeful sampling - refers to how participants were chosen for the study. Participants were purposively selected from the four selected hospitals in Edo State of Nigeria.

3.2.3 Data collection and fieldwork strategies

- Qualitative data - is information obtained through document reviews and interviews that may be used to generate data on the study's emphasis. The researcher performed focus groups and in-depth interviews to acquire data on the opinions of patients and trained caregivers. The researcher also reviewed the records of patients with PPD discharged from the hospitals.
- Personal experience and engagement - refer to using a researcher's knowledge of the topic being studied, their familiarity with the participants, and their capacity to immerse themselves in that particular investigation fully. The researcher in this study has a positive relationship with most of the respondents at the hospitals included in the study. She is a certified psychiatric nurse and a faculty member at a university, and she accompanies students to hospitals for clinical practice as part of her day job. The researcher did all of the in-depth interviews in addition to moderating the focus groups. The researcher took field notes throughout the interview to record the nonverbal cues and observations.
- Empathic neutrality and mindfulness - the researcher's capacity to observe a phenomenon or listen to participant-provided information without passing judgment on or biasing the information. By addressing each interviewee according to their rank and the social conventions of the time, the researcher demonstrated respect for the respondents. Participants who had questions that were difficult to grasp were given explanations that made more sense to them. The researcher closely monitored the participants and paid careful attention to them during the focus group meetings and interviews.

- Dynamic systems - refers to a researcher's capacity to comprehend the dynamics, style, or any potential change in the subject under study at any given time. The researcher looked at the variation in clinical nursing care for PPD management at each hospital.
- Bracketing - is a technique used in qualitative research to minimize the researcher's biases and preconceptions. The researcher achieved bracketing by acknowledging their preconceptions and assumptions before data collection. The researcher also ensured that data collected during this study was reviewed by the supervisor and accepted before they were included in any analysis

3.2.4 Analysis strategies

The analysis strategies used in this study follows best practices for qualitative research outlined in Denzin and Lincoln (2018).

- Unique case orientation - the idea that every participant in a phenomenon study is unique and that the researcher respects and accepts the information presented as true. It is the primary level of the inquiry. The participant information was all transcribed verbatim.
- Inductive analysis and creative synthesis – relate to the ability of a researcher to ingest the material to identify patterns and connections thoroughly. In order to find themes and connections, the researcher read and reread the transcripts repeatedly throughout the study.
- Holistic perspective - involves examining and comprehending the phenomenon under study as a sum of its parts. Despite having four different participant groups in the study: professional nurses, clinical psychologists, medical social workers, and patients, the researcher chose to view the data from all participants holistically.

- Context sensitivity - refers to the capacity to guarantee the transferability of the research work. To guarantee that the study's findings could be distributed to all hospitals in Nigeria's Edo State, the researcher used facilities that the federal and state governments privately managed.
- Voice, perspectives, and reflexivity - the capacity to communicate one's viewpoint in a research study without sacrificing the depth of the facts gathered. While writing the report, the researcher added her insights without diluting the originality of the data collected from the study's participants.

3.3 RESEARCH SETTING

This research study was conducted in Benin City, the capital of Edo State, Nigeria. Edo state has 33 secondary hospitals and four tertiary institutions. According to the most recent estimates, the city has 17.802 square kilometres of land mass and 1.6 million people (Nigerian-National-Population-Commission, 2016). Like other urban areas, Benin's city is overpopulated and plagued by issues related to unchecked urbanization and civilisation.

3.3.1 The Health System Organization Policy in Nigeria

3.3.1.1 Levels of Government and Impact on Healthcare Delivery

In Nigeria, there are three levels of government namely the federal, state, and municipal governments. Nigeria's three levels of government are responsible for providing healthcare in varying capacity. In Nigeria, the private sector also has a significant impact on the delivery of healthcare. In Nigeria, the delivery of health services and initiatives is a shared duty among the three levels of

government. The three levels of government help ensure the decentralization of services to provide accessible health care to all people.

1. The Federal Level of Government

The Federal Ministry of Health (FMOH) provides the 36 States and the Capital Territory (Abuja) with policy guidance and technical assistance. It assists in coordinating State efforts to accomplish the goals outlined in the national health policy. It develops a management information system intended to improve planning at the federal and state levels. The FMOH additionally assesses and monitors how the national health policy is implemented. Additionally, FMOH is directly in charge of managing Federal Medical Centers, mental and orthopaedic hospitals, teaching hospitals, and professional training programs. Teaching hospitals, exceptional hospitals, some private organizations, and centres for advanced technology-based research all offer highly specialized services as part of tertiary-level care (Federal Ministry of Health Nigeria, Health Policy, 2016).

2. The State Level of Government

The health initiatives at the state level are jointly overseen by the State Ministry of Health (SMOH) and the Hospital Management Board (HMB). Each State is affiliated with at least one institution for health education. The HMB is in charge of overseeing State hospitals as well as occasionally overseeing urban clinics and health facilities. The HMB's key tasks include managing and funding logistical support systems, including pharmaceuticals, supplies, equipment, and maintenance. Health services in Edo State are provided by Social and Health Welfare Counsellors (Federal Ministry of Health Nigeria, Health Policy, 2016).

Several Nigerian states have an uneven distribution of health facilities and those that do exist lack basic infrastructure and staff (Onwujekwe, Mbachu. Onyebueke, Ogbozor, Arize , Okeke, Ezenwaka & Ensor, 2022). In order to facilitate smooth collaboration with other ministries in the multi-

sectorial execution of policies, numerous departments, agencies, and sections/units have been established within the federal and state ministries of health.

3. The Local Level of Government

In Nigeria, there are 774 local government authorities (LGA). Each local government offers primary healthcare, and it is delivered through several wards and communities. However, many LGAs are unable to fulfil their mandates efficiently (Uzochukwu, Onwujekwe, Mbachu, Okeke, Molyneux & Gilson, 2018). The local government offers general health care at the primary level, including preventative, curative, promotional, and rehabilitation services (Abdulraheem, Olapipo & Amodu, 2015).

3.3.1.2 Financing of Healthcare and Challenges

In Nigeria, Out-of-pocket payments (OOPs), direct and indirect taxes, private people, religious organizations, donor financing, and health insurance are numerous ways the health industry is financed. The difference in the proportional input from these specified sources will determine how well the health sector achieves an appropriate healthcare financing system. Unfortunately, it is still tricky in Nigeria to combine these sources well (Uzochukwu, Ughasoro, Etiaba, Okwuosa, Envuladu & Onwujekwe, 2015).

Nigeria's weak healthcare system has seen several setbacks, especially at the local government level. Nigeria's healthcare system is plagued by persistently low funding on all fronts. Nigeria spends much less on healthcare than the recommended US$12 per person yearly for underdeveloped countries, at less than US$4 per person. Poor quality and ineffective delivery of public health services characterize Nigeria's health sector, leading to poor health outcomes. According to Na-

tional Health Council (2016), there is still room for improvement in the healthcare system, as evidenced by the fragmentation of services, insufficient resources (including medicines and supplies), declining facilities, unequal resource allocation, inequitable access to, and subpar quality of care. NHC (2016) further emphasizes how the problem has been made worse by the unclear duties and responsibilities among the many levels of government.

Due to a lack of resources, poverty keeps individuals in bad health, and the poor health of many Nigerians keeps them in poverty (Babalola, Ajumobi & Ajayi, 2020). To expand access for those who are less fortunate and finance health care through this method, the National Health Insurance Scheme was introduced in 2005. However, due to its poor implementation, the goals of this scheme have not been met. Drug supply is a service provided by health facilities, but sadly, especially at the primary care level, pharmaceutical access is rarely accessible. A widespread occurrence in the community is the over-the-counter purchase of prescribed medications and new prescriptions from the store due to the abundance of private pharmacies and patent medicine stores (Adewole, Adebayo, Udeh, Shaahu & Dairo, 2015).

3.3.2 Selection of hospitals for study

Due to the consistent interpretation of an individual's experiences as a function of the setting, the context in which research is performed is a crucial factor in qualitative research. In order to investigate the meaning of the phenomenon, the researcher immersed themselves in this milieu, which is a natural setting (Holloway & Wheeler, 2013). Since it is assumed that time and place affect behaviour, qualitative researchers look at how context affects participants' behaviour (Hennink, Hutter & Bailey, 2020). Additionally, they want to learn about and comprehend a person's behaviour, viewpoints, and significance (Holloway & Wheeler, 2013).

The study area's capital, Benin City, has two primary health centres, a number of private clinics, two big missionary hospitals, and four government-owned hospitals, two federal and two state. The few hospitals that offer psychiatric care in the state differ in the level of care and support they offer. Using the purposive sample technique, the researcher chose four hospitals (two tertiary and two secondary hospitals) in Benin City, Edo State, based on the phenomenon of interest (Saunders, Lewis & Thornhill, 2012). The research study was carried out in four hospitals where patients with postpartum depression are treated and nursed. One of the tertiary hospitals is a teaching hospital, one is a psychiatric specialist hospital, and two are secondary hospitals.

3.3.2.1 Hospital A

The three (3) wards used in hospital A are made up of 30 beds. The patients deliver in the labour ward (delivery unit) consisting of six single rooms equipped with autoclaved modern delivery kits. The nurses' station is situated at the entrance of the ward. The mother and baby are later transferred into the postnatal ward with 30 beds, six single rooms and twenty-four beds in the ward with a bay system. This is where the patients with postpartum depression are nursed amongst those with normal postpartum (puerperium).

3.3.2.2 Hospital B

This hospital has six wards, each comprising forty-bed spaces, without cubicles (open wards). The hospital caters solely to patients with psychiatric health problems. Patients with postpartum depression deliver their babies to other hospitals. The patients are transferred to the female ward from their homes or after being diagnosed with postpartum depression at another hospital. Patients with

postpartum depression are not nursed in the hospital's particular unit but in the last bay in the wards.

3.3.2.3 Hospital C

It is a secondary healthcare institution that can receive patients everywhere in the state. The patients give birth in the labour ward and are nursed in an open twenty-bedded post-natal ward in the hospital. The nurses' station is at the centre of the ward. The patients with postpartum depression are nursed together in this postnatal ward with other patients with no postnatal complications (normal puerperium). The patients with postpartum depression are secluded at the end of the ward when they start presenting with signs and symptoms of postpartum depression.

3.3.2.4 Hospital D

Hospital D is a faith-based secondary maternity facility. The nurses' station is in the middle of the ward. The patients deliver in the labour ward, are transferred after delivery, and nursed in the long open two (2) wards with thirty-bed space each. Patients with postpartum depression are not nursed in a separate postnatal ward.

3.3.3 Access to the site

The ethical committees at each of the four hospitals used for the study granted permission for the researcher to enter the study site (see Appendices iii – vi). By working with the sectional unit heads in the wards and the director of nursing, appointments were made based on the participants' availability.

3.4 RESEARCH DESIGN

A research design is a route that leads a researcher to their intended location. As a result, it encompasses various methods a researcher uses to collect and analyse data to decide how to successfully address a particular research subject (Polit & Beck, 2017). The best way to choose a research design is to know why you are conducting the study and what you hope to learn from it. The optimum outcome in a study is significantly aided by a suitable research design.

Two phases of this study's execution were used. The exploratory and descriptive phase was the first. It explored the knowledge of the professional nurses of nursing care practices for patients with PPD, established the experiences of healthcare professionals and patients who recovered from PPD on the nursing care practices and determined nursing care of patients with PPD through a review of documents.

The study's second phase followed a theory-generating design that adopted concept synthesis to facilitate the development of the model for the nursing managing PPD in Edo state. It addresses the fourth objective - development of a model for professional nurses, based on the study's findings, for the management of PPD. The overall study design was an exploratory descriptive and theory generative design.

3.4.1 Exploratory design

An exploratory investigation is carried out to learn more about a notion, to identify concepts and constructions from a study, and to obtain a deeper grasp of it (Babbie & Mouton, 2012). The study adopted an exploratory research design because no model for manageing patients with postpartum depression is currently known or used in Edo state. The researcher, therefore, explored the knowledge and experiences about the phenomenon under study amongst the nurses, midwives,

social workers, and clinical psychologists who care for patients with postpartum depression and patients with postpartum depression who were discharged after treatment.

3.4.2 Descriptive design

Giving a thorough description of a phenomenon or condition without making any changes to the circumstance as it is described is the goal of a descriptive study. It answers the what, where who, and how inquiries but does not explain why a problem presents itself in a particular way (Babbie & Mouton, 2012). In qualitative research methodology, descriptive research typically comes after exploratory research. Shields, Patricia, and Rangarajan (2013) cite that in qualitative research, a descriptive study results in "a deeper account" of a phenomenon. The descriptive research is appropriate for this investigation because it intends to give a thorough account of the knowledge, experiences, and nursing care in managing patients with postpartum depression in Edo state.

3.4.3 Theory of generative design

The theory-generating approach was followed in developing the model for postpartum depression management in Edo state, as postulated by Chinn and Kramer (2015). This research study aimed to develop an empirical hypothesis as “an innovative and demanding organizing of philosophies that shows a systematic, tentative and purposeful perspective of phenomena” (Chinn & Kramer, 2015). This strategy is acceptable since it is founded on the participants' experiences gathered throughout the exploration, as mentioned above, the descriptive phase. In the section of this chapter that follows, the research techniques for each of the two phases are thoroughly explained.

3.5 PHASE 1: EXPLORATORY DESCRIPTIVE

3.5.1 Population and sampling

The term "research population" describes "the total collection of instances that satisfy predetermined criteria (Polit & Beck, 2017). The population for this study comprised all professional nurses, clinical psychologists, medical social workers, and patients who had postpartum depression and were discharged from each of the four hospitals included in the study.

3.5.2 Sampling technique

A sample represents a subset of the studied population (Strydom, De-vos, Fouché & Delport, 2015). Therefore, selecting the sample units that best represent the population being researched is the process of sampling (Polit & Beck, 2017).

Probability and non-probability sampling procedures are the two most common types utilized in research. Purposive or judgment sampling is the non-probability method used in this qualitative research study (Polit & Beck, 2017), wherein informants are chosen based on their distinctive qualities (Oppong, 2013).

Purposive sampling was employed in this study to select educated individuals about postpartum depression nursing management. The participants were chosen based on their background or experience as a nurse caring for patients with postpartum depression at any of the four selected hospitals in Edo state or as key informants within nursing care management of psychiatric patients. Participants were selected based on the following inclusion criteria:

- Professional nurses who cared for patients with postpartum depression in any of the four selected hospitals in Edo state. This ensured that the study's nurses were more knowledgeable about caring for patients with postpartum depression.

- Medical social workers who had knowledge and expertise in the management of patients with postpartum depression at the selected hospitals.
- Clinical psychologists who had knowledge and expertise in the management of patients with postpartum depression at the selected hospitals.
- Patients who had postpartum depression were admitted, nursed and then discharged from any of the four hospitals included in the study.

3.5.3 Sample demographics

Limited demographic information is shown in the tables below for each hospital sample. The demographic data, which were not included in chapter 4 since they were not a goal of this study, will help readers comprehend the findings in perspective.

Table 3.1: Number of participants recruited in phase one

Hospital	Professional Nurses	Medical Social Worker	Clinical Psychologist	Discharged Patient	Total
Hospital A	10	6	6	3	25
Hospital B	10	6	6	6	28
Hospital C	5	4	2	3	14
Hospital D	5	4	2	2	13
Total	30	20	16	14	80

Table 3.2: Professional Nurses' demographics

Hospital	**Sample size**	**Sample size per gender**	**Average age**
Hospital A	10	Male 2	38 years
		Female 8	
Hospital B	10	Male 6	38 years
		Female 4	
Hospital C	5	Male 1	36 years
		Female 4	
Hospital D	5	Male 0	30 years
		Female 5	

Table 3.3: Medical social worker's demographics

Hospital	Sample size	Sample size per gender	Average age
Hospital A	6	Male 2	30 years
		Female 4	
Hospital B	6	Male 2	34 years
		Female 4	
Hospital C	4	Male 1	29 years
		Female 3	
Hospital D	4	Male 1	35 years
		Female 3	

Table 3.4: Clinical psychologists' demographics

Hospital	**Sample size**	**Sample size per gender**	**Average age**
Hospital A	6	Male 4	30 years
		Female 2	
Hospital B	6	Male 4	35 years
		Female 2	
Hospital C	2	Male 1	32 years
		Female 1	
Hospital D	2	Male 1	40 years
		Female 1	

Table 3.5: Patient demographics

Hospital	Sample size	Average age
Hospital A	3	22 years
Hospital B	6	25 years
Hospital C	3	30 years
Hospital D	2	30 years

3.5.4 Data collection methods

This study employed several data collection techniques, including focus group interviews, in-depth interviews, and a document review. Data collection took place between 4th October 2014 and 25th January 2015.

3.5.4.1 Focus group discussion (FGD)

This group interview aims to obtain detailed information from the participants about the topic being examined (Strydom et al., 2015). Focus group participants have similar backgrounds, share particular characteristics, and freely debate a subject under the direction of the facilitator, who is responsible for keeping the discussion on the topic (Cheng, 2014). In this study, the researcher planned to hold focus group discussions with professional nurses, clinical psychologists, medical social workers, and patients. However, due to the nurses' busy schedules in the department, which prevented them from participating in a focus group discussion, and the patient's unwillingness to cooperate, the researcher was unable to conduct FGDs with the professional nurses and patients. The researcher believes that the nurses may have been unwilling to participate in the focus group discussion on caring for patients with PPD due to the sensitive nature of the topic and a fear of

being judged by the researcher, colleagues and management, should confidentiality be broken. Hence the researcher, in consultation with the research supervisor, changed the data collection method to in-depth interviews with professional nurses and patients. Since conducting interviews in a calm, comfortable, and private setting is one of the qualities of a good interview (De-Vos, Strydom, Fouche & Delport, 2012), the focus group discussions took place in the nurses' board-room at the four hospitals. A total of 6 six focus group discussions were held – two each in Hospital A and Hospital B and one each in Hospital C and Hospital D, respectively. The reason for only one FGD in Hospital C and Hospital D is because of their low number of employed staff to care for the patients. Data saturation was reached at the point of the 6th FGD. Data saturation is when new information is no longer forthcoming (Polit & Beck, 2017). Each focus group discussion lasted approximately one and a half hours each. The focus group discussions consisted of the following participants:

Focus group 1: This focus group discussion (FGD) session was conducted at Hospital A. The group was made up of six (6) participants. Comprising three (3) medical social workers and three (3) clinical psychologists

Focus group 2: The focus group discussion (FGD) session was conducted at Hospital B. The group was made up of six (6) participants comprising three (3) medical social workers and three (3) clinical psychologists.

Focus group 3: This focus group discussion (FGD) session was conducted at Hospital C. The group was made up of six (6) participants comprising four (4) medical social workers and two (2) clinical psychologists.

Focus group 4: This focus group discussion (FGD) was conducted at Hospital D. The group was made of six (6) participants comprising four (4) medical social workers and two (2) clinical psychologists.

Focus group 5: The focus group discussion (FGD) was conducted at Hospital A. The group was made up of six (6) participants comprising three (3) medical social workers and three (3) clinical psychologists.

Focus group 6: The focus group discussion was conducted at the Hospital B. The group comprised six (6) participants, three medical social workers, and three clinical psychologists.

Prior to the commencement of the FGD, the researcher briefed the participants about the study before they signed the consent form as well as a confidentiality binding form, and for the use of an audio recorder. The participants were informed that their identities would not be exposed and that pseudonyms would be used for accurate recording. An interview guide was used for all the sessions. The questions asked were: (i) Describe how patients diagnosed with PPD are care for in the hospital. (ii) Are you satisfied with the treatment the patients received? Probes were used to elicit deeper discussion.

Descriptive field notes on the observation of the participants' verbal and non-verbal expressions and also on the researcher's experiences during the sessions were kept, which provided additional meaning to the study. The FGD sessions were facilitated and recorded by the researcher. Each participant was allowed to share their views on the topic in an unthreatening environment.

3.5.4.2 In-depth interviews

An in-depth interview is a qualitative research technique involving intensive individual interviews with participants to explore their perspectives on a particular phenomenon. They are useful when you want detailed information about a person's thoughts, experiences and behaviours or to explore

new issues, in-depth. They provide much more detailed information than available through other data collection methods such as surveys (De Vos, Strydom, Fouche, & Deport, 2012). An in-depth interview was required for this study since some participants were not immediately accessible to take part in a focus group discussion.

3.5.4.2.1 Interviews with professional nurses

The professional nurses at each hospital were interviewed in the boardroom in the ward and the outpatient clinic office where they worked, and at a time convenient to them. A notice was placed on the door for the duration of the interview to prevent interruptions. The nurses were interviewed individually during their break, because of their busy schedules in the department. The participating nurses were briefed about the study before they signed a consent form for their participation and the use of an audio recorder. Nurses were informed that their identity would not be exposed and that pseudonyms would be used in the write up of the study. The researcher facilitated the interview and kept descriptive field notes. An interview guide, developed by the researcher and approved by the research supervisor, was used to obtain detailed information and to facilitate the discussion. The questions asked were (i) where do you nurse your patients with PPD? (ii) How do you nurse your patients with PPD? (iii) To what extent was the patient and family satisfied with the care the patient received and what do you think could be improved in managing the patient with PPD? Probes were used to elicit deeper discussion. A total of 30 professional nurses were interviewed at which point data saturation was reached (see Table 3.2 for breakdown of nurses per hospital). Each interview lasted about 30 to 60 minutes.

3.5.4.2.2 Interviews with patients

The researcher initially proposed conducting focus group discussions with discharged PPD patients. However, the patients were very uncooperative at the first two hospitals (Hospital A and Hospital B). The researcher approached the patients with care and empathy by first introducing herself and explaining the purpose of the study. She then emphasized that participation is voluntary and confidential, and that their experiences could help improve care for other patients in the future. She reminded them that their preferences and comfort level will be prioritized throughout and they were free to stop the interview at any time.

Furthermore, most patients did not turn up on the agreed-appointed day for the focus group discussion, hence the focus group did not occur. The researcher reverted to individual in-depth interviews with the patients, which proved a better option as the interviewees could freely dialogue, allowing the researcher to follow up on information shared by the participant. The interviews were conducted in the clinical therapeutic room in the ward. Participants were briefed about the study before they signed consent to participate and for use of an audio recorder. During their interviews, they were asked about their own experiences with the nursing care they received while being treated for postpartum depression. Interviews were conducted by the researcher until data saturation was achieved at the point of the 14th interview. The interviews were conducted during follow-up visits and lasted 20 – 30 minutes.

3.5.4.3 Document review

According to Bretschneider, Cirilli, Jones, Lynch, and Wilson (2016), a document review is a technique for gathering information for evaluation of already-existing documents to determine their underlying significance. Private and public papers are the two main types of records, and

each is maintained for a different reason. Depending on the purpose of the study, a document can be analysed using various methods, including content analysis, textual analysis, semiology, and linguistic analysis (De Vos et al., 2012). In this study, content analysis was used to understand the nursing management and nursing care rendered to patients with postpartum depression in the wards at the four hospitals. The prescription regimens, nurses' notes, medication charts, and patient charts and any notes made by medical personnel caring for the patient were reviewed. These were documents of patients who were already discharged. The nurse in charge of the ward granted the researcher access to the patient's records. A tick chart was developed for data collection, approved by the supervisor, and used to facilitate the document review.

In the context of this study:

- Medication chart is a document for the recording of all medications administered to the patients. The name of drug dosage, time given, and the nurses signature are appended immediately after the drug administration.
- Nursing care is the individualized care rendered to patients with postpartum depression which is evidence based and patient centred.
- Nursing Management is the holistic care rendered to patients with postpartum depression using scientific principles.
- Nurses' notes are documentation done for completed tasks carried out on the patients with postpartum depression. ln some hospitals, this is done in a Kardex.
- Patient's case note is a booklet that contains all patient's information This include the demographic data, present and past medical histories.
- Patient drugs chart is where the prescribed drugs/infusions are written up. This is what is used for collection of the patient personal drugs from the pharmacy.

- Prescription regimen is the instructions given on the administration of drugs and the dosages to the individual patients with postpartum depression.

3.5.4.4 Field notes

Field notes are descriptions of everything the researcher observed and felt while working with the participants in the field. In order to give the field data more context, documented observations of people's verbal and nonverbal expressions are necessary (Marshall & Rossman, 2014). Reflective and descriptive field notes are the two main categories of field notes (Asplund & Welle, 2018). As the name suggests, descriptive field notes accurately depict what the researcher sees and encounters while in the field. On occasion, they utilize precise words the researcher overheard to give crucial background information for the study. While reflective field notes contribute to descriptive field notes by giving a personal comment and describing what the researcher is learning and comprehending about the topic, descriptive field notes are still important (Ritchie, Lewis, Nicholls, & Ormston, 2013).

The researcher gathered field notes during focus group discussions and interviews, focusing specifically on capturing participants' nonverbal cues such as facial expressions and body language. These notes were instrumental in identifying issues faced by participants that needed further investigation. Analysing these notes, the researcher found that they accurately portrayed the emotions and reactions of the participants during the interviews. This information provided valuable insights and contributed to a deeper understanding of the research topic.

3.5.5 Data Analysis

Data analysis is the methodical review of information that has been systematically acquired, simplifying the complexity of the data and evaluating the data for patterns of similarity and difference to draw informed conclusions from the data (Neuman, 2016). According to De Vos et al. (2012), data analysis typically employs an inductive methodology. Qualitative data analysis has historically drawn on various research methodologies, including grounded theory, discourse analysis, narrative analysis, and phenomenology (Polit & Beck, 2017). A systematic analytical technique is general inductive analysis, sometimes referred to as "approaches that primarily employ extensive readings of raw data to develop concepts, themes, or a model through judgments extracted from the raw data by an assessor or researcher" (Polit & Beck, 2017). The data from the in-depth interviews and focus group discussions were analysed using the general inductive methodology described in De Vos et al. (2012) as follows:

i) Planning for the recording of data - Before data collecting had started, a researcher planned to record the interviews to facilitate the data analysis process. A tape recorder was used to capture the interviews with the participants' permission.

ii) Data collection and preliminary analyses - The researcher saved the recording on a computer and transferred the files to a pen drive for safekeeping. The voice files were named according to the name of the hospital and participant group. After the data collection, the researcher organized all professional nurse records from the four hospitals they had chosen into a single folder. She then repeated the process for clinical psychologists, medical social workers, and discharged patients, giving each one a code for quick identification. The researcher sent a tape copy of the first focus group discussion to her supervisor after that to check if she had asked the subjects of the focus groups in an appropriate manner. Where

necessary, changes were made to the researcher's questioning strategy. Reflective field notes were taken, paying particular attention to the interviewees' enthusiasm, the surroundings, facial expressions, and how they responded to questions.

iii) Managing the data - To fully engage with the study and gain a more profound knowledge of how to classify detected themes, the researcher verbatim transcribed the audio files. The transcribing was made more accessible by the researcher's online transcription and dictation tool from www.transcribewreally.com.

iv) Reading and writing memos - the researcher utilized Atlas Ti 7 software to help with data analysis.

v) Generating categories and coding the data - The researcher used an open coding methodology which, according to De Vos et al. (2012), entails naming and categorizing data only after rigorous evaluation of the read data. Initially, a large number of codes were later recoded and refined to 52 codes. The researcher further decreased the codes by classifying them into categories, sub-themes, and themes.

vi) Testing the emergent understandings and searching for alternative explanations - The concepts produced from the cognitive apprenticeship model served as a guide for the developed themes. The researcher also assessed the themes that arose to see if they were pertinent to the stated research aims and if they may help achieve those objectives. The researcher also noted a few categories that did not directly address the research questions but made a substantial contribution to the analysis.

vii) Interpreting and developing typologies and presenting the data - The complete data research report is presented in Chapter 4.

3.5.6 Measure to ensure the trustworthiness of the research

According to Polit and Beck (2017) and Anney (2014), The "gold standard" for evaluating the dependability of qualitative research remains the model developed by Lincoln and Guba in 1985. As a result, the study relied on the four suggested characteristics listed below to determine trustworthiness.

3.5.6.1 Credibility

This requirement seeks to verify that the research is compiling its intended information. It is the main and most important factor for determining whether qualitative research is reliable (Houghton, Casey, Shaw & Murphy, 2013). Four of the procedures for assuring credibility in a study—triangulation of data sources and methods, peer debriefing, sustained involvement, and member checks - were used in this study by the researcher.

- Data source and methodology triangulation is a technique that uses a variety of sources and research techniques to increase the reliability of data collected from studies (Sabina & Khan, 2012); (Carter, Bryant-Lukosius, Dicenso, Blythe & Neville, 2014). Triangulations of the following types may be found in a qualitative research study: triangulation of data, triangulation of investigators, triangulation of methods, and triangulation of theory (Denzin & Giardina, 2016). In this study, the researcher employed data triangulation and methodological triangulation.

Data triangulation combines information from several sources, such as people, places, and times. Clinical psychologists, medical social workers, professional nurses, and patients discharged from the four hospitals where the data sources for the study.

Methodological triangulation is the use of many methods to understand a phenomenon. The two forms of methodological triangulation are between methods and inside methods (Bekhet & Zauszniewski, 2012). The researcher used triangulation within methodologies or employed various data-gathering techniques within the research. In-depth interviews, focus groups, and document analysis were used as data collection techniques. After analysing the data, the researcher combined it to create categories and themes.

i) Peer debriefing is a technique a researcher uses with one or more colleagues to help dispel myths, explain concepts, and ensure an objective assessment of the research work (De Vos et al., 2012). In this study, the researcher's supervisor reviewed the questions used during the interviews and focus group discussions and the essential points on noting in the document review. The researcher's supervisor clarified misconceptions and offered additional explanations and insight. Additionally, the researcher talked with her peers—who had previously employed similar data collection techniques—to get their perspectives, which added to the study's insight.

ii) Prolonged engagement. The four hospitals chosen and employed in the study were familiar to the researcher. She was able to interact with the participants and gain a thorough understanding of the phenomenon. However, to avoid influencing the research outcome, the researcher avoided personal bias and remained mindful of this.

3.5.6.2 Dependability

Whether the study is carried out at a different period with the same participants and technique, data consistency is essential in qualitative research (Houghton et al., 2013). The researcher used the inquiry audit technique to ensure dependability, which comprises maintaining an audit trail of

the research's progress and enabling data to be examined by an external assessor (Polit & Beck, 2017). The researcher's supervisor was the external assessor for this study. The study supervisor listened to some voice file samples and read transcripts. The supervisor also carried out an independent coding check.

3.5.6.3 Conformability

The "neutrality or objectivity of the data" is referred to as conformability (Polit & Beck, 2017). It can be done by creating an audit trail, which records the research process and allows an outside reviewer to check the procedure. This includes recording every step of the research process, from collecting the first data to writing the final report. To enable a complete evaluation of the process, the researcher incorporated the supervisor in all phases of the work, from data collection to the final report. In order to strengthen the study's credibility, verbatim quotes from the participants were also included when writing the report.

3.5.6.4 Transferability

The term "translatability" describes how well a study's findings can be applied in different contexts (Polit & Beck, 2017). Giving a thorough explanation of the entire research effort will increase transferability. To ensure transparency and the readers' ability to understand the research method, the researcher supplied a lengthy explanation of the study.

Table 3.6: Summary of phase one methodology process

Specific objective	Methodology		Theoretical Framework
	Data source/collection	Data analysis	
i) To explore the knowledge of professional nurses regarding the nursing care of patients with postpartum depression.	In-depth interview Purposive sampling.	Inductive analysis	Donabedian • Structural, • Process • Outcome Evaluation
ii) To establish the experiences of social workers, clinical psychologists, and patients who recovered from postpartum depression	Focus group Discussions Purposive sampling	Inductive analysis	Donabedian • Process • Outcome Evaluation

3.6 PHASE 2: THEORY GENERATION

3.6.1 Elements of theory building

Polit and Beck (2017) state that while a conceptual model provides a visual description of how ideas are connected, a theory explains how events are related. Concepts, assertions, and theory are the three fundamental building blocks of theories, and they can be formed by the following three fundamental processes: analysis, synthesis, and derivation (Walker & Avant, 2014). The development of guidelines for this study will include concept clarification and statement development. The researcher will use relational statements to indicate the relationships between a

couple of concepts. According to Walker and Avant (2014), relationship statements reflect the association (correlation) or causality between concepts. According to Chinn and Kramer (2015), such statements are concerned with the type of relationship between the concepts of a model and predict the type of interactions between the concepts.

Model development has been carried out as part of this study. In this work, the following theory-generation procedure was used:

3.6.2 Concepts

According to Chinn and Kramer (2015), concepts are the theoretical building blocks and represent an action's mental picture. The creation of hypotheses can benefit from using exploratory, descriptive investigations devoid of bias. The data gathered from the investigation were analysed inductively and iteratively to develop concepts. According to Chinn and Kramer (2015), words, experiences, and the surrounding attitudes and emotions give concepts significance. The proposed model created in this study was built on the themes and categories that arose from the analysis of the data gathered during document analysis, focus group interviews, and interviews with knowledgeable individuals regarding the phenomena under inquiry.

3.6.3 Statements

Since they express the relationships between concepts, statements play a significant role in theory construction. Walker and Avant (2014) assert that there are two types of statement articulation: relational and non-relational. Two or more related theoretical ideas are related via a relational assertion. A non-relational statement operationalizes or theoreticalizes the notions in terms of the proposed theory. This is essential since it provides a framework for analyzing and judging the

theory (Chinn & Kramer, 2015; Walker & Avant, 2014). The researcher explained the relationships between the various model concepts using relational statements in this study. The operational definitions of the concepts in the model were provided to clarify the meaning and ensure that the notion was understood correctly.

3.6.4 Theories

A theory is a group of connected propositions that explains and forecasts a fresh idea or occurrence. In this study, a model was developed for the nursing management of postpartum depression, and it explained how the concepts linked to one another.

3.6.4.1 Approaches to theory building

According to Walker and Avant (2014), the creator of a theory may need to transition between various theory formation techniques during the creation process. The theory building blocks of synthesis and derivation are aware that no one method can satisfy all of the requirements of theory creation (Walker & Avant, 2014). This is pertinent to the research since the researcher used a variety of strategies.

3.6.5 Steps followed in the development of the model

The following three steps, as described by Henderson (2018), were employed in the development of a model for the nursing management of postpartum depression patients in Edo state:

Step 1: Concept synthesis

Clarifying the concepts used in theory is a step in the concept analysis process. It correctly explains a concept's meaning and serves as a model evaluation benchmark (Walker & Avant, 2014).

Identification of the concepts and main concepts

The data was first inductively analysed, and then the researcher utilized inductive reasoning to pinpoint the critical ideas of the model. The study's objective and the researcher's values, beliefs, and attitudes toward nursing served as a guide for selecting concepts (Chinn & Kramer, 2015). In order to prevent the danger of the selected concepts losing their contextual significance, the researcher made sure they were neither too broad nor too narrow. The concepts came from horizontal themes discovered through data analysis, which led to the identification of concepts. Concept synthesis was carried out by comparing and contrasting the chosen concepts. The conceptual paradigm for the management of postpartum depression in Edo state was developed using these fundamental ideas.

Classification and definition of concepts:

Chinn and Kramer (2015) contend that an idea must be categorized and specified for significance. To accomplish this, they advise that reading widely on concepts relevant to the concept. Concepts were categorized using the survey list of Dickoff, James, and Wiedenbach, 1968, which emphasizes the six key questions that the researcher considered:

i. Agency (The activity is performed by who or what?)
ii. Recipient (Who or what is the beneficiary of the activity?)
iii. Framework (The activity is performed in what context?)
iv. Terminus (What is the end point of the activity)
v. Procedure (What is the guiding procedure, protocol, or technique of the activity?)

vi. Dynamics (What is the energy source for the activity- biological, chemical, mechanical, psychological, or physical?)

The concepts were subsequently defined by referring to three components: dictionaries, literary works, and experts' opinions on psychiatric nursing. This was done to make sure the ideas were appropriate for the situation. These definitions were drawn from the above sources, were combined to produce a contextually appropriate summary, and gave the model context.

Step 2: Statement synthesis

The first stage in the concept synthesis process is obtaining existing or freshly generated data from observations and interviews (Chinn & Kramer, 2015). The document review provided previously collected data, and fresh data from participant interviews and focus groups were combined to form the core data for this study. A statement synthesis was then conducted to describe and explain the structure of the ideas and their relationships with the assertions found in the data. When building relational assertions supported by real data, the researcher paid attention to content, orientation, intensity, and the reliability of the link between ideas, as proposed by Walker and Avant (2014).

Step 3: Theory synthesis

Thereafter, a model was created using a series of relational statements. According to Walker and Avant (2014), this procedure involved the following three steps:

- Defining concepts that would act as the model's anchors.
- Reviewing the literature to find elements connected to the concepts mentioned above.
- Arranging the ideas and claims in a coherent and significant manner that reflects the study's objective.

3.6.6 Process of describing the model

The model's description was organized around the following questions and justifications developed by Chinn and Kramer (2015):

- Why was this model created? What is its purpose? This reveals the conditions and context for which the model was developed.
- What principles support the model? This clarifies how the ideas in this model are organized and connected.
- How are the concepts within the model defined? This exemplifies the connections between concepts.
- What kind of relationships are there within the model? This illustrates the relationships between the concepts in the model.
- How is the model structured? This exemplifies how the model's structure is built on the conceptual links included inside.
- What presumptions is the model based on? This speaks to the fundamental truths that underlie its theoretical thinking.

3.6.7 Guidelines to operationalize the model

According to Chinn and Kramer (2015), the following subcomponents are included in the model's deliberate application:

- *Selecting the clinical setting*. The hospital ward where postpartum depression patients are cared for would serve as the clinical setting for the intentional application of this research.

- *Determining outcome variables for practice*. Ensuring that the model is applied when providing care for all postpartum depression patients in Edo State is the study's primary objective.
- This study will not use or test the model because of its limited scope.

Table 3.7 Summary of phase two methodology

Theory generation Process	Methodology		Reasoning Strategy
	Purpose	**Framework**	
Step 1. Concept Synthesis	Identification of concepts from data generated in phase one.	Survey list (Dickoff et al., 1968) Concept synthesis (Walker & Avant, 2014)	Synthesis
Step 2. Statement Synthesis	Development of relational statements	Statement development (Chinn & Kramer, 2015; Walker & Avant, 2014)	Synthesis
Step 3. Theory Synthesis	Extracting and synthesising key aspects	Theory development (Walker & Avant, 2014)	Synthesis
Model description	Description of the model	Structure and process description (Chinn & Kramer, 2015)	Synthesis
Guidelines Development	Development of the guideline to operationalize the model	Deliberative guidelines (Chinn & Kramer, 2015)	Deduction

3.7 RESEARCH ETHICS

According to Hammersley and Traianou (2012), ethics is the branch of thought that looks at how humans decide what is good and wrong. Protecting research participants and published data is a critical component of research ethics.

3.7.1 Permission

The University of Western Cape Senate Research and Ethics Committees reviewed and approved the research proposal (Appendix I and II). Hospital A and other institutions that took part in the study granted permission to the researcher to conduct the study. Additionally, the researcher received approval from every one of the chosen institutions where the study was carried out and from the Director of Nursing Services in Edo State (Appendices III-VI).

3.7.2 Ethics principles

The researcher followed the three major ethical guidelines for qualitative research (Hammersley & Traianou 2012).

- Autonomy - refers to acknowledging the participants' rights, including the right to know the purpose of the study and the right to stop participating if it is uncomfortable (Owonikoko, 2013). A document with information on the study was delivered to each participant (Appendix VII). Each participant was given a verbal explanation before giving their written consent to participate in the study and to use a voice recorder. Participants were made aware that participation was optional and that leaving at any point would not have any negative consequences.

- Beneficence - Briefly put, beneficence lessens the risks that people are subjected to (Owonikoko, 2013). The researcher took precautions to guarantee that none of the participants faced any health risks or other forms of victimization from the researcher or other participants that might have been related to their participation in the study. The researcher investigated a remote location to increase participant anonymity in the study. Support, including access to counselling services and community organization support groups, was set up in case any participant suffered unanticipated negative consequences from participating in the research.
- Justice - refers to participants being granted the same rights. The researcher ensured that focus group participants were free to express their opinions and forbade using words that would have intimidated other participants. Before each focus group session, the researcher established the ground rules. Additionally, focus group participants must sign a confidentiality agreement (Appendix VIII).

3.8 SUMMARY

All the methodologies utilized in this study were thoroughly explained in this chapter. A description of the rigour used in qualitative research to establish its validity was also provided. The research study's ethical guidelines were followed throughout the study. Chapter four presents the findings and an integrated discussion of conducting the research using the methods described in chapter 3.

CHAPTER FOUR

PRESENTATION OF FINDINGS AND DISCUSSION

4.1 INTRODUCTION

This chapter presents the empirical findings which addressed the following research objectives of the study:

- To explore the knowledge of professional nurses regarding nursing care for patients with PPD.
- To establish the experiences of social workers, clinical psychologists, and patients who have recovered from PPD regarding the nursing care practice and its effectiveness in managing patients with PPD.
- To determine the nursing care of patients with PPD through the review of documents.

The chapter further presents an integrated discussion of the findings in relation to the conceptual framework selected for the study and in the context of existing local and internationally published literature. Data was analysed using an inductive approach, as outlined by De-Vos and Delport (2015).

Phases one and two of theory generation, as described by Walker and Avant (2014), are represented by the data in this chapter, which form the basis for achieving the study's primary goal, which was to create a model for the nursing management of postpartum depression patients in the Edo state.

The chapter is structured as follows:

Section A: presents the findings from interviews with professional nurses to explore their knowledge regarding nursing care practice for patients with PPD.

Section B: presents the findings from focus group discussions with medical social workers and clinical psychologists to establish the experiences of these groups of health workers regarding nursing care practice and its effectiveness in managing patients with postpartum depression.

Section C: presents the findings from interviews with patients to establish their experiences of nursing care practice and its effectiveness in managing patients with postpartum depression.

Section D: shows the findings of the document analysis to support the conclusions drawn from the focus group discussions and the interview results.

Section E: highlights the contribution of field notes review to the study.

Section F: summarizes the topics in all three participant groups, the document review, and the conclusions.

The findings are presented per the Donabedian model's steps (structure, process, and outcome). As a result, each section's data is provided under the following headings:

i. Structure evaluation -refers to (i) the ward in which the patient is admitted, (ii) the part of the ward where the patient is placed, and (iii) the bed space and environment.
ii. Process evaluation - refers to nursing care delivered and includes (i) knowledge of PPD, (ii) nursing care approach to PPD, and (iii) PPD nursing care experiences.
iii. Outcome evaluation - describes patients' satisfaction level with the nursing care rendered to them while admitted to the ward.

The keys used for the presentation of participant quotes are as follows: professional nurse (PN), social worker (SW), clinical psychologist (CP), and patients (PT).

4.2 SECTION A: INTERVIEWS WITH PROFESSIONAL NURSES

This section presents the findings from in-depth interviews with professional nurses, which answered the first objective, namely, to explore the knowledge of professional nurses regarding nursing care for patients with PPD.

4.2.1 In-depth interviews

The 8 themes and 11 categories identified from the information are all closely connected to the Donabedian model's structure, process, and outcome. The themes and categories from the interviews are shown in Table 4.1.

Table 4.1: Themes and categories from professional nurses' interviews

Steps in the Donabedian framework	**Themes**	**Categories**
Structure	1A: The general condition of the ward is not conducive for the care of patients with PPD due to a lack of space and noise	Non-conducive ward environment
Process	2A: Nurses' attempts at holistic treatment and a family care approach to patients with postpartum depression	Nurses attended to the mother, baby, and the family
		The holistic treatment approach should involve other health professionals
		The patient and her relations should be reassured
	3A: A conducive atmosphere should be created	A conducive environment was created for patient care

	4A: An inclusive environment for patients with postpartum depression	Use of a village ward
Outcome	5A: Nurses' knowledge of postpartum depression was satisfactory	Nurses' sufficient knowledge of PPD enhanced patients' care
	6A: Management of postpartum depression requires adequate medication	Inadequate drug supply
	7A: Need for rehabilitation before discharge	The provision of rehabilitation is inadequate
	8A: Management of stigma, isolation, and feelings of resentment	Management of stigma and isolation
		Resentment by fellow patients

4.2.2 DISCUSSION

The findings on nurses' experiences regarding nursing care for patients with PPD relate to the evaluations of the Donabedian model. The themes and related categories are presented and discussed below.

Structure evaluation

Theme 1A: The general condition of the ward is not conducive for the care of patients with PPD due to a lack of space and noise

A ward refers to the accommodation provided for patients' comfort while being managed on admission to a hospital. It can be configured in different ways, including open wards, a bay system, and side rooms. Open-configured wards are used in hospital B, hospital C, and hospital D. Forty patients are nursed in an open ward in a hall-like configuration with twenty beds on either side of the hall and the nursing station in the middle.

The open ward system is standard in all hospitals except for Hospital A, where patients are nursed in bays with modern architectural structures.

The open ward configuration is not a modern architectural design because it does not cater to patients' privacy, convenience, comfort, and relationships. For patients in open wards, the beds are close together, and the patient only has space available on one side where the bedside locker is placed; there is no room for one-to-one interaction with patients, which bay system is a new structural design in newly built health facilities in the urban part of Edo state had.

In the bay system, 6 patients are admitted in each of the 6 bays and 1 in each of the four side rooms. The side rooms are self-contained with conveniences such as a personal bathroom and toilet facility. The bay system has 6 patients in an enclosed corner, separated by curtains and screens. A nurse is always scheduled in this section to care for all the patients' needs. Most patients prefer this option to the open ward as they are shielded from other patients and visitors coming into the ward. The side rooms attached to the bay provide privacy for patients. One-to-one counselling can be done without the other patients being able to hear or listen to the session. These extra amenities are available to patients who can afford to pay for them and provide them with privacy, thereby helping reduce stigmatization. It also allows for a better rapport with the patient. In Hospital A, with its modern structural and architectural design, patients are nursed in bays.

Category i: Non–conducive ward environment

With limited bed spaces in the ward, this environment is not conducive to the proper nursing management of patients with postpartum depression. The ward is noisy due to overcrowding and minimal spaces between the patients' beds.

One participant reported, "*Noisy ward environment is very evident in the mission hospital, which is mostly patronized by their religious faithful*" (PN30).

Wards are also unsuitable for proper nursing management because they are overcrowded, with more patients than available bed spaces. Although patients with PPD need to be interacted with, they need to be continuously monitored by the nurses; this cannot be done adequately when patients are crowded with other psychiatric patients with mania or even substance abuse, who are restless and talkative.

A patient with PPD who presents with suicidal ideation is already a threat to the safety of other patients in overpopulated wards. This concurs with Frisch and Frisch (2016), who stated that "patients with PPD present with muteness, refusal to eat, nor breastfeed baby, have their bath, especially have suicidal intent and tendencies."

A participant opined that "*The patients with postpartum depression are managed in the postnatal ward because this depression occurs after delivery, nursed close to the nurses' station which is very noisy and busy too because patients and their relations are coming in and out by the door beside it*" (PN14).

The Roman Catholic mission in Edo state encourages its members to utilize its health facilities, where the hospital bill is subsidized. This encourages maximum patronage, resulting in hospital overcrowding and large numbers of patients in the maternity wards. Anon-conducive ward environment is also mainly linked to poor environmental sanitation in the wards. Patients are refused admission because the ward is full, and some must wait for discharged patients to go home because of the limited bed spaces.

Despite the increase in the number of patients with PPD, the government is not attempting to build new infrastructure or units for patients. This unconducive health care environment is also due to

the ever-increasing population of Benin City, which is 1.6million, resulting in inadequate health facilities and human resources in Edo state and Nigeria as a whole. The government does not prioritize the health of the people in Edo state, with the result that the state has an inferior health status and health is allocated only a tiny amount from the state's annual budget despite population growth of 2.3% annually (Vanderkruit, Allen, Say & Cohen, 2017). Nigeria spends far less on health than the minimum of 12 USD per person per year. This originates at the Federal government level and filters down through the states to local government areas at the grass root level. This concurs with Uzochukwu et al. (2015). They claimed Nigeria's health sector is funded by various resources and processes, including out-of-pocket payments (OOPs), direct and indirect taxes, private citizens, religious institutions, donor funds, and health insurance. Unfortunately, getting the correct mix of these resources in Nigeria is still challenging.

Process evaluation

Theme 2A: Nurses' attempts at holistic treatment and a family care approach to patients with postpartum depression

Nursing care involves assisting the individual with PPD to carry out activities that she struggles with as she does not have the ability and strength to do so. In this regard, nurses assist the patient, her baby, and her family with therapeutic care and administer medication to the patient. The family receives health education and collaborates with other healthcare providers to enhance the patient's recovery.

Category i: Nurses attend to the mother, baby, and the family

The current trend in nursing focuses on the holistic care of the patient. Roy's systems theory states that "the patient evolves in an environment" (Roy, 2012). Nurses are expected to take care of the patient's essential needs, such as bathing, feeding, and other activities of daily living (ADL). At the same time, she is admitted to the ward to make her comfortable during her stay. There should be a good rapport between the patient's relatives and the nurses while she is in the ward. Often, the patient neglects herself and the baby.

One participant agreed and stated, "*As nurses, we will pick up the baby and attend to the baby's need and later give the baby to her mother and incorporate the family into the baby's care*" (PN3). Another participant said: "*This abnormal behaviour of a woman who just put to birth and refused to eat, breastfeed her baby, withdrawn, not friendly is what makes the nurses separate the baby from the mother to avoid harm to the baby*" (PN22).

Participants provided extensive evidence of caring for the baby, mother, and families, especially during the acute phase of PPD when the mother is withdrawn and refuses to eat or feed her baby. The patient's behaviour and the nursing care rendered concur with (Frisch & Frisch, 2016), who stated that patients need good relationships and care during this acute stage. The administration of drugs is a significant aspect of the nursing management of patients with PPD. The drugs prescribed for managing PPD are mainly antidepressants, but significant tranquillizers may be added in severe cases.

A participant stated that "*medications such as antidepressants like amitriptyline are given to them regularly as prescribed*" (PN11). In contrast, another participant said that "*most PPD patients are now placed on SSRI because they are lactating; they will get better within two four weeks of admission, with fewer side effects on the patients*" (PN5).

One participant opined that "*Postpartum depressive patients do not take to instructions. We encourage them to take their drugs in our presence, as some will hide the drugs under their tongue and spit them out later. We have to ask them to open their mouth to ensure that the drug was swallowed before leaving their bedside*" *(*PN29).

Antidepressants affect neurotransmitters such as dopamine and epinephrine, which help to elevate the mood. The full therapeutic effects of the drug will be noticed within the second to fourth week of its administration. Medication must be monitored to ensure that the most effective dosage is given and to minimize side effects. For those who have had several bouts of depression, long-term medication is the most effective means of preventing recurring episodes (Umo, 2017).

The participants highlighted the importance of drug administration to patients and the documentation as prescribed by the physician. All the nursing care rendered concurred with Awadhi, Atahwneh, Alalyan, Shahid, Al-alkhadhari and Zahid (2017), who opined that "despite the busy schedule on the ward, professional nurses make great use of obtrusive and unobtrusive observation for early identification of the side effects of the antidepressants. PPD patients are placed on serotonin selective reuptake inhibitors (SSRIs), which have fewer side effects on lactating patients than tricyclic, monoamine oxidase inhibitors (MAO)".

Category ii: The holistic treatment approach should involve other health professionals

Nursing of PPD is a psychiatric emergency that requires great therapeutic skill while working in collaboration with other departments to ensure the patient's speedy and holistic recovery. Thus, the inter-professional treatment approach involves professional nurses, the patient's family members, medical social workers, and clinical psychologists. There was a collaboration with other health professionals in caring for patients with PPD.

A participant said, "W*e need inter-sectorial collaboration [*inter-professional]; *all hands need to come together and not nurses alone*" (PN3). This concurs with Sulyman et al. (2016), who suggests that inter-sectorial management of psychiatric patients should be encouraged.

One participant opined that "*the patient should be engaged in occupational and other diversional therapies as this enliven them, divert their attention away from their grief' and boost their moods*" (PN11). Another stated, "*The social worker does not always come to see the patients on the ward except when they are getting ready to go home. This does not seem right as her job is paramount in bringing the patient and her family together again*" (PN23).

Yet another participant opined that "*Recent novels and daily newspapers are not supplied to the ward for the patients to read. The only television on this ward is bad. This is not educative enough from the social workers unit*" (PN15).

This should be provided where it is lacking, especially in smaller health facilities. The nursing management of PPD patients demands that all caregivers involved attend to the patient promptly and treat her in accordance with the best and current management practices. The participants' responses were most relevant in managing patients with PPD. According to Umo (2017), when the patient's hospital care includes multi-sectorial units, with good interpersonal relationships between personnel from these departments, the patient will recuperate faster and be discharged home.

Category iii: The patient and her relations should be reassured

Reassurance is essential to the patient and her relatives; hence rendering empathetic care using therapeutic skills is paramount to the nursing of patients with PPD. The third level of Maslow's hierarchy of needs is love and belonging. The patient and her relatives must be reassured, loved, and experience a sense of belonging. This will help to build the nurse/patient relationship and trust.

Once the patient has a nurse's trust, she will cooperate with the nurse. Reassuring a patient is an essential function of a nurse. Everyone on the health team should assist in reassuring the patient and her family (Henderson, 2018).

A participant confirmed this by stating, "*reassurance is very needful of this patient as it relieves the patient's psychological burden* and *should be family inclusive*" (PN5).

Some nurses do not reassure patients, and their relationships, as this participant stated, "*Is she not your relation and why are you frightened about the patient's embarrassing behaviour. Listen to me, you are on admission here, stop all your noisy cries*" (PN16).

A participant quoted a nurse who was not being reassured to a patient's relatives as follows "*How can you people bring the patient down to the hospital without any money, that this condition is a psychiatric emergency and you are just coming in today, and this evening to the hospital when she started this since last week,* and *she had it before with her first baby, you would have expected reoccurrence*" (PN24).

This observation by the nurses concurs with Long and Phipps (2012), who opined, "Once the patient has the nurse's trust, love, and reassurance, she will cooperate with the nurse."

Theme 3A: A conducive atmosphere should be created

The primary nursing procedures are carried out skilfully, involving obtrusive and unobtrusive observations of the patients while in the ward. The psychiatric patient is nursed in a therapeutic milieu.

Category i: A conducive environment should be created for patient care

The environment should be clean, calm, and quiet and not overcrowded. This is important because some psychiatric patients can harm themselves and others. Dangerous objects such as knives,

blades, and other sharp objects should be stored where the patient cannot see or access them. Some participants indicated that the environments are not conducive and therapeutic for adequate nursing management of patients with postpartum depression.

A participant stated that she informed her colleagues to "*call the electrician to cover these open electric wires on the ward and remove this knife and eating fork left carelessly on her bedside cupboard to prevent patients committing suicide or harm to others*" (PN10). Another participant said that she asked, "*Why is this patient not placed in an open ward where other nurses can have a view on her and right now, this baby is not safe here because this patient is in her acute phase of depression, so that she can inflict wound on the baby*" (PN I4).

A third participant stated, "*Suicidal caution card is not used in this hospital; only new changes in patient's nursing care documented in the note at the end of every shift*" (PN26).

This lends credence to the fact that patients are nursed in an unconducive environment and that a limited number of nurses cannot fully monitor the environment. These responses from participants evidenced the absence of an expected conducive environment for the nursing of patients with PPD. They highlighted the finding by Moses (2017) "that it is supposed to be a very conducive environment for the psychiatric patient and help minimize stigmatization and danger to other patients and their caregivers. The nurses must be very tolerant of the patient behaviour to enhance a serene environment therapeutic milieu".

Theme 4A: An inclusive environment for patients with postpartum depression

Caring for patients with PPD involves caring for the patient, her baby, and her relatives who want to stay with her. At the same time, she is hospitalized and necessitates adequate accommodation for them. This can be achieved through the use of a village ward.

Category i: Use of a village ward

A village ward is found in psychiatric hospital settings. It is a unit in the hospital where the patient and her relatives live in the same room (Jack–Ide et al., 2016). This unit allows the relatives to live with the patient, observe her, and care for her while the nurse supervises all their actions. This enables the patient to feel safe in the loving arms of her relatives as she would in her own home. It is like a bridging facility on the way home for the patient, where the relatives gradually acclimatize to the patient's new lifestyle. The village ward is an essential structure in any modern psychiatric setting.

One of the participants agreed with this by stating that "*it will create no room for stigmatization after discharge*" (PN10). Another participant reinforced this by saying, "*I suggested the village ward because it holistically incorporates patient and family therapeutically, and patients will be observed well*" (PN12). Yet another participant opined that "*Since this patient is on parole for two weeks and she lives more than 600 kilometres from the hospital, ideally she should be admitted into the village ward for further observation before her final discharge from the hospital, but this is not possible in this hospital and Village wards would have saved us a lot of these problems with shortage of bed spaces for admitting patients with PPD, as those recuperating should move into the village wards to make room for the yet to be admitted new acute cases*"(PN28).

Most hospitals do not have a village ward, the exceptions being Hospital A and Hospital B, where patients are cared for while in the company of their relatives. They are nursed as if they are in their homes. This gives realisation to the dream of Prof Lambo and Prof Binitie, the first two doyen British trained psychiatrists in Nigeria who, in 1956, ideated the village ward structure in Aro village. They believed that the psychiatric hospital structure was insufficient to accommodate the

patient and their relations in the wards, as most psychiatric patients are hospitalised for long periods.

Outcome Evaluation

Theme 5A: Nurses' knowledge of postpartum depression was satisfactory

Nurses generally have a good knowledge of PPD. However, there are challenges. Participants had different opinions about PPD. In their training, professional nurses undergo at least twelve weeks in a psychiatric posting, both in theory and practice. The curriculum consists of a comprehensive 18 months of training to enable a nurse to qualify and register as a psychiatric nurse. This course is vital for nurses working in a psychiatric unit or at a psychiatric hospital. During these periods of training in psychiatric nursing, nurses are provided with in-depth training on all aspects of the medical requirements, nursing, and management of PPD (Earls et al., 2019b), thus ensuring nurses have an adequate knowledge of PPD as illustrated by the participants' responses.

Category i: Nurses' sufficient knowledge of PPD enhanced patients' care

On the first day of admission to the ward, patients are depressed but gradually become more responsive. Nurses' good knowledge of postpartum depression enhances the nursing care rendered to the patient, which is an ongoing and dynamic process that requires constant assessment and evaluation. "Patients' utmost satisfaction is the modern nursing goal, enhancing quality assurance. The nursing process approach is used in the nursing care of patients. This is a scientific, systematic approach to patient care, with a series of steps to meet of nursing needs of the patient. It involves continuous action and evaluation and identifies recurrent problems".

The participants had a good knowledge of PPD regarding the signs and symptoms of postpartum depression, such as refusal to eat, not communicating with anyone, refusal to breastfeed, etc.

One of the participants stated that "*it is a pathological state of sadness characterized by extreme withdrawal from social activities, quietness, not relating to anyone and withdrawn*" (PN7). Another participant commented on the predisposition to illness: "*When patients have a family history of PPD, then they are predisposed to PPD after delivery*" (PN7*).*

"PPD is a range of emotional, behavioural challenges presenting after the delivery of a baby. The mildest and most common form of PPD is known as the baby blues" (WHO, 2018). This concurs with Moses (2017), who stated, "PPD is a pathological disturbance of mood towards sadness, pessimism, psychomotor retardation, and suicidal ideation and intent." One participant opined that "*PPD patients are withdrawn, so we carry out the obtrusive and unobtrusive observation on the patient*" (PN10*).* Another said, "*Once a patient who has just given birth is showing evidence of moody disposition, lack interest in social activities and the care of her baby because she sees it as a burden, she is specially monitored and cared for*" (PN28). This is evidenced that most patients with PPD have psychomotor retardation; they will not talk, walk, or even take care of the activities of daily living, such as bathing themselves. The patients with PPD in all the participating hospitals presented with withdrawal symptoms, even from their babies. This concurs with Moses (2017), who stated, "The patients normally present with signs and symptoms such as muteness, withdrawal, crying, refusal to eat and feed the baby, and will not touch or carry her crying baby. She will not even participate in activities of daily living such as having her bath and changing her soiled sanitary towel". Participants knew the various signs and symptoms of a patient's oncoming episodes, ranging from mild signs, such as not eating or talking to anyone, to acute signs, such as

suicidal ideation. Patients refuse all kinds of communication, both verbal and non-verbal. They even refuse entreaties to have baths and change their soiled and smelling sanitary pads.

A participant gave the following detailed answer during the interview: " W*hen they were admitted, the patients tend to have this serious look; they are sad, but after treatment has been given to them, they try to interact. They put up smiling faces and try to interact*" (PN30).

Another participant stated that "*some were satisfied with the nursing care rendered, as they carry their baby home*" *(*PN30).

Admission into hospital wards creates tension for patients and their relatives. Nurses ensure that a rapport is created immediately with them. As the patient receives their treatment, education, and nursing care, there is improvement in care and quality of life, and the tension is reduced; both patient and nurse relax and relate better to each other. This corroborates the object of the nursing profession according to Henderson (2018), who stated that "the unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health on its recovery (or a peaceful death) that he/she would perform unaided if he/she had the necessary strength, will or knowledge." The nursing process is patient-oriented, with an organized series of steps to meet the patient's needs. A possible reason for not achieving patient goals would be if these steps are not implemented or are poorly implemented in some hospitals. Once the possible reason for the lack of goal achievement is identified, revisions are made, and the process is repeated until an adequate level of satisfaction is achieved.

Theme 6A: Management of postpartum depression requires adequate medication

The administration of prescribed medication is paramount to the speedy recovery of patients with PPD. This must be given following the protocols of drug administration.

Category i: Inadequate drug supply

Antidepressant medication in combination with therapy is recommended for women with moderate-to-severe depression. Care is taken to select the appropriate anti-depressant because of the patient's postpartum condition (Guille, Newman, Fryml, Lifton, & Epperson, 2013). SSRIs are the drug of choice because of their minimal side effects on patients. However, these psychiatric drugs are expensive (Omoaregba, Aroyewun & Uteh, 2016).

One of the participants complained that "*there should be more of the drugs in the wards and clinics*" (PN22). Another participant stated, "*Most times, discharged patients cannot even afford to buy their drugs because they are expensive*" (PN6).

The hospitals in Edo State cannot afford to subsidize expensive psychiatric drugs, especially SSRIs, to provide them free of charge to patients. The participant responses support the viewpoint on this theme. Due to a decrease or inappropriate government budget for health, these expensive drugs are in short supply at hospitals. Psychiatric drugs cannot be found in some hospitals and primary health centres (Uzochukwu et al., 2015). The government must be educated on the need for more of these drugs to enhance good maternal mental health care in the state.

Theme 7A: Need for rehabilitation before discharge

Going to the occupational therapy unit is essential to prepare a patient for rehabilitation before discharge. The patient can interact with patients from other wards in preparation for social interaction upon discharge.

Category i: Provision of rehabilitation is inadequate

In the rehabilitation unit, patients can interact and learn a new trade, such as tailoring, hair styling, and weaving techniques. Patients go to the occupational therapy unit twice weekly, playing games while being observed (Olotu, Inogbo, James, & Nna, 2017).

One participant believed that "*Rehabilitation measures should be improved for patients with PPD because these patients might have been away from their jobs for a very long time, and going back home may not be possible*" (PN2). Another participant stated, "*The patient can even learn a new trade like dressmaking and fashionable costume bead making. All these will help divert her thoughts from what had given her depression*" (PN25).

Most hospitals do not have rehabilitation units, the exceptions being Hospital A and Hospital B. These rehabilitation units are poorly equipped, and there is a need for an improved rehabilitation department with modern equipment that is less intimidating, where patients can acquire a skill to earn a living after being discharged from the hospital, such as using computers, sewing machines, baking equipment, and knitting machines. This is corroborated by Olotu et al. (2017), who stated that "patients can learn a new trade from the unit, which helps to prepare patients for rehabilitation before the patient is discharged home."

Theme 8A: Management of stigma, isolation, and feelings of resentment

Stigmatization refers to treating somebody in a way that makes them feel bad or unimportant. In contrast, stigma refers to feelings of disapproval that people have about particular illnesses or ways of behaving, e.g., there is a social stigma for mental illness (Moses, 2017). Resentment relates to feeling bitter and angry about something a person thinks is unfair. Isolation is the act of separating somebody, being alone or lonely. The other patients' shy away from patients with PPD (Okolo,

2017). Some participants noted that these punishments are meted out to patients with PPD at all hospitals in Edo State. This concurs with documented opinions that some mentally ill patients are marginalized and disaffiliated from society. This is particularly the case with homeless mentally ill patients, with 60-90% having no contacts. Patients with PPD become more depressed by these actions.

Category i: Management of stigma and isolation

Stigmatization is a significant complication of a psychiatric disorder. This is because the patient does not conform to the cultural and social norms of the community in which they live. Stigmatization affects both the moral and psychological actions of the patient.

One participant opined, "*Stigmatization can lead to isolation as they are admitted to the end of the ward, which causes more depression for the patients*" (PN6).

Another participant stated, "*In some institutional health settings, patients are not being referred to by their name, but by their disease condition. For example, she is called madam PPD*" (PN22).

Nurses are also responsible for the isolation and stigmatization of patients. There are assumptions from some health practitioners that all psychiatric physicians and nurses behave like their patients. This is extended to the patient's care, according to a participant, who stated, "*The patient's nursing care are attended to last after the other patients had their baths*" (PN28). Another participant stated, "*since the patients do not interact with anybody, some of their due nursing care is not rendered to them*" (PN16).

Such actions by professional nurses are most unprofessional and do not boost patients' morale. "The professional nurse ought to respect a patient's dignity, and the act of stigmatization is not therapeutic since the nurse is expected to educate the patient's relatives on the negative effects of

stigmatization on a patient's health. Patients with postpartum depression are not placed near others with normal puerperium as they are isolated. The practice of stigmatization is not therapeutic. The nurse should respect the patient as this will boost her dignity and moral" (Hunkuyi, 2017).

Category ii: Resentment by fellow patients

Resentment is the feeling of anger or unhappiness about something a person thinks is unfair. Some of the other patients in the ward resent patients with PPD. This can be expected in the ward as most mothers will love and cuddle their babies, while the patient with PPD will not touch their babies (Moses, 2017). Clinical features presenting in PPD are both severe and complex. The post-partum period should be a joyful time for the mother and her family. However, in this condition, a patient turns the situation around for herself, her family, and everyone around her. In severe cases, she will want to strangle her baby or even commit suicide (Frisch & Frisch, 2016). Other patients in the ward are sceptical of these patients because of their behaviour, action, and reactions towards everyone, including their babies.

Another participant reported that "*this was a surprise to the other patients; the mother, who is supposed to be happy, is withdrawn and even cut herself off from the baby*" (PN27).

One participant reported that "*all the other patients initially resented the PPD patient, but when she began to improve, they accepted the patient*" (PN19). Another stated, "Some patients pleaded to be transferred from the ward or discharged *home because they felt unsafe with their baby at risk*" (PN6). Another stated, "*She is sad and cries. She will not breastfeed her crying baby, so I do not like her"* (PN20).

Resentment is common in all psychiatric patients, not just those with postpartum depression. What makes it worse as far as the patient with PPD is concerned is that instead of celebrating the birth

of her new baby, the patient only feels sadness. The worst resentment occurs when the patient wants to kill her baby. All the responses from the participants concurred with Frisch and Frisch (2016) and Hunkuyi (2017), who stated that the patient turns the festive period around for herself and her family.

4.3 SECTION B: FOCUS GROUP DISCUSSIONS WITH SOCIAL WORKERS AND CLINICAL PSYCHOLOGISTS

The findings from the focus groups with licensed social workers licensed nurses, and licensed clinical psychologists are presented in this section. The results met the study's second goal: to determine social workers' and clinical psychologists' opinions on nursing care practices and their suitability for treating PPD patients.

Five themes and 13 related categories were created using the data from the focus group conversations. The themes and classifications that surfaced are connected to the Donabedian model's process and result evaluation.

The themes and categories resulting from the focus group talks are shown in Table 4.2.

Table 4.2: Themes and categories from focus group discussion with social workers and clinical psychologists

Steps in the Donabedian framework	Themes	Categories
Process	1B: Patient health education	Need for patients and family health re-education
		Sensitization of the patients on the predisposing factors

	2B: Diversion therapy was included in the treatment	Diversion therapy was used in patient care
	3B: Several areas are of concern.	Financial instability
		Nursing staff shortage
		Ward overcrowding
		Neglect from family members
Outcome	4B: Social workers and Clinical Psychologists were satisfied with the care nurses provided	Adequate level of care provided
	5B: Several areas require improvement in care provided by nurses	Patient and family counselling
		Balanced nutrition
		Close monitoring of the patient
		Patient transportation
		Professional, cordial relationship

4.3.1 DISCUSSION

Process evaluation

Theme 1B: Patient health education

Health education refers to the information or knowledge provided to patients about their disease, the signs and symptoms, treatment regimen, possible outcome, and its effect on the patient, their relatives, and their baby. Patients should receive health education as soon as they are admitted to the hospital. This can be done by any of the health care professionals depending on the need. Health education is one of the main functions of the professional nurse. It is rendered wherever it is necessary, not only in hospitals. Health education creates awareness about the patient's condition, serves as a guide to other patients, and helps promote unity in the ward, at clinics, etc. "This can be achieved on a large scale with the involvement of the mass media, families, and religious

groups. Concurrent health education can be done in the wards while the patient is still on admission until discharged home" (Moses, 2017).

Category i: Need for patients and family health re-education

A family is a unit of a community. There is a need for patients and their families to be re-educated on the causes and misconceptions about PPD and mental illness. Some of these misconceptions include the following: PPD patients are different from other people, they do not recover, they are dangerous, mental illness is different from physical illness, nurses and doctors caring for the mentally ill behave similarly to their patients, and PPD is a punishment for the sins, witchcraft, poisoning, or infidelity on the part of the patient (Subu, Wati, Netrida, Priscilla. Dias, Abraham, Slewa-Younan & Al-yateem, 2021). Hence, it is necessary to re-educate patients with PPD and their families.

A participant opined that "*nurses have to advice the patients on what causes their problems*" (CP3). Another stated that "*the patient's relatives should be educated on what causes and predisposes the patients to this particular ailment*" (SW3). At the same time, one said that "*the nurses in this hospital will have to call them, advice and counsel them*" (SW2).

This indicates that nurses do not take cognizance of this essential required nursing care duty. One participant opined that "*the family should be health educated on the care of the patient because the condition might reoccur during the next pregnancy*" (CP6). This concurs with Moses (2017), who stated that "PPD can reoccur in patients."

A participant also stated, "*Nurses are few on this ward, and there is too much workload in this unit, so there is no specific time allotted for health educating the patient and her family*" (SW4).

Patients do not receive health education on admission or during hospitalization but only on discharge. All caregivers need to provide health education; however, they often offer excuses or blame each other for work not done. Each group rationalizes why they failed to provide health education to patients while caring for them. With good health education, family members and caregivers will not fear the patient, there will be reduced misconception about PPD, and families will not abandon the patient inward. This concurs with Subu et al. (2021), who stated that "there are many misconceptions about mental illness. Health education is, therefore, vital to help reduce stigma and increase tolerance from other patients and relatives."

Category ii: Sensitization of patients on the predisposing factors

Osadolor (2017) stated that possible triggers of PPD are an inability to breastfeed (if this was what the patient wanted to do), a history of depression, abuse, mental illness, smoking or alcohol use, fears over childcare, anxiety before and during pregnancy, background stress, a poor marital relationship, a lack of financial resources, and the baby's temperament.

A participant opined that "*prophylaxis should be the best measur*e, *and the patient still worried that she cannot afford the baby's upkeep*" (CP1). In this regard, the prevalence of PPD will be reduced, if the cause of the patient's PPD is known. Another participant stated that "*resolution of the pre-disposing factor will depend on the individual cause of PPD accordingly, for example, in those with same-sex babies, you educate them that, though our culture preferred the male child uptake obtains globally now is an emphasis on gender equality*" (SW6). Nevertheless, another stated, "*The patient's family and husband are afraid of recurrence in subsequent pregnancy and are seeking advice and redress for divorce"* (SW1). At the same time, a participant also stated that "*In Africa, the families tend not to care for patients with PPD and might not want to put on a*

behaviour that will help this woman" (SW10). This has to do with some traditional beliefs that PPD is caused by a patient's evil deeds and is a punishment from the gods (Osadolor, 2017).

A participant said: "*The patient confided in me that the mother-in-law is accusing her of infidelity in marriage, and she would prefer to live permanently in this hospital*" (CP5).

All these responses from participants highlighted the misconception that some family members and patients have about the predisposing factors for PPD. "These traditional beliefs lead to stigmatization of the patient in society" (Osadolor, 2017).

PPD can be inherited; hence, nurses should consider a patient's history while treating her. There is a need for patient follow-up before delivery at her home to educate her family on what to expect after her delivery and to avoid stigmatization. Screening a patient for PPD in the ANC before delivery is necessary as it helps to reduce the incidence of PPD. This concurs with Marcus and Heringhausen (2016), who opined that "healthcare providers should assess risk for PPD, and health educate the patient during pregnancy" and stated that "the use of the EPDS for assessing the patient will be of great benefit."

Theme 2B: Diversion therapy was included in the treatment

Diversion therapy is an activity that is done for pleasure because it diverts a person's attention from something while something else is happening (Umo, 2017).

Category i: Diversion therapy used in patient care

According to Okolo (2017), diversional therapies used in treating patients with PPD include hypnosis, occupational therapy, psychotherapy, rehabilitation, behavioural therapy, and recreational

therapy. Occupational therapy is any activity, mental or physical, guided towards a specific purpose which contributes to or hastens the recovery of the sick or injured. Some vocational activities include painting and dress-making, while social and recreational activities include dancing and listening to music. Psychotherapy or communication therapy is primarily the process of a verbal encounter between two or more people. It is a non-physical treatment of the mind, employing psychological means, and includes individual guidance and counselling, group psychotherapy, ward meetings, psychodrama, psychoanalysis, and hypnosis. Behavioural therapy enables patients to unlearn their morbid fears and impulses and to learn new, generally acceptable behaviour. Recreational therapy emphasizes social re-education and the restoration of some personality changes temporarily lost due to mental illness and includes listening to music and dancing. Rehabilitation is the process of assisting a patient in reintegrating into society, helping her realize her potential, giving her a goal and, restoring her confidence and ambition, making her an independent and helpful community member. Successful diversional therapy is a matter of teamwork which should begin at the onset of the illness. Diversional therapy is necessary to remove a patient's thoughts from some of the causes of her depression (Okolo, 2017). This is a vital aspect of a patient's nursing management.

One participant opined, "*we try to incorporate the patients in diversional therapy to make them lively*" (CP12).

The importance of this care was also stressed by another participant, who stated that "*With diversional therapy, the patients move their thoughts from their illness at that particular time and focus on the activity being carried out as in psycho drama carried out once a month*" (CP4). At the same time, another said, "*The patients had recreational psychotherapy like watching television, dancing and reading when they were getting better and recuperating on the ward*" (SW2).

Patients are invited into the occupational therapy clinic and asked what they like doing. They are encouraged to mix with other patients from other wards, read newspapers, and discuss religious or political issues. The healthy and stable patients in the teaching hospital, Hospital A, are taken out during festivities for sightseeing. When patients return from the occupational therapy clinic after watching a drama, dancing, or playing cards, they are happy. Patients are made to act out a drama similar to their psycho problem and are then asked questions on how to resolve the problem. All these diversional therapies, combined with drug therapy, assist a patient in coming out of her depression and helps improve her interaction with the nurses, her baby, and her relatives. This concurs with Umo (2017) and Townsend and Morgan (2018). They opined that diversional therapy is a treatment option that helps patients gain insight into and resolve their problems, as patients learn new behaviours that lead to more satisfaction in life and unlearn counterproductive behaviours.

Theme 3B: Several areas are of concern

During the evasive data collection, some factors constantly emerged regarding the patient's condition and nursing management. These are a cause of concern with the management of patients and should be identified and rectified.

Category i: Financial instability

Money and financial issues can be significant sources of stress for a person. Money problems may produce overwhelming negative feelings and self-criticism that can adversely affect a patient's mental and physical health. Financial instability is an area of concern relating to PPD.

A participant said, "*An important aspect for the patient's improvement could be financial provision, and there is a need in the area of finances because this care for patients with PPD is financially demanding*" (CP10). Another stated that "*when financial stability is low when patients after*

being cared for are returned home, they are still exposed to the same situation again" (SW5). At the same time, another participant opined, "*There is no government policy on social security that take care of patients with PPD, and drugs are not even supplied that patient can take home to reduce their financial burden*" (SW1).

Financial instability creates stress that affects some single mothers even before the delivery of their baby. The patients do not have much faith in receiving possible government assistance. Most PPD patients cannot afford the cost of delivering their baby and have no financial backing, given the declining economy and lack of jobs in Edo State. This concurs with Townsend and Morgan (2018). They opined that PPD could be due to a lack of financial assistance, social security, and loss of job/employment by either the patient or their significant other. This concurs with Schindler, Novack, Cohen and Yager (2016), stating "that mental health and financial safety are linked. Experiencing a mental illness can add to financial stresses, and this can add to emotional distress and mental illness."

Category ii: Nursing staff shortage

Staffing shortages throughout the healthcare industry are increasing, and this is a nationwide concern. These workforce deficiencies make providing high-quality and affordable care a daunting task. The population is growing and ageing – meaning more people will need health care (Moses, 2017). Shaddock and Shaddock (2012) cited Sawaengdee, Tangcharoensathien, and Theerawit (2016) that health care will face staff shortage by 2022 because "there is an increase in patients needing health care coupled with low turnover of new nurses. Some potential reasons for this are these ten reasons, which are: ageing registered nurse workforce, Baby Boomers approaching retirement, Hiring medical assistants instead of nurses, Women having many alternative careers to

consider, the nursing career losing its appeal among the youth, insufficiently trained professional nurses, Nurses are not willing to work in critical care scenarios, there are not enough nursing trainers, Nurses face poor working conditions and nursing jobs experience slower growth to the peak of the career." In addition, the health care policy in Edo state is inadequate, especially regarding mental health and psychiatric care. In general, there is a shortage of human resources, materials, and money in the state's health budget, which reflects the country as a whole.

A participant stated, "*Very few nurses on every shift as you have three nurses caring for both aggressive and depressive forty-two patients*" (SW8). Another stated that the "*shortage of nurses now manifests in the number of professional nurses caring for these patients with PPD despite the seriousness and enormous task needed for their care. The patients with PPD demand double nursing care for both the baby and mother in her acute state, so I have to care for the mother and the baby*" (CP4). At the same time, one opined, "Since the patient is always quiet, the nurse pays less attention to patients with PPD and cares for the aggressive patients" (SW1). However, another stated, "*Some nurses do not like and are not willing to work in the psychiatry unit because of its nature of critical care services*" (CP8).

The poor economy in the state leads to a low healthcare budget that does not allow for the employment of more nurses. Most hospitals have a shortage of nurses, which has a ripple effect on the quality of nursing rendered to patients with PPD. Until the state government corrects this, there will not be enough nurses in the wards to care for patients. This concurs with Moses (2017), who stated that "staff shortages throughout the health care industry are of increasing concern across the nation and these workforce deficiencies make providing high-quality, affordable care a daunting task. Our population is growing and ageing – meaning more people will need more health care services".

Category iii: Ward overcrowding

The wards are generally overcrowded because of inadequate structural facilities. This is most apparent at Hospital D, where there is a large influx of patients, and at hospital C, where there is a high patient population compared to the structural facilities and available staff to manage patients with PPD.

A participant opined that "*sometimes in overcrowded ward conditions, everywhere is flooded up with patients*" (CP2).

This is because these hospitals charge lower fees than tertiary and specialist hospitals. The mission and state authorities subsidize treatment rates, boosting their patronage. Patients are managed in outpatient clinics awaiting the discharge of patients from the wards. This is particularly the case when it comes to the nursing care of patients with PPD because very few hospitals in the state provide psychiatric care.

A participant opined, "*Most private hospitals do not render psychiatric care making the few who does to be overcrowded*" (SW7). Another stated, "*There are only a few beds allocated for managing a patient with PPD in the few hospitals who care*" (CP4).

Due to the overcrowded wards, the principles of nursing management of patients with PPD are not carried out efficiently. Patients with PPD are admitted to the same ward as patients with normal puerperium after delivery instead of the psychiatric unit. In some hospitals, patients are admitted to a ward near aggressive psychiatric patients, affecting their nursing care. "Ward overcrowding affects the quality of nursing care rendered to patients; hence the government should draw out policies that will buttress the psychiatric mental care of the people" Hunkuyi (2017). The mission and state hospital authorities should review their subsided hospital bills which boosts their patronage despite the lack of available ward space and inadequate facilities.

Category iv: Neglect from family members

Lavhelani (2017) stated that "there are many stigmas attached to the mentally ill patient which leads to increased verbal abuse, sexual abuse, social neglect, etc. We have had the challenge of families who just come here and dump their mentally ill siblings. They never bother to visit again to monitor their progress. Some patients have been leaving here for years without their families ever visiting them. These families fuel stigma against mental health, but when we try to re-unite them, the families swear and insult us, saying that they have nothing to do with people who are mentally ill. Families must also play their part to stop this negative effect on our patients and end the stigma around mental illness". This is a common feature in the wards.

A participant stated that "*the patient's husband tends to shy away because of the patient's diagnosis*" (CP2). Another opined, "*The patient told me her mother went to get her some beverages, and she never came back, and this is her third week on admission*" (SW6).

One participant reported, "The patient's family *gave me the wrong house address never existed when we went on a home visit to check on them*" (SW2). However, another stated that "*The patient's husband told me the patient should go to her parent's house from here on discharge from the ward, and the mother-in-law says the family has nothing to do with her; she alone should pay for the sins she had committed against the husband and the family"* (CP2).

At Hospital D, abandoned patients with PPD are adopted by Vincent De Paul, a catholic society in the church, while at Hospital A and Hospital B, the abandoned patients with PPD are cared for by an NGO called Friends of Uselu Clinic. This is a common phenomenon in Edo State, as patients' families do not want them back home because of the stigma attached to mental illness. It is seen as taboo in Edo state culture; hence, people do not marry into families with mental health problems.

Outcome Evaluation

Theme 4B: Social workers and Clinical Psychologists were satisfied with the care nurses provided

The main objective of nurses is to provide care for patients. “Nurses must assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that she would perform unaided if she had the necessary strength, will, or knowledge. The interactive relationship between the nurse and patient is part of the therapeutic process” (Haggerty, Samules, Norcini, & Gigliotti, 2017).

Category i: Adequate level of nursing care

Current trends in nursing practice emphasize the need for the nursing process outline being used. This is based on the theory developed by Orlando in 1961. The theory focuses on the interaction between the nurse and patient about perception, validation, and the use of the nursing process to produce a positive patient outcome (Toney-Butler & Thayer, 2022).

A participant agreed and stated that *“I am satisfied with the care rendered” with what they had to work with* (CP9). Another said, *“I am satisfied with the nurse’s care”* (SW4). One participant gave further reason and said, "*I am satisfied with the nurses because; to nurse a patient with PPD is more tasking as you have to care for the baby and the mother”* (CP12). Another participant said, “*Patients had their respective therapeutic therapies as when due”* (CP3). At the same time, one said, "*During the acute stage of PPD, the nurses give the patient a bed bath since the patient will refuse to eat, bath or even change her soiled sanitary towel pads*” (SW3).

Postpartum depression, being a psychiatric emergency, demands a high level of professional nursing skills management. Nursing care for patients with postpartum depression is frenetic, taxing,

and demanding. Patients were provided with the required nursing care despite the shortcomings experienced by the nurses and the limitations of the ward. Responses by the participants lent credence to the theme that adequate nursing care was given within the limits of available resources. This concurs with the statement of Henderson (2018) about the qualities and cares expected from nurses.

Theme 5B: Several areas require improvement in care provided by nurses

Counselling, nutrition, patient monitoring, transportation, and the improvement of relationships are essential for patient care. For the nurse to achieve quality nursing care, she must be able to assess these essential components of patient care. Hence, the nurse must evaluate the outcomes using a nursing care plan after implementation. If the objective has not been achieved, the patient should be reassessed to identify areas where nursing care can be improved.

Category i: Patient and family counselling

Counselling is provided to the patient and her family to boost the patient's morale and health and inform the family of what the patient is going through. Both patient and family need adequate counselling regarding the importance of care for the patient's baby.

A participant opined that *"the patient and her family did not appreciate the need to tolerate each other as the patient may not be aware of her actions, so they need counselling*" (CP1). Another stated that *"the patient said her husband is still accusing her of infidelity, which she did not do, so we encourage the husband to support the wife because stress can contribute to this PPD"* (SW6). One participant mentioned that "*the mother abuses her whenever she refuses to pick up her crying baby, claiming she is known to be very wicked even to her siblings and everyone*'' (SW5).

Counselling for the patient and her family is essential from admission through to the discharge of the patient from the ward. They must be counselled on both parties' need for tolerance and cooperation. The patient needs her family to assist with the care and protection of her baby, whom she might harm due to her psychiatric condition. A lack of counselling can increase the stigmatization of the patient by her family. All participants above responses highlight the need for patient and family counselling. The nurse must also ensure the safety of the mother, her baby, and everyone around the patient (Frisch & Frisch, 2016). This concurs with Moses (2017), who stated that "counselling is for everyone and enables them to understand the situation the others are in, which helps everyone deal with problems in an objective manner. Group counselling encourages interdependence and self-exploration while providing opportunities to try new skills and roles".

Category ii: Balanced nutrition

Balanced nutrition means providing the body with the nutrients necessary for functioning. To obtain proper nutrition from a diet, a person should consume most of their daily calories by eating fresh fruits and vegetables, which is vital for the body and all its systems to function correctly. A balanced nutrition diet contains protein, carbohydrates, fat, vitamins, and water, which can be obtained from beans, pulses, fish, and eggs, all of which are good sources of vitamins and minerals essential for the body to grow and repair itself. The patient with PPD will not eat her meals or feed her baby.

A participant opined that *"nutrition is a challenge the patient face because they become nutritionally imbalanced"* (SW1). Another stated that *"refusal of foods affects both the patient and the*

baby's nutritional value as the patient feels weak, especially during her acute phase, and her family did not bother to bring her anything to eat in between mealtimes" (CP3). Refusing to eat and drink is one of the main signs and symptoms of PPD (Frisch & Frisch, 2016).

One participant stated, "*The family made no provision for baby`s milk to feed the baby"* (SWI7). The patient needs a balanced diet as she is a lactating mother. The baby needs breast milk to develop appropriately. The family had to complement the meals provided by the hospital to the patient who ate little or nothing. The responses from participants highlighted why patients need balanced nutrition. Without balanced nutrition, the body cannot build new cells and produce hormones and neurotransmitters that aid the patient's healing.

Category iii: Close monitoring of the patient

Patients with PPD need continuous close monitoring of their behavioural, physical, and attitudinal states while in the ward. To achieve this, the nurse has to use her professional skills by using obtrusive and unobtrusive observational skills.

A participant stated that *"the patients with PPD need to be observed very closely so that they will not harm the baby and themselves. During individual psychotherapy, the patient said the baby is her major problem"* (CP2). Another stated that *"they do not like to take their drugs even at close monitoring due to their suicidal ideation and some patients hide their drug under their tongue without swallowing it"* (SW9).

A participant also opined that "*the nurses need to improve their nursing care by going close to the patients to monitor them as; some patients do borrow dangerous equipment like knives, eating forks, blades, electrical extension cables with which they can injure themselves and others*." (CP3*).*

Patients with PPD need close monitoring; hence they are admitted to the ward in an area where nurses can constantly watch them. Professional observational skills are required when caring for patients with postpartum depression. A suicidal caution card must be opened, the patient must be observed, and her actions must be recorded. When this is neglected, serious incidents such as suicides self-harming, or harming others can occur. The participants concurred with Frisch and Frisch (2016), who stated that the importance of close monitoring is the exceptional nursing care for patients is PPD after medications. Patients are mainly nursed in the nurses' sight lines in an open ward. There is a need for such patients to receive special nursing care from a nurse during each shift to document their activities on the suicidal caution card.

Category iv: Patients' transportation

Transportation refers to the movement of humans and goods from one location to another. Modes of transport include land, water, etc. Syed and Rask (2013) studied obstacles to care for urban, low socio-economic status (SES) adults in Atlanta and found that walking or using public transportation to receive medical care was an independent predictor of not having a regular source of care and that such patients were likely to delay care. Some group members identified a lack of transportation to the health facility as a problem for the patient's follow-up care.

A participant said, "*Distance can be a problem to follow up for the discharged home patients so the government and the hospital management can provide means of transportation to ease patient follow up care"* (CP2). Another stated that *"The social works unit of this hospital has no vehicle for health visits to patients' home before and after discharge to see how she is coping with the relations* [relatives]*at home and patients complain they are from the rural areas cannot easily access transportation due to insufficient fund and bad reads"* (SW4).

This is confirmed by Osadolor (2017), who suggested that "prompt follow-up of the discharged patients with PPD will prevent lapse. Some patients with PPD cannot afford to come to the hospital due to the unaffordability of transportation fares. This is due to the country's multiple problems, with the low economy, bad roads, no ambulance services, and even vehicles to pay home visits to the patients' homes before and after discharge from the ward". The responses confirmed the need to provide adequate transportation for patients with PPD and their families.

Category v: Professional, cordial relationship

Professional relationship refers to the responsibility of a nurse to act in the patient's best interest. A professional, cordial relationship is necessary for the nurse to do her job correctly. Strategies to build a cordial, professional relationship include appreciating others, managing boundaries, avoiding gossiping, identifying, and developing people skills. This relationship can become a close friendship. A professional relationship is an ongoing interaction between two people who observe a set of established boundaries or limits deemed appropriate under governing ethical standards. Establishing a proper professional relationship is essential for a professional nurse's successful career development. Kostowskie (2017) stated that an improved cordial, professional relationship is paramount to the therapeutic skills of the mental health psychiatric nurse.

A participant stressed the need to improve cordial, professional relationships by stating that *"better relationship with the patients and other health care providers would help to gain patients confidence"* (SW2).

One participant agreed that a cordial, professional relationship is a significant aspect lacking in the nursing of patients with PPD by stating that *"firstly, we all ought to establish rapport with the patient, but there is no good relationship with the nurse and other care providers which would*

have enhanced quick recovery for the patient" (CP3). Another said,*" the nurses are not friendly with the patient on the ward because the patient does not do the activities expected of her"* (SW9). A professional, cordial relationship with the patient and her family is essential. Good communication skills are critical to the nursing care rendered. With a good relationship, the patient's quick recovery is enhanced. This concurs with Osadolor (2017), who stated that everything is affected by relationships, the self, other people, communication, and the environment. People feel devalued, misunderstood, alienated, bitter, lonely, and frustrated when this goes awry. With a good relationship, people become aware of their problems, learn to solve them and communicate more effectively. This is especially important as a nurse requires excellent communication and relationship skills to excel.

4.4 SECTION C: IN-DEPTH INTERVIEWS WITH PATIENTS

This section presents the findings from in-depth interviews with patients who recovered from PPD and were discharged from the hospital. The findings from these in-depth interviews answered the study's second objective, which was to establish the experiences of professional nurses, social workers, clinical psychologists, and patients who recovered from PPD regarding nursing care practice and its effectiveness in managing patients with PPD.

Two themes and eight associated categories were produced from the in-depth interview data. The Donabedian model's method and results are connected to the themes and categories that surfaced. The themes and categories resulting from the in-depth interviews are shown in Table 4.3.

Table 4.3: Themes and categories from in-depth interviews with patients

Steps in the Donabedian framework	Theme	Categories
Process	1C Nursing care given to patients	Patients were reassured
		Patients were monitored
Outcome	2C Some challenges resulted in varying levels of satisfaction	Display of professionalism was inadequate
		General reassurance was not always provided
		Patients were adequately monitored
		Patients were not all aware of their medical condition
		The baby was separated from the mother
		General dissatisfaction with nursing care rendered

4.4.1 DISCUSSION

Process evaluation

Theme 1C: Nursing care given to patients

Nursing practice emphasizes the need for nursing process-oriented care for the patient. The theory concentrates on how nurse and patient interaction results in a successful patient outcome. The nursing process involves a systematic approach to determining a patient's health status, initiating and implementing the care plan, and evaluating the extent to which the plan effectively promotes wellness. The quality of care rendered using the nursing care plan allows for good patient care.

Category i: Patients were reassured

Reassurance of a patient and her relatives is considered therapeutic nursing care for patients with PPD, helping to build trust and an excellent patient-nurse relationship. This creates a therapeutic milieu for good nursing management.

Some patients confirmed that "*they also reassured me and my family members too*" (PT5, PT8, and PT7). "*The nurse was only kind to my baby*" (PT1). "*The nurses reassured my baby" (PT2) and me.*

The general reassurance given to the patient helps to build a friendship and creates a good rapport and trust between the patient and the nurse. It also helps to create a therapeutic milieu in the ward.

Category ii: Patients were monitored

Patients with PPD are monitored constantly because of the risk they pose to themselves and others, especially their babies. The nurse uses her professional skills to observe the patient without the patient realising that she is being watched. During such observation, the nurse tries to get close to the patient and talk to her. Talking to the patient encourages her to express her feelings, especially if the topic is essential to her (Osadolor, 2017).

Some patients confirmed this: "*Nurses come to my bedside to take my temperature and blood pressure and write it down in my chart*" (PT5). "*The nurses are very busy; they did not check my locker to see if I hid anything there*" (PT3). "*One nurse on night duty always tells me to give her my knife to cut her orange, and I do not even have any knife with me*" (PT6). "*I was tired of the nurses; they always have something to write on my case notes and disturb me in every shift as my bed is close to the nurses' station"* (PT4).

This concurs with Frisch and Frisch (2016) observations that "adequate monitoring close to the nurses' eye view is one of the prime nursing care on the activities on the suicidal caution card."

Outcome evaluation

Theme 2C: Challenges resulted in varying levels of satisfaction

Jack–Ide, Amiegheme, and Ongutubor (2016), stated that "the challenges in psychiatric nursing care are ageing psychiatric nursing workforce, low human professional resources to provide education and care, exclusion of mental health in key health sector documents, a negative societal attitude of professionals engaged with the provision of care and people living with mental illness and their families." Due to stigma, mental health care is not prioritised at a policy level. At the professional level, many people do not take up mental health care practice because mental illness is seen as "taboo" at the community level. Hence, the care is not satisfactory, and challenges are encountered.

Category i: Display of professionalism was inadequate

Professionalism in nursing is essential for achieving a healthy work environment and is enabled by the concept of practice. The guiding tenet enhances outcomes for nurses, patients, organizations, and systems. Ghadirian (2014) opined that "the nurse must achieve her set preventive, restorative, and palliative goals towards the patient's quick recovery from PPD." The goal is to encourage the patient to face reality and resume independent action. This is achieved through the nurse's humanitarianism and understanding of contact with patients in her day-to-day activities, being a member of the therapeutic team in establishing a therapeutic milieu, and formally conducting psychotherapy with some patients.

A patient stated, "*The nurses were firm and too strict, but some showed love and empathy*" (PT2).

It is expected of a professional nurse to be empathetic toward patients because this is an essential element in the therapeutic care of mentally ill patients (Frisch & Frisch, 2016).

Appreciation is subjective, but all patients agreed on the firm and strict behaviour of the nurses: "*The nurses were monitoring me too much, and I had no privacy*" (PT3).

This is a significant part of the nurses' duty towards patients with PPD. A patient stated, "*Only the head nurse that asks me to open my mouth after l even swallowed my drugs*" (PT5).

Another patient stated, "*No nurse follows me to have my bath; l did it alone on the ward even during my first week on admission*" (PT10).

Most of these statements by the patients do not concur with Hunkuyi (2017), who opined that nurses plan and provide safe nursing care, including the administration of medications, participation in various therapies with formal and informal groups, being a role-playing advocate for the patient, providing a safe environment to protect the patient and others from injury, and observing and documenting the patient's actions. The nurses' observation of the patient's behaviour and the provision of feedback, as well as the creation of learning opportunities for the patient and her relatives during the nursing process, provide an opportunity for the patient to make decisions and assume responsibility for her emotions and life. Cooperating with other professionals in caring for patients helps facilitate a multi-disciplinary approach to care, ongoing education, and exploration of new ideas, theories, and research (Hunkuyi, 2017). As an advocate for the patient, the nurse takes responsibility for her actions. The psychiatric nurse's role in hospitals, health care centres, remand homes, etc., cannot be over-emphasized. Hence, the nurse must be patient and empathic with her patients, despite their heavy workload.

Category ii: General reassurance was not always provided

General reassurance refers to a close and harmonious relationship in which specific people or groups understand each other's feelings or ideas and communicate well with others (Moses, 2017). Participants had different experiences of nurses' reassurances. A patient confirmed that "*they also reassured me and my family members too*" (PT5).

However, another patient said, "*The nurse was only kind to my baby and told me that I may be all right, but I never believed her at first*" (PT3). Other patients reported, "*The nurse did not tell my husband not to be scared that I will be all right*" (PT4), and "*The nurses do not even crack jokes with me as they do with the other patients on the ward*" (PT8).

General reassurance helps to build good patient/nurse relationships and trust. This creates a therapeutic milieu for good nursing management and concurs with Hunkuyi (2017), who stated that "despite the shortage of nursing staff on the wards, the nurse is expected to perform her professional duties with great patience and humility." The general reassurance given to a patient helps build a friendship and creates a good rapport and trust between the patient and the nurse. It helps to create a therapeutic milieu on the ward. Creating rapport and reassurance between the patient and her relatives is therapeutic nursing care that patients find lacking.

Category iii: Patients were adequately monitored

Adequate observation is essential in the nursing care of patients with PPD and involves watching and tracking them, keeping them under surveillance, and recording and reporting on patients' activities. Routine monitoring and feedback improve a patient's outcome; however, the feasibility of its use to inform decisions about discharging a patient from the ward has not been explored (Page, Cunningham & Hooke, 2016).

A patient stated, "*nurses came to my bedside that week that I was admitted into the ward*" (PT2).

One patient said, "*The nurses do not talk to me except during meals and medication*" (PT7). Another said, "*One nurse on night duty always tells me to give her my knife to peel her orange, and I do not even have any knife with me*" (PT6).

A patient said, "*It is only the head nurse that asks me to open my mouth, even after l had swallowed my drugs and no nurse follows me to have my bath, l clean up myself on the ward*" (PT1).

The patients with PPD were monitored adequately because of the risk posed to themselves, others, and the baby. Adequate monitoring is essential in the nursing care of patients with PPD. No matter how busy the shift is, the nurse must use her therapeutic skills to observe. However, some nurses focus on aggressive patients to the detriment of the quiet ones, which is unprofessional. This concurs with Frisch and Frisch (2016), who stated that "adequate monitoring is one of the prime nursing care for patients with PPD after medications. Patients are nursed close to the nurses' eye view, where the nurses monitor the activities on the suicidal caution card. Although this is not achievable in hospitals with a great shortage of nursing staff".

Category iv: Patients were not all aware of their medical condition

World mental health day is marked worldwide on the 10th of October each year. In Nigeria, it is celebrated by nurses by providing the public with health education on the awareness, reoccurrence, and prevention of mental illness. "Each year, we educate the public, fight stigma and provide support" (Jack–Ide et al., 2016).

A patient confirmed, "I did not know that mental illness can reoccur though l had this same illness after my earlier delivery until I *saw myself admitted here*" (PT1). One mentioned, "*I did not know what I was doing was not normal, and I was fragile and did not want to be disturbed by anybody at all*" (PT4). Another patient stated, "*The baby was a great problem, and her cries irritate me,*

and I was hungry, but I did not want to eat any food because I was annoyed with the baby" (PT7). However, another patient said, "*I started getting very sad when I was getting close to the date to deliver my baby because I had no husband and money to cater for the baby*" (PT3*).*

Despite the high prevalence of mental illness, stigma, and misunderstanding, many patients are unaware of their mental condition. PPD can reoccur, and some patients and their relatives do not know about this. Patients do not recognise the early manifestation of the signs and symptoms of PPD, such as increasing sadness as the delivery date approaches and intolerance of the baby's cries. Hence, drug compliance is essential, and home visits to patients after discharge are necessary. When treated early and promptly with adequate medication and therapy, patients with PPD recover speedily without complications. They can cope with their baby on discharge from the hospital with the assistance of her family. Home health visits to patients will also ensure drug compliance and prevent a reoccurrence of the condition (Osadolor, 2017).

Category v: Baby was separated from mother

PPD is associated with detached and neglectful mother/child relationships that inhibit maternal bonding and providing warm and attentive care to the baby (Song, Yang & Xiao-jing, 2017). Prioritizing PPD screening and intervention could improve maternal-infant psycho-education on PPD. Hence, patients are nursed according to the instructions on the suicidal caution card, on which each nurse on duty documents the patient's activities and signs them off at the end of each shift. If suicidal tendencies are detected, the patients' babies are removed from their care into the nurse's custody (Hunkuyi, 2017). Most PPD patients do not like this, especially when they are getting better, but they are happy and do not mind when they are in critical condition (Cox, Holden & Sagovsky, 2016).

A patient stated, "*The nurses took my baby from me; that was the first thing they did*" (PT7).

A patient said, "*She took the baby away from me as if the baby is her own. Can you imagine that?*" (PT4).

Another stated, "*The baby was a great problem, and the baby irritates me because I had no husband and money to cater for the baby; I did not even notice that the baby was crying because I had my problems bordering me*" (PT3).

These emotional problems can be detected with early screening. One patient said, "*I thought I would deliver a boy; instead, it is a girl again, so I feel like throwing her away. I wanted the baby to cry and feel the pain she had caused me, so l did not feel bad when they took the baby from me*" (PT7).

This concurs with Cox et al. (2016) who opined that "most patients with PPD resent their babies and might harm them during the acute phase but will want them once they are getting better." When nursing a patient with PPD, the baby is kept in a cot next to the nurses' station while the patient is nursed within the nurses' sight lines. This prevents the patient from harming the baby because she cannot tolerate crying. This separation removes some of the stress from the patient and promotes her wellness. In Hospital C and Hospital D, the patient's relatives are made to take care of the baby due to the lack of bed space in the ward, the nurses' heavy workload, and the shortage of nurses. Frisch and Frisch (2016) opined that a patient with PPD needs to be monitored, especially during her acute phase; hence the nursing staff on duty should ensure that her baby is kept in a place of safety where the baby can be observed and monitored to ensure the baby´s good health.

Category vi: General dissatisfaction with nursing care

Dissatisfaction implies a sense of dislike for, or unhappiness in, a person's surroundings (Oxford-dictionary-for-Nurses, 2019). Quality care can be enhanced by providing comfort and clean, sanitary ward facilities. Nursing staff should understand a patient's characteristics and personal expectations when providing care. Most of the patients were dissatisfied with this area of nursing care rendered. They complained that nurses were impatient with them and their families while rendering nursing care.

A patient opined that "*the nurses should be more tolerant with the sick patients, and I can say the attitude of some of the nurses is hostile*" (PT6). Another stated, "*The nurses want you to do all things according to their schedule and not at your convenience and the nurse on permanent night duty is not friendly at all*" (PT2).

One patient complained, "*The nurse will force me to eat my food even when I am full and forced me to carry my troublesome ever, crying baby*" (PT5). At the same time, another stated, "*The nurse took my baby away from me as if the baby is her own. Can you imagine that and the nurses are not patient with me as l was prolonged with taking my meals*" (PT6).

Responses from the patients confirmed this category, namely the patients' general dissatisfaction with nursing care. These remarks highlight the inappropriate actions of nurses, which contrasts with a nurse's expected quality, namely patience. This is where adequate training and professionalism come into play. The patient should be integral in determining the nursing care rendered to her. This concurs with Alsaqri (2016), who stated that nursing staff should understand patients' characteristics and personal expectations when providing care. This has to be reintegrated into nursing ethics and patients' rights (Henderson, 2018).

Some patients rated the nursing care rendered to them as low, while the majority rated it as poor.

A number of patients responded as follows:

"*very few of the nurses were good in their nursing care, while others were not good, and I am satisfied because I am getting better now*" (PT3); "*The nurses mistreated me as they restricted my movement out of the ward*" (PT5); "*I am satisfied but not so much because sometimes, depending on the nurses on duty, you will be calling the nurses, some will not answer you*" (PT4); "*The nurses were monitoring me too much, and I had no privacy and the nurses force me to take my drugs and force my month open to check if swallowed all the drugs*" (PT8); "*The nurses squeeze their faces when talking to me, and the nurses do not ask you what you want to eat but force their meal on me*" (PT8); "*The nurses refused my mother to bath me throughout my stay in the hospital, and the nurses did not allow my parents to sleep with me on the ward and were shouting at my visitors who wanted to assist me in bathing my baby*" (PT3).

Most patients complained that they felt resented and stigmatized, especially when nursed with other patients with normal puerperium. Nurses did not have empathy for them, and they had no privacy. This is because the nursing actions were not carried out using professional nursing skills in a therapeutic milieu. Smith and Megumi (2021) opined that the perceptions of quality of care received were less related to health status than to judgments of quality care received. The nursing care received fulfilled neither the patient's nor their family's expectations. This is an important message to healthcare professionals and providers and requires further exploration. Such nursing care is not in accordance with the objective of nursing, which states that nurses assist the individual in regaining optimal health and the patient should be satisfied with the nursing care rendered (Roy, 2012) This does not portray the profession in a positive light and needs to be corrected urgently.

4.5 SECTION D: DOCUMENT REVIEW

This part addresses the third purpose of the research: to understand the level of nursing care provided to PPD patients by reviewing patients' documents and discussing the document review findings. According to CD de-Leon Castaneda and Toledano (2019), document review is a technique for gathering data for evaluation that examines already-existing documents to comprehend the patient's underlying document.

Documents that provided information on the guiding principles of practices of expected nursing management and nursing care rendered to patients with postpartum depression in the wards at the four selected hospitals were reviewed. The nurse in charge of the ward granted access to the patient's records. To help with the document review, a data-gathering tool was created in accordance with the study's third stated purpose. The document sources were the patients' case notes, medication charts, and the nurses' notes. Hospital charts from fourteen patients was reviewed until saturation (See Table 3.5 for breakdown of patient's distribution and demographics). The nurses' notes and treatment charts for each of the participants who were discharged were reviewed. Content analysis, which primarily evaluates the documents' meaning, was applied in this study. The four themes and seven related categories from the document reviews were utilized to triangulate the focus group discussions and interview results based on the Donabedian model's assertion of Process and Outcomes.

Table 4.4: Overall themes and categories from the document review

Steps in the Donabedian framework	Themes	Categories
Process	1D Nursing care was rendered to the patients	Administration of prescribed drugs
		Other nursing activities carried out on the patients in the wards
		Patients were encouraged
	2D Collaborative care provided for the patients	Inter-professional relationships with other professionals toward patients' care
Outcome	3D There was marked progress in patients' condition	Patients relate better with everyone in the ward before discharge
		Nurses and patients achieved good rapport in the ward
	4D Patients had knowledge of good mental health	Patients were knowledgeable about their mental health and self-care on discharge

Process Evaluation

Process evaluation involved reviewing the nursing care provided to patients with postpartum depression in collaboration with other professionals and documented in the patient's records.

Outcome Evaluation

Outcome Evaluation involved reviewing the documented nursing care provided to patients with postpartum depression, indicating the patient's satisfaction or dissatisfaction with the care provided.

The findings are presented per hospital and include units of meaning or reports related to each theme and category.

4.5.1 Hospital A

At Hospital A, patients are admitted into the psychiatry unit, which has a bay system, and they are nursed amongst other patients with psychiatric disorders. There is no particular unit for obstetric psychiatry to care for patients with PPD. Five discharged patients' documents were reviewed.

Table 4.5: Document review Hospital A

Theme	Category	Units of meaning/report per patient				
		Hospital A: P1	**Hospital A: P2**	**Hospital A: P3**	**Hospital A: P4**	**Hospital A: P5**
Process Evaluation 1D: Nursing care was rendered to the patients.	Administration of prescribed drugs	The patient had oral medications at 10 am and 10 pm, respectively, charted and signed by the nurse on the drug chart	She refused oral medications but was given later at 11 am by the nurse. She had her drugs at 10 pm, charted and signed by the nurse	The nurse gave the patient her morning oral medications, and an Intramuscular injection was given at 10 pm. This was charted and signed by the nurse	Oral medications were given at 10 pm, charted and signed by the nurse	Oral medications were given, charted, and signed by the nurse at 10 pm
	Other nursing activities carried out in the ward	The patient had her bath assisted by the nurse	Patient still cried and was reassured by the nurses	Vital signs were done and charted by the nurse	Vital signs were done, and the nurse signed a suicidal caution card	The patient fed herself, assisted by the nurse
	Patients were encouraged	The patient hid her food under her bed, was reassured and spoon-fed by the nurse	She still refused to eat despite the nurse's plea. The nurse reassured her and fed her	Was spoon-fed by the nurses and was encouraged to have a bed bath today	Still sad, the nurses reassured and encouraged her to communicate with them	The patient only communicated once. Was encouraged to chat more with everyone
2D: Collaborative care provided for the patients	Inter-professional relationships with other profes-	The patient's physician had his ward round with the nurse. No change in patients care as	This morning the physician had his ward round. No change made in patients' medication	Social worker did not see the patient and her mother as the nurses did not deliver	Still refused to see her baby. Nurses did not inform her	Today her physician had a general ward and was informed of the patient's progress as

	sionals toward patients' care	documented in the patient's chart	as documented in patients' chart	the referral note to them	physician immediately to change her drugs	documented in the patient chart.
Outcome Evaluation 3D: There was marked progress in patients' condition	Patient-related better to everyone before discharge	The patient was not spoon-fed by the nurses, and she was encouraged to help herself, which she did	The patient bathed and changed her clothing, assisted by the nurse, who also took care of her baby throughout the shift	The patient breastfed her baby today after the nurse bathed the baby. The nurse gave the patient a maternity bra which she appreciated	The nurse gave the patient soap to wash the soiled dresses, which she did	The patient sat on her bed to listen to her radio and communicate with everyone in the ward
	Nurses and patients achieved good rapport in the ward	The patient agreed to let the nurse wash and comb her hair after reassurance from the nurse and her mother	The patient finished her meal and was commended by the nurses	The patient was reassured by the nurse and stopped crying during this week	The patient was happy to carry her baby and allowed the nurse to dress her baby in a new dress	The patient accepted a new clean dress brought by the nurse, which she wore after a bath
4D: Patients had knowledge of good mental health	Patients were knowledgeable about their mental health and self-care on discharge	Before leaving the ward, the patient received health education from the nurse and social worker. The patient knew the importance of drug compliance and good nutrition, as documented on the chart	The social worker advised the patient on the need to take her drugs at home and keep her hospital appointment which she agreed to do as documented	The patient went home with her mother after receiving advice from the social worker on the importance of drug compliance to stop reoccurrence and promised to do so	On discharge, the patient was advised to continue to love her baby and take her drugs at home. The patient carried her baby home	The patient was happy wearing her new self-sewn dress at home. The social worker advised her to use her newly acquired skill of dressmaking to boost her economy at home

4.5.2 Hospital B

At the Hospital B, patients are admitted into the female ward with other psychiatry patients. This is an open ward. There is no particular unit for nursing patients with postpartum depression and their babies. Five discharged patients' documents were reviewed.

Table 4.6: Document review Hospital B

Theme	Category	Units of meaning / report per patient				
		Hospital B: P1	**Hospital B: P2**	**Hospital B: P3**	**Hospital B: P4**	**Hospital B: P5**
Process Evaluation1D: Nursing care was rendered to the patients	Administration of prescribed drugs	The patient's drugs were given orally twice daily during the acute state, but later this was changed to daily as prescribed at 10 pm, charted and signed by the nurse	The patient had her drugs orally after breakfast and at 10 pm, charted and signed by the nurse	The patient received her drugs after breakfast and at 10 pm, charted and signed by the nurse	The patient was given her drugs intramuscularly at 10 am and 10.30 pm by the nurse, charted and signed	The patient's drugs were given by the nurse orally after breakfast and at 10 pm, charted and signed
	Other nursing activities carried out in the ward	The patient is still sad. She was advised and reassured by the nurse	The nurse assisted the patient in breastfeeding her baby, sitting up in a correct and comfortable position	The patient had her bath by her bedside, assisted by the nurse	The patient is still sad and crying. She was reassured, and the nurse opened a suicidal caution card to monitor her closely.	The patient is still refusing her meals. She was reassured and fed by the nurse, as documented
	Patients were encouraged	The nurse noticed that the patient threw away her meals. She	The patient was anxious about her	The patient refused to sit out of her	The patient does not cry anymore	The patient is getting better;

		was advised to stop doing this, as was documented. She was encouraged and spoon-fed by the nurse	other two children, as documented. The nurse reassured her of their good health and safety at home with her mother	bed. She was reassured and encouraged to walk around her bed, assisted by the nurse	after she was advised and encouraged by the nurse to participate in the indoor game session in the ward	she was encouraged by the nurse to bath and care for her baby
2D: Collaborative care provided for patients	Inter-professional relationships with other professionals toward patient care	Nurses were with the patient during ward rounds, and the patient's medication was changed, as documented on her chart	The nurses informed social workers of the patient's request for her husband to visit her.	The patient was seen by her physician and the nurse on ward rounds. No change was made to her management	Nurses reported the patient's improved health condition to her physician during ward rounds, and her medication was changed	The clinical psychologist and nurse saw the patient at the clinic. No change was made to her management
Outcome Evaluation 3D: There was marked progress in the patient's condition	Patient relates better to everyone before discharge	The patient had her bath and went with the nurse for her diversional therapy at the clinic	The nurse allowed the patient's husband to stay for about three hours by her bedside to enhance the ongoing interaction between them	The patient informed the nurse that she wanted to be with her baby. The patient's physician was informed and agreed to this, which pleased the patient	The patient requested laundering soap from the nurses to wash her soiled dress. This was provided to her as documented	The patient now accepts and willingly comes to the nurses to carry her baby for bathing and breastfeeding
	Nurses and patients achieved good rapport in the ward	The nurse assisted the patient to the bathroom and gave her a warm bath	The patient was happy to see her husband when he came to visit. The nurses reassured	The patient now finishes her meals and gets out of bed to chat with nurses and other patients	The patient now freely interacts with the nurses. She breastfeeds and cares for her	The patient read her novel and interacted with the nurses. She was encouraged to communicate

		which the patient requested, as documented	the patient and her husband	in the ward, as documented	baby, as documented	with her husband frequently
4D: Patients had knowledge of good mental health	Patients were knowledgeable about their mental health and home care on discharge	The nurse advised the patient to take her drugs and resume her job when she is fit enough to do so	The nurse gave the patient health education on the need for good care of the baby, drug compliance, and good nutrition	The nurse advised the patient on the need to take her drugs at home and keep her hospital appointment	The nurse gave the patient health education on the importance of drug compliance to avoid relapse	On discharge, the patient was advised by the nurse to continue to love her baby and take her drugs at home

4.5.3 Hospital C

At Hospital C, patients with PPD and their babies are admitted into an open postnatal ward. These patients are nursed together with other postnatal patients with normal puerperium. Five discharged patients' documents were reviewed.

Table 4.7: Document review Hospital C

Theme	Category	Units of meaning / report per patient				
		Hospital C: P1	**Hospital C: P2**	**Hospital C: P3**	**Hospital C: P4**	**Hospital C: P5**
Process Evaluation 1D: Nursing care was rendered to the patients	Administration of prescribed drugs	The patient had drugs orally after breakfast and supper, and the nurse charted this as documented	The patient had her drugs orally after breakfast, and the intramuscular injection was given after supper and charted by the nurse	The patient's drugs were given orally after breakfast and supper and charted by the nurse as documented	The patient had her medication as prescribed orally, and the nurse charted this	The patient initially refused her drugs this morning but later took them. She had her drugs this evening, which the nurse charted
	Other nursing activities carried out in the ward	Patient still refused to talk to anyone but was reassured by the nurse, as documented	The patient is still crying intermittently. She is being monitored for suicidal intent	The nurse assisted the patient in sitting out of bed and positioned her and the baby well for	The patient is still sad, refused to communicate,	The patient fed herself, assisted by the nurse and finished her meal as documented

			and charted by the nurse	breastfeeding, as documented	and was reassured by the nurse	
	Patients were encouraged	The patient refused her dinner, but she later finished her meal after being encouraged by the nurse to do so, as documented on her chart	The patient initially refused her breakfast but was reassured and encouraged by the nurse to drink more fruit juice, which she preferred. She finished her dinner as documented	The patient was advised and encouraged to accept the baby's cot to be by her bedside to increase maternal love and bonding with her baby, which she accepted	Although the patient was still moody, she was encouraged to have her bath and change her soiled clothes with the assistance of the nurse, as documented	The patient did not accept her medications until she received reassurance and encouragement from the nurses. This was reported to her physician as documented
2D: Collaborative care provided for patients	Inter-professional relationships with other professionals toward patient care	The patient's physician changed her medication after the nurses reported on her condition during the ward round	The patient was seen by her physician and nurses, but no change was made to her medication	The patient was seen by the social worker during the ward round, and the nurse advised her to wind her baby after breastfeeding	The patient was seen during the ward round by her physician and clinical psychologist. Her medication was changed	Patient was seen by the nurse and her physician, her medication was changed and administered as prescribed and documented

Outcome Evaluation 3D: There was marked progress in patients' condition	Patient-related better to everyone before discharge	The patient now accepts her medications and takes her meals unassisted by the nurse. She sat on the bed to eat lunch today, as documented	The patient's health condition was better. She now readily accepts her drugs and takes her meals from the nurses, as documented	The patient now breastfeeds her baby without being instructed to do so, as documented	The nurse accompanied the patient for therapy at the occupational therapy clinic	The nurse played indoor games with the patient to enhance communication between both of them, as documented
	Nurses and patients achieved good rapport in the ward	The nurse was pleased with the patient as she came to inform her that she had washed her clothes today undirected, as documented	The patient impressed the nurse when she took the correct dosage of her oral drugs	The patient confided in the nurse that she now wants to go home with her baby, as documented in her chart	The patient chatted with the nurse, who was impressed with the patient for having her meal and putting on a clean dress unassisted	The nurse commended the patient as she voluntarily came for her drugs during the medication round

4D: Patients had knowledge of good mental health	Patients were knowledgeable about their mental health and home care on discharge	There was no evidence of health education from the nurses on the patient's chart, but the social worker advised the patient on the need for personal cleanliness at home, as documented	There was no evidence of documented health education given by the nurses, but the patient was advised by her physician on the importance of drug compliance to avoid a reoccurrence, as documented	The social worker advised the patient of the need to continue to love her baby and breastfeed her at home, as documented	There was no health education from the nurses, but her physician informed her of the need to take her drugs and keep her appointment as documented	There was no health education provided to the patient by the nurses, as evidenced in the patient's chart, but the social worker advised the patient on the need to take her drugs at home and keep her appointments, as documented on the patient's chart

4.5.4 Hospital D

At Hospital D, patients and their babies are admitted into a crowded, open postnatal ward. They are nursed with other patients with normal puerperium. Five discharged patients' documents were reviewed.

Table 4.8: Document review Saint Philomena Catholic Hospital (SPCH)

Theme	Category	Units of meaning / report per patient				
		Hospital D: P1	**Hospital D: P2**	**Hospital D: P3**	**Hospital D: P4**	**Hospital D: P5**
Process Evaluation 1D: Nursing care was rendered to the patients	Administration of prescribed drugs	The patient had her drugs at10am and 6 pm as prescribed, signed by the nurse as documented	The patient took her drugs at 10 am and 6 pm after dinner, as documented	The patient had her prescribed drugs orally at 10 am and 6 pm, respectively, as documented	The patient had drugs orally at 10 am and 6 pm as prescribed as documented	The patient had her intramuscular injection at10am and 6 pm, as documented
	Other nursing activities carried out in the ward	The nurse at the patient's bedside gave her a bath	The patient is monitored for suicidal intent and charted by the nurse	The patient did not cry today and was commended by the nurse, as documented	The patient fed herself with assistance from the nurse	The patient eats her meal with assistance from the nurse
	Patients were encouraged	The patient hid her food under her bed, was reassured and spoon-fed by the nurse	She still refused to eat despite the nurse's plea. The nurse reassured her and fed her	The patient was spoon-fed by the nurses and encouraged to have a bed bath today	The patient was still sad, but the nurses reassured and encouraged her to communicate with them	The patient only communicated once. Was encouraged to chat more with everyone
2D: Collaborative care provided for patients	Inter-professional relationships with other professionals toward patients' care	The patient was seen by her physician and the nurse, and it was documented that she	The patient was seen during the ward round, no change in the patient's medication	The patient was seen by the social worker, and no change in care seen on the patient's chart	Nurses took the patient away to the diversional therapy unit; thus, she was not assessed during ward round	A Ward round was done, and the nurse detected no change in her management

		needed more rest				
Outcome Evaluation 3D: There was marked progress in patients' condition	Patient-related better to everyone before discharge	The patient accepted a piece of cake that she had requested from the nurse	The patient read through a pictorial novel that the nurse gave her	The nurse walked with the patient to see the clinical psychologist in his clinic	The nurse assisted the patient with her baby for immunization after the patient had breastfed the baby	The nurse helped the patient to wash her hair while the patient tidied her surroundings
	Nurses and patients achieved good rapport in the ward	The nurse reassured the patient and gave her a bath in the bathroom, for which the patient thanked her, as documented	The nurse encouraged the patient to feed herself and commended her for it	The patient chatted with the nurse on duty after being assisted with her bath	Nurses are happy today as the patient communicated with her mother, as documented	The patient washed her pants and was commended by the nurse, as documented on the chart
4D: Patients had knowledge of good mental health	Patients were knowledgeable about their mental health and home care on discharge	The patient was health educated by the doctor on the importance of good nutrition and keeping her clinic appointment as documented	The patient was not health educated by the nurse on the excellent care of the baby	The patient was seen and advised by the social worker to keep her hospital appointment to monitor her drug compliance	The clinical psychologist advised the patient on the need for drug compliance to avoid a relapse	The patient was health educated by the nurse on the need to take her drugs and to keep up her cleanliness at home

4.6.5 DISCUSSION

This section discusses the themes generated from the document review conducted at the four hospitals.

Process Evaluation

Theme 1D: Nursing care was rendered to patients

The documents reviewed from all four hospitals used for the study evidenced that nursing care was rendered when required despite the shortage of professional nurses in some hospitals' wards.

Category i: Administration of prescribed drugs

Antidepressants are often recommended as part of the overall therapy for PPD. PPD patients are placed on the serotonin selective re-uptake inhibitors (SSRIs), which have fewer side effects on lactating patients than the tricyclic, monoamine oxidase inhibitors (MAOIs) (Omoaregba et al., 2016).

It was evident from the documents reviewed that the relevant drugs were administered to the patients at all four hospitals. Anti-depressants are prescribed for managing PPD, and significant tranquillizers are added in severe cases. Anti-depressants affect neurotransmitters such as dopamine and nor-epinephrine and help elevate the patient's mood. The full therapeutic effects of the drug will be noticed within the second to the fourth week of its administration. Medication administration must be monitored to ensure the most effective dosage and minimize side effects.

The administration of prescribed medication, observing and monitoring the condition of patients under medication, maintaining records, and communicating with doctors on the effects of the drug on the patients are among the primary responsibilities of the professional nurse in the ward. It was

evident that the nurses administered the drugs at Hospital A at 10 am and 10 pm daily. Patients' drugs were charted and signed off by the nurses. The patients' drug charts reviewed at Hospital B showed that nurses on duty gave the patients their medications as prescribed. The columns for the nurses to sign off on the drug administration chart were all signed. At hospital C, drug charts indicated that patients were given their prescribed drugs, which the nurse charted after their morning bath, breakfast, and supper. The reviewed drug charts at Hospital D showed that patients' prescribed drugs were given and documented. At Hospital D, patients had their drugs at 6 pm after dinner. The drug charts were not signed off every time drugs were given, which calls into question the professional nurses' medication skills.

The document review showed a disparity in the exact time of drug administration at the different hospitals, which could be due to the different physicians' prescriptions and hospital policies. Patients admitted into the wards in an acute or severe state are given injectable drugs. Despite the busy work schedule in the ward, professional nurses make good use of obtrusive and unobtrusive observation for early identification of the side effects of the antidepressants. "For those who have had several bouts of depression, long-term medication is the most effective means of preventing recurring episodes" (Umo, 2017).

Category ii: Other nursing activities carried out on the patient in the ward

Being recognized and treated as an individual remains vital to every patient. One of the nurse's expected duties is to assist the individual with the activities she would have done if she had the strength and willpower to do so (Henderson, 2018). Documents reviewed at Hospital D showed that nurses did and documented nursing care activities in the ward, such as assisting patients to

bathe, feeding and monitoring them, and using the suicidal caution card. The other nursing activities carried out on patients in the wards documented on the nurses' charts at HOSPITAL C included reports that patients were reassured as they were primarily sad, refused meals, and did not communicate with anyone. Documents reviewed at Hospital A and Hospital B showed that nursing activities carried out on the patients in the wards at these hospitals were similar to those at HOSPITAL C. The charts showed that patients had their vital signs checked and recorded. Nurses reassured and advised the patients to breastfeed their babies, assisted with feeding the patient and helped her bathe by her bedside. Patients were monitored, and observations were charted daily on their suicidal caution cards.

To be treated and given health care service is an essential component of the whole experience in maintaining a patient's dignity during a stressful period. The patient with PPD needs close monitoring; hence she is placed within the nurse's sight line. Professional observational skills are essential when caring for patients with postpartum depression. A suicidal caution card must be opened when required, and observations must be recorded. When this is neglected, a tragedy such as suicide, self-harming, or harming others can occur. Frisch and Frisch (2016) stated the importance of close monitoring after medication administration as the prime nursing care for patients with PPD.

Category iii: Patients were encouraged

Encouraging patients' self-care means giving them the knowledge, tools, and confidence to make choices and take actions to control and improve their health. This can positively impact their health and well-being and reduce stress on health services (Sharma, 2016). Reviewed documents at Hospital B showed that patients were reassured and encouraged to take their meals and baths. The

seriously ill patients had their drugs reviewed and administered with sound effects. There was evidence that at Hospital A, the mother's nutritional needs were taken care of, and those who refused to eat their meals were encouraged to do so. Their nurses also cared for their babies. There were similar reports at Hospital D, where the charts showed that seriously ill patients hid their drugs and meals. Patients were reassured and encouraged to take their drugs when administered, assisted with bathing, and spoon-fed when they would not eat alone. One of the qualities of a nurse is to show empathy for the patient, which is essential to enhance the patient's recovery. It forms part of the therapeutic milieu in the ward (Sharma, 2016). This was evident in the documents reviewed at HOSPITAL C, which showed that patients were encouraged regarding hygiene, nutrition, and communication. The nutritional status of lactating mothers is essential; therefore, the nurses closely observed the patients' nutritional intake.

Theme 2D: Collaborative care provided for patients

The care of a patient with PPD requires a multi-sectoral approach, with different professionals partaking in the care. There is a need for a good rapport and cordial working professional relationships with one another to enhance a patient's recovery.

Category i: Inter-professional relationship with other professionals toward patients' care

A group of specialists manages psychiatric patients because brain malfunction has many effects on these patients. Thus, the inter-sectorial treatment approach involves professional nurses, patients' family members, medical social workers, and clinical psychologists. This concurs with Sulyman et al. (2016), who suggested that inter-sectorial management of psychiatric patients should be encouraged. This should be provided where it is lacking, especially at smaller health

facilities. The documents reviewed at Hospital A showed that nurses took part in the combined ward rounds, except when it was inconvenient. Nurses did not remind other professionals to visit patients in the ward. The documents reviewed at Hospital D showed that nurses did not partake in ward rounds but copied the changes made to the patients' management from their charts.

When asked about this, the nurses claimed they had a hectic work schedule. However, nurses do sometimes make errors. This can be prevented by improving the working relationship with other caregivers (Donatti et al, 2016). At Hospital C, the documents reviewed evidenced cordial relationships with other professionals who visited patients. At Hospital B, there was a cordial relationship with other professionals caring for patients. Nurses took part in ward rounds and documented changes. There is, therefore, a need for inter-sectorial collaboration in the care of patients as this is therapeutic for patients. Patients need to have confidence in the health care professional and be able to confide in them. The patient/nurse relationship is based on good communication, trust, and mutual respect. Nursing care for PPD is a psychiatric emergency and requires a high level of therapeutic skills while working in collaboration with other sectorial departments to ensure a patient's speedy recovery. The nursing management of patients should revolve around a holistic approach. Patients' hospital care revolves around multi-sectorial units, and, with good interpersonal relationships with the personnel from these departments, patients will recuperate quicker so that they can be discharged (Umo, 2017).

Outcome Evaluation

Theme 3D: There was marked progress in the patient's condition

The art of nursing emphasizes meeting basic human needs as the focus of nursing practice and that nursing assists in meeting the patient's needs to enhance their recovery. The interactive relationship between nurses and patients is essential to the therapeutic process (Hagerty et al, 2017).

Category i: Patient relates better with everyone in the ward before discharge

Nurses provide and promote patient-centred care, which includes their families. Nurses' career decisions help them make informed choices about the patient's treatment and care. These career decisions include: promoting effective communication and relationships, promoting non-discriminatory practice, maintaining the confidentiality of information, respecting the patient's right to dignity, independence, and empowerment, acknowledging individuals' beliefs, safeguarding the patient from abuse, and providing individualized care. Fields (2013) stated, "whenever the nurses take to their professional training and views, they will achieve the principles of nursing care." This evidenced as an outcome evaluation showed that the patient's conditions improved before they were discharged home. From the documents reviewed at Hospital A, patients related better with others before discharge. At Hospital D, there were similar reports of enhanced health status. The nurses rendered the expected nursing care to patients. The review at Hospital C showed that patients' health status improved with the nursing care rendered. At Hospital B, there was marked progress in the patient's condition as she had her bath, wanted her baby, wore clean clothes, went for diversional therapy sessions, and communicated freely with her husband, as evidenced by the documents reviewed.

Current trends in nursing practice emphasize the need for the nursing process outline, which is patient-centred. The theory focuses on the interaction between the nurse's and patient's perception,

validation, and the use of the nursing process to produce a positive patient outcome (Toney-Butler & Thayer, 2022). Postpartum depression, being a psychiatric emergency, demands a high level of professional nursing skills management. The nursing care for patients with post-partum depression is frenetic, tasking, and demanding. However, patients should still receive adequate nursing care despite the shortcomings experienced by the nurses in the ward. This concurs with the statement (Henderson, 2018) about the quality and outcome of care expected of nurses.

Category ii: Nurses and patients achieved good rapport in the ward

Nurses are professionally trained to render empathetic care to their patients while managing them. This care is also expected to extend to the patient's families as it creates a good rapport and relationships between all parties involved while the patients are in the ward. However, the nurses' attitudes changed as patients recuperated and their communication improved. This was evident in the documents reviewed at Hospital A, where nurses reassured and commended patients as the patient's conditions improved. Similarly, the documents reviewed at Hospital B showed that patients had a good rapport with nurses who acceded to their requests. The documents reviewed at Hospital C showed that the patient informed the nurse that she felt ready to go home with her baby and was commended for her progress in health status.

Furthermore, the documents reviewed at Hospital D showed that nurses had a good rapport with their patients. The patients' behaviour contributed to the nurses' attitudes toward their patients. "When nurses were knowledgeable about the main signs, symptoms, and management of PPD, their attitude improved" (Afolayan et al., 2016). A good rapport with the patient is the responsibility of a nurse, as it is in the patient's best interest. A professional, cordial relationship is neces-

sary for getting the work done. Establishing a proper relationship is the backbone of career development and gives the nurse a greater chance of succeeding in her chosen profession. Kostowskie (2017), on what constitutes a good relationship, stated that an "improved cordial, professional relationship is a crucial point of the therapeutic skills of the mental health nurse. A cordial relationship with the patient and her family is important. Good communication skills are key to the nursing care rendered. With good relationships, the patient's recovery is enhanced. People feel devalued, misunderstood, alienated, bitter, lonely, and frustrated when this goes awry. With cordial relationships, people become aware of their problems and learn to solve them by communicating more effectively". This is especially important as a nurse requires excellent communication and relationship skills to excel.

Theme 4D: Patients had knowledge of good mental health

As PPD can be inherited, checking the patient's history for any previous cases of PPD in the family is essential. The patient should be visited at her home before delivery, where her family can be educated on what to expect after the patient's delivery to avoid stigmatization. Healthcare providers should assess the risk for PPD and health education the patient during pregnancy. Using the EPDS for assessing the patient would, therefore, be of great benefit.

Category i: Patients were knowledgeable about their mental health and self-care on discharge

One of the vital functions of a nurse is to provide health education to patients and their relatives. This is done for the patient's duration in the ward until she is discharged. In Hospital A, the reviewed document indicated that patients were given health education before discharge. In Hospital D, it was evident that nurses did not provide patients with health education. This was done by the

patient's physician during his ward rounds and included the need for drug compliance at home, keeping hospital appointments, and the importance of preventing PPD. The timing for health education may not have been optimal, or there was a lack of education, which was not conducive to health changes. If health education is done optimally, patients recover more quickly. In Hospital C, documentation evidenced that patients were health educated on the causes of the reoccurrence of their ill health, prevention of relapse, and self-care. In Hospital B, the document review showed nurses' health-educated patients on discharge. The nurses also health educated the patients' relatives on the need to cooperate with the patient to ensure her drug compliance and avoid stigmatizing patients. Health education is the prerogative of all caregivers; however, nurses highlighted the staff shortage and increased workloads as an excuse and blamed each other for not doing the work. With good health education, family members and caregivers need not be scared of the patient, misconceptions about PPD would be reduced, and families would not ignore the patient while she is hospitalized. This concurs with Subu et al. (2021), who stated that "there are many misconceptions about mental illness and PPD. Health education is, therefore, vital to help to reduce stigma and increase tolerance from other patients and their relatives."

4.6 SECTION E: FIELD NOTES REVIEW

The field notes gathered during the study were reviewed and it was found that while they did not directly contribute to the structure and outcomes of the research, they did add color and nuance to the study's findings. Specifically, the nonverbal cues such as facial expressions and body language provided valuable insight into the participants' experiences and perspectives, enriching the overall understanding of the research topic.

4.7 SECTION F: CONCLUDING STATEMENTS FROM THE THEMES ACROSS PARTICIPANT GROUPS AND DOCUMENT REVIEW

The final remarks from the document review and each participant group are presented in this section based on the main themes of the discussion. As the next stage of the model creation phase in chapter 5, these conclusions act as the final sentences. The following conclusions in line with the Donabedian Model ideas are found and shown in Table 4.9 below.

Table 4.9: Themes across participants groups and document review and concluding statements

	Participants Groups				
	Professional Nurses (Interviews)	**Social Workers, Clinical Psychologists (FGD members)**	**Patients (in-depth-interviews)**	**Document review**	
Steps in the Donabedian model	**Vertical Themes**				**Concluding Statements**
Structure	1A General condition of the ward is not conducive due to lack of space and noise				1. Infrastructure in the wards where patients with postpartum depression were nursed was inadequate
Process	2A: Nurses' attempts at holistic treatment and a family care approach to patients with postpartum depression 3A A conducive atmosphere should be created 4A Inclusive environment for patients with post-partum depression	1B Patient health education 2B Diversion therapy was included in the treatment 3B Several areas are of concern	1C Nursing care was given to patients	1D Nursing care was rendered to the patients 2D Collaborative care was provided for the patients	2. Despite nursing care provided, several challenges were reported, which could be resolved through the implementation of holistic treatment approaches and inclusive health care provision by an inter-professional team in a conducive environment

	Participants Groups				
	Professional Nurses (Interviews)	**Social Workers, Clinical Psychologists (FGD members)**	**Patients (in-depth-interviews)**	**Document review**	
OUTCOME	5A Nurses' knowledge of the signs of postpartum depression was satisfactory 6A Management of postpartum depression requires adequate medication 7A Need for rehabilitation before discharge 8A Management of stigma, isolation, and feelings of resentment	4B Nurses were satisfied with the nursing care they provided 5B Several areas require improvement in nursing care	2C Challenges resulted in varying levels of satisfaction	3D There was marked progress in patients' condition 4D Patients had knowledge of good mental health	3. Despite nurses having satisfactory knowledge of postpartum depression and delivering satisfactory nursing care, many areas were identified for improvement, which potentially is the basis for patients' varied levels of satisfaction even though there was an improvement in their health

4.7.1 Discussion of Concluding Statements

The following conclusion assertions supported the concepts contained in the Donabedian Model used in the study.

Structure

Concluding statement 1: Infrastructure in the wards where patients with postpartum depression were nursed was inadequate

The ideal setting for patients with psychiatric disorders comprises a serene environment with adequate infrastructure, which is not the case in Edo state. Here, patients with postpartum depression are nursed in the same ward as mothers who usually deliver and do not have postpartum depression. This unconducive health environment is due to Edo state's inadequate health facilities and human resources. There is no room for one-to-one interaction with the patients to boost their morale and develop a rapport with the nurse. The government should provide better infrastructure for patients with abnormal puerperium. Better nursing care with minimal noise can be achieved by building facilities where these patients to be nursed in the bay system. This supports Donabedian's (2003) assertion that "The style of care influences the caregiving processes and that, in turn, impacts the outcomes of care", according to this statement.

Process

Concluding statement 2: Despite the nursing care provided, several challenges were reported, which can be resolved by implementing holistic treatment approaches and inclusive healthcare provision by an inter-professional team in a conducive environment.

Within the poor structural environment, nurses provided nursing care to patients with PPD though several challenges were observed by the patients and other professionals caring for the patients. Roy's systems theory states that "the patient evolves in an environment," and current trends in nursing care revolve around the holistic care of the patient, the baby, and the family.

Nurses administered prescribed long-term medication and observed a few side effects on lactating patients. However, some of the patients could not afford these drugs because they were expensive, resulting in their hospitalization period being extended. Some patients could only afford drugs for five days.

Patients often neglect themselves and their babies, which is typical of a postpartum depressive patient. The nurses separated the baby from the mother to prevent the baby from being harmed. Patients were often unhappy about this; however, it was done to guarantee the baby's safety during the acute phase of the patient's ill health. In Edo state, no provision is made for relatives who travel long distances to stay with patients needing prolonged hospitalization. Aside from one hospital, the village ward does not exist in the state hospitals, which presents a challenge to the nursing care of patients with PPD.

In some hospitals, harmful instruments were carelessly left on bedside cupboards. Patients can use these to harm themselves or others as the limited number of nurses cannot fully monitor the environment. Patients and families are often not educated on the causes, predisposition, and reoccurrence of PPD. This concurs with Al-Awadhi et al. (2017), who stated that "there are many misconceptions about mental illness and PPD. Health education for all patients and caregivers is vital to help to reduce stigma and increase tolerance from other patients and their relatives". Nurses at some hospitals did not provide health education to patients while hospitalized except on discharge, which is inadequate. This is a challenge to the nursing care rendered. Diversion therapy was not

used in some hospitals as part of their nursing care. The healthy and stable patients in one of the hospitals were made to read newspapers and act out drama. The limited number of diverse therapists could not always thoroughly attend to all the patients.

Some factors were highlighted with the management of patients that must be taken cognizance of and managed. Financial instability was a significant source of stress for the patients. This was corroborated by Johnson (2014). He stated, " People with financial instability may experience such overwhelmingly negative feelings that their mental and physical health can be adversely affected" Other problems included poor marital relationships and anxiety over childcare. In this state, some single mothers with no family support and who have predisposing factors for PPD are stigmatized. Nurses and other professionals do not screen or assess patients for possible triggers of PPD on their first visit to the antenatal clinic. Edo state has no government policy on social security for patients with PPD to reduce their financial burden.

Nurses encounter poor working conditions and poor career advancement. The shortage of human resources, materials, and money affect the state's healthcare system. In some hospitals, there are challenges where patients are secluded, abandoned, and not situated within the nurses' site lines where they can be monitored because of the risk they pose to themselves and others, especially their babies. These anomalies need to be corrected. The document review showed a disparity in the exact time of drug administration and the use of suicidal caution cards at different hospitals, which can be ascribed to the various physicians' prescriptions and hospital policies. This constitutes a challenge to the nursing care rendered. Challenges reported with the management of patients could be resolved if an inter-professional and holistic management regimen was instituted. The nursing management of patients currently does not revolve around a holistic approach. There should be a multi-professional approach to patient care. Nurses do not encourage patient self-care

or provide patients with the tools for self-care to boost their confidence to make choices and take actions to control and improve their health. This would have a positive impact on the patient's health and well-being. Patients' hospital care should be carried out in an environment with good interpersonal relationships between nurses and other healthcare personnel to speed up the patients' recovery and discharge (Umo, 2017). This should be ensured as it is lacking, especially in the health facilities in the state.

Outcome

Concluding statement 3: Despite nurses having sufficient knowledge of postpartum depression and delivering adequate nursing care, many areas were identified for improvement, which potentially was the basis for patients' varied levels of satisfaction even though there was an improvement in their health.

Not all nurses have adequate knowledge of postpartum depression despite their training, which affects the patient's care. This highlights the need for continuous professional development through regular refresher courses for nurses to acquaint themselves with the current trends in nursing practice. It should be mandatory for nurses to attend seminars and conferences to be conversant with the current nursing care guidelines and educational tools for the early detection and prevention of PPD (Holloway & Galvin, 2016)

The provision of selective serotonin receptors inhibitors, the drugs of choice because of their common side effects on PPD patients, was not adequately managed. These psychiatric drugs are costly (Omoaregba et al., 2016). Some psychiatric drugs cannot be found in some hospitals and primary health centres, as corroborated by Uzochukwu et al. (2015). The Edo State government needs to

source more effective drugs to complement the supply of the expensive selective serotonin receptors inhibitors for patients at a subsidized rate to help curb this puerperal problem and enhance good maternal mental health care.

Most hospitals do not have rehabilitation units, and where these are available, they are poorly equipped. The State needs new rehabilitation units at all hospitals, with modern equipment, where the patients can learn skills to earn a living after discharge. This is corroborated by Olotu et al. (2017), who stated that "patients can learn a new trade from the unit, which helps to prepare them for rehabilitation before being discharged." Stigmatization, isolation, and resentment are experienced by patients with PPD in all the hospitals in the state, which affects their morale and makes them more depressed. Other patients in the ward and the public should be health educated to avoid marginalization of these patients. More village wards should be built to allow relatives to live, observe, and care for patients. At the same time, the nurse supervises all their actions in a supportive manner to reduce stigmatization after discharge.

Although the professional nurses were satisfied with their nursing care, lapses in their nursing care were observed, as stated by other professionals. This made nurses fail to carry out their expected duty, which is to assist the individual, sick or well, in the activities contributing to health or a peaceful death. Counselling the patient and family, which is an essential part of care, was inadequate in several areas. This should be corrected to boost the patient's and her family's morale. They need to know the possible causes and pre-emptive signs of an imminent recurrence to prevent the patient from harming the baby due to her psychiatric condition. Balanced nutrition for patients is inadequate, and their families do not complement the meals provided by the hospital. The family should be educated on this need to ensure a balanced diet for the patient. In some hospitals, patients are admitted at the far end of the ward, a challenge that needs to be corrected. The patient should

be situated within the nurses' sight lines for easy observation and care to avoid the possibility of her committing suicide or harming herself or others. This concurs with Frisch and Frisch (2016), who stated that the importance of close monitoring is the prime nursing care for patients with PPD. The distance to a health facility was another problem for some patients with PPD because they could not afford transportation to and from the hospital. The government and hospital management should provide subsidized transportation to ease patient follow-up care and prevent relapse. This is corroborated by Osadolor (2017), who argued that "poor public transportation was likely to delay care."

Kostowskie (2017) stated, "Professional, cordial relationship is the backbone of career development." However, this was found to be inadequate in most of the hospitals. Good inter-professional, cordial relationships must be keyed to nursing care rendered to ensure adequate collaboration in patient care.

Patients were not satisfied with their nursing care level while in the wards. The display of professionalism in nursing care was reported to be inadequate. The nurse should not resent or stigmatize the patient. Nurses should understand the patients' characteristics and expectations when providing nursing care to them and their families. Nurses need to fulfil the patients' and family members' realistic expectations and be part of the determinant of the nursing care rendered. This observation differed from the findings of Hunkuyi (2017), who reported that the nurse provided safe nursing care, safeguarded the patient and others from injury, observed, documented, and cooperated with other professionals while facilitating a multi-disciplinary approach to care. The nurse should be patient and empathic with her patients and other professionals, despite the heavy workload she experiences in Edo state.

Some patients did not know that they had a mental illness and that it could reoccur after their first attack. This concurs with Jack–Ide et al. (2016) who opined that "most patients are not aware of the predisposing factors, early signs, and symptoms of mental illness." There is a need for more public awareness of PPD, showing that the prevalence rate can be reduced with early detection, good antenatal care, and health education for those predisposed to PPD.

There is a challenge concerning the ignored, anxious, and scared family members. The creation of rapport and general reassurance of the patient and her relatives is therapeutic nursing care that needs to be continuous. "General reassurance given to them helps to build up friendship, creates good rapport and trust between the family, the patient, and the nurse." In some hospitals in Edo state, patients were adequately observed. There was no utilization of the suicidal caution card, and this needs to be corrected in all the affected hospitals. Typical symptom monitoring and feedback improves patient outcomes (Page et al., 2016).

Most PPD patients do not like to be separated from their babies. This was confirmed by (Cox et al., 2016), who stated that "most patients with PPD resent their babies and might harm them during the acute phase but will want them once they are getting better." This should be done with professional skills so the patient can appreciate the nurse's efforts toward their care. Some of the Edo state patients were generally dissatisfied with their nursing care. The challenges resulted in varying satisfaction levels among the patients and their families. This was due to nursing actions not being carried out using professional nursing skills in a therapeutic milieu. Afolayan et al. (2016) opined, "Although a majority of the professional nurses rated their information level on PPD as moderate, the patients' behaviour added to the wrong attitude of the nurses towards the patients with PPD." To rectify this, nurses should use professional and skilled nursing procedures in patients' care.

Although the patients' documents indicated marked progress in their condition, their dissatisfaction indicates that nurses must embrace effective communication, good interpersonal relationships, non-discriminatory practice, and individualized care. This will assist patients, and their families make informed decisions and choices about patient care toward a positive patient outcome. Professional nurses must be informed regularly through organized in-service training in the ward, workshops, and conferences, where the current trends in nursing practice are discussed. This will enhance evidence-based care for patients with PPD.

4.8 SUMMARY

This chapter reveals and discusses the findings derived from the exploration of the knowledge of professional nurses regarding nursing care for patients with PPD, the experiences of professional nurses and the inter-professional team that cared for these patients, the experiences of patients who have recovered from PPD regarding the nursing care practice and its effectiveness for managing patients with PPD and evaluated the nursing care of patients with PPD through the review of documents. It further presented an integrated discussion of the findings in relation to the conceptual framework selected for the study in the context of existing local and internationally published literature. Data was analysed using an inductive approach, as outlined by (De-Vos et al., 2015). From the findings, it was concluded that nursing care for patients with PPD in Edo state is challenging due to inadequate infrastructure in the hospital setting, inadequate clinical nurses, non-implementation of holistic treatment approaches, and a lack of inclusive health care provision by an interprofessional team in a conducive environment. These challenges make the nursing care of patients with PPD inadequate. The following chapter describes the development of the model for the nursing management of PPD in Edo state.

CHAPTER FIVE

DEVELOPMENT OF A MODEL FOR THE NURSING MANAGEMENT OF POSTPARTUM DEPRESSION IN EDO STATE, NIGERIA

5.1 INTRODUCTION

Chapter four presented the conclusions from the focus groups and interviews with professional nurses, medical social workers, and clinical psychologists involved in the care of patients with postpartum depression, discharged patients, and the review of patients' documents.

The purpose of this study was to develop a model for the nursing managing PPD in Nigeria's Edo state. The results from phase one of the study, which concluded with the creation of concluding statements from the analysed data from exploratory, descriptive investigations, were employed in phase two, where the primary concepts from phase one's data were recognized. A foundation for developing the model for the nursing management of PPD is laid by giving meaning to the concepts from the data that have been identified. This chapter, therefore, focuses on developing a model, which was the fourth objective of the study.

Walker and Avant (2014), Chinn and Kramer (2015), and Dickoff et al. (1968) all presented a set of actions that were followed in this phase. In order to facilitate this model creation process, as stated in chapter 3. The argument over whether these should be referred to as theories, models, theoretic frameworks, or conceptual frameworks was highlighted in Chinn and Kramer's (2015) description of the evolution of conceptual nursing frameworks by various theorists between 1952 and 1989. They concluded that, regardless of what they were labelled, the frameworks created for nursing practice were utilized in 184 nursing education programs, real-world applications, and research. As a result, the

researcher refers to the development of a model and the methods for making it operational, as the outcomes of this chapter.

The following steps guided the development of the model for the nursing management of patients with PPD:

Step One: Concept synthesis–Identify concepts from data generated in phase one.

Step Two: Statement synthesis - Development of relational statements.

Step Three: Theory synthesis–Development of a model and strategies for operationalizing the model.

After completing these three processes, an overview, the purpose, and context of the model are presented.

In conclusion, a description of the model's validation procedure is provided.

5.2 STEP ONE: CONCEPT SYNTHESIS

Walker and Avant (2014b) define synthesis as extracting ideas from a body of facts to learn new things about a phenomenon and advance theory. According to Walker and Avant (2014b), "Concepts are the foundations around which theories are developed." They serve as the mental representation of activity. Identifying, categorizing, and defining concepts for the model development improved conceptual meaning by bringing the researcher's awareness of the variety of word uses and meanings (Chinn & Kramer, 2015). Walker and Avant (2014b), however, advise against viewing the analysis or synthesis of concepts as a final output rather than as a snapshot of its 185 essential components at the time. They mention that although concept analysis has a precise process, the final product is always tentative. The concepts are dynamic, changing according to the cultural, social, and contextual factors that should be considered when applying the min different

fields (Walker & Avant, 2014b). Additionally, they contend that concept synthesis is a multi-stage, interactive process that calls for the researcher to switch back and forth between each step (Walker & Avant, 2014b).

In this study, concepts were extracted from data derived through focus group discussions, in-depth interviews, and the review of patients' documents. The following steps were used:

5.2.1 Concept Identification

The first step of the procedure was critically analysing the three concluding statements that emerged from the themes that permeated focus group conversations, interviews, and the phase one document review. The researcher framed the concluding sentences using the Donabedian Model. Ten concepts were found and combined into seven basic concepts by comparing and contrasting them (Donabedian, 2003). The next step was to name the concepts.

Table 5.1 below illustrates the procedure of categorizing and identifying concepts and primary concepts resulting from concluding statements.

Table 5.1: Concept identification from the concluding statements

Donabedian Model	Concluding statements	Main Concept
Structure	Statement 1: Infrastructure in the wards where patients with postpartum depression were nursed was inadequate.	1. Inadequate Infrastructure
Process	Statement 2: Despite competent nursing care provided, several challenges were reported, which can be resolved through the implementation of holistic treatment approaches and inclusive health care provision by an interprofessional team in a conducive environment	1. Competent patient-centred, holistic care 2. Conducive healthcare environment 3. Healthy nurse-patient relationships 4. Satisfactory knowledge
Outcome	Statement 3: Despite nurses having satisfactory knowledge of postpartum depression and delivering satisfactory nursing care, many areas were identified for improvement, which potentially is the result of patients' varied levels of satisfaction even though there was an improvement in their health	1. Patient satisfaction 2. Improved health

5.2.2 Classification of concepts

The seven concepts were classified according to Dickoff et al. (1968), who, as part of their study, responded to six foundation questions about the reasoning map:

i) Agency that responds to the fold by whom?

ii) Patiency or recipiency – Who is the recipient of the activity performed?

iii) Procedure – What is the activity's protocol, technique, and guiding procedure?

iv) Dynamics – What is the source of energy for the activity?

v) Framework –In what context is the activity performed?

vi) Goal or Terminus – The endpoint of the activity is what?

The concepts in the table below are represented by arrows depicting concept classification as follows:

1. Inadequate infrastructure – Blue

2. Competent patient-centred, holistic care– Yellow

3. Conducive healthcare environment – Brown

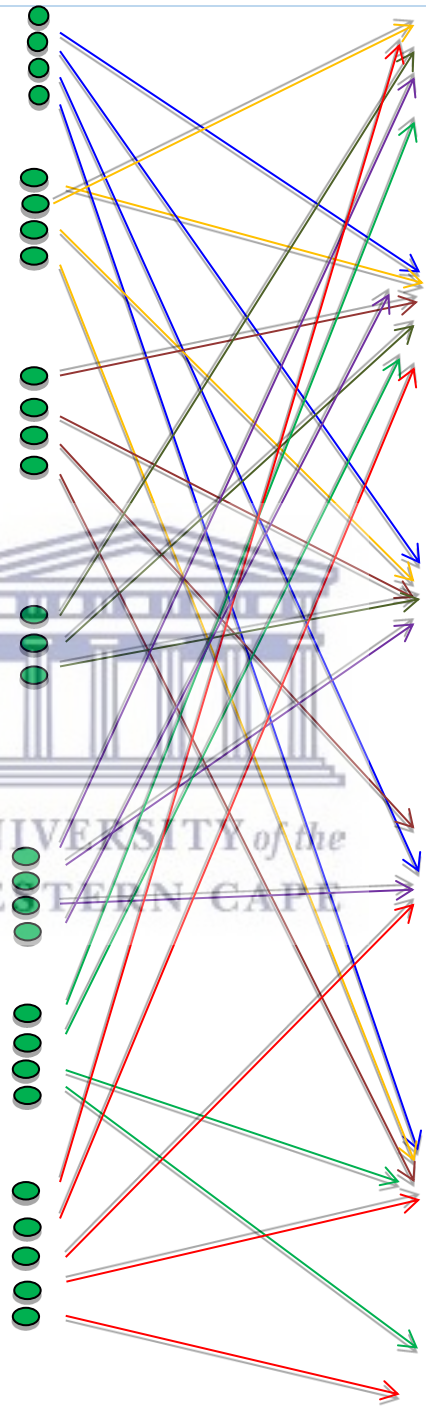
4. Healthy nurse-patient relationships – Dark green

5. Satisfactory knowledge – Purple

6. Patient satisfaction – Light green

7. Improved health– Red

Table 5.2: Concept classification

Main concepts	Arrows depicting logical arrangement from concept identification to concept classification	Concept classification
1. Inadequate infrastructure 2. Competent patient-centered, holistic care 3. Conducive health care environment 4. Healthy nurse-patient relationships 5. Satisfactory knowledge 6. Patient satisfaction 7. Improved health		Agent: Professional nurses Recipient: Patients with postpartum depression Procedure: Development of a model for the management of PPD Dynamics: Factors in the healthcare environment which affect the care of patients with PPD Context: Healthcare facilities in Edo state, Nigeria Terminus: Use of the model for the management of patients with PPD

5.2.2.1 Implementation of the survey list

The primary ideas' connections to the survey list are explained in the paragraphs that follow:

i) Agent

According to Dickoff et al. (1968), the agent relates to who will be liable for performing the activity. According to the developed model, this study refers to who will perform the nursing care. This will be the responsibility of the professional nurses employed by the various health facilities where patients with PPD are managed. The main concepts linked to the agent are:

- Competent patient-centred, holistic care
- Healthy nurse-patient relationships
- Satisfactory knowledge
- Patient Satisfaction
- Improved Health

ii) Recipient

These are individuals who will take part in the activity. Patients experiencing postpartum depression are the study's subjects. The main concepts linked to the recipient are:

- Inadequate infrastructure
- Competent patient-centred, holistic care
- Conducive healthcare environment
- Healthy nurse-patient relationship
- Satisfactory knowledge
- Patients' satisfaction
- Improved Health

(iii) Procedure

The procedure, according to Dickoff et al. (1968), refers to the guidelines and protocols for the activity. This study refers to developing a model for the nursing managing of patients with PPD. The main concepts linked to the procedure are:

- Inadequate infrastructure
- Competent patient-centred, holistic care
- Conducive healthcare environment
- Healthy nurse-patient relationship
- Satisfactory knowledge

iv) Dynamics

This refers to the factors in the healthcare environment that affect patients with PPD. The main concepts linked to dynamics are:

- Inadequate infrastructure
- Conducive healthcare environment
- Satisfactory knowledge
- Improved Health

v) Context

According to Dickoff et al. (1968), the context in this study is the healthcare facilities in Edo state, Nigeria. The main concepts linked to the context are:

- Inadequate infrastructure
- Competent patient-centred, holistic care
- Conducive healthcare environment
- Patients' satisfaction

- Improved Health

i) Terminus

According to Dickoff et al. (1968), the terminus is where the action comes to a halt– what will it achieve? The central concept linked to the terminus is:

- Patients' satisfaction
- Improved Health

5.2.3 Definition of main concepts

Concept synthesis then required empirically testing the hypotheses by consulting field notes, dictionaries, specialists in psychiatric nursing education, psychiatry clinical nursing practice, and the researcher's study supervisor. According to Dickoff et al. (1968), classifying concepts guides a deeper comprehension of the concepts and the formation of conceptual meaning. The seven ideas listed below are defined as follows:

1. Adequate infrastructure

Adequate infrastructure refers to the availability of good, durable physical facilities and organisational structures in the ward. The development of a model for the nursing management of patients with PPD, however, requires an adequate rather than inadequate infrastructure. Therefore, the concept will be framed positively as adequate infrastructure.

Dictionary definition:

i) Inadequate means "insufficient in quantity, or not good enough in quality, for a particular purpose or need."

ii) Infrastructure means "the basic physical and organisational structures and facilities (e.g., buildings, roads, power supplies, etc.) needed to operate a society or enterprise.

Subject definition:

Adequate infrastructure refers to buildings, equipment, furniture, communications, and ambulatory systems.

Summary:

Adequate infrastructure development within the framework of this study refers to the changes and advancement of the health facilities buildings, space, and the availability of ambulatory services for the transport of patients, which are currently lacking in Edo state.

2. Competent patient-centred, holistic care

Competent patient-centred, holistic care relates to skilled nursing care and other inter-professional care rendered, including rehabilitation and diversion therapy, determined by patients' particular needs.

Dictionary definition:

i) Competent means doing something, having enough skill or knowledge to do something well or to a necessary standard

ii) Patient-centred means that the treatment a doctor or a dentist provides is focused on each patient's needs.

iii) Holistic care refers to treating the whole person rather than just the symptoms or considering a whole thing or being to be more than a collection of parts.

Subject definition:

According to the Institute of Medicine, patient-centred care implies "providing respectful and responsive to individual patient preferences, needs, and values, and ensuring that patient values

guide all clinical decisions. Competent patient-centred, holistic care entails skilled multi-professional care for all the patients' needs.

Summary:

Competent patient-centred, holistic care in this context refers to nursing care of patients with PPD that provides the patient and their family with preferences. This includes providing nursing care that guides their values and decisions to uplift their morale (Long & Phipps, 2012).

Competent patient-centred care must be holistic and rendered in collaboration with all other professionals who care for the patient with maintained professional skills and current nursing standards. The care should also involve the patient's baby and family.

3. Conducive healthcare environment

A conducive healthcare environment refers to an environment that is safe and devoid of harm to the patient and everyone around her.

Dictionary definition

i) Conducive means making something accessible, possible, or likely to happen (Brunner & Suddarth, 2019).

ii) The healthcare environment means caring for somebody or something and providing what they need for their health or protection.

Subject definition

A conducive healthcare environment refers to caring for persons in a therapeutic setting at home or in hospital conditions that positively affect their health status. It provides the proper condition for something good to happen or exist, such as a quiet room that is conducive to a good night's sleep.

Summary

A conducive healthcare environment in this context means ensuring that the patient is nursed in a neat, safe environment where she is comfortable. The environment should include the availability of all health professionals to enhance patient management.

4. Healthy nurse-patient relationships

Healthy nurse-patient relationships in this context are based on professionalism, mutual respect, and positive attitudes.

Dictionary definition:

i. Healthy refers to enjoying health and vigour of body, mind, or spirit.

ii. Nurse-patient relationship refers to an interaction between a nurse and a patient to enhance the patient's well-being.

iii. Relationship refers to how two people behave towards or deal with each other.

Subject definition:

This refers to the relationship between a nurse and the patient she is caring for. The relationship is expected to be cordial, help boost the patient's morale, and build trust in the nurse, allowing for a good rapport (Brunner & Suddarth, 2019).

Summary:

A healthy nurse-patient relationship also refers to those cordial, professional interactions between patients with PPD and nurses, which increase rapport and enhance good interactions. It is therapeutic and builds confidence. The nurse should develop a good rapport with patients and their relatives from their first visit to the clinic or admission into the ward.

5. Satisfactory knowledge

Satisfactory knowledge in this context refers to the level of knowledge that nurses have on post-partum depression. Nurses generally knew, but some challenges were encountered in patient care.

Dictionary definition:

i. Satisfactory means good enough for a particular purpose or acceptable but may not be significant.

ii. Satisfactory knowledge is acceptable to you or fulfils a particular need or purpose.

Subject definition:

Satisfactory knowledge in this context means the nurse has sufficient information on all the possible risks and benefits of postpartum depression.

Summary:

Satisfactory knowledge means that the nurse has adequate knowledge about the quality and quantity of nursing care for postpartum depression at every stage of the patient's care, ranging from the critical stage to the continuous aftercare on discharge home.

6. Patient satisfaction

Patient satisfaction is essential in assessing the quality of care and healthcare facility performance. However, patient satisfaction is highest with empathy and lowest with tangibility.

Dictionary definition:

i. A patient is someone treated by a doctor or a dentist, etc.

ii. Satisfaction refers to the good feeling you have when you have achieved something as you wanted it.

Subject definition:

Patient satisfaction in this context is the extent to which patients are happy with their health care inside and outside the nurse's office. It is a measure of quality care.

Summary:

A PPD patient's satisfaction with the nursing care rendered is essential. The patient and her relatives should not have or hold any ill feelings towards the nursing activities rendered by the nurse while the patient is hospitalised. The patient should be happy and appreciate the nursing care rendered to herself, the baby, and her family.

7. Improved Health

Achieving health is important, especially for populations at risk and caregivers. Value in improved health care can be calculated by measuring outcomes as therapeutic interventions help improve health's physical, mental, and social components (David & Gourion, 2016).

Dictionary definition:

i. Improved health refers to becoming physically and mentally fit or better than before, to make something or somebody better.

Subject definition:

Improved health in this context refers to awareness of acquired individual behaviours, biological factors, social determinants of health, and individual healthcare decisions.

Summary:

Improved health means that the patient should be physically and mentally fit to handle her daily activities at home upon discharge from the hospital. This can be achieved by an integrative healthcare system that involves the active participation of the entire healthcare team.

5.3 STEP TWO: STATEMENT SYNTHESIS

Identification of the connections or interactions between two or more concepts is known as statement synthesis (Walker & Avant, 2014b). Based on the data gathered in step one's notion synthesis in this instance. The process's objective is to create assertions that result in theory synthesis and, in this study's context, the model development. By employing the survey list suggested by Dickoff et al. (1968), comprehension of relationships was improved. These statements might have auxiliary significance rather than being essential to the model, according to Chinn and Kramer's (2015) analysis. Understanding the relationship between ideas is essential since certain concepts may not be connected, be related to one another in a variety of ways, or be related to one another just in one way (Walker & Avant, 2014b). According to Chinn and Kramer (2015), this could lead to straightforward or complex relational claims. The creation of relationship assertions gives the model form (Walker & Avant, 2014b).

5.3.1 Relational statements of the model

Based on the relationship, the following relational statements were created that may, in this study, characterize, explain, or help to comprehend the phenomenon. The discussion of the relational statements is aligned with the steps in the Donabedian model.

1. Structure

According to the Donabedian model, the structure impacts the setting where care is delivered. This includes equipment, furniture, and organizational characteristics, such as staff development and payment processes (Grondahl, Karlsson, Hall-Lord, Appelgren, & Wilde-Larsson, 2011). This study's structure relates to the infrastructure required for managing patients with PPD.

i) Adequate infrastructure

Adequate infrastructure is essential for the effective functioning of any healthcare system. This applies to the infrastructure available at a macro and micro level of service delivery. As indicated in the definition of central concepts, infrastructure refers to physical and organisational structures and facilities lacking in Edo state. This relates to the provision of new facilities to replace the obsolete ones found in hospitals in this state. Adequate infrastructure is required to ensure competent patient-centred, holistic care and provide adequate nutrition and medication to patients by staff trained to render care to patients with PPD. Adequate infrastructure would also create a conducive healthcare environment, a requirement for improved health and patient satisfaction. Financial assistance from the government, the missions, and NGOs in better health budgeting and funding will improve the infrastructure.

2. Process

The Donabedian model refers to the process as the sum of actions that make up the health care rendered, consisting of the diagnosis of patients, treatment provided, preventive care, and actions taken by patients and their families (Dimick et al., 2016). This study's process refers to competent, patient-centred, holistic care, a conducive healthcare environment, healthy nurse-patient relationships, and satisfactory knowledge.

i) Competent patient-centred, holistic care

Competent patient-centred, holistic care requires nurses with satisfactory knowledge and skills to treat the whole person rather than just the symptoms. This care extends to the baby and includes members of the patient's family. Care will require the involvement of all other health professionals who care for patients with PPD to ensure that all the necessary health-related aspects of the patient's care are managed. Competent patient-centred, holistic care depends on a conducive

healthcare environment with adequate infrastructure. Healthy nurse-patient relationships can be fostered when these criteria are met, leading to improved health and patient satisfaction.

ii) Conducive healthcare environment

A conducive healthcare environment provides adequate infrastructure and a calm atmosphere. It allows for good rapport and encourages inter-professional relationships that ensure competent patient-centred, holistic care for patients. A conducive healthcare environment requires a healthy nurse-patient relationship. This is therapeutic and enhances a patient's satisfaction with nursing care, enabling improved health. It implies a safe environment for both patients and caregivers.

iii) Healthy nurse-patient relationships

A healthy nurse-patient relationship is based on mutual respect, professionalism, and a positive attitude toward patient care. This can be enhanced when the nurse has satisfactory knowledge of PPD, thus making it possible to be extended to the patient's family, as this will help to boost the patient's morale and build trust in the nurse. A healthy nurse-patient relationship will thrive in a conducive healthcare environment with adequate infrastructure, resulting in incompetent patient-centred, holistic care. It will positively affect the patient's relatives, enhance collaboration with other healthcare professionals caring for them, and improve health and patient satisfaction.

iv) Satisfactory knowledge

Satisfactory knowledge of postpartum depression is vital for the nurse, the patient, and the relatives. This knowledge must be of good quality and quantity to be adequate. Nurses should be provided with the resources to implement their knowledge in a conducive healthcare environment with adequate infrastructure that focuses on current nursing care trends using models to manage PPD. It is also vital to educate patients and their relatives to improve their knowledge of PPD and

improve the patient's care at home upon discharge from the hospital to prevent relapse and reoccurrence. The nurse should remember that she needs a healthy nurse-patient relationship is therapeutic and can be used to avert suicidal ideation and intent by using professional skills in collaboration with other healthcare professionals to enable the achievement of competent patient-centred, holistic care for the patient. This culminates in achieving enhanced patient satisfaction with nursing care rendered and improved health.

3. Outcome

According to the Donabedian model, patient outcomes include behavioural changes, health knowledge, and patient satisfaction (Donabedian, 2003). In this study, outcome refers to patients' satisfaction and improved health.

i) Patients satisfaction

Patient satisfaction is an assessment tool for quality health care rendered to patients. The patient and her relatives should feel optimistic about the care nurses provide in the hospital or clinic. Satisfactory knowledge of PPD assists the nurse in using her professional skills to satisfy the patient's and her relatives' preferences while rendering care. A healthy nurse-patient relationship will boost the patient's morale, and self-esteem as decisions about her care are jointly taken by all the caring professionals with the patient's and her family's consent (Walker & Avant, 2014b). This will enable competent patient-centred, holistic care to be accomplished. This is achieved in a conducive healthcare environment with adequate infrastructure, leading to patient satisfaction and improved health.

ii) Improved health

Therapeutic interventions help to improve physical health. The patient and her relatives learn to recognise the nurse's satisfactory knowledge of PPD in conjunction with the competent patient-centred, holistic care rendered. Healthy behaviours and decisions are made in a conducive healthcare environment with adequate infrastructure. This is accomplished through a healthy nurse-patient relationship, enhancing patient satisfaction and improved health. To attain improved health, the patient should comfortably fit into her hospital and home environment. Using the model with its integrated healthcare profile and the collaboration of the entire healthcare team, improved health is attainable within the shortest possible time frame.

5.4 STEP THREE: THEORY SYNTHESIS

Synthesis uses empirical data arranged into a network of interconnected concepts. However, conceptual frameworks and pictorial representations also highlight the connections between the statements that characterize a theory. Synthesis is frequently provided in an explanatory format (Walker & Avant, 2014b). The goal of this study was to develop a model for nursing management of PPD based on the research findings.

Figure 5.2 represents the model developed to meet the final objective of the study.

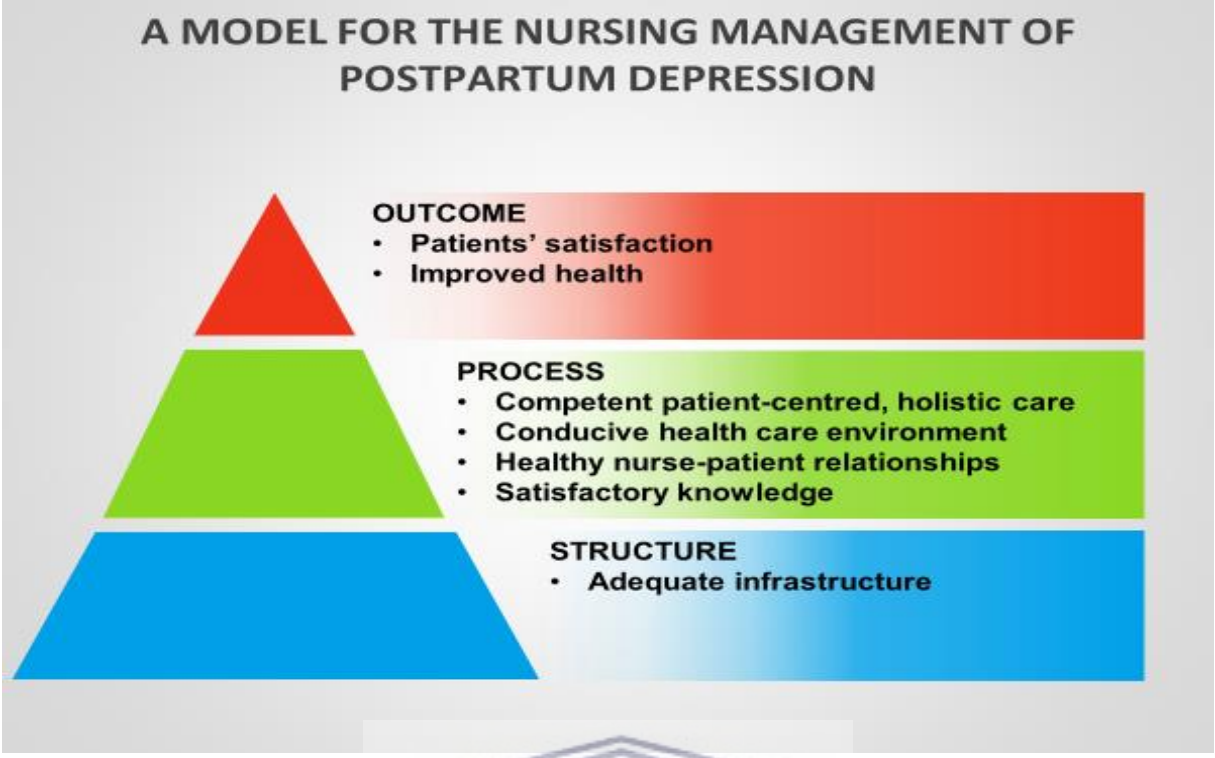


Fig 5.2 Model of the structure, process, and outcome for the nursing management of post-partum depression

5.4.1 Overview of the model

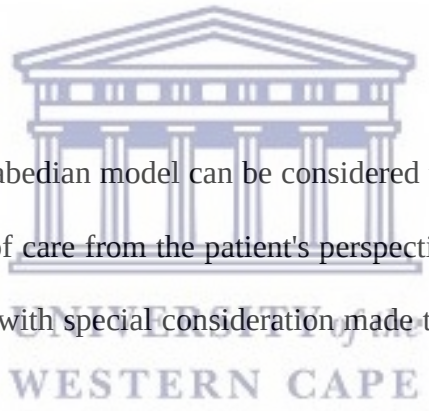
The structure shown in Fig. 5.2 is the foundation for the model's high-level view. The model for nursing management of postpartum depression in Edo state, although simple in its structure, is patterned to exhibit the processes for managing postpartum depression and is framed according to the tenets of the Donabedian framework used in this study. The model shows the relationships between structure, process, and outcomes that lead to improved health and patient satisfaction, which according to Dickoff et al. (1968), is the terminus or end point of the activity and answers the question: what will it achieve? This relates directly to the problem statement, significance, and purpose of this study.

5.4.2 Purpose of the model

The purpose of developing the model is to provide a visual presentation of the key elements for restoring adequate nursing care for patients with PPD in Edo state. The Operationalisation of this model could potentially provide input into the development of a model of a more pragmatic nature and can be explored in future research.

5.4.3 Agent of the model

The Donabedian model already includes the concept of the provider, which can be considered the agent in this context. The provider is responsible for delivering care and in this study is represented by the nurses providing care to the patients.



5.4.4 Recipient of the model

The recipient of care in the Donabedian model can be considered the patient or client. The focus is on understanding the quality of care from the patient's perspective. Throughout this study, the recipient was the primary focus with special consideration made to ensure their perspective was sought.

5.4.5 Context of the model

Data was gathered from four selected hospitals in Edo state to develop a model to be used in all the health facilities in the state. The quantity and calibre of the evidence will determine how generalizable the model is (Chinn & Kramer, 2015). In addition, generalisability depends on the nature of contexts that can be applied, compared to Edo state.

5.4.6 Assumptions of the model

The following assumptions are made for the effective implementation of the model:

1. The health budget at the national and state levels will be reviewed to ensure budgeting for adequate infrastructure in health facilities.
2. Competent patient-centred, holistic care will be provided when nurses work in a conducive healthcare environment.
3. The nurses will be re-educated on the model for managing patients with PPD to ensure that due nursing care is rendered.
4. Patient satisfaction and improved health are influenced by the quality of health care, relationships with health care providers, the adequacy of the health care environment, and the infrastructure where care is provided.
5. In-service training and other opportunities for staff development will be made available and used to improve healthcare workers' knowledge of managing patients with PPD.
6. The nurse will establish a culture of inter-professional collaboration with other health professionals caring for patients with PPD. This will ensure holistic care for patients.

5.4.7 Structure of the model

A model is a collection of ideas and claims that are combined and explain how the ideas relate to one another, allowing for a fuller comprehension of a reality (Fawcett & Ellenbecker, 2015). Chinn and Kramer (2015) contend that relationships between concepts must be illustrated in a framework to be recognized and demonstrated. Therefore, the key concepts are compiled in diagrammatic form, as in Figure 5.2 above, and the model illustrates the connections between the concepts. Figure 5.2 represents the proposed model for the nursing managing of postpartum depression in Edo

state. The triangular framework is based on the findings that indicate that structure at the triangle's base is imperative for providing the foundation or infrastructure on which the process of managing patients with PPD can occur. The inner or middle part of the triangle represents the process of care. The third part of the triangle represents the terminus or top of the triangle, which appropriately relates to patient satisfaction and improved health, which would be the ultimate hoped-for outcome of this research.

5.4.8 Descriptions of the concepts in the model

The developed model offers the practical meaning of the main concepts. By combining dictionary definitions with definitions found in nursing literature, the operational definitions were discovered earlier in 5.2.3. These definitions were then discussed with reference to the core and related concepts.

Figure 5.2 suggests that the goal/target or outcome of effective management of postpartum depression is patient satisfaction and improved health. The process, however, must be adequate and must be supportive of the achievement of the outcome. This includes a conducive healthcare environment where nurses with satisfactory knowledge can provide competent patient-centred, holistic care while having healthy nurse-patient relationships. Figure 5.2 further illustrates that the structure is a fundamental requirement for achieving the outcome. Key to the structure is adequate infrastructure.

5.4.8.1 Discussion of the concepts in the model

The following is a discussion of the model's central concepts, supported by the literature.

Structure:

Adequate infrastructure

Only a few health facilities in Edo state actively manage patients with PPD. The conditions at these health facilities are inadequate, as some buildings are dilapidated and unsuitable architecturally. The government must improve health facilities. The budget for health must be increased to improve the physical and human resources to help improve the health of patients with PPD. Literature reveals that adequate structures enhance and improve the health of patients. In developed countries like the United Kingdom, the United States of America, and the Kingdom of Saudi Arabia, the structure of healthcare facilities can be equated to comfortable hotels compared to those in developing world countries like Nigeria.

Luxon (2015) opined that "adequate infrastructure must integrate the hospital as the centre for acute and in-patient care into the broader care system. Adequate infrastructure includes the physical building environment and supporting elements such as access to equipment, information technology systems and processes, sustainability initiatives, and staff. Overall, these interwoven facets should enable patients to move seamlessly while maintaining their privacy and dignity from initial referral to discharge home. Arah, Klazinga, Delnoij, Ten-Asbroek, and Custers (2013) state that adequate infrastructure "is the key pillar supporting improved standards of care and wellbeing for all patients together with a good experience of the health care system. In addition, a secondary aim must be to improve the wellbeing of staff as this is integrally related to ensuring improved care for patients". Wards and patient areas should have space, light, and a good view, wherever possible, to promote a patient-friendly and healing environment.

Existing buildings may require reconfiguration to promote seamless and efficient healthcare with specific services at specific sites. Such provision across the whole health care pathway should be supported by integrated medical, nursing, and multi-professional health care services according to the Bromley by Bow Centre

Appropriate medical equipment must be available and fit for purpose, as required for delivering high-quality clinical services. It must be evaluated, and appropriate new technologies introduced, ensuring that the requirement for medical equipment care is factored into service development proposals.

Adequate infrastructure should have fully integrated information technology systems that support information to ensure that patients, carers, and health professionals can access the information they need as and when they need it. This will improve care outreach by reducing travel, health visits, and inpatient provision to support improved health care (Beauchamp & Childress, 2020). Adequate infrastructure should accommodate multi-disciplinary teams with the emergence of new healthcare roles, including physician assistance and advanced nurse (clinical) practitioners (Batalden, Batalden, Margolis, Seid, Armstrong, Opipari-Arrigan & Hartung 2016). Staff planning should focus on optimising quality patient care, irrespective of the professional category, and ensuring cost-effective and resource-efficient use of all staff.

In conclusion, adequate infrastructure, processes, and personal arrangement are critical to the aims and objectives underpinning a new approach to healthcare that will ensure cost reduction, efficiency, sustainability, and improved health.

Process:

Competent patient-centred, holistic care

Competent patient-centred, holistic care that is all-inclusive is what the patient needs to achieve improved health. The patient's health should be the nurse's primary concern. The patient is the pivot around which the nurse and all other healthcare professionals care for the patient. Competent patient-centred, holistic care increases when nurses have adequate knowledge of the condition of the patient and the expected care that should be given. It is a goal for enhancing health outcomes. It is a dynamic and multifaceted process according to the nurse's understanding of the concept. It does not involve repeating routine tasks but requires an all-embracing understanding of the patient and showing respect for her values, needs, and preferences: competent patient-centred, holistic care centres around adopting a humanistic viewpoint in care provision. The patient has to be accepted, focusing on her values and human potential while maintaining her human dignity, "bill of rights," and needs (Bechtel & Ness, 2015). Competent patient-centred, holistic care involves paying careful attention to the patient's needs and preferences, performing continuous assessments to identify her needs, and taking immediate actions to satisfy these needs and preferences. Competent patient-centred, holistic care establishes therapeutic communication and individualisation of care based on an individual's unique needs and problems and their demographic, physical, and psychosocial characteristics. The result of such patient and situation-specific care is greater satisfaction for the patient and nurse. According to Bechtel and Ness (2015), competent patient-centred, holistic care requires a situational analysis using nursing knowledge that helps identify the patient's needs and problems. Hudon (2012) states that "competent patient-centred, holistic care is achieved by obtaining rich information from patients about their condition, which is necessary to enable

nurses to manage patients. Individuation can lead to improved quality of care, shorter hospital stays, reduced infection rate, and fewer patient complaints".

A holistic approach can help meet patients' needs by identifying and understanding its determinants and improving the quality of health service delivery through a continuous improvement process. Nurses should not provide obligation-centred care but competent, patient-centred, holistic care (Morstal, 2014). Decreasing patients' vulnerability and involving them in collaborative care with other healthcare providers improve their safety and is essential for competent patient-centred, holistic care. Understanding cultural differences and the personal attributes of the patient and their family is essential in competent patient-centred, holistic care (Morstall, 2014).

Conducive healthcare environment

A conducive healthcare environment demands being a good guest and involves knowing and adhering to the established routine policies and practices of the setting (Gaberson, Shellenbarger & Qerman, 2022). It also requires healthy interpersonal relationships between staff and patients. Ali and Wael (2015) commented that early practical experience in an excellent conducive healthcare environment ensures nurses opportunities to apply and integrate their previous knowledge, develop interpersonal skills, and appreciate the value of patient-centred care. It can help to improve nurses' bedside manner significantly. This can be attained through experience, where patients, peers, and ward staff mentors provide adequate support and feedback to patients and their families, which can help change the management of patients (Henderson, 2018). A conducive healthcare environment has available role models for staff relationships with other professionals, providing opportunities for interdisciplinary activities (Gaberson et al, 2022).

Smith and Megumi (2021) state that some nurses display a dismissive attitude toward patients in a hostile and oppressive atmosphere, which leads to the patient viewing them as unapproachable. Nurses in a conducive healthcare environment should be friendly and receptive to their patient's needs and feel free to approach them when they need assistance. Ali and Wael (2015) opined that a conducive healthcare environment should have effective nurses capable of enabling patients' involvement, interaction, and participation, thereby promoting positive and improved health. Systemic issues and time constraints may be encountered that need to be addressed to support the delivery of effective emotional care to childbearing women (Jones & Shakespeare, 2014).

Healthy Nurse-Patient Relationship

A therapeutic, healthy nurse-patient relationship is defined as a helping relationship that is based on mutual trust and respect; the nurturing of faith and hope, being sensitive to self and others and assisting with the gratification of patients' physical, emotional, and spiritual needs through knowledge and skills (Pullen & Mathias, 2020). The nurse-patient relationship has been proven to affect the health-related outcomes of the patient. A positive therapeutic relationship includes showing empathy, building trust, advocating for the patient, providing knowledgeable feedback, and responding to patients' unmet needs. This professional relationship can enhance patients' satisfaction and the entire core experience. Nurses have the opportunity to heal the heart, minds, souls, and bodies of patients and their families. Patients may not remember your name, but they will never forget how you made them feel. A nurse-patient relationship is vital for the patient's well-being. It can also benefit the nurse's mental health and establish a balance between compassionate care and professionalism, which is critical in connecting with the individuals they are treating. A strong nurse-patient relationship facilitates cooperation and promotes greater opportunities

to learn about a patient's unique health needs. This enables nurses to better connect patients with the treatments and resources necessary to improve their overall health, reduce the number of days of hospital stay, and improve the quality of care (Molina-Mula & Gallo-Estrada, 2020).

Satisfactory Knowledge

If ignored, PPD can have long-term adverse consequences for both mother and child; timely identification of its risk factors requires the care provider's good knowledge base. Afolayan et al. (2016) recommended that periodic suitable training programmes on PPD should be developed for nurses who are the first point of contact to enhance their knowledge. Mental illnesses postpartum have long-lasting consequences. Nurses are often the most frequent contact, with the potential for the early detection of mental illness. Despite good awareness and knowledge, applying this in practice and using validated assessments is poor. This may probably explain why Sri Lanka has a high prevalence of PPD, suggesting urgent attention (Patabendige & Athulathmudi, 2020).

Emotional care provided by nurses may improve health and well-being, but the care can be challenging and requires a good knowledge base for the provider to screen and assist distressed women. There are critical knowledge deficiencies relating to the onset, assessment, and treatment of PPD symptoms and a need for continuing professional education to improve knowledge and competency in assessing and caring for women suffering from PPD (Patabendige & Athulathmudi, 2020). Satisfactory knowledge can be measured by using multiple methods of assessment (Gruppen & Frohna, 2013). In this study it was measured informally by using feedback from participants to drive improvement.

Outcome:

Patients' satisfaction

The level of patient satisfaction is an important care health indicator regarded as a determinant of quality of care. There is an excellent opportunity to improve patient satisfaction when the quality of service is improved. Devising strategies to routinely assess the satisfaction level of patients in the health facility is critical. Furthermore, providing tailored on-the-job training for healthcare workers in the facility is a crucial step to improve their knowledge and skills to render patient-centered, quality service to improve their patients' satisfaction. A checklist may be used during service delivery (Nebsu et al., 2020). Patient satisfaction is critical to performance improvement and clinical effectiveness. Patient satisfaction is a perception and an attitude that a consumer has toward a total experience of health care. It is a multi-dimension aspect relating to the quality of healthcare delivery (Al-Abri & Al Balushi, 2014).

Various dimensions of patient satisfaction have been identified from admission to discharge processes, waiting time, and medical care to interpersonal communication (Abdul Fattouh, Gadanya & Ahmed, 2017). General amenities at the facility and structural design were also among the identified dimensions which significantly affected patients' satisfaction levels, while the socio-demographic and economic status of patients and their expectations of care and attitudes towards the health care system were among the dimensions identified to have a direct influence on patients' satisfaction. Other psychosocial factors, including pain and depression, are also known to contribute to patients' satisfaction level scores (Al-Abri & Al Balushi, 2014).

Hence, the focus should be on improving all these aspects of health care organisation and the quality of health service delivery to ensure patients' satisfaction, acknowledging that continuous

quality improvement is linked to timely and valuable feedback from clients (Renzi, 2015). According to Sran et al. (2017), a patient's care is not considered to be of high quality unless the patient is satisfied. In this regard, Umoke, Umoke, Nwalieji, Onwe, Emmanuel, and Nwimo (2020) stated, "Hospital managers should focus their quality improvement efforts on hygienic conditions at the hospital. Also, biannual assessments of patients' satisfaction should be done, and the result generated should be used judiciously to provide a platform for health sector reform".

Nurses generally want their patients to be satisfied by attending to their healthcare needs (Hachem & Caner, 2014). Ongoing measurement of patient satisfaction gives insight into the worker's progress toward patient satisfaction and is a significant factor in determining patients' expectations (Xesfingi, 2016). Health workers' attitudes toward patients, their ability to offer immediate attention to send information, and the nurse's willingness to explain procedures to patients affect patient satisfaction. Alkins et al. (2014) state that the extent to which patients are satisfied will improve adherence and the patient return rate.

Aigbavboa and Thwala (2013) observed that patients' satisfaction is a judgment, feeling, or response that patients have if their needs are met. A variety of factors influence patient satisfaction. In addition to those already mentioned, Zerei et al. (2015) state that "charges for services, quality of the procedure, and excellence of communication on health matters had the greatest effect on patients' happiness. Other factors include health personnel, water disposal, admission procedures, and diagnostic services". At the same time, Ejim (2014) opined that "patients decide on the quality of health care as it relates to the compassion, answers, information, and care they receive."

Patient-reported outcome measures (PROMs) are standardized questionnaires that ask patients about their health status and quality of life. These measures can be used to assess the impact of

healthcare interventions on patient outcomes and can help identify areas for improvement. PROMs will be recommended as the primary means of measuring patient's satisfaction (Basch, 2017). Witts, Chiaramonte, and Berman (2017) opined that value in health care could be calculated by measuring outcome, divided by cost, as patients' choices are essential to increasing value and reducing cost. Improved health requires awareness of social determinants of health and individual choice in health care decisions. Although improved health is vital to the patient, it is also essential for the caregivers. Staying healthy is important, particularly for the population at risk and caregivers responsible for the well-being of those who depend on them.

Health care exists to help people maintain an optimal state of health. Good health is central to having less stress and a longer, more active life. Improved health equates with a healthy lifestyle that provides the means to lead an entire life with meaning and purpose. It also enhances the ability of the body to adapt to new threats and infirmities. It is harder to define mental health than physical health because many psychological diagnoses depend on an individual's perception of their experiences. With improvements in testing, however, doctors can now identify some physical signs of mental illness in CT scans and genetic tests. WHO (2018) stated that "Good mental health is not only categorised by the absence of depression, anxiety, or another disorder, it also depends on a person's ability to bounce back after a difficult experience and adapt to diversity, different balance elements of life such as family and finances, feel safe and secure, and achieve their full potential." Knowledge of what to do about the escalating burden of PPD has improved over the past decade. WHO (2018) stated, "A range of effective measures now exist for the prevention of suicide, dementia, and child psychosis. The mental health Gap Action Program (mh GAP) has produced evidence-based guidance for non-specialists to enable them to identify better and manage a range of priory mental health conditions". In 2013, the World Health Assembly proposed "a comprehensive

Mental Health Action plan for 2013-2020" to promote and improve mental wellbeing and enhance recovery. Ministries of health will need to work with the WHO to implement this plan. Since no single action fits all countries, each government will need to adapt the action plan to its specific national circumstances to achieve improved health.

5.4.9 Model operationalization

The phases of the Donabedian model, Structure, Process, and Output will describe the model's operationalization for managing patients with PPD in Edo State. The model will be described in the context of the hospitals used in the study because of their involvement in the nursing management of patients with postpartum depression in Edo state.

Table 5.3: Operationalisation of the model

Guideline based on Donabedian Model	Strategies	Responsible person(s)

Structure
Guideline 1:
The health budget at the national and state level should be reviewed to ensure adequate budgeting for infrastructure at health facilities in Edo state
	• Review health budget at national and state levels to increase adequate infrastructure at health facilities in Edo state. Appeal to the government, the missions, and NGOs to increase health budgeting.
	• Provide more psychiatric facilities in Edo state.
	• Renovate the existing facilities.
	  ○ Wards should be built with bay systems
	  ○ Construct village wards for patients
	  ○ Allocated a specific number of beds for the care of PPD in all government health institutions in the state
	  ○ Provide bed space for patients with PPD at private hospitals
	• Provide new facilities to replace the obsolete facilities
	• Remove harmful equipment from the ward
	• Procure more vehicles for home visits to ensure follow-up and monitoring of drug compliance while the patient is at home.
	• Employ more qualified nurses to ensure an acceptable staff-to-patient ratio.
	• Ensure sufficient drug supply for the management of patients with PPD.
		The Federal, state, local government, and Nongovernmental organisations (NGOs).

Process Guideline 2:	• Collaborate with all other professionals involved in patient care to achieve quick recovery.	Professional nurses, other health care professionals,

Ensure competent patient-centred, holistic care	• Use professional skills in patient care.
	  ○ Evaluate and ensure current nursing standards are maintained
	  ○ Establish a culture of inter-professional collaboration with other health professionals caring for patients to ensure holistic care for patients
	• Involve the patient's relatives in all clinical decisions on her health.
	• Embrace holistic care for patients.
		patients, and their families

Guideline 3:
Provide a conducive healthcare environment, inter-professional communication, and management strategies for patient care
	• Provide a calm, safe and clean environment for the patient.
	  ○ Provide the specific wards/ units and departments that manage patients with PPD
	• Monitor patients' treatment using professional skills.
	  ○ Ensure that standard operating procedures are followed
	  ○ Ensure patients' values guide all the care provided
	• Develop inter-professional communication and management skills to support patient care.
		Professional nurses, other health care professionals, and the hospital management

Guideline4:
Create healthy, professional nurse-patient interactions that build cordial relationships
	• Base relationships on professionalism and mutual respect.
	• Develop a positive attitude towards patient care.
	  ○ Respect the patient
	  ○ Avoid stigmatisation
	  ○ Enhance good interaction with the patient
		Professional nurses

	○ Build patient's confidence in your care ● Create awareness among the public about PPD. ● Have a cheerful disposition. ● Attend in-service training to keep abreast of current trends in the nursing profession.	
<u>Guideline 5:</u> Provide adequate knowledge (quality and quantity) on the care of patients with PPD	● Improve knowledge of the care of patients with postpartum depression. ● Plan and implement in-service training for nurses on caring for patients with PPD. ● Re-educate nurses on the care of patients with PPD ● Sponsor scholarships or grants for staff to attend courses to enhance their knowledge of PPD ● Encourage inter and multi-departmental therapeutic PPD management seminars at hospitals ● Recognise the official State celebration of the annual World Mental Health Day. ● Legislate and enforce laws to reduce the stigmatisation of patients with PPD. ● Develop and implement awareness campaigns to educate the public on the predisposing factors of PPD. ● Implement health literacy campaigns to educate and prevent stigmatisation of patients.	Professional nurses, the Federal government, state government, local government, hospital management board, and NGOs.

Outcome
Guideline 6:
Ensure patient satisfaction
	• Take decisions that are not detrimental to the patient's progress in health.
	• Assess quality nursing care rendered to the patient.
	  • Develop a feedback mechanism to assess patient care
	  ○ Ensure the use of good communication skills in patient care
	  ○ Maintain patients' physical comfort and emotional support
	• Collaborate with other health professionals to render quality care to patients.
	• Keep patients in the village ward until they are well enough to go home.
	• Carry out procedures with professional skills.
	• Deliver patient-centred care.
	• Have regular consultations with patients to discuss their progress.
	• Involve the patient's relatives in the nursing care.
		Professional nurses, patient's family, patients, and other health care professionals

Guideline 7: Use professional skills to assess patients' improved health	• Evaluate therapeutic interventions. • Collaborate with other health professionals to render quality care to patients. • Conduct a formal assessment of patients' coping skills according to a structured plan. • Monitor the healthy behaviour of patients and their relatives. • Evaluate patients' fluent communication skills. • Monitor as the patient accepts and cares for her baby	Professional nurses and patients

	○ Observe as the patient carries out all her activities of daily living unassisted ● Ensure the patient communicates more frequently.	

5.4.10 Validation of the model

According to Sousa (2014), validation is a crucial step in the theory-generation process since it allows the researcher to determine whether the target group comprehends the meaning intended for the concepts used to build the model. Validation was sought by presenting the model to two senior lecturers in psychiatric nursing in the Department of Nursing, University of Benin, Benin City, and two nurses in psychiatry clinical practice at the Federal Neuro Psychiatry Hospital, Uselu, Benin City to verify the model's significance, generality, clarity, and simplicity, as well as its accessibility. The model was also presented to the Director of Nursing in charge of curriculum and policy development of the education unit of the Nursing and Midwifery Council in Edo state. The critical reflection questions pertaining to the theory's validity were taken from Chinn and Kramer (2015).

Clarity

The model's definitions must be understood clearly in order for there to be clarity. Additionally, it shows whether the model's structural description matches the model's description. After changes were made, the professionals expressed their satisfaction with the clarity. A member of a university said:

"*The arrows are now appropriately indicating the direction of the concepts, and the concepts are adequately stated" (Professor of mental health and psychiatry nursing).*

Simplicity

Simplicity seeks to determine if the model is clear and straightforward. The model is simple and only uses seven ideas. Respondents in the review agreed that it was straightforward to grasp. Its precise explanation served as proof of the model's simplicity. The Director of Nursing in charge

of curriculum and policy development of the education unit of the Nursing and Midwifery council in Edo state expressed:

"*The model is simple and apt."*

Generality

The model's relevance in other fields of nursing was acknowledged. The expert from the Nursing and Midwifery council's education unit understood the concepts and acknowledged their applicability in all aspects of nursing education. Although it was carried out in Nigeria's Edo state.

Accessibility

The researcher intends to propose the model to the Education Unit of the Nursing and Midwifery Council of Nigeria so that they may recommend it be used nationally. This goal is still being pursued.

Importance

There is no model currently utilized in Nigeria for mental health or psychiatric nursing care of PPD. As a result, the proposed model is significant since it will act as a benchmark for treating patients with PPD in Edo state.

5.5 SUMMARY

The second stage of this research project was to establish a theoretical foundation for postpartum depression treatment in Edo state. The development process was thoroughly described in this chapter. The model was developed by extracting ideas from the assertions derived from the analysed data of phase one and constructing meaning from the concepts discovered, which served as the basis for building the model.

The steps mentioned by Walker and Avant (2014b), Chinn and Kramer (2015), and Dickoff et al. (1968) were crucial in building the model and comprised concept composition, statement formulation, and theory generation. The following aspects of the model were presented: an overview, structure, purpose, assumption, context, and a description of the process for evaluating the model. Strategies for the Operationalisation of the model were also tabulated.

Chapter six will present the conclusion of the study, the limitations of the study, and finally, recommendations will be made.

CHAPTER SIX

CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

6.1 INTRODUCTION

The previous chapter presented the development of a model for the nursing management of PPD in Edo state, Nigeria. The thesis's concluding chapter summarizes and recommends Chapters 1 through 5. The presentation of limitations of the study and recommendations are also presented in this chapter.

6.2 SUMMARY AND CONCLUSIONS

This study aimed to develop a model for the management of PPD in Edo state, Nigeria. Four objectives were outlined for this study. They were:

- To explore the knowledge of professional nurses regarding nursing care for patients with PPD.
- To establish the experiences of professional nurses, medical social workers, clinical psychologists, and patients who have recovered from PPD regarding the nursing care practices and their effectiveness in managing patients with PPD.
- To determine the nursing care of patients with PPD through the review of documents.
- To develop a model for the management of PPD based on the study's findings.

In-depth interviews and focus group discussions were conducted in the first phase of the study among the professional nurses, medical social workers, and clinical psychologists who cared for patients with PPD, and patients who were nursed and recovered from PPD. The themes and categories that emerged from the data were produced using an inductive technique.

In the second phase of the study, patients' documents were reviewed. Concluding statements were then generated from the analysis across phases one and two.

A model for the management of PPD in the Nigerian state of Edo was developed in the third part of the study using concepts extracted from the concluding statements.

The model development process adopted instructions provided by Walker and Avant (2014), Chinn and Kramer (2015), and Dickoff et al. (1968). Critical reflection questions suggested by Chinn and Kramer (2015) were used to analyse and validate the model. The phases of the Donabedian model were then used to establish the operationalization recommendations. Phases one and two of the study's successful execution allowed the researcher to accomplish the study's objectives.

6.3 LIMITATIONS

The following limitations of this study have been identified:

- The model developed is intended to serve as a guide to nursing care for managing PPD in Nigeria. The research was conducted only in Edo state of Nigeria and may not be contextually relevant to other states.
- The study was restricted to Edo state only and the number of participants was limited, thereby compromising its transferability. However, the study design provided a rich understanding of the phenomenon.
- The researcher could not access the nurses simultaneously for focus group discussions; therefore, in-depth interviews were conducted based on their availability. This extended the data collection time because the researcher had to make several trips to the data collection site.

Despite these drawbacks, the results of this study can be utilized to guide practice and policy in treating postpartum depression patients in Edo state.

6.4 RECOMMENDATIONS

The following recommendations are based on the research findings:

6.4.1 Recommendations for nursing education

- An orientation session should be arranged for lecturers to ensure that nurses in training are well-educated on the current nursing management of PPD using the developed model.
- Nurse educators and professional nurses should plan frequent stakeholder meetings and seminars to discuss topics relating to the nursing management of PPD using the created model.
- Nursing training colleges should establish a program for upskilling preceptors in clinical settings who would assist student nurses in the nursing management of PPD.

6.4.2 Recommendations for nursing practice

- Nurses should create good therapeutic relationship with other members of the care team (doctors, clinical psychologists and the medical social workers) to enhance good nursing care of the patient.
- Nurses should undergo more mental health education to upgrade their knowledge and skills in the current trends and nursing management of patients with postpartum depression in Edo state.

- Weekly ward meetings should be carried out in the wards with the patients and all the caregivers to find out the current needs of the patients so that it can be incorporated into their immediate nursing care.
- A ward program should be created having different ward activities with a range of interventions such as more psychotherapy, therapeutic skills, drama, games and dancing sessions. During which there is incorporation of mental health education and coping strategies for postpartum depression.
- Ward mangers should encourage and supervise the nurses to implement therapeutic interventions in the ward.
- Encourage professional nurses and nurse educators to participate in developing laws, instructions, and training about the nursing treatment of patients with PPD.
- Patients with PPD should be admitted into psychiatric units and not among patients with normal puerperium.

6.4.3 Recommendations for nursing research

- After successful implementation, a deeper examination of the developed model should be done.
- Research should be conducted on factors contributing to professional nurses' negative attitudes toward patients with PPD.
- A health economic study should be conducted to establish the expenditure of health funding for health care infrastructure and its impact on patient care in Edo state, Nigeria.

6.5 CONCLUSION

PPD is rising in Edo state; however, managing PPD has proven difficult across all Nigerian states, not just this one. The nursing practice in Edo state has been hampered by the lack of a conceptual paradigm for handling PPD patients in hospitals. The lack of a model that guides the management of PPD was the precursor to the challenges professional nurses experienced while caring for patients with PPD.

This research aided in development of a model for treating patients with PPD by highlighting several difficulties. The model has the potential to positively reverse existing challenges and improve the maternal obstetric mental morbidity rate in Edo state. Complications stem from the fact that the patients are not skilfully nursed to reduce the incidence rate, which often compounds their problems. An inadequate environment, an unconducive healthcare environment, non-holistic patient-centred care, and non-collaboration with other healthcare professionals in the patient's care also compounded the problem. Health education to the patient and her relatives, a friendlier hospital environment through improved infrastructure, a change of attitude from the caregivers, and the use of the model might bridge the gap and significantly improve the management of PPD in Edo state.

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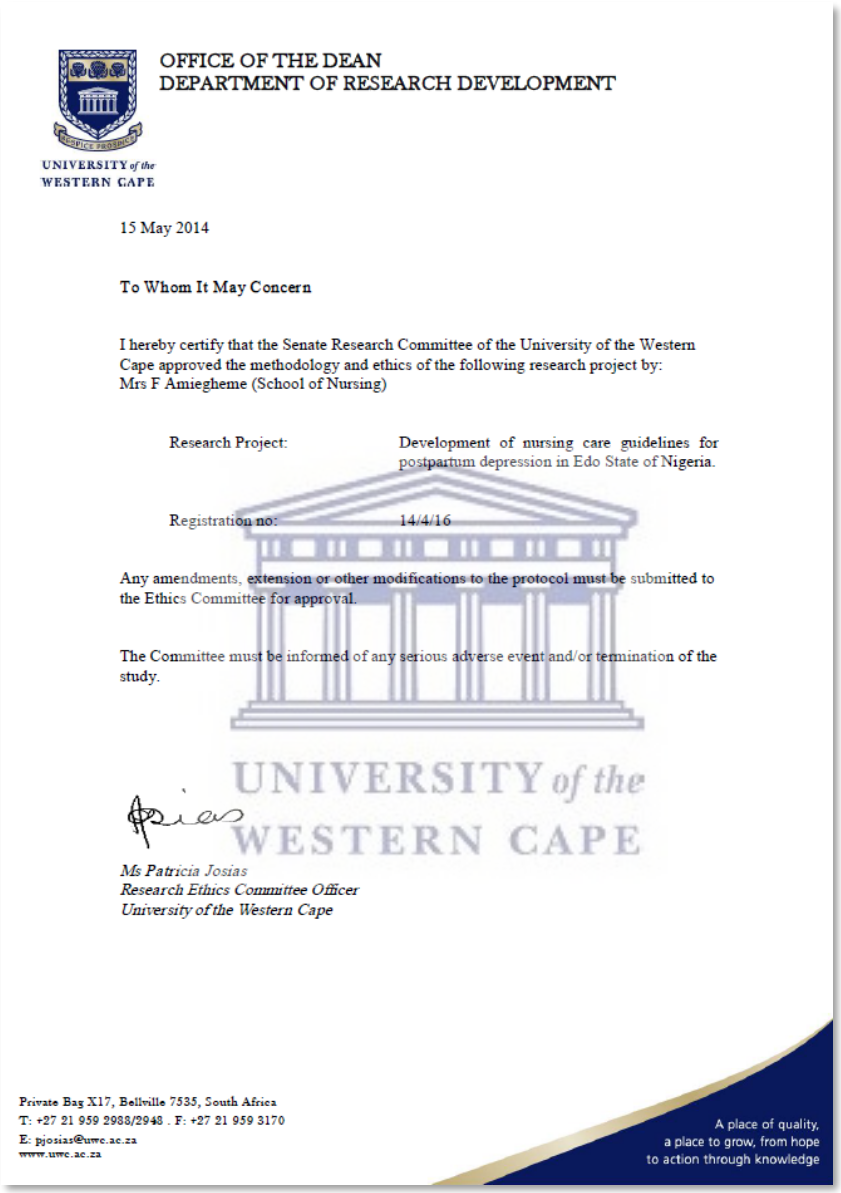
APPENDICES

APPENDIX I

ETHICS CERTIFICATE



OFFICE OF THE DEAN
DEPARTMENT OF RESEARCH DEVELOPMENT

UNIVERSITY of the
WESTERN CAPE

15 May 2014

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by:
Mrs F Amiegheme (School of Nursing)

Research Project: Development of nursing care guidelines for postpartum depression in Edo State of Nigeria.

Registration no: 14/4/16

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

UNIVERSITY of the
WESTERN CAPE

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

Private Bag X17, Bellville 7535, South Africa
T: +27 21 959 2988/2948 . F: +27 21 959 3170
E: pjosias@uwc.ac.za
www.uwc.ac.za

A place of quality,
a place to grow, from hope
to action through knowledge

APPENDIX II

CHANGE OF TITLE: UPDATED ETHICS CERTIFICATE

UNIVERSITY of the WESTERN CAPE

60 YEARS of hope, action & knowledge

18 October 2022

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape, at its meeting held on 9 May 2014, approved the methodology and ethics of the following research project by Mrs F Amiegheme (School of Nursing).

Research Project:	Development of a model for nursing management of postpartum depression in Edo State, Nigeria.
Registration no:	14/4/16

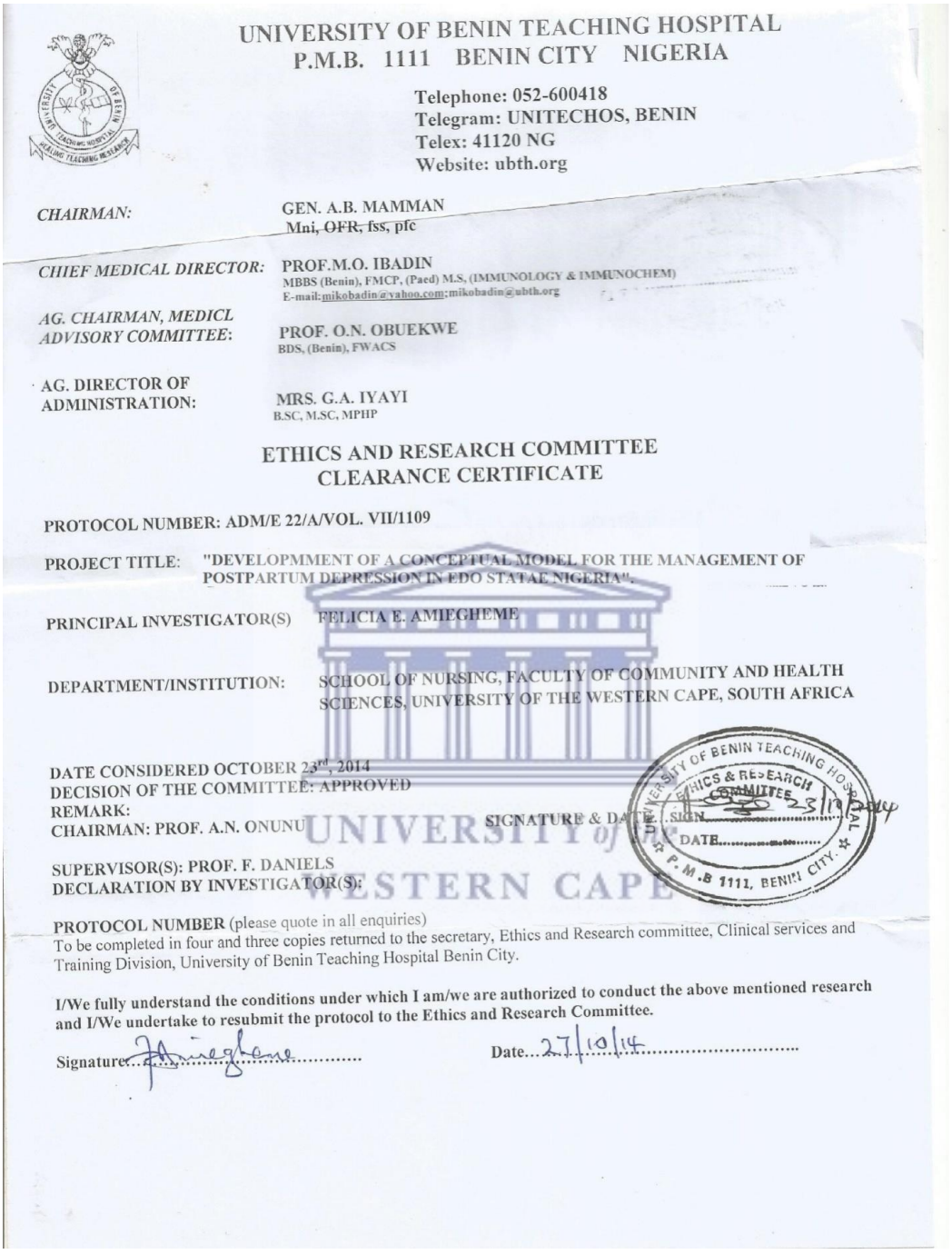
Any amendments or other modifications to the protocol must be submitted to the Senate Research Committee for further approval. The Committee must be informed of the termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

Director: Research Development
University of the Western Cape
Private Bag X 17
Bellville 7535
Republic of South Africa
Tel: +27 21 959 4111
Email: research-ethics@uwc.ac.za

APPENDIX III

ETHICS CLEARANCE TO CONDUCT RESEARCH - UBTH



UNIVERSITY OF BENIN TEACHING HOSPITAL
P.M.B. 1111 BENIN CITY NIGERIA

Telephone: 052-600418
Telegram: UNITECHOS, BENIN
Telex: 41120 NG
Website: ubth.org

CHAIRMAN: GEN. A.B. MAMMAN
Mni, ~~OFR, fss, plc~~

CHIEF MEDICAL DIRECTOR: PROF.M.O. IBADIN
MBBS (Benin), FMCP, (Paed) M.S, (IMMUNOLOGY & IMMUNOCHEM)
E-mail:mikobadin@yahoo.com;mikobadin@ubth.org

AG. CHAIRMAN, MEDICL ADVISORY COMMITTEE: PROF. O.N. OBUEKWE
BDS, (Benin), FWACS

AG. DIRECTOR OF ADMINISTRATION: MRS. G.A. IYAYI
B.SC, M.SC, MPHP

ETHICS AND RESEARCH COMMITTEE CLEARANCE CERTIFICATE

PROTOCOL NUMBER: ADM/E 22/A/VOL. VII/1109

PROJECT TITLE: "DEVELOPMMENT OF A CONCEPTUAL MODEL FOR THE MANAGEMENT OF POSTPARTUM DEPRESSION IN EDO STATAE NIGERIA".

PRINCIPAL INVESTIGATOR(S) FELICIA E. AMIEGHEME

DEPARTMENT/INSTITUTION: SCHOOL OF NURSING, FACULTY OF COMMUNITY AND HEALTH SCIENCES, UNIVERSITY OF THE WESTERN CAPE, SOUTH AFRICA

DATE CONSIDERED OCTOBER 23rd, 2014
DECISION OF THE COMMITTEE: APPROVED
REMARK:
CHAIRMAN: PROF. A.N. ONUNU SIGNATURE & DATE..... SIGN..... DATE.....

UNIVERSITY OF BENIN TEACHING HOSPITAL ETHICS & RESEARCH COMMITTEE 23/10/2014 P.M.B 1111, BENIN CITY.

SUPERVISOR(S): PROF. F. DANIELS
DECLARATION BY INVESTIGATOR(S):

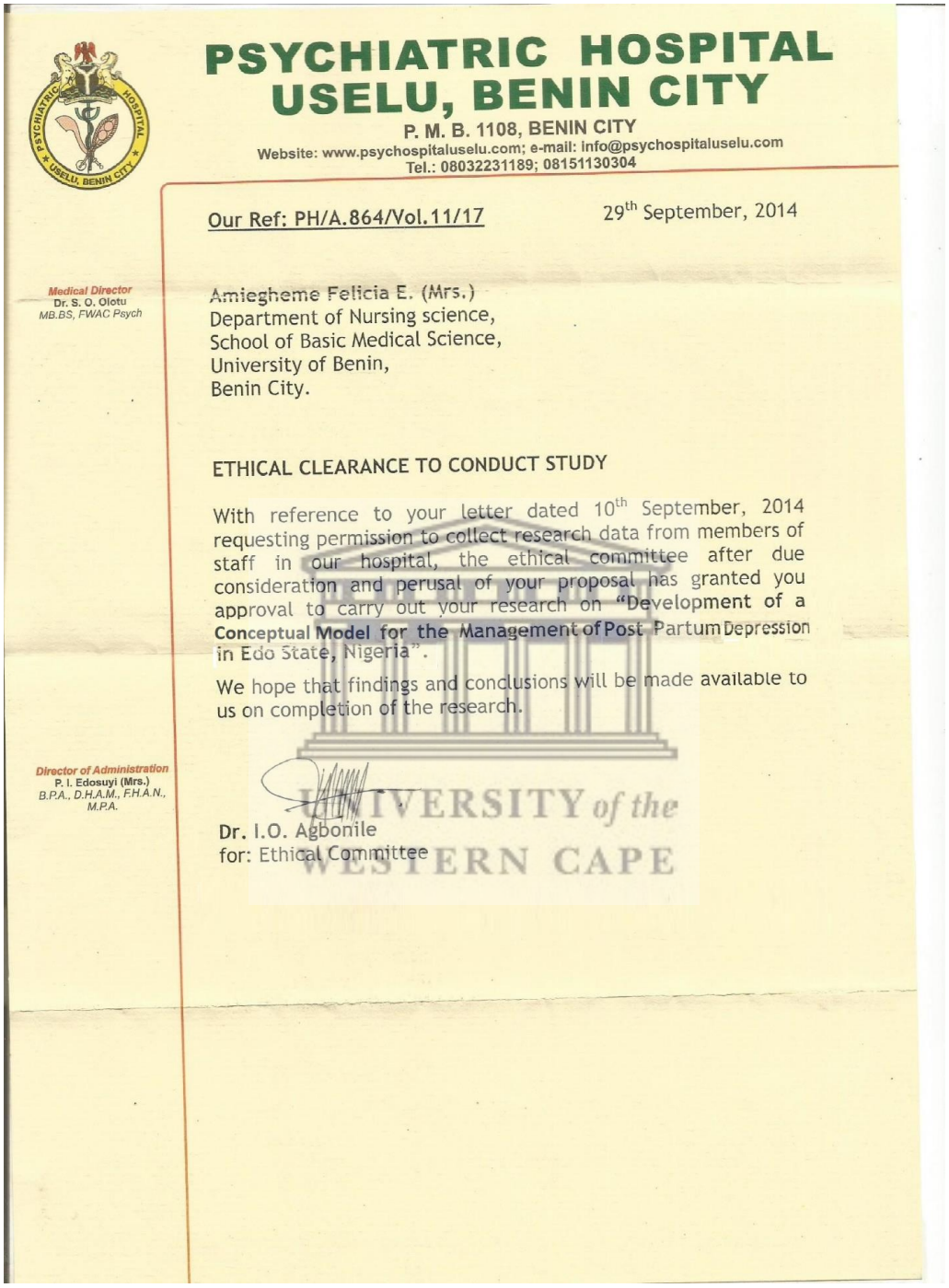
PROTOCOL NUMBER (please quote in all enquiries)
To be completed in four and three copies returned to the secretary, Ethics and Research committee, Clinical services and Training Division, University of Benin Teaching Hospital Benin City.

I/We fully understand the conditions under which I am/we are authorized to conduct the above mentioned research and I/We undertake to resubmit the protocol to the Ethics and Research Committee.

Signature...Amieghene..... Date...27/10/14.....

APPENDIX IV

ETHICS CLEARANCE TO CONDUCT RESEARCH – FNPH



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USELU, BENIN CITY
P. M. B. 1108, BENIN CITY
Website: www.psychospitaluselu.com; e-mail: info@psychospitaluselu.com
Tel.: 08032231189; 08151130304

Our Ref: PH/A.864/Vol.11/17

29th September, 2014

Medical Director
Dr. S. O. Olotu
MB.BS, FWAC Psych

Amiegheme Felicia E. (Mrs.)
Department of Nursing science,
School of Basic Medical Science,
University of Benin,
Benin City.

ETHICAL CLEARANCE TO CONDUCT STUDY

With reference to your letter dated 10th September, 2014 requesting permission to collect research data from members of staff in our hospital, the ethical committee after due consideration and perusal of your proposal has granted you approval to carry out your research on "Development of a Conceptual Model for the Management of Post Partum Depression in Edo State, Nigeria".

We hope that findings and conclusions will be made available to us on completion of the research.

Director of Administration
P. I. Edosuyi (Mrs.)
B.P.A., D.H.A.M., F.H.A.N., M.P.A.

Dr. I.O. Agbonile
for: Ethical Committee

APPENDIX V

ETHICS CLEARANCE TO CONDUCT RESEARCH – HOSPITAL C

Telegrams: PERM HEALTH

Telephone: 200030

EDO STATE

MINISTRY OF HEALTH

P.M.B. 1103,
BENIN CITY
EDO STATE OF NIGERIA

Our Ref: HA.739/30
Your Ref:
*Date:*16th October, *2014*

Felicia E. Amiegheme
Dept. of Nursing Science,
School of Basic Medical Sciences,
University of Benin
Benin City.

RE: APPLICATION FOR THE ETHICAL APPROVAL TO CARRY OUT RESEARCH ON "DEVELOPMENT OF A CONCEPTUAL MODEL FOR THE MANAGEMENT OF POSTPARTUM DEPRESSION IN EDO STATE, NIGERIA.

I am directed to acknowledge the receipt of your request on the above stated matter. Consequent upon the review of your proposal and recommendations by the State Ethical Clearance Committee, you are hereby given approval by the Honourable Commissioner to conduct the research on **"DEVELOPMENT OF A CONCEPTUAL MODEL FOR THE MANAGEMENT OF POSTPARTUM DEPRESSION IN EDO STATE, NIGERIA."**

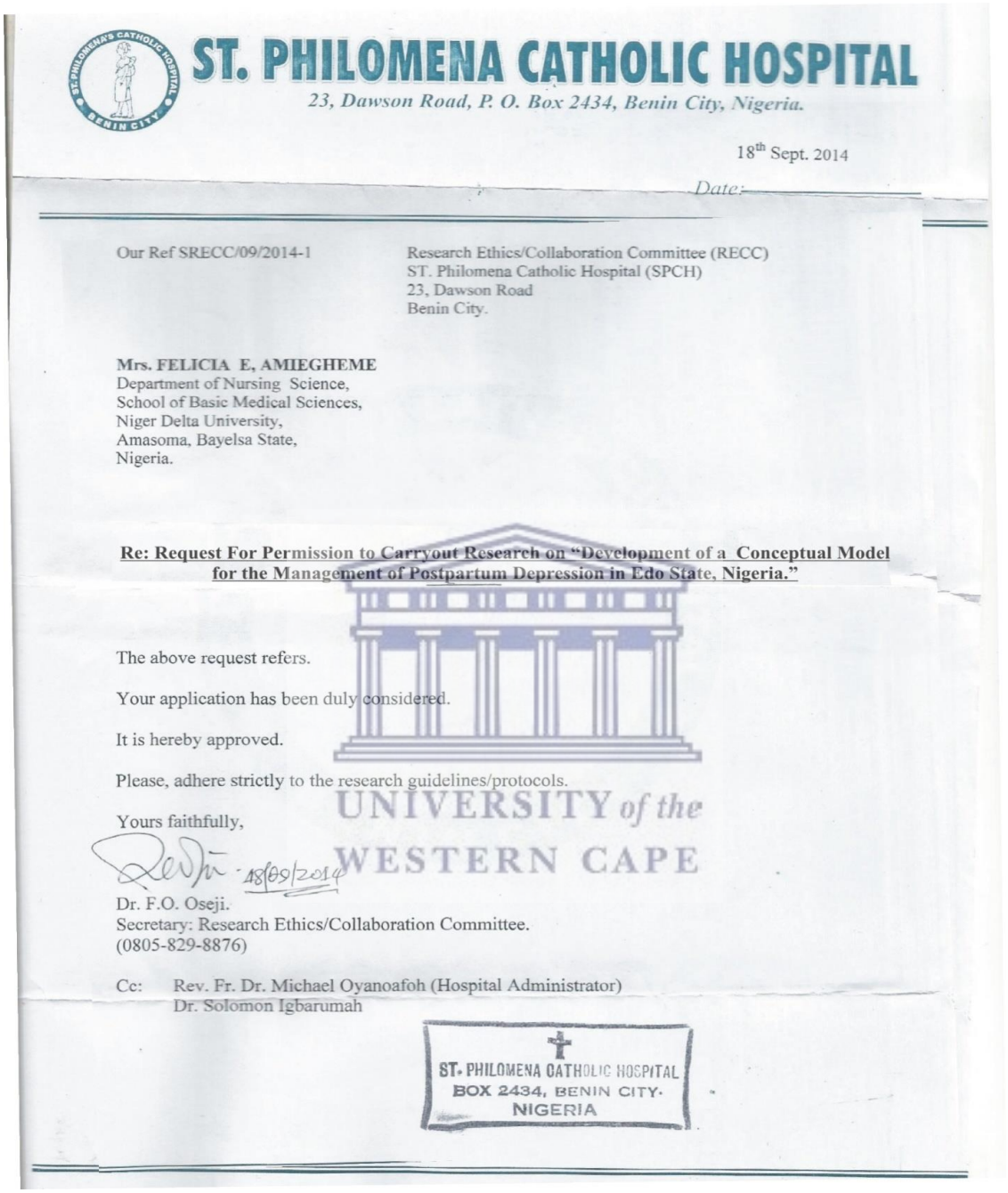
You are to ensure confidentiality of the respondents and make available to the library of the Ministry of Health, a copy of your research findings.

Accept the assurances of the highest esteem of the Honourable Commissioner.

Dr. (Mrs.) H.I. Eboreime
(Director Medical Services)
for: Honourable Commissioner.

APPENDIX VI

ETHICS CLEARANCE TO CONDUCT RESEARCH -SPCH



ST. PHILOMENA CATHOLIC HOSPITAL

23, Dawson Road, P. O. Box 2434, Benin City, Nigeria.

18th Sept. 2014

Date:

Our Ref SRECC/09/2014-1

Research Ethics/Collaboration Committee (RECC)
ST. Philomena Catholic Hospital (SPCH)
23, Dawson Road
Benin City.

Mrs. FELICIA E, AMIEGHEME
Department of Nursing Science,
School of Basic Medical Sciences,
Niger Delta University,
Amasoma, Bayelsa State,
Nigeria.

Re: Request For Permission to Carryout Research on "Development of a Conceptual Model for the Management of Postpartum Depression in Edo State, Nigeria."

The above request refers.

Your application has been duly considered.

It is hereby approved.

Please, adhere strictly to the research guidelines/protocols.

Yours faithfully,

18/09/2014

Dr. F.O. Oseji.
Secretary: Research Ethics/Collaboration Committee.
(0805-829-8876)

Cc: Rev. Fr. Dr. Michael Oyanoafoh (Hospital Administrator)
Dr. Solomon Igbarumah

ST. PHILOMENA CATHOLIC HOSPITAL
BOX 2434, BENIN CITY.
NIGERIA

APPENDIX VII

UNIVERSITY OF THE WESTERN CAPE

SCHOOL OF NURSING

INFORMATION SHEET

Project Title: Development of a model for the nursing management of postpartum depression in Edo State of Nigeria.

What is this study about?

This is a research project being conducted by FELICIA E. AMIEGHEME at the University of the Western Cape. We are inviting you to participate in this research because you will be able to share your views on nursing care for postpartum depression in order to develop a model for the management of postpartum depression in Edo State, Nigeria.

What will I be asked to do if I agree to participate?
You will be asked to come to a quiet office in the ward where you will share your views with others during group discussion. The researcher will moderate all the discussion and the period will not exceed an hour.

Would my participation in this study be kept confidential?
We will do our best to keep your information confidential. To help protect your confidentiality, Codes will be used instead of names on any of the document during data collection and participants will be interviewed in a quiet place within the hospital to ensure privacy. All tapes and instrument used during the study will be under lock and key and will be accessible only to the researcher. If we write a report or article about this research project, your identity will be protected to the maximum.
In accordance with legal requirements and/or professional standards, we will disclose to the appropriate authorities, information that comes to our attention concerning neglect or potential harm to you or others.

What are the risks of this research?
There may be some psychological or emotional risks or uncomfortable feeling such as fear, guilt, or embarrassment from answering some personal questions during participation in this research study. However, in case of any sign of distress during the interview, it will be discontinued and rescheduled if necessary. The services of clinical psychologist will be made available to participants who may require an intervention due to an emotional episode during the study.

What are the benefits of this research?

Your participation in this research will assist you in having more insight into care of patients with postpartum depression. Your participation will help researcher learn more about important and salient nursing care rendered to patients with postpartum depression in Edo State, Nigeria. We hope that, in the future, other people might benefit from this study through the development of a model for the nursing management of postpartum Depression in Edo State of Nigeria. This will help to improve nursing care of patients with postpartum depression thus increasing positive patient outcomes and increased maternal mental health.

Do I have to be in this research and may I stop participating at any time?
Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

Is any assistance available if I am negatively affected by participating in this study?
If a participant feels the need for counselling or care, it will be the researcher's responsibility to make an appointment with a relevant counsellor for the participant.

What if I have questions?

This research is being conducted by Felicia E. Amiegheme, of the School of Nursing, the University of the Western Cape. If you have any questions about the research study itself, please contact:

Felicia E. Amiegheme
Department of Nursing,
University of Benin,
Benin- City, Edo State, Nigeria
+2348033459777

E-mail: *feliamies@yahoo.com*

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Ag Dean of Faculty (At the time of data collection)
Prof Jose Frantz
Faculty of Community and Health Sciences
University of the Western Cape
Private Bag X17
Bellville 7535
Tel: +27 (0) 21 959 2631/2746
Fax: +27 (0) 21 959 2755
jfrantz@uwc.ac.za

Supervisor:

Prof. Felicity Daniels
University of the Western Cape
Private Bag X17
Bellville 7535
021 959 3024

E-mail: fdaniels26@gmail.com or fdaniels@uwc.ac.za
This research has been approved by the University of the Western Cape's Senate Research and Ethics Committee

APPENDIX VIII

UNIVERSITY OF THE WESTERN CAPE

SCHOOL OF NURSING

GROUP CONFIDENTIALITY BINDING FORM

Title of Research Project: Development of conceptual model for the management of postpartum Depression in Edo State of Nigeria.

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone by the researchers. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits. I understand that confidentiality is dependent on participants in the group maintaining confidentiality.

I hereby agree to uphold the confidentiality of the discussions in the group by not disclosing the identity of other participants or any aspects of their contributions to members outside of the group.

Participant's name: Lucky Njah

Participant's signature:

Date: 16/10/2014

APPENDIX IX

UNIVERSITY OF THE WESTERN CAPE

SCHOOL OF NURSING

INDEPTH INTERVIEW FOR NURSES

CONSENT FORM

Title of Research Project: Development of conceptual model for the management of postpartum Depression in Edo State of Nigeria.

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

_✓_ I agree to be audiotaped during my participation in this study.

___ I do not agree to be audiotaped during my participation in this study.

Participant's name: Grace Ayamekhue

Participant's Signature:

Date: 16/10/2014

APPENDIX X

UNIVERSITY OF THE WESTERN CAPE
SCHOOL OF NURSING

CONSENT FORM

FOCUS GROUP DISCUSSION

Title of Research Project: Development of conceptual model for the management of postpartum Depression in Edo State of Nigeria.

Title of Research Project: Development of conceptual model for the management of postpartum Depression in Edo State of Nigeria.

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

✓ I agree to be audiotaped during my participation in this study.

___ I do not agree to be audiotaped during my participation in this study.

Participant's name: Imafidon Gregory

Participant's Signature:

Date: 20/10/2014

APPENDIX XI

UNIVERSITY OF THE WESTERN CAPE

SCHOOL OF NURSING

CONSENT FORM

INDEPTH INTERVIEW FOR PATIENTS

Title of Research Project: Development of conceptual model for the management of postpartum Depression in Edo State of Nigeria.

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

✓ I agree to be audiotaped during my participation in this study.

___ I do not agree to be audiotaped during my participation in this study.

Participant's name: *Ese Adolor Cynthia*

Participant's Signature:

Date: *16/10/2014*

APPENDIX XII

UNIVERSITY OF THE WESTERN CAPE
SCHOOL OF NURSING

INDEPTH INTERVIEW SCHEDULE

PROFESSIONAL NURSES

Study title: Development of a model for the nursing management of Postpartum Depression in Edo State of Nigeria

QUESTIONS	POSSIBLE PROBES
1. Structural (Environment)	
1.1Where do you nurse your patients with PPD?	Explain, Elaborate
2. Process (Nursing care activities)	
2.1 How do you nurse your patients with PPD?	Explain, Elaborate
3. Outcome (Satisfaction)	
3.1 To what extent was the patient and their family satisfied with the care which the patient received and what do you think could be improved in the management of the patient with PPD?	Explain, Elaborate

APPENDIX XIII

UNIVERSITY OF THE WESTERN CAPE

SCHOOL OF NURSING

FOCUS GROUP DISCUSSION SCHEDULE

SOCIAL WORKERS AND CLINICAL PSYCHOLOGISTS

Study title: Development of a model for the nursing management of postpartum depression in Edo State of Nigeria

QUESTIONS	POSSIBLE PROBES
1. Describe how the nurses care for patients that were diagnosed with post-partum depression?	Elaborate; Describe or give examples; Explain; How; Who; Where; When. How did it make you feel?
2. Were you satisfied with the treatment the patients received?	Elaborate; Explain; Give examples; Why; Why not.

APPENDIX XIV

UNIVERSITY OF THE WSTERN CAPE

SCHOOL OF NURSING

INDEPTH INTERVIEW SCHEDULE

PATIENTS

Study title: Development of a model for the nursing management of postpartum depression in Edo State of Nigeria

QUESTIONS	POSSIBLE PROBES
1. Describe how you were cared for by the nurses when you were diagnosed with post-partum depression.	Explain; Elaborate; Give examples; When; Where; How; Who
2. Were you satisfied with the treatment you received?	Explain; Elaborate; Give examples; Why; Why not.

APPENDIX XV

UNIVERSITY OF THE WESTERN CAPE

SCHOOL OF NURSING

DOCUMENT REVIEW

CHECKLIST

Study title: Development of a model for the nursing management of postpartum depression in Edo state of Nigeria.

QUESTIONS AND PROBES	YES	NO
Are drugs given on time and as per schedule on this ward by the nurses'		
Drugs are served by two trained and registered nurses on each shift on this ward to prevent mistakes.		
Drugs are not served by student nurses on this ward as they are not licensed and to prevent mistakes and litigation		
Drugs are crushed and mixed into liquids by nurses for patients with difficulty with swallowing as some postpartum depressive patients refuse foods and drinks during depressive state		
Drugs are served after meals on the ward by nurses apart from exceptions		
Drugs administered to the patients are documented and drug chart is signed by both nurses who gave the drug		
Nurses cross check that patients to ensure patients don't throw the drugs away to the back, across their ears while pretending to take their drugs		
Nurses ask the patients to open their mouth to check if the drug is hidden under the tongue.		

I feel satisfied with the nursing care rendered on this ward.		
Nurses nursing care activities on the ward during shifts		
Nurses give Individualized nursing care to patients on the ward		
Nurses are allotted patients for care according to patients bay		
Nurses assist the patients with bathing and grooming		
Nurses assist the patients with their feeding		
Nurses do vulvar toileting twice daily for the patient on the ward.		
Nurses assist with the care of the baby while on the ward		
Nurses help to prepare the patients for electro convulsive therapies (ECT).		
Nurses give preoperative and postoperative ECT nursing care		
Nurses give counseling to the patients on the ward		
Nurses take the patients temperature, pulse, respiration and blood pressure every eight hours on the ward.		
Nurses follow the patients to the occupational therapy unit where they play games and learn new skills acquisition.		
Are there individual differences among the nurses caring for the patients on the ward		
All the nurses on this ward like nursing patients with postpartum depression		
All the nurses give the patients with postpartum depression therapeutic nursing care on this ward		

Nurses on this ward are tolerant and patient hence they give better nursing care to patients with postpartum depression.		
Nurses on this ward don't transfer aggression to patients with postpartum depression because they demand more nursing responsibilities and care.		
All parturient nurses on this ward because they are mothers give better nursing care to the patient's baby while on the ward		
All Nurses on this ward care for the neglected baby of the patient while on the ward.		
Nurses in the Senior cadre in the profession on this ward give better nursing care to these patients because of their knowledge and years of experience on the job.		
Nurses on this ward happily accept the multiple nursing care of the baby and her postpartum depressive mother and still go ahead to give satisfactory nursing care.		
Nurses attitude to patients are prompt and not delayed on this ward.		
Nurses on this ward move immediately to answer the patient because she seldom talks to anyone.		
Nurses on this ward watch patient obstructively and unobtrusively because of her suicidal tendencies		
Nurses on this ward willingly give the patient all due nursing care even though patient will not ask		
Nurses on this ward allow patients to assist with nursing care for their babies while the patients are carefully watched and monitored.		
Nurses on this ward say encouraging words to patients when they are in the depressive mood as every nurse's action here is to assist you to get well fast.		

Nurses on this ward reassures the patients and tells the patient that she will be alright as you take your drugs		
Nurses on this ward tell the patients the need for vulvar toileting, perineal cleanliness to avoid fowl smelling lochia and prevent possible puerperal sepsis.		
Nurses on this ward greet the patients whenever in contact even when she will not respond.		
Nurses on this ward admit the patient close to the station so that patient can even listen to them talk and to talk to her too		
Nurses on this ward tell them to eat and encourage them take plenty of water boost breast feeding		
Nurses on this ward caring for the patient with postpartum depression involves a cordial multidisciplinary interaction with other professionals		
Nurses on this ward has good cordial working relationship with other professionals working on this ward		
Nurses on this ward, doctors, clinical psychologists and social workers form the panel during psychological group and personal therapies on this ward.		
Nurses on this ward document all their findings in the patients' medical case note for other professions to read and take note of.		
Nurses on this ward and doctors jointly work together to perform the ECT procedure on the patients on this ward		
Nurses on this ward promptly inform the doctors about the changes in patients' condition.		
Nurses on this ward form part of the team in the weekly grand ward round on this ward.		

Nurses' on this ward health educate patients and relations on the ward before they are discharged home.		
Nurses on this ward health educate patients and their relations and demonstrate vulvar toileting, perineal care, sitz bath and nursing care of engorged breasts before discharge from the ward.		
Nurses' on this ward health educate patient and relations on the possible causes of patients' postpartum depression before discharge from the ward.		
Nurses' on this ward health educate patient and relations on the need to continue with her prescribed drugs to be taken home on discharge from the ward.		
Nurses' on this ward health educate patient and relations on discharge the importance of strictly keeping to their postnatal clinic and mental health clinic appointments.		

APPENDIX XVI

EDITOR CERTIFICATION

Lowe's
Editing Services

LETTER OF CERTIFICATION

Gareth O P H Lowe
9 Lamborghini Avenue
Wierda Park
Centurion
0157
Tel: +27 83 726 6868
Email: gareth_lowe@yahoo.com

11 NOVEMBER 2022

To whom it may concern

I hereby certify that I, Gareth Owain Paul Howel Lowe, edited the thesis of Felicia Ehobhayi Amiegheme, entitled "Development of a Conceptual Model for the Management of Postpartum Depression in Edo State, Nigeria.", for language.

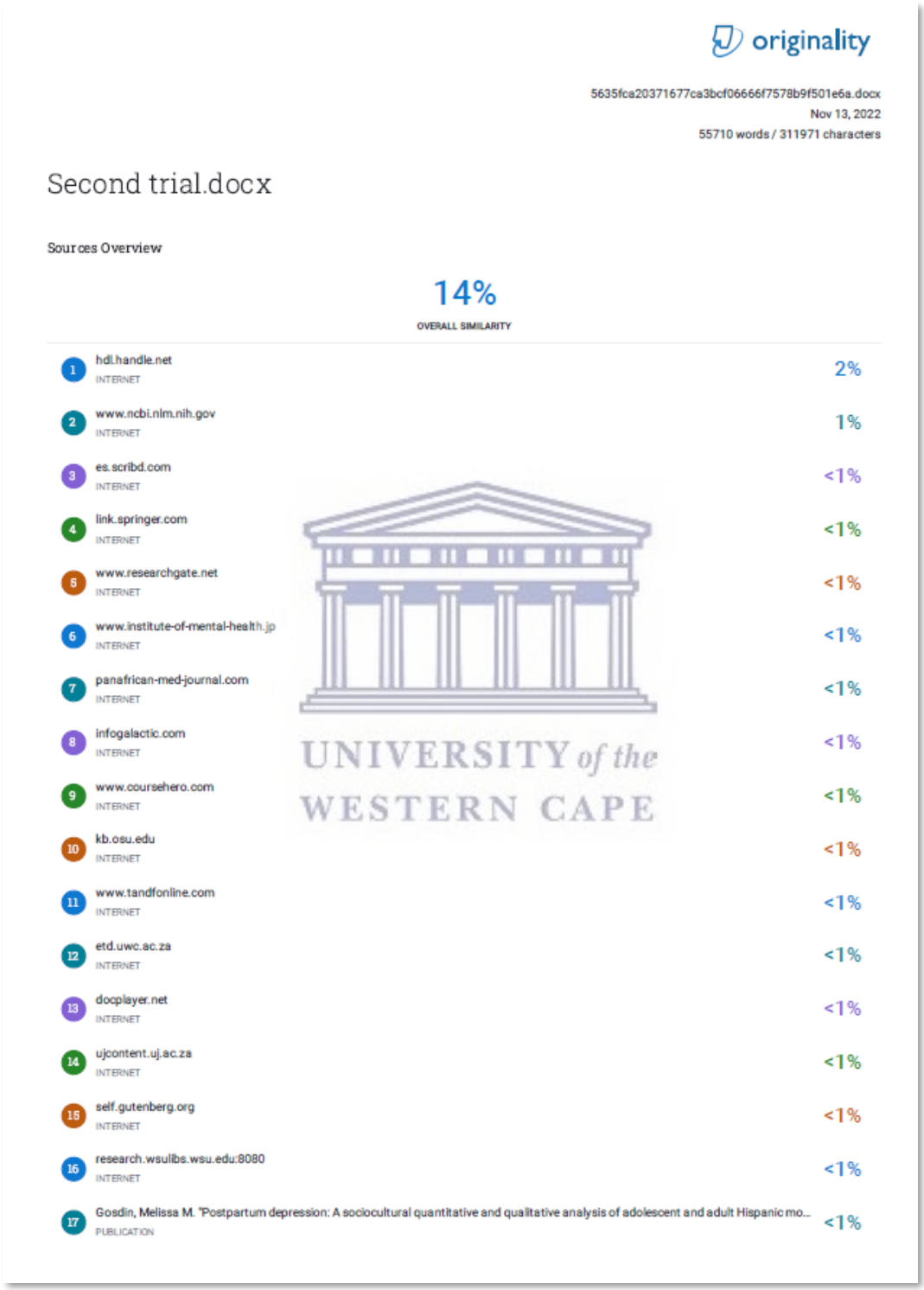
Regards

Gareth Lowe

Editor

APPENDIX XVII

TURNITIN SIMILARITY REPORT



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