UNIVERSITY OF GHANA, LEGON COLLEGE OF HEALTH SCIENCES SCHOOL OF NURSING AND MIDWIFERY

EXPLORING PERSPECTIVES OF NURSES AND MIDWIVES ON PAIN MANAGEMENT AFTER CAESAREAN SECTION AT THE GREATER ACCRA REGIONAL HOSPITAL

BY PHILIMON GYAPONG 10631957

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DECLARATION

I therefore declare that the research conducted for this thesis was done by myself independently. This thesis/dissertation has not been submitted in any way to a university or

other tertiary educational institution for a degree or diploma. The text and references list properly credit the authors and publishers whose works were used in this study.

PHILIMON GYAPONG		15/12/2023
Students	Signature	Date
PROFESSOR LYDIA AZIATO	(for)	15/12/2023
(First Supervisor)	Signature	Date
DR. DAVID TENKORANG -TWUM		15/12/2023
(Second Supervisor)	Signature	Date

DEDICATION

To the Gyapong family, my wife, Comfort, and my children, D.D, Ewurabena, and Paa Kwesi.

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LIST OF ABBREVIATIONS

CS - Caesarean section

GARH - Greater Accra Regional Hospital

GHS - Ghana Health Service

IASP - International Association for the Study of Pain

MOH - Ministry of Health

NHIA - National Health Insurance Authority

N&MC - Nursing and Midwifery Council of Ghana

NRS - Numerical Rating Scale

NSAIDS - Non-Steroidal Anti-Inflammatory Drugs

POP - Post-operative pain

PTM - Pain Transaction Model

PUD - Peptic Ulcer Disease

WHO - World Health Organization

ABSTRACT

Globally, caesarean section has gained increasing attention as the most frequently performed surgical procedure. The assessment and management of pain related to this surgery must therefore be discussed. There is a lack of empirical data on the factors that affect nurses' and midwives' assessments of and management of post-operative pain in a resource- constrained setting like Ghana, despite the fact that they play crucial roles in providing post- operative pain management for puerperal women after caesarean sections. Against this backdrop, this study aimed to explore from nurses and midwives' perspective, the factors that influence assessment and management of post-operative pain after caesarean section at the Greater Accra Regional Hospital. An exploratory-descriptive qualitative design and an interpretivism approach was employed. A purposefully sampled group of 16 nurses and midwives were interviewed using an interview guide that was designed in accordance with the concepts of the Pain Transaction Model. The study employed content analysis using the Braun and Clarke's (2006) approach to analyse the data Three main themes emerged from the study, which were nurse/midwife related factors, perceived nurse/midwife skills, and challenges associated with the assessment and management of post-operative pain. In addition to the three themes, seven sub-themes emerged. Findings suggest the need for nurses to make conscious efforts to get abreast with current trends in the assessment and management of post-operative pain.

Key words: Assessment, Caesarean section; Post-operative pain; Management; Greater Accra Regional Hospital

CHAPTER ONE

1.0 Introduction

This thesis is about the perspectives of nurses and midwives on the management of post-operative caesarian pain. This chapter presents the background of the study, problem statement, research questions, purpose and objectives of the study. The significance of the study and operational definition of key terms are also detailed in this chapter

1.1 Background of the Study

Caesarean section (CS), is a surgical procedure for giving birth that involves making a (transverse or vertical) skin incision above the pubic hairline, then opening the subcutaneous tissue, the aponeurosis of the rectus abdominis muscles, separating the muscles at the midline, opening the parietal peritoneum, the visceral peritoneum, and the uterine wall, from which the fetus is extracted (Toijonen et al., 2022). Caesarean section has been performed for well over four centuries, though the surgery was avoided until the end of the nineteenth century due to its high fatality rate (Antoine & Young, 2020). However, current evidence suggest that the rate of CS has increased significantly over the past 30 years particularly in the high and middle- income countries (Takegata et al., 2020). Caesarean section is considered among the most common surgical procedures and in the United State, for instance, over a million women are delivered by caesarean annually (Sung & Heba, 2021). Caesarean delivery is now performed on one out of every three women in the United States, and up to four out of every five women in various parts of the world undergo CS (Antoine & Young, 2020). By its very nature, the procedure is commonly associated with post-operative pain (POP).

Since it contributes to high-quality care and patient satisfaction, post-operative pain management has become a crucial area of attention for the delivery of healthcare. C-section pain may be affective as well as physiological or sensory, with both physiological and psychological factors playing a role (Brianne, Sukalich, & John, 2016). Sensory pain response identifies the location,

timing, and physical characteristics of the noxious stimulus, and prompts withdrawal reflexes to prevent or limit tissue damage (Lumley et al., 2011). Furthermore, affective pain dimension describes the unpleasantness associated with exposure to a noxious stimulus and activates defensive behaviors such as escape and recuperation, thereby enabling the individual to cope with the pain (Berger & Baria, 2022; Lumley et al., 2011). Finally, psychological pain is defined as a diffuse subjective experience of pain by an individual (Crombez et al., 2023;Mee et al., 2006).

POP is a cause of concern in modern surgical practice, despite the International Association for the Study of Pain's (2018) mission to translate pain management research into better pain care globally (Menlah et al., 2018). There are a number of research works indicating that there are several obstacles with POP management, which are more severe in underdeveloped nations because of insufficient budget allocations for pain management (Kizza et al., 2016; Murray & Retief, 2016; Kizza et al., 2016).

Post-operative pain affects more than 80% of surgery patients, with 39% experiencing severe to extreme postoperative pain (Anghelescu & Tesney, 2019). With more CS, there is thought to be a higher likelihood of experiencing pain. Women who have had repeated repeat CS are significantly more at risk of experiencing organ damage after surgery (Antoine & Young, 2020).

Evidence from studies done in high-income settings suggests that poorly treated pain after CS is associated with an increased prevalence of chronic pain and post-traumatic stress disorder (de Brito Cançado, Omais, Ashmawi, & Torres, 2012; Kintu et al., 2019). Pain can be expressed in a variety of ways, including vocal (spoken), nonverbal (bodily motions), or a mixture of both (Walsh, Eccleston,& Keogh, 2014). Again, it is the responsibilities of healthcare workers to undertake thorough in patient undergoing CS to ensure adequate pain management. The health system may suffer from inefficient or poor POP management, especially in the modern world

when healthcare is a business and patient satisfaction is essential to its profitability (Menlah et al., 2018).

Although some discomfort following surgery is common as part of the inflammatory process, the healthcare provider must restrict POP to ensure patients' comfort and happiness (Meissner et al., 2015). Most of the hurdles to ineffective pain treatment have been linked to nurses. This might be the case as nurses and midwives are the sole health workers who spend 24 hours per day with the patient (Aziato & Adejumo, 2014). As a result, nurses, and midwives are critical in the management of postoperative pain (POP) in general and post-caesarean pain in particular because these health care practitioners are required to assess pain and give timely assistance. Medical professionals working in postoperative departments must develop effective pain management techniques (World Health Organization [WHO], 2016). POP management should, according to some earlier studies (Abdalrahim et al., 2011; Yüceer, 2011), include care, commitment, therapeutic communication, appropriate assessment, good knowledge, use of evidence-based multimodal approaches, and proper evaluation of interventions in the presence of additional variables like cultural factors. Effective pain evaluation is considered the cornerstone of effective pain treatment in Ghana and is a must for all postoperative surgeries (Kotekar et al., 2014). Patients' reactions to pain are subjective and individualized, thus they should be assessed individually. However, a study's findings revealed that over 57% of nurses lacked appropriate knowledge of the instruments that could be used for measuring and assessing pain, and 12% of healthcare professionals had never used a tool to do so (Mahama & Ninnoni, 2019). In order to validate the use of three pain rating measures among adult postoperative patients, Aziato et al. (2015) undertook a mixed-method study in Ghana. They noticed that employing a reliable method for pain evaluation provides the practitioner with an impartial standard for pain control. Once more, Aziato and Adejumo (2014) carried out a qualitative study using a clinical ethnography methodology with the intention of examining the perspectives and

reactions of Ghanaian surgical doctors on patients' POP. The findings showed that doctors' opinions of POP were subjective, and they treated patients' pain by giving them analgesics and non-pharmacological remedies. With POP management becoming increasingly necessary due to the rising numbers of CS, this study explores the POP management of C- Section mothers particularly in Greater Accra Regional Hospital. Particular focus is given to caregivers, thus nurses and midwives who are directly involved in POP management for puerperal women who had undergone CS.

1.2 Problem statement

Post operative pain is usually an acute pain that results from tissue injury during surgical procedures (Masigati & Chilonga, 2014). In world health policies on pain, the management of pain, including POP, has gained traction. Post-operative pain has received a lot of scientific attention in most high-income countries, particularly in America and Europe, resulting in the availability of adequate empirical literature (Aziato & Adejumo, 2013; Kintu et al., 2019; Kotekar et al., 2014; Mahama & Ninnoni, 2019; Manage, 2011; Murray & Retief, 2016). However, POP management continues to be a significant concern, particularly in low- and middle-income countries, for medical professionals such as surgeons, anesthesiologists, and nurses (Eshete et al., 2019). Poorly managed post-operative pain increase hospital stay, cost to the patients, patients dissatisfaction with care, disability to the patients (Tadesse,Yohannes, & ,Bez 201; Eshete et al., 2019; Vickers, 2011).

In order to effectively manage POP in mothers who had CS, nurses and midwives must possess a broad range of knowledge and abilities. According to Menlah et al. (2018), nurses are in a good position to manage pain in the post-operative situation and need to make sure that their interventions are customized to each patient's preferences and comfort. However, both midwives and doctors play crucial roles, particularly when it comes to managing POP in mothers who have

undergone CS. Adequately managed POP results in early discharge from the hospital (Ofori, 2017)

According to Eccleston's (2011) research on POP management, nurses and midwives have subpar pain management techniques. The author claims that this is brought on by professional culture, ward culture, a lack of necessary theoretical understanding, a lack of priority for pain management, and a lack of clarity regarding the evidence for various pain management therapy. Additionally, studies across four district hospitals in Ghana's Ashanti Region indicated that the four hospitals' nurses and midwives lacked basic expertise of POP care (Menlah et al., 2018).

Currently, research in POP management has been centered on general surgeries performed at the hospitals with little focus on post-CS pain management. In Ghana, research on POP have been done in major hospitals in the cities such as Accra and Kumasi with result indicating non used of pain assessment scale, fear of addiction, and increase workload as factors affecting POP pain management ((Aziato & Adejumo, 2013; Menlah et al., 2018).

The Greater Accra Regional Hospital is a major referral facility in the Greater Accra Region that received patients from other part of the country. The hospital undertakes major surgical procedures. And as such nurses and midwives are expected to effectively managed POP. Anecdotal observation indicates inadequate POP among nurses in the facility. the subject of this study, where nurses and midwives play a key role in managing POP in moms following CS.

1.3 Purpose of the study

The purpose of this study is to explore the CS post-operative pain management practices of nurses and midwives at the Greater Accra Regional.

1.4 Objectives of the study

1. To explore nurses/midwives related factors influencing the assessment and management of POP after C-section at the Greater Accra Regional Hospital (GARH).

2. To identify the perceived nurses/midwives' skills in the assessment and management of POP after C-section at the Greater Accra Regional Hospital.
3. To explore the challenges faced by nurses/midwives in assessment and management of POP after C-section at the Greater Accra Regional Hospital.

1.5 Research Questions

The following research questions are the focus of the study:

1. What are the nurses/midwives related factors influencing the assessment and management of POP after C-section at the Greater Accra Regional Hospital?
2. How do nurses and midwives conduct POP assessment and management after C- section at the Greater Accra Regional Hospital?
3. What are the challenges faced by nurses/midwives in assessment and management of POP after C-section at the Greater Accra Regional Hospital?

1.6 Significance of the Study

This research is significant in a variety of ways as it will aid in the development of strategies to minimize the pain women experience after a caesarean section. There are several reasons why women cannot give birth through spontaneous vaginal delivery and therefore require caesarean section. Therefore, there is the need to attend to the ways of mitigating the pains associated with caesarean section in order to make it a less difficult alternative for women to choose to give birth.

The results of this study will add to the body of knowledge on how nurses and midwives should understand, evaluate, and manage POP. The study will also be used as a resource by healthcare professionals, especially nurses and midwives who deal with postoperative pain.

Moreover, this study will serve as a starting point for more research into caesarean section POP management in Ghana. It will provide direction for future research that will lead to the

development of context-specific guidelines and protocols for caesarean section POP management in Ghana.

1.7 Operational Definition of Terms

Challenges: Personal, patient-related and institutional factors that hinder proper assessment and management of POP among women after caesarean section.

Knowledge: Understanding of the post-operative discomfort experienced by women who have had caesarean sections by the nurse or midwife.

Management: Pharmacological and non-pharmacological methods involved in handling or controlling post-operative pain after C-section.

Nurse/Midwife: A registered professional nurse/ midwife working at the recovery ward or lying-in ward of the Greater Accra Regional Hospital.

Pain assessment: A method of determining how much pain a patient experience after caesarean section.

Post-operative pain: A form of acute pain experienced by women due to surgical trauma with an inflammatory reaction occurring after caesarean section delivery.

CHAPTER TWO

LITERATURE REVIEW

The purpose of the study is to explore the post-operative pain management of nurses and midwives at the Greater Accra Regional hospital. This chapter discusses relevant theories and empirical research on pain man. This was done with literature and reviews on POP management of Online databases like Science Direct, SCOPUS, Google Scholar, and PubMed were used to access the literature. "Nurse," "Midwife," "Knowledge," "Assessment," "Management," "Challenge," Postoperative pain," "Caesarean section," and "Mothers" are some of the key words used in the literature search.

A review of three theories, including the Pain Transaction Model, which has been used in the study to give a theoretical framework, is presented in the first section of the chapter. The overview of pain follows this. In this chapter, a review of prior research on POP knowledge, POP assessment and management, and issues related to POP assessment and management are also included.

2.1 Theoretical review

2.1.1 Gate Control Theory

The Gate Control Theory presents a unifying explanation for the interplay between the physiological, anatomical, and psychological factors that contribute to the occurrence of pain (Asmundson & Wright 2004). It once more gives a rationale for the fencing principle, which serves as a gate in the dorsal horn of the spinal cord. When it senses a signal, this gate either closes or maintains the upward transmission of painful feeling from various areas of the body to the brain Melzack (2000). At the same time, this hypothesis recognizes that brain impulses may be impacted by emotions and mental processes, which may lessen or obstruct the perception of pain being delivered from the spinal cord (Hadjistavropoulos et al., 2009).

On the other hand, a person's interpretation and experience of pain can be greatly influenced by a variety of factors, including culture, emotional state, and the surroundings (Asmundson & Wright, 2004; Hadjistavropoulos et al., 2009). Stronger impulses may be able to open the gate that prevents the uncomfortable sensation from being perceived as pain, which is the fencing system. This can only happen if the system is already compromised (Melzack, 1996). The following is an outline of the actual steps involved in the transmission of pain according to the gate control theory: a painful stimulus that originates in the body's periphery is carried to the dorsal horn of the spinal cord by nerve fibres that move quickly along the A delta and slowly along the C. If the painful stimulus is of sufficient intensity or continues for an extended period of time, the pain will be transferred from the limbic system all the way up to the cerebral cortex. The sensation of pain is identified by the cerebral cortex, which then triggers the activation of the efferent neural pathway in order to produce an appropriate response to the pain (Ekanem, 2020).

Emotion has a direct impact on the experience of pain. These include physical contact, focused attention, and emotional support, all of which have the capacity to either lessen or heighten the sensations of pain elicited by impulses sent from the brain (Good et al, 2009). This opens the door for various non-medication techniques that impact a person's psychological state to be effective in blocking pain perception. You may find these techniques here. Additionally, activating thick and quick A delta fibers with massage or other forms of touch can reduce the perception of pain (Bonica & Loeser 2001). Non-nociceptive input, such as massage and touch, which is transmitted by big, myelinated, thick, and fast A delta fibers, has the potential to prevent or lessen the perception of pain in circumstances like these. The degree of pain felt decreases when there is a higher ratio of extensive fiber activity to thin fiber activity at the inhibitory cell. (Garu, 2012). Although it has some practical implications, in the opinion of nurses, this theory is more likely to be used in the management of pain in patients.

2.1.2 Self-Care Deficit Theory

This is a general idea that nurses can utilize to create and validate nursing knowledge as well as teach and learn nursing, according to Orem (1995). The theory of self-care, the theory of self- care deficits, and the nursing system theory are the three interconnected theories that make up Orem's (1995) thesis.

Self-care is the practise of self-initiated and self-performed activities for the purpose of maintaining life, health, and well-being (Orem, 1995). Self-ultimate care's objective is for the patient to administer his or her own healthcare. If this is not possible, the patient and the nursing staff can work together to meet the patient's needs. Since pain is subjective, it is optimal for the patient to assume responsibility for pain management, which is consistent with Orem's (1996) theory of self-care. If this is not feasible, a deficit in self-care is created.

The second argument put forth by Orem (1995) centres on the idea of a deficit in self-care. According to Orem (1995), a self-care deficit is a relationship between the therapeutic self-care demand of human properties and a self-care agency in which the agency's developed self-care capabilities are insufficient or inoperable for identifying and addressing some or all of the components of the current or projected therapeutic self-care demand. Orem (1995) uses the word "agency" to describe intelligence or skill. This theory's main tenet is that people can occasionally be prevented from taking care of themselves because of restrictions (Hartweg, 1991). Patients who have extreme acute or chronic pain may experience this.

A person becomes a patient and a recipient of nursing care when their ability to take care of themselves is outstripped by their inadequacies in that area (Orem, 1995). Professionals in healthcare should step in at this point. In this circumstance, nurses must be equipped with the knowledge and abilities required to recognize, access, and take action to address patient care

shortcomings. Because of this, nurses who work with patients who are in pain need to be familiar with pain and how to manage it (Orem, 1995).

The third theory in Orem's (1995) nursing self-care deficit theory is the theory of nursing systems. Both the structure and the substance of nursing practice are determined by this paradigm. This idea explains the connection between patient actions and roles and nursing actions and roles (Hartweg, 1991). According to Orem (1995), nursing systems are a collection of deliberate nursing practices that nurses perform, sometimes in concert with those of their patients, in order to understand and meet the therapeutic self-care needs of those patients as well as to safeguard and control the development or exercise of their patient-centred autonomy.

The nursing system theory's concept of nursing agency is a key element. According to Orem (1995), nursing agency refers to the developed abilities of nurses that allow them to represent themselves as nurses and act, know, and assist patients in meeting their self-care needs and controlling the development or exercise of their self-care agency within the context of a legitimate interpersonal relationship (Orem, 1995). Orem (1995) asserts that this theory accurately captures nursing's overarching goal, which is to make up for patients' health-related constraints. She views nursing agency as a force that is developed through specialised education and clinical nursing practise experiences. In this portion of Orem's (1995) theory, the problem of inadequate pain control due to the nurse's lack of knowledge and attitude exists. Orem (1995) emphasises that nursing agency is a developed force. Learning continues after graduation. To remain a competent nurse and to have true "nursing agency," nurses must continue to learn throughout their entire career. Therefore, if a nurse is identified as having a knowledge deficiency, such as an inadequate understanding of pain management, that nurse must take corrective action. According to Orem (1995), knowledge is essential for providing care, responsibility, and respect. Therefore, proper nursing care cannot be provided without knowledge.

Orem (1995) also elaborated on additional nursing personal factors, which she defined as factors that are unique to each nurse and crucial to the delivery of care. Age, gender, race, culture, and maturity are examples. In addition to education and experience, personal factors contribute to a nurse's knowledge base and attitude. In the context of caring for a client with pain, these personal factors influence the knowledge and attitudes of an individual nurse regarding pain management. When nurses have a greater understanding of pain and its management, they are more likely to aggressively treat it (Orem, 1995). This, in turn, results in adequate pain management for the patient and, hopefully, an improved sense of well-being. Orem (1995) defines well-being as a state characterised by feelings of contentment, pleasure, and various forms of happiness; by spiritual experiences; by the pursuit of one's self-ideal; and by ongoing personalization. As a result, Orem (1995) emphasises that well-being is attainable even under adverse conditions like illness. Baar (2000) utilised this theory to investigate the knowledge and attitudes of advanced practise nurses regarding pain and pain management. Consequently, this theory may be applicable to study the knowledge and attitude of nurses regarding pain management but not their perspectives in the management of post-operative pain after CS.

2.1.3 Pain Transaction Model

The most suitable model for the investigation was determined to be the Pain Transaction Model (PTM). Critically ill patients frequently experience pain, which makes it one of the most difficult clinical issues for nurses and midwives to handle. Therefore, acknowledging it is equally essential (Bloor, 2012). The PTM framework acknowledges that elements related to both the nurse and the patient have an impact on interpersonal communication between the nurse and the patient. These variables include the knowledge and attitudes of the nurse as well as the pain behaviors and coping techniques of the patients (Keen et al., 2017). These variables also have an impact on the evaluation, treatment, and post-treatment management of pain. The linkage

between the PTM components is shown in Figure 2.1, which was taken from Keen et al. (2017), to help comprehend the clinical association between pain evaluation, therapy, and management.

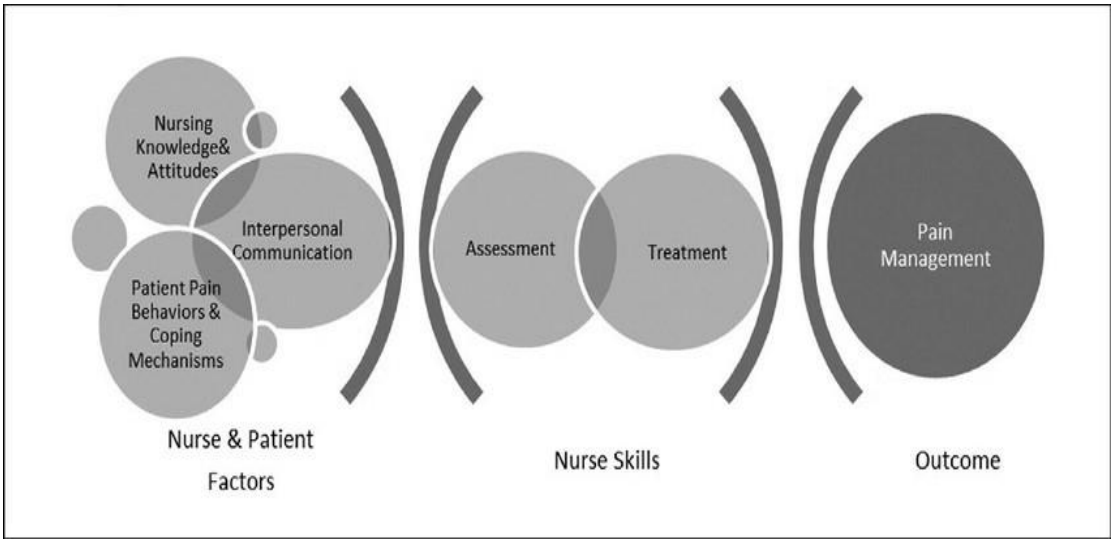

Figure 1: Pain Transaction Model

Source: Keen et al. (2017)

Rationalists contend that knowledge is the product of a reasoning process in which our sensory experience has no bearing. Contrarily, empiricists view knowledge as something that is produced by our senses' interaction with the real world and then refined by our brains (Bolisani & Bratianu, 2018). Another empiricist, Locke (1841), defended the empiric method by highlighting the fact that things exist in the real world and that human sensory perception is the primary source of knowledge.

Some scholars, such as Dombrowski, Rotenberg, and Bick (2014), explained that there are three categories of knowledge: (a) experiential knowledge, (b) skills, and (c) knowledge claim, each of which has unique qualities despite being interconnected. The term "skills" refers to the knowledge gained from knowing how to do something. Though it is founded on experiential knowledge, it also includes well-planned and action-oriented knowledge derived from repeatedly performing a specific task and learning by doing it. This knowledge is commonly referred to as

procedural knowledge because it is primarily concerned with task performance following a predetermined course or protocol (Bolisani & Bratianu, 2018).

The behavior and coping mechanisms of the patient are another component of the Pain Transaction Model. Different attitudes and levels of expertise among nurses towards postoperative pain management in various clinical settings have been linked to several particular patient demographic features (Kiekkas et al., 2015). For instance, even though their pain is relatively intense, some patients' drug-induced pain is significantly influenced by their beliefs, which has an impact on overall therapy (Muntlin Athlin, Carlsson, & Gunningberg, 2015). A similar result was demonstrated by Fry et al. (2012) that the ability of a patient to maintain a steady-state balance under all conditions is examined as a trait of stability since it can affect the patient's response to therapy and lower mortality. On the other hand, high-quality nursing care and the right nursing interventions might affect patients' stability (Swickard, Swickard, Reimer, Lindell, & Winkelman, 2014).

Nurses are crucial in not only delivering individualized, comprehensive care but also in providing treatment alternatives after a pain evaluation and making sure that treatment methods are continuously revised. Only a nurse with the required level of knowledge and a positive outlook on pain evaluation would be able to achieve this (McIlfatrick, 2015). Another pillar of the PTM framework is nurses' perspectives on pain evaluation and management. According to Chaikin (2010), attitude is a grouping of feelings, thoughts, and actions that are focused on a certain person, thing, or outcome. In many cases, attitudes are the product of experiences or upbringing, and they can have a significant impact on behavior. Although attitudes are enduring, they are also malleable. A subjective judgment of a person's attitude, which can be favorable or bad, is also based on an analysis of how they behave (Ajzen, 1991).

Affective, cognitive, and behavioral factors all contribute significantly to attitude. One's sentiments and impressions towards a particular object or event are included in the affective portion of an attitude. Regarding locations, people, or objects, one's thought processes are the focus of the cognitive aspect of attitude. This element also reflects a person's opinions or beliefs regarding a particular subject. The way a person typically acts or is likely to act toward something or someone is referred to as their behavioral attitude, which is the third element of attitude (Kreitner & Kinicki, 2010). According to recent study, our intentions and behavior can both be predicted by how we feel or think about whether or not to engage in a behavior (Richetin, Conner, & Perugini, 2011).

A crucial aspect of nursing practice is the interaction between the nurse and the patient (D'antonio, Beeber, Sills, & Naegle, 2014). Because they persuade the patient to take part in activities that ensure a safe recovery and total comfort, the nurse's interpersonal contact skills are crucial (Peplau, 1997). Patient-centeredness, therapeutic listening, and rapid attention to patients' needs and emotions were all emphasized in a recent review of the literature on healing relationships in critical care settings (Kornhaber, Walsh, Duff, & Walker, 2016). Nursing professionals believe their relationships with patients are important and meaningful, but they are nonetheless concerned since time and opportunity have become obstacles they must overcome (Cleary, Hunt, Horsfall, & Deacon, 2012; Humble & Cross, 2010).

Palliative care, intervention-based research, pain evaluation and management, evidence-based practice, and patient education are some of the criteria used to measure nurses' performance (Vallerand, Musto, & Polomano, 2011). To increase the standard of pain care, nurses must fulfill their duties to assess and treat patients' pain (Herr, 2011). Regardless of the hospital setting, patients' satisfaction with the caliber of pain care is viewed as a definite sign that pain assessment and management have been appropriate (Larsen et al., 2010; Topolovec-Vranic et al., 2010).

The PTM blends the knowledge and attitude of the nurses with the patient's methods of pain management to produce a singular collective transaction. Nurses are strategically positioned to give patients access to their treatment plan and to other resources that can help with pain reduction as much as feasible. To establish a collaborative connection with the patient and an effective care plan, a nurse's expertise and positive outlook on pain evaluation and treatment are essential (Keen, Embree, Lancaster & Bartlett Ellis, 2017). In general, better communication between the nurse and the patient can help with pain management

(Youngcharoen & Park, 2017). As a result, the PTM is the best model for this investigation.

2.2 Justification for the use of Pain Transactional Model

Three theories were reviewed to guide and expand on the theoretical understanding or the conceptual framework for this study. The Gate Control Theory and the Self Care Deficit Theory although contributed to explaining and providing in-depth understanding about the subject matter of pain, the constructs do not directly relate to the objectives of this study, thus, they only contribute to providing detailed understanding about the concept of pain but not in relation to the objectives of the study being conducted.

However, the pain transactional model contains significant similarities between each construct and the objectives of this study. For instance; the constructs for nurse and patient factors related with the first objective of exploring nursing knowledge, attitude and interpersonal communication in POP assessment and management. The second construct of nurse skills also related with the second objective of perceived nurse/midwife skills in assessment and management of POP. In addition, the challenges associated with assessment and management of POP by nurses/midwives also correlated with the third construct of the pain transactional model which stipulates the outcome of pain management.

Giving the similarities between the constructs of the pain transactional model and the objectives of this study, it was considered most appropriate to illuminate and broaden the theoretical understanding of pain assessment and management within the context of this study and among the study population.

2.3 Review of Related Studies

2.3.1 Knowledge of Nurses/Midwives Regarding POP Assessment and Management

In a descriptive survey in the US, Loomis et al. (2022) assessed the perspective of 92 nurses on postpartum pain management. They discovered that 91.2% of the nurses had received training in general pain treatment. Again, the reported various means of training the nurses. These includes online (74.7%), followed by coursework completed for a degree (48.4%), and emails from leadership that focused on education (37.4%). Similar trends emerged for postpartum-specific pain management training, with online modules accounting for 56% of all training sessions. Sixty- five percent of all respondents said that their training had given them the information they needed for clinical practice. A majority (81.3%) of those who responded to a question about training specifically on opioid management said they have taken some kind of course on using opioids to treat pain. Online modules were the most popular method of training for opioid-specific general (49.5%) and postpartum pain management (38.5%). In addition, Loomis et al. (2022) discovered that nurses indicated a median patient pain score of 7 out of 10 as the level at which they would suggest an opioid for pain treatment. While just 5% of respondents felt the same way about vaginal birth, the majority (95%) said that opioid use is required for pain management in more than half of all patients after a cesarean birth.

In Ethiopia, a total of 395 nurses, mostly from 22 to 29 years of age, successfully completed a questionnaire survey on nurses' knowledge and attitude towards POP management (Dessie, Asichale, Belayneh, Enyew, & Hailekiros, 2019). Nurses' knowledge on POP management was assessed using the (NKASRP) scale. The average POP management knowledge score of the

nurses was 7.74 (SD=2.16). The majority of nurses (93.16%) scored a mean of 5 and 12, whereas only 2.03% of the nurses correctly answered all questions. More than a half (56.5%) of the nurses had adequate knowledge regarding postoperative pain management. The nurses knew that pain is exactly what the patient claims and that the onset, length, variability, location, and intensity of pain are all factors to consider while assessing pain. They knew that untreated POP makes it more difficult to recover, analgesia is a critical component of POP control and that analgesics for POP should be given on a set schedule around the clock at first. They also understood how to treat acute pain using the WHO pain ladder. They incorrectly said that the patient's primary nurse is the best assessor of the severity of the patient's pain and that vital signs are consistently accurate predictors of the severity of a patient's discomfort. Furthermore, they incorrectly stated that injectable opioid analgesic injection is the preferred method for treating abrupt onset, transient, acute pain like POP.

In an Ethiopian study, Teshome, Aychew, Mitiku, & Guta (2022) examined the knowledge of nurses regarding POP. Through a systematic random sampling technique, 144 nurses were recruited to participate in the cross-sectional study that found an overall adequate knowledge (54.2%) among them regarding POP management.

Similarly, a cross-sectional study was conducted by Wurjine & Nigussie (2018) among 144 nurses who were providing post-operative patient care at hospitals of Arsi zone, Southeast Ethiopia to determine their knowledge regarding POP management. Knowledge regarding POP management was adequate among the population as more than half of them (54.86%) had high scores on knowledge related items.

Additionally, Menlah et al. used the Nurses Understanding and Attitudes Survey Regarding Pain (NKASRP) to gauge nurses' knowledge of postoperative pain and its management in

Ghana (2018). 168 nurses took part in this descriptive cross-sectional survey that involved 4 district hospitals in Ghana. According to the findings, 48% of the nurses lacked sufficient expertise on POP management.

Adams et al. (2020) used a modified version of the knowledge and attitude survey on pain questionnaire to evaluate the expertise of 211 nurses on POP management at the Tamale Teaching Hospital in a related study conducted in Ghana. They discovered that participants' percentages of correctly answered knowledge-related questions ranged from 19.9% to 92.9%. Between 25% and 82%, the total mean knowledge score was 59%. 20.9% of respondents had acceptable understanding of postoperative pain management, compared to 79.1% who had insufficient knowledge. The majority of nurses, or 76.8%, were unable to recognize that a patient might sleep through discomfort. The majority of nurses (58.8%) failed to recognize patients who can be distracted from pain but do not often experience severe pain. The majority of them (87.2%) were also unable to recognize that injecting sterile water into patients as a placebo was not a viable test to establish whether the pain was real.

2.3.2 Attitudes of nurses/midwives regarding POP management after CS

Using the Nurses' Knowledge and Attitudes Survey Regarding Pain, Dessie et al. (2019) used a cross-sectional design to examine the attitudes of post-operative pain care among nurses working in Amhara regional referral hospitals in Ethiopia (NKASRP). The majority of nurses (8.9%) had a bad attitude.

Similarly, nurses' attitudes toward the management of POP at Hospitals of Arsi zone, Southeast Ethiopia were assessed by Habte Wurjine & Girma Nigussie (2018) among 144 nurses using a cross-sectional design. More than half of the nurses were found to have unfavorable attitudes toward POP.

In another cross-sectional study conducted, Shakya & Shakya (2016) utilized a modified version of Nurses' Knowledge and Attitude Survey Regarding Pain (NKASRP) in determining the attitudes of nurses toward POP in Nepal. Nurses had low scores regarding their attitudes toward POP management.

Similarly, negative attitude was found among nurses in Greece, in a cross-sectional study conducted by Kiekkas et al. (2015) to determine attitudes of nurses regarding POP management. The outcome of the study indicates he knowledge deficits, negative attitudes of the nurses toward postoperative pain, inadequate knowledge on medication. However, increase workload as a barrier affecting nurses management of POP. The study recommends pre-graduate and continuing education, and appropriately specialized for the surgical unit.

Also, Rasmi-Issa et al. (2017) conducted a study among the Intensive Care Unit (ICU) nurses' working at King Saud Medical City (KSMC) in Saudi Arabia revealing poor attitudes among them towards POP and lack of knowledge on POP. Again, 60% of the respondent could not answer knowledge questions on POP.

However, some studies revealed positive attitudes of nurses toward management of POP. For instance, Menlah et al. (2018) examined the attitudes of Ghanaian nurses working in four selected district hospitals and found an overall positive attitude among them. Inadequate knowledge on POP among 48% of the respondents, non-use of pharmacological pain intervention method was reported by the researchers

2.3.3 Interpersonal Communication in POP management

The importance of effective communication in the assessment and management of POP cannot be understated, as it provides numerous benefits to the patients emotionally, psychological and physically. Thus, through effective communication between the nurse and patient, patients'

problems are identified, education provided to them and they tend to benefit from other interventions that help in the relief of pain.

Sugai, Deptula, Parsa, and Don Parsa (2013) conducted an experimental study to investigate how patient education and communication affect post-operative pain outcomes. A random sample of 69 patients who underwent surgery (experimental group) and were communicated with or given education, and 66 who also underwent the surgery but were not given education (control group) were sampled. Two weeks before the surgery, the patients in the experimental group were engaged in series of communications and educations regarding pain but the control group were not given. Post-operatively, it was found that about 90% of those in the experimental group did not receive hydrocodone analgesia after being educated while 10% of the control group required hydrocodone analgesia.

Vacek, Wiggins, & Struwe (2021) also demonstrated the importance of communication in the management of POP through their study which sought to describe healthcare providers' pain education to patients through a qualitative-descriptive study. Among a convenient sample of 206 healthcare providers, it was found that immediate POP management education was a priority although timing of education and communication barriers between healthcare providers and patients were also identified.

A systematic review by Reaza-Alarcón & Rodríguez-Martín (2019) summarized the importance of nursing educational interventions in the management of POP among surgical patients. Their literature search found 12 studies, among which 9 studies reported lower pain among the group of surgical patients who received educational interventions.

2.3.4 Assessment of Postoperative Pain

Ismail et al. (2012), in their cross-sectional study in Pakistan, investigated pain assessment among 263 women who have had elective caesarean section under general anesthesia (42%) and

minor anesthesia (57%). In Pakistan, 263 women underwent elective cesarean sections; their analysis of the overall pain score since the time of surgery using the Visual Analogue Scale (VAS) revealed that mild pain (VAS 0-3) was experienced at rest by 89.7% of patients, moderate pain (VAS 4-6) by 9.5%, and severe pain (VAS 7-10) by 0.8% of patients. 60.1% of patients had mild pain, 33.1% had moderate pain, and 6.8% had severe pain when they moved.

The majority of patients (91.6%) said their pain treatment was effective (Ismail et al., 2012).

Kintu et al. (2019) evaluated the intensity of pain in 333 Ugandan women who had caesarean sections under spinal anesthesia 24 hours after birth. They discovered that 68% of individuals thought their pain was adequately controlled. At 0 hours and 6 hours following surgery, all subjects' data on pain evaluation scores were complete. However, only 301 patients had data on pain assessment available 24 hours following surgery. Participants on pethidine had statistically significantly lower pain scores than those on tramadol ($Z = 3.13$, $p = 0.01$), those who did not receive analgesics ($Z = 2.78$, $p = 0.04$), and those who received multiple types of analgesics had lower pain scores than those who received tramadol ($Z = 2.9$, $p = 0.028$) after administering prescribed analgesics. For the intervals from right after surgery to six and twenty-four hours later, there was no statistically significant difference in the median pain assessment scores between the rest of the treatment group pairs (Kintu et al., 2019)

In addition, during the time period under consideration, South Africa solely employed the Verbal Rating Scale (VRS) to evaluate pain. 13 of the 55 patients whose pain was evaluated on the day of surgery had their pain measured again after receiving analgesia, representing a follow-up rate of the response to pain management of just 24%. 64% of patients had their pain evaluated on day 2 and then had it evaluated again after receiving analgesia. After receiving analgesia on day 3, 43% of patients had their pain assessed again. This was from a descriptive, retrospective, cross-sectional audit of folders of 300 women who had undergone caesarean section in a regional

hospital in Cape Town, South Africa (Munsaka, van Dyk, & Parker, 2021). In this study, most of the women (93.3%) had CS through spinal anaethesia.

2.3.5 Management of POP

For the management of pain, there are both pharmaceutical and non-pharmacological methods available. Studies on both interventional approaches have been reviewed. With emphasis on non-pharmacological pain interventions, Belay & Yirdaw (2022) hospital-based cross-sectional study was conducted in South Wollo Zone governmental hospitals, Northeast Ethiopia, to assess the POP management strategies adopted by health professionals. Findings revealed that, aside from pharmacological approaches, health workers utilized non-pharmacological measures including application of cold and heat immobilization, massage, acupuncture, and hypnosis.

Also, a cross-sectional study by Kia, Allahbakhshian, Ilkhani, Nasiri, & Allahbakhshian (2021) was conducted among 224 conveniently sampled nurses working in ten university-affiliated hospitals in Northern Iran to explore their perspectives on the non-pharmacological pain managements they adopt. Non-pharmacological managements used by nurses include: repositioning, providing serene and comfortable environment, use of assistive devices, acupuncture, acupressure, and reflexology.

Similarly, Bayoumi, Khonji, & Gabr (2021) conducted a cross-sectional study to explore perceptions on the non-pharmacological management of pain among 47 nurses who were conveniently sampled in the surgical wards in El-Mansura University Hospital, Egypt. Nurses mostly utilized non-pharmacological pain management interventions such as provision of emotional support, comfortable environment, physical methods (thermal regulation, massage, positioning) and, cognitive methods (distraction, relaxation, positive reinforcement and breathing technique).

Using an explorative descriptive qualitative approach, Konlan, Afaya, Mensah, Suuk, & Kombat, (2021) explored the use of non-pharmacological intervention in managing labour pain among nurses and midwives in Adidome Government Hospital in Ghana. The following non-pharmacological pain interventions were utilized in managing labour: encouraging deep breathing, diversion therapy, reassurance, and change of positions.

In a narrative review, Sangkum et al. (2021) posited that the primary principle of caesarean birth and pain management is multimodal analgesia. Long-acting neuraxial opioids (such as morphine) and adjunct pharmaceuticals like scheduled acetaminophen and nonsteroidal anti-inflammatory drugs are advised for a traditional analgesic regimen unless they are contraindicated. Opioids, whether taken orally or intravenously, should only be used for severe pain.

The most important criteria influencing the nursing decision about the kind and dosage of pain medication in the US were the patient-reported pain score (87%), routine habit (71.7%), and patient preference (70.7%). Fear of patient discontent and worry about opioid abuse had less of an impact on nurses (14.1% and 30.4%, respectively). The nurses stated that when it comes to pain relief options, they always suggest ibuprofen, perineal cold packs, and acetaminophen. They occasionally suggested painkillers, but infrequently massage, Lidoderm patches, and never aromatherapy (Loomis et al., 2022).

In Pakistan, 263 women who had elective caesarean section; 111 (42%) under general anesthesia and 152 (57%) under spinal anesthesia were assessed in an observational study for POP management (Ismail et al., 2012). Continuous intravenous opioid infusion was used for POP management in 94% of patients. The obstetrician changed the opioid infusion dose for the following 24 hours at a rate of 10 mg/h for pethidine and tramadol and 1 mg/h for morphine. Following surgery, the obstetric team monitored these patients and managed their insufficient

pain medication. 6% of patients chose patient-controlled intravenous analgesia (PCIA). Pethidine was administered to all patients in the PCIA form, with settings chosen by an anesthetist. Acute pain service (AMPS) monitored all PCIA patients for a full day. Additionally, 99% of patients received monthly prescriptions for co-analgesia.

Kintu et al. evaluated a prospective study of POP management in 333 Ugandan women who underwent spinal anesthesia for cesarean sections (2019). They discovered that 95% of the subjects had analgesia prescribed by surgeons. A nurse did not prescribe any analgesic drugs. Only 42% of the subjects took their analgesics exactly as directed. The median amount of time among all individuals to receive their first analgesic after leaving the operating room was 241 minutes.

According to Kintu et al. (2019), 44% of patients received only one type of analgesic medication in the first 24 hours following surgery, 14% received numerous medications, and 42% received none. Tramadol, then pethidine, was the analgesic most frequently recommended, followed by intramuscular diclofenac. No patient was given morphine intravenously or intramuscularly.

In addition, Ogboli-Nwasor et al. (2012) published a study on the management of POP among adult surgical patients in Nigeria with the goal of identifying the typical analgesics utilized in practice and the pattern of prescription in adult postoperative patients. According to the study's findings, 132 patients, or 95.7% of the respondents, had post-operative analgesics recommended by surgeons or surgical residents. Only six patients—representing 4.3%—had their post-operative analgesics suggested by the anesthetist, who acted only in a passive manner. Nine (9) patients (6.5%) received intramuscular injections of non-steroidal anti- inflammatory medicines, and one hundred and twenty-six (126) patients (91.3%) of the responders received intermittent intramuscular injections of opiates. Six patients (4.3%) received oral paracetamol prescriptions, while three patients received no postoperative analgesics. Eight hours following their surgeries,

before receiving additional doses of analgesics, 34.5% of the patients who received this pattern of analgesic prescription experienced moderate pain, and 65.2% reported mild discomfort. The study came to the conclusion that despite recent advancements and development of more effective pain management techniques for POP control, a significant number of patients continue to experience POP of moderate to severe intensity with the above pattern of post-operative analgesics prescription.

Again, in a tertiary care hospital, Kumarasingam et al. (2014) did a study on the pattern of analgesic usage among post-operative patients. For the study, patients who underwent general surgery, obstetrics and gynecology, and orthopaedic surgery were employed. The study's findings showed that 53% of patients were given monotherapy on the day of surgery, with diclofenac (60%) being the most frequently prescribed medication, followed by tramadol (37%) and pentazocine (3%). For their POP, 45% of the patients received a combination of analgesics. Out of this, 56% received a combination of tramadol and diclofenac, 24% received diclofenac and pentazocine, and the least amount (20%) received tramadol and pentazocine. Only 2% of the respondents had tri-drug therapy (diclofenac, tramadol, and pentazocine) prescribed to them. The most popular method of administering these medications was intramuscularly. The study suggested that non-opiates analgesics like diclofenac and opiates analogues might be added to patients' medications to provide pain relief when non-opiates were ineffective. It was discovered that the choice of the doctor and the type of surgery affected how analgesics were used.

Munsaka et al. (2021) in their study in South Africa found that analgesia was prescribed for over 98% of the women who had undergone caesarean section. However, 32.6% of the patients had pain medication administered as prescribed on the first day and 37% on the second day.

Oral paracetamol and morphine were prescribed in 99.7% and 82.0% of cases respectively. Minimal use of oral Nonsteroidal Anti-inflammatory Drugs (NSAIDs) was evidenced by low prescription rates throughout (4.0% – 5.0%). None of the patients received either patient-

controlled analgesia (PCA) or Transversus Abdominis Plane (TAP) block, while only one patient received a wound infusion catheter (with local anaesthetic) as supplementary strategies.

Menlah et al. (2018) observed that the vast majority (97.6%) of the nurses reported that they offered a clean, peaceful, and well-ventilated ward environment postoperatively at four district hospitals in Ghana. Encouragement of early ambulation/exercise with analgesia was another extremely successful intervention the nurses implemented. Here, up to 97.0% of respondents said they have utilized this measure. Approximately 73% and 25.6% of the respondents said they typically strengthened, wrapped, splinted, and dressed wound sites after surgery. These actions are among the standard POP therapies used by nurses worldwide, with the majority being chosen by nurses.

2.3.6 Challenges with assessment and management of POP

Due to various new rules and advancements in POP management approaches over the past 20 years, there has been an increased focus on improving POP management. Despite these advancements, POP is frequently inadequate and may put patients at risk for developing chronic pain disorders (Guillemot-Legris et al., 2018). Over the past 20 years, the prevalence of moderate to severe POP has been persistently high, affecting 20–80% of postoperative patients (Gan, 2017; Capdevila et al., 2017). Despite a sizable amount of research and therapeutic recommendations, POP management still confronts a number of challenges (Cooney, 2016). The complexity of pathophysiological mechanisms, the overlap and diversity of pain pathways, and the frequent incidence of negative side effects are some of these barriers to the creation of therapeutic drugs (Borsook, 2017). According to Drzycka-Dbrowska et al. (2016), inadequate pain management affects 80% of the world's population and is a major issue in more than 150 nations. According to Drzycka-Dbrowska et al. (2016), certain vulnerable populations are more susceptible to poor pain management than others, including the elderly, pregnant and breastfeeding women, children, persons who abuse drugs or alcohol, and people who are mentally ill.

According to Bishop et al. (2019), post-caesarean discomfort is a significant but often overlooked complication. It causes pain, interferes with breastfeeding, and is linked to postpartum depression and the onset of chronic pain syndromes. Significantly in resource-rich circumstances, pain control is difficult; it is likely to be even more difficult in resource-limited settings, when the focus is on lowering the high maternal mortality rate. In resource- constrained areas, the lack of proper staffing, education, and postoperative monitoring severely limits the alternatives. Limited access to critical analgesic medications and equipment for their administration exacerbates the problem in resource-constrained situations. Consequently, Francis and Fitzpatrick (2013) advocated the need for nurses to gain more knowledge on pain management since they found that nurses had poor knowledge on pain assessment and management practices.

Ismail et al. (2012) discovered that 9% of the women in their study who had caesarean sections in Pakistan complained of various problems. 0.8% of the patients had backaches, 1.5% had headaches, 2.3% had nausea and vomiting, and 0.4% had drowsiness. The remainder (4.2%) cited other difficulties. All of these issues, though minor, were successfully treated, and they didn't cause any delays or require readmission after release.

In four district hospitals in Ghana, nurses responded minimally to not at all to interventions such as music therapy, frequent administration of the painkiller pethidine, promoting use of transcutaneous electrical nerve stimulators, and the use of acupuncture. This was related to the lack of several essential tools and medications needed to carry out specific POP control strategies (Menlah et al., 2018). Additionally, Adams et al. (2020) discovered that the majority of the nurses in Ghana who participated in their study (61.6%) had never undergone POP management training.

Existing literature reveals several hindrances (such as system-related, staff-related, nurse-related, physician-related, and patient-related) that have been identified to hinder health care professionals from achieving optimal pain management (Mędrzycka-Dąbrowska et al., 2016). System-related hindrances include a lack of clearly defined standards and pain management protocols and limited access to pain specialists and analgesics (Shoqirat et al., 2019; Mędrzycka-Dąbrowska et al., 2016). Staff-related hindrances include inadequate knowledge and skills, and a lack of teamwork (Shoqirat et al., 2019; Mędrzycka-Dąbrowska et al., 2016). Lack of knowledge and false concerns about addiction and overdosing are examples of physician-related barriers (Shoqirat et al., 2019; Mędrzycka-Dąbrowska et al., 2016). Nurse- related hindrances include inadequate knowledge, heavy workload, and lack of time (Shoqirat et al., 2019; Mędrzycka-Dąbrowska et al., 2016). Reluctance to take analgesics, fear of side effects, and fear of addiction are examples of patient-related factors (Shoqirat et al., 2019; Mędrzycka-Dąbrowska et al., 2016).

2.4 Summary

The purpose of this study is to explore POP management by nurses and midwives. Results from the review of studies on pain point to a clear lack of education in pain evaluation and management. There are certain obvious obstacles preventing POP management interventions and indicating the need for greater training in POP pain management. Although studies on POP pain management abound, there is paucity of studies on management of POP in women after caesarean section and the challenges associated with it. The outcome of the literature indicates that experiences is a universal experience associated with surgical procedure. As a result, nurses knowledge and attitude is very crucial. Again, literature was reviewed from resources constraint countries and advanced countries. This study will fill in this gap.

CHAPTER THREE

METHODOLOGY

This chapter introduces the methods of data collection and analysis that was used in this research. The chapter also explores why the chosen framework is suitable for the study. Specifically, this chapter presents the research design, the study population, sampling technique and sample size selection, the inclusion and exclusion criteria, the procedure for data collection and strategies adopted in the analysis of the data. The chapter also addresses methodological rigour and pertinent ethical issues pertaining to qualitative research.

3.1 Research Design

This study employed the exploratory-descriptive qualitative research design to assess the phenomenon under study. The philosophical underpinning of this research is interpretivism. According to an interpretivist viewpoint, social worlds cannot be examined in the same way that physical phenomena can since complexity must be considered (Saunders, Lewis, & Thornhill, 2016). The goal of interpretivist research is to develop new and more complex perspectives on the world we live in. With interpretivism, the starting point for the development of knowledge is the interpretation of reality (Duberley, Johnson, & Cassell, 2012).

This research falls under the paradigm of qualitative research as it uses words as data and utilizes a meaning-based form of data analysis (Braun & Clarke, 2013). According to Creswell (2013), qualitative research intends to provide a complex and detailed understanding of a phenomena, which can only be identified by talking directly with people and allowing them to share their lived experiences.

Mack et al. (2005) also suggest that qualitative research is a type of scientific research and, in general terms, consists of an investigation that seeks answers to a question, systematically uses a pre-defined set of procedures to answer the question, collects evidence, produces findings that

were not determined in advance, and that are applicable beyond the immediate boundaries of the study. The strength of a qualitative research lies in the opportunity to provide complex textual descriptions of how people experience a given research issue (Mack, Woodsong, MacQueen, Guest, & Namey, 2005).

Rather than offering observations and explanations regarding the phenomena under inquiry, exploratory qualitative studies entail a thorough examination of the phenomenon. This gives a more comprehensive explanation and comprehension of the phenomenon of interest (Polit & Beck, 2010). The exploratory method to qualitative research has several advantages, including the flexibility of data sources, such as the use of interviews and conversations, as well as a focus on understanding a topic under study rather than drawing firm conclusions. The descriptive research approach aids the researcher in obtaining an objective and accurate description of the phenomenon being investigated (Polit & Beck, 2018). It gives a broad picture of the notion and how particular phenomena occur, making it easier to describe and deliver information.

However, it is important to acknowledge and accept that researcher's values and experience inevitably influence data interpretation. Therefore, good qualitative research is committed to using critical reflection on how the research process may have been affected and the data that it produced (Morrow, 2005). Moreover, given the usually small sample size and absence of statistical analyses, qualitative research is not generalizable and it is important for the researcher not to imply that the findings can be generalized to other population or setting (Morrow, 2005).

3.2 Research Setting

The study was conducted at the Obstetrics and Gynaecological Department of the Greater Accra Regional Hospital (Ridge Hospital) in the Greater Accra Region of Ghana. The Greater Accra Regional Hospital is one of the largest hospitals in Ghana and also serves as one of the main referral centres for other health facilities in the South-Eastern part of Greater Accra.

The Greater Accra Regional Hospital (GARH) is situated at North Ridge in the Osu-Klottey Sub-Metro of the Accra Metropolitan Area in the Greater Accra Region (GAR) of Ghana. It occupies a total land area of about 15.65 acres. As the Regional Hospital for Greater Accra, its catchment area is the whole of the region with an estimated population of over 5,455,692

(based on 2021 population and housing census by the Ghana Statistical Service)

The GARH started as a Hospital for the European expatriates around 1928. It became a District Hospital after Ghana's independence in 1957 and was later designated as Regional Hospital in 1997. The hospital is now redeveloped and transformed into an ultra-modern 420 bed capacity hospital with the full complement of specialist services that reflects the current social aspirations of the rapidly growing capital city of Ghana.

The hospital has departments which include internal medicine, general surgery, paediatrics, theatre, obstetrics and gynaecological care as well as accident and emergency services among others. Its specialized clinics and units include neurosurgery services, spine health service, ophthalmology, services, dental services, maxillofacial service. Supporting services include medical laboratory, blood bank, radiology, ultrasound scan, pharmacy and physiotherapy. The Obstetrics and Gynaecological department is one of the clinical departments and it provides free antenatal care services, childbirth and postpartum services and child health services. It is equipped with state of the art and modern health care delivery services such as ECG, CT scan, MRI, and carry out major surgical procedures. All deliveries are attended by registered nurses, midwives and doctors.

Figure 2: Map of Greater Accra Region, showing the location of Greater Accra Regional Hospital, Ridge and its surrounding environs.

3.3 Study Population

The target population is referred to as the general aggregate of people or subjects with certain properties that are of particular interest to the investigator and for the research (Nieswiadomy, 2008). The population for the study is professional nurses and midwives at the Greater Accra Regional Hospital.

3.4 Inclusion Criteria

1. Registered nurses and midwives working at the obstetrics and gynecological department of the Greater Accra Regional Hospital.
2. Registered nurses and midwives with at least two-year work experience at the obstetrics and gynecological department of the Greater Accra Regional Hospital.

3. Registered nurses and midwives who have been involved in post-operative assessment and management of women who have undergone caesarean section.

3.5 Exclusion Criteria

1. Registered nurses and midwives at the obstetrics and gynecological department of the Greater Accra Regional Hospital who are sick or on study leave at the time of the study.
2. Registered nurses and midwives at the Obstetric and gynecological department of GARH who declined participation.
3. Nurses and midwives with less than two years' experience at the obstetric and gynecological department of the Greater Accra Regional Hospital.

3.6 Sample size

The decision on sample size was based on several factors. According to Kish (1965), one factor that affects the decision of sample size is the homogeneity of the population. In this research, nurses and midwives in the Greater Accra Regional Hospital are homogeneous in that they offer very similar services and have little distinguishing characteristics. Again, since the data collected was more qualitative in nature, a smaller sample size was reasonable. Qualitative researchers are concerned with cases that can afford clarity and deeper understanding (Neuman, 2006). According to Patton (2002) there are no rules for sample size in qualitative research. Morse (2000) also suggests that the more useful data are collected from each person, the fewer participants are needed in qualitative research.

A total of 16 nurses and midwives were selected as the sample to represent the target population for the study. This number was determined at the point of saturation, where no new data could be extracted from participants. The concept of data saturation is considered as important in qualitative research because it addresses whether a study is based on an adequate sample to demonstrate content validity (Francis et al., 2010).

3.7 Sampling Technique

The sampling technique is a means to determine how a sample is identified and recruited and the number of subjects involved in the sample (Polit & Beck, 2012). This study employed the purposive sampling technique to recruit participants for the study. The purposive sampling technique is a form of non-probability sampling technique defined by Parahoo (2014) as a method of sampling in which participants are actively picked by the researcher based on their (participants') ability to contribute relevant information for the study being undertaken.

This sampling technique was applied by collaborating with the nurse or midwifery managers in charge of the Obstetrics and Gynaecological department to help identity the nurses and midwives who met the criteria for inclusion into the study. This was done by identifying and selecting on purpose only registered nurses and midwives at the Obstetrics and Gynaecological department of the Greater Accra Regional Hospital who have at least 2 years work experience and have been involved in post-operative management of women who have undergone caesarean section. Only those who agreed to take part in the study were recruited for the study.

This recruitment was done until the required number was achieved.

3.8 Tool for Data Collection

A semi-structured interview guide was developed and used to collect data for the study. The semi-structured interview guide helped to conduct in-depth face-to-face interviews with participants. This is a tool in which open and direct questions are used to elicit detailed narratives and stories (DiCicco-Bloom & Crabtree, 2006). It is very flexible and provides the interviewees the opportunity to freely express themselves and provide in-depth information concerning their experiences of the phenomenon under study. Furthermore, it allows the researcher the opportunity to seek clarifications through follow up questions (Kusi, 2012).

The semi-structured interview guide was developed in accordance with the objectives of the study and in relation to the constructs of the model being adopted for the study. Therefore, the

researcher prepared a list of indicative questions around what participants experienced in terms of the phenomenon under study. In developing the interview guide for the study, the researcher carefully drafted, edited and polished the interview questions and guide based on the objectives of the study and review of the extant literature.

The interview guide was structured into two sections. The first section (section A) covered demographic characteristics of respondents such as age, sex, profession (nurse or midwife), unit or ward, religious affiliation, highest educational level. The questions in section B comprised open-ended questions to elicit data from the participants in regard to nurse/midwife related factors, perceived skills in POP assessment and challenges with assessment and management of POP of women who have had caesarean section.

The researcher probed further with follow up questions such as "could you describe more about that"? "Could you give me an example"? "What does that mean to you"? to better understand how nurses and midwives manage POP of women who have undergone caesarean section and the challenges they face with assessment and management of their POP. The interview guide was refined after pretesting on a total of 5 nurses and midwives at the 37 Military Hospital.

3.9 Data Collection Procedure

Prior to commencement of data collection, ethics clearance was obtained from the Ghana Health Service Ethics Review Committee and permission sought from management of the Greater Accra Regional Hospital to conduct the interviews. Face-to-face in-depth interviews were conducted using the semi-structured interview guide. According to Braun and Clarke (2013), interviews are the most utilized method for collecting qualitative data, as interviews are well suited for experience-type questions such as the one presented in the current study. Seidman (2013) also suggested that when people tell stories, they select details of their experience from their stream of consciousness. Hence, the interview is a technique designed to elicit a vivid picture of the participant's perspective on the research topic.

The participants were identified at the obstetric and gynecological department while providing care. The participants information sheet containing the purpose and nature of the study was given to them. Again, the nature of the study was further explained to them. Those who agreed to participate in the study were made to signs a consent form and an appointment booked. The interviews were conducted at a venue and time of choice of the participants. The interviews were conducted in a private, and noise free environment where participant could easily express themselves. The researcher ensured that the venue where data was being collected was quiet and appropriate for the interview. Each interview lasted for a time period of 45 to 60 minutes and was audiotaped with the consent of the participants. The data collection process lasted for one (1) week.

The interview started with general questions about the participant's work before focusing on their knowledge and management of POP of women after caesarean section and the challenges they face. The open-ended questions gave participants the opportunity to respond in their own words, rather than forcing them to choose from fixed responses (Mack et al., 2005). The interviews were conducted in English. Responses from participants were followed by probes to gain more understanding into the accounts of the participants. Follow-up questions helped elicit clarification from participants, where necessary. Field notes on observations made during each interview were also taken and added to the data during analysis to provide some more clarity.

3.10 Methodological rigour

There are four measures or criterion for ensuring trustworthiness of qualitative research by Lincoln and Guba (1985) and they were applied in this study. These include principles of credibility, transferability, dependability and confirmability.

- **Credibility:** The degree to which the findings are consistent with reality is referred to as credibility (Speziale & Carpenter, 2007). This was ensured through longer involvement

with the topic matter and member checking, which involved returning the final report to the participants to determine if it accurately reflected their report

(Creswell, 2015).

- **Transferability:** The amount to which findings can be transferred to similar situations is referred to as transferability (Creswell, 2014). To ensure transferability, full descriptions were depicted exactly as the participants delivered them. This included enough contextual information on the fieldwork to allow readers to make this

  connection. The research setting, the calibre of people who participated in the study, and the methodologies used were all described in detail.

- **Dependability:** The degree to which content judgments regarding similarities and differences are constant across time is referred to as dependability (Graneheim & Lundman, 2004). The researcher generated extensive documentation of the study's processes to assure dependability. This includes (1) a description of the research strategy and how it was carried out; (2) a full explanation of the data collection procedure; and (3) a description of the field work.

- **Confirmability:** Confirmability refers to the degree to which impartiality in qualitative research is assured without the researcher's prejudices (Kusi, 2012). Confirmability entails comparing the procedures and maintaining an audit trail. During the data analysis phase, data triangulation was done using a combination of field notes and interviews.

3.11 Data Management

Hard copies of information collected including signed consent forms and hard copies of demographic data were kept safely in a file and kept under lock and key. Audio transcripts were also stored on a password protected computer and made accessible only to the researcher and supervisor. Codes were used in the stead of real names of the participants in the report of results

from the study. All information forms of data collected for the study will be stored securely for a period of at least 5 years before they will be destroyed.

3.12 Data Analysis

The study adopted the thematic analysis approach as postulated by Braun and Clarke (2006) to analyse the data collected. According to Braun and Clarke (2006), thematic analysis is a qualitative method for identifying, analysing and reporting patterns (themes) within data. It is a widely used method for recovering the theme or themes that are embodied and dramatized in the evolving meaning and imagery of work (Van Manen, 1997). In this study, thematic analysis helped in the identification and analysis of the themes that emerged from the data analysis. Data was transcribed verbatim and analysed concurrently after each interview.

The thematic analysis involves a thorough and a rigorous data familiarization (transcripts) and then coding and recoding to identify the major themes and sub themes from the data collected (Braun & Clarke, 2006). The researcher followed the six phases of the thematic analysis as enumerated by Braun and Clarke (2006). These phases are familiarization with the data, generating initial codes, searching for themes, reviewing the themes, defining and naming themes and producing the report.

In familiarizing with the data, the researcher took time to transcribe the interviews as recorded. The transcriptions helped the researcher to better understand the data collected. The transcription of the data helped to create a better meaning to the interviews to be conducted.

The time spent on the transcription was very useful as it informed the patterns of the data set. The researcher then proceeded to use codes to organize the data in a meaningful manner as suggested by Braun and Clarke (2006). This involves using words or phrases to represent sentences or parts of transcribed data from the transcripts. The researcher after coding the data, grouped similar codes together to form sub-themes. Similar sub-themes were also grouped

together to form themes that fell under the constructs of the pain transaction model adopted for the study. Essentially, the researcher began by analysing codes and considered how similar codes could be combined into potential themes. At the phase of reviewing the themes, the researcher checked and rechecked the themes identified for consistency.

According to Braun and Clarke (2006), the next phase after reviewing the identified theme is to define and name themes. The researcher identified the aspect of the data each theme carries and also identified how each theme fits into the overall purpose of the study. Finally, the researcher produced a report from the findings of the study. The themes identified were integrated and the findings presented in chapter four of the study. Verbatim quotes were used to support the findings.

3.13 Ethical considerations

The study was guided by the guidelines of the American Psychological Association (APA, 2002) ethical code for research that involves using humans as research participants. The principles per the APA (2002) standard include being conscious of multiple roles in the research process, following informed-consent rules, and respecting the confidentiality and privacy of the participants. Ethical approval for the study was sought from the Ghana Health Service Ethics Review Committee. Formal permission was also sought from the management of the Greater Accra Regional Hospital. This was done by sending an introductory letter from the School of Nursing and Midwifery, University of Ghana, Legon to the medical director of the hospital and the nurse or midwifery manager (s) in charge of the Obstetrics and Gynaecological department of the Greater Accra Regional Hospital.

The researcher explained the purpose of the study to the participants. They were then invited to take part in the study. Those who gave their consent to take part in the study, were then recruited and allowed to participate in the study. They were given an information sheet which stipulates their roles, rights, risks and benefits of participating in the study. The participants were also given

a written consent form to sign to indicate their willingness and consent to participate in the study. The researcher also sought the consent of the participants to audio- record the interview.

No one was coerced to participate in the study. The participants were informed about their freedom and right to withdraw from the study at any time if they wish to do so without providing any detail of reasons to stop being a part of the study. They were also informed that any decision to stop taking part in the study will not affect them in any way. Participants were also informed of their right to refuse to answer any question they are not comfortable with during the interview.

In order to ensure privacy, the interviews were conducted at a place and time of convenience to the participants without any interference. To ensure confidentiality, all the participants were reassured that all information provided by them will be treated as private and confidential. Audio records and transcribed data were stored on a password protected computer and kept within the reach of only the research and supervisors. The researcher in ensuring the anonymity did not tag the names of the respondents in the analysis and reporting of the research data. Codes instead of real names of participants were used in the reporting of findings to ensure anonymity.

Strict adherence to all COVID-19 protocols were also observed to ensure participants and researcher safety. Thus, social distancing of at least 6 feet was maintained at all times between the researcher and the respondents. Hand washing was ensured before and after each interview. All respondents were provided with nose masks and sanitizers to use. Both respondents and the researcher wore face masks throughout the period of interaction.

CHAPTER FOUR

FINDINGS / RESULTS

This chapter presents the findings of the data generated from the study. The aim of the research was to explore the perspectives of nurses/midwives in the management of POP after CS at the GARH. Three (3) major themes emerged from the data as guided by the constructs of the conceptual framework by Keen et al. (2017) with seven (7) sub-themes emerging from the content analysis of the data. The three themes were nurse/midwife related factors, perceived nurse/midwife skills, and challenges associated with assessment and management of post-operative pain. Verbatim quotations were used to support the themes and sub-themes using appropriate pseudonyms to ensure anonymity. Detailed description of the demographic characteristics of participants were also captured.

4.1 Demographic characteristics of participants

Sixteen (16) participants comprising six (6) nurse-midwives and ten (10) direct midwives working at the post anaesthesia care unit and the lying-in ward of the Greater Accra Regional Hospital participated in this study. All sixteen (16) participants were females. Of the total participants, four (4), representing 25% were between the ages of 20 to 29, five (5), representing 31.25% were between ages 30 to 39, four representing 25% were between ages 40 to 49, and three (3), representing 18.75% were between ages 50 to 59 years. Seven (7) of the participants had 2-7 years working experience in the healthcare service, four (4) had between 8-14 years and five (5) had between 15 to 21 years, representing 43.75%, 25% and 31.25% respectively. Concerning their levels of education, four (4) of the participants representing 25% had Diploma, ten (10) representing 62.5% had Degree and two (2) representing 12.5% had attained Master of Science degree. A greater number of the respondents (8) were married, seven (7) were single and one (1) was a widow representing 50%, 43.75% and 6.25% respectively. Finally, four (4) of the participants representing 25% of the participants have

personally had CS delivery while the remaining twelve (12) have not undergone caesarean section.

4.2 Emerged Themes and Sub-Themes

The concepts that emerged from the data analysis were classified into themes and sub-themes to reflect the perspectives of nurses/midwives in the assessment and management of post- operative pain. The table below shows the three main themes and seven sub-themes which emerged from the analysis of the findings following the objectives of the study. No other themes were identified from the study.

Table 1: Themes and sub-themes

NO.	THEMES	SUB THEMES
1.	**Nurse/midwife related factors**	Nursing knowledge
		Nursing attitude
		Interpersonal communication
2.	**Perceived nurse/midwife skill**	Assessment
		Treatment
3.	**Challenges associated with assessment and management of POP**	1. Individual level challenge 2. Structural level challenge a. health system b. health policy

4.3 Nurse/Midwife Related Factors

The first objective of the study was to explore nurses/midwives related factors influencing the assessment and management of post-operative pain after C-section at the Greater Accra Regional Hospital. The main theme of nurses/midwives related factors sought to answer the question 'what is the knowledge of nurses/midwives on POP assessment and management after CS?'. To answer this question, three sub-themes were identified following the data analysis: nursing knowledge, nursing attitude and interpersonal communication.

4.3.1 Nursing knowledge

The study explored the knowledge of participants on pain expression, intensity, quality, aggravating and relieving factors experienced by patients after C-section. Participants described some of the pain behaviours of patients as well as personal experiences that have contributed to knowledge on post-operative pain after CS.

Most participants described post CS pain after recovery from anaesthesia as severe and unbearable until interventions are given. They recounted patients expressed the pain by crying, groaning, holding unto the nurses tightly or persistent calls and complaints.

> *Well, I haven't experienced it yet, but from the look on their faces, it is not easy at all, they go through a lot of pain. Some cry and they will call you every minute that they're in pain once the anaesthesia has worn off, and sometimes hold you tightly when you get close to them. – NM-4*

> *At times, the patient will keep calling and complaining of pain few hours after they have returned from theatre until you have intervened by given pain medication before they calm down. – NM-6*

Some participants described the severity of POP, and those with previous exposure to C-section delivery also recounted the ordeal they went through after the anaesthesia had worn off after surgery, describing the pain as cutting in nature and very severe.

> *Okay, let me use my own experience, personally, immediately after surgery, I was fine. I think about 3 hours after surgery then I began to have severe pains, it was damaging and very very painful once the anaesthesia wears off. So you don't want to wait for someone to go through that pain for a long time before you respond- NM-9*

Participants acknowledged that post CS pain was more intense in patients who had had multiple surgeries, especially patients having CS the second and third time experience more pain compared to those having CS for the first time.

> *Okay, from my observation I think that the pain is very intense, especially those who have had CS for the second and the third time. They really have pains and even if you give them pain medications they still complain and request for more pain medications. NM-12*

> *I've had three (3) caesarean sections, and each operation comes along with more pain, not like the previous one but much more painful, it's not a pleasant experience at all. – NM-3*

Others attributed the quality of pain after CS to the type of anaesthesia which was given in the theatre. It was noted that clients who were given intrathecal morphine as part of the anaesthesia in the theatre experienced less pain as compared to those who did not receive such treatment.

> *What I see is, if they don't receive morphine with the Marcaine in theatre, the pain is so severe and they don't cooperate with you when you're talking to them and they keep talking about the pain. NM-5*

> *For those who were not given the spinal block with morphine, they complain of severe pains, especially when they make attempt to ambulate or breastfeed. Some patients will not even attempt to change their position in bed because of pain and will not attempt to breastfeed even if the baby is crying. NM-8*

Those who had intrathecal morphine were more cooperative in their care, ambulated faster, and assisted in self-care as well as breastfeeding and care of their new-borns whiles their

counterparts who were not given intrathecal morphine refused to get out of bed or breastfeed because of pain.

> *Once they get intrathecal morphine in theatre, the pain is well managed and when they come out and we also top it up with what we have here, they cooperate with us and they ambulate faster. NM-6*

From the participants, it was realized that patients expressed pain differently. Some women were more tolerant to pain than others, though you can see from their facial expression that they were in pain.

> *Some patients don't talk about the pain at all, they keep lying down quietly until the midwife asks questions and assesses to know if they are in pain. Sometimes they come out to tell you "I'm in pain but I'm just managing it'. Especially women from the north, they believe they have to go through some form of pain during delivery no matter what. NM-6*

> *Other patients cry aloud and make funny noises that will let you know that they're in severe pain and need treatment. They will keep disturbing everyone in the ward until something is done to relief the pain. NM-7*

Some participants also recounted some of the aggravating factors to pain as ambulation, breastfeeding, wound dressing, and sometimes changing position in bed.

> *Some patients complain a lot, especially when you are changing their wound dressing. Others complain of pain when they make attempt to ambulate and change position in bed, and sometimes remain in one position in bed for a long time. NM-8*

Some patients complain of severe pain during breastfeeding, and sometimes refuse to attend to their babies. Because of pain, they do not even attempt to breastfeed even if the baby is crying. –NM-9

4.3.2 Nursing attitude

All 16 participants recounted how the attitude of nurses/midwives towards assessment and management of post-operative pain plays a pivotal role in the care of the post CS patients. The sub-theme that sought to capture the participants' attitude towards patients with post-operative pain assessment and management looked at both positive and negative attitudes. Some of the positive attitudes identified include: recognizing the presence of post-operative pain, willingness to help alleviate pain, response to calls from patients and regular communication with patients. The negative attitudes include: not prioritizing patients' pain complaints, not giving enough attention to patients, feeling patients are exaggerating, administration of placebo (water for injection), and expression of participants' frustrations.

Few participants indicated that some of the positive attitudes during care of the patients with POP included acknowledging patients' pain and willingness to help.

Most of us empathize with the patients when they are in pain, and I don't think the patients exaggerate because, post-op pain is not easy. Past post-op experience makes some of us take immediate action to treat the pain and calm patients. NM-3

You see, even when you have severe headache, you know it is not comfortable at all. Once the patient tells you she's in pain, you feel for her and you quickly have to give her something before you call the doctor to come and assess the client and review. NM-4

Though the response from the participants show they identified with the pain experiences of the patients, others were also concerned about breastfeeding the new-born baby and in order to achieve this, the mother must be calm and pain free.

> *We become very worried and even the pain can prevent the woman from breastfeeding. But as much as possible, we all know that the baby must be breastfed after he/she is delivered. So we quickly have to take off the pain for the mother to feel comfortable to feed the baby so that she can rest. NM-5*

> *We're a baby friendly facility and if pain is not well managed, she cannot breastfeed the baby. She will not take any instructions from you, so it is paramount that the pain is well managed, then they take instructions and breastfeed their babies. –NM-6*

Most participants recounted how they empathize with patients complaining of pain after surgery and did not consider the behaviour or the excessive noise and cry from the patient as a nuisance but rather empathized with them and assisted in the pain management.

> *So, when the patient is in pain like that, it makes you uncomfortable because she is not calm and will be calling you every minute and will be crying and complaining and disturbing other patients in the ward. So when I'm on duty, I don't even wait for the patient to complain, but as scheduled on the treatment sheet, you have to go by it, and start giving them medication. – NM-7*

> *We feel their pain because of personal experiences, and we are committed to manage their pain. At first, we used to say that "Oh it'll go (in Twi)" or the pain, it will go down, but nowadays we take initiative the moment the person complains about the pain. – NM-8*

Okay, it's not easy at all to observe someone in pain especially for those of us who have not been there. So you'll picture yourself in it, and try to do something about the pain by giving them analgesics and informing the doctors to come and review them – NM-12

Some negative attitudes included: thinking patients exaggerate, ignoring calls and complaints from patient and giving placebo instead of pain medication. The study identified some of the negative attitudes as not responding to the initial calls from patient.

"Oh they're not complaining much so let's wait until the pain is severe", I would say most of them are not worried, because, they feel this is surgery and there should be pain and at times give placebo to see if patients are really in pain. So it depends on the person managing the patient in the ward –NM-7
Sometimes there are several patients in the ward so if you keep calling that you are in pain meanwhile we have already given some medication, it takes time before we come back to attend to you. At times the person will say "You you're wicked. – NM-12

Other participants felt since surgery was done, pain, is expected and once some pain medications have been given initially, the patient must try to tolerate the pain for a while till the next treatment schedule is due.

So at least they should be able to bear some pain. Most midwives will want the patients to accommodate the pain a little because even the normal traditional way of labour is painful. NM-10

Participants also gave account of some of the comments from patients which was unpleasant to the nurses and midwives. They sometimes accuse some staff of wickedness for refusing to give a particular medication (pethidine) and this influence the attitude towards patients.

Sometimes they give us pressure and request for pethidine, and call you names or at times say that you are very wicked, and their relatives will be coming around "My wife is in pain, you're not doing anything about it". Meanwhile we've been there already and given suppository for the pain to subside. So that sometimes get us angry but we try to control ourselves. –NM-12

Sometimes you end up shouting at them and ignoring them after giving them medication and they keep complaining. 'We have given you the diclo so you lie down for it to work so don't complain again. – NM-8

When they are in pain, they really give a lot of attitude, when they request for Pethidine and you don't give pethidine but anything else, some will say "you are very wicked", nothing you tell them will make them be calm, so we try and then manage it. - NM-11

4.3.3 Interpersonal communication

In this study, it was realized that majority of the participants (13) showed concern and had interest in the wellbeing of the patient, their newly born babies as well as their relatives. Patients who had elective surgery were more enlightened about their condition compared to those who had an emergency surgery.

Some positive interpersonal communication according to participants included: reassurances, simple conversation, smiles, listening attentively, showing empathy, health education and personal care.

They like lying down still, and they want their relatives to be around them. When they call and you go they don't want you to leave their site but to talk and talk so for some of us who like talking, it's an interesting time with them. –NM-5

In the first 3 hours of CS they have to be in the supine position, but after 3 hours we assist them out of bed, sit up or help them lay in different positions. Sometimes, some people will prefer to bring the head a bit up. When you assist them in to be comfortable, they really appreciate it. NM-2

So if I'm to use myself as an example, I realized when I put the pillow behind me halfway, it helped reduce my incisional pain, yes. So with the others, sometimes they'll tell you they want to adjust their legs, and when they are able to lift one leg in a way it reduces a bit of pressure on the abdomen reducing pain at the incisional site. I also had similar experience during my time so these are some of the little things you can assist the patient with, to relief her of pain and while doing that you have to talk to her. -NM-7

For some of the patients, they were much concerned about their babies, especially if it was the first baby, and according to the participants, most of their conversation was about the care of the baby. Providing them with the necessary information and answers to their questions about their babies' condition made them calm and less apprehensive.

Some babies are sent to NICU after birth for monitoring, so after a mother has stayed in the ward for some hours and hasn't seen her baby, She'll be restless, anxious no matter what you say and ask many questions. Immediately she goes down there to see the baby you realize her mood has changed and she becomes responsive, knowing her baby is fine. – NM-6

Participants recounted how difficult it is to counsel those who lose their babies during or after surgery. They become very disturbed and withdrawn from any activity.

... But same cannot be said for those who lose their babies. They feel worthless and worry about the fact that they will be going home without their babies.

Using different scenarios to reassure them help to relief some of the psychological pain. Sometimes if there are other clients in the ward with similar experience, you introduce them to each other and allow them to chat since they become very quiet and sober. –NM-2

Relatives of patients were not left out. Some participants were of the view that involving the close relatives of patients in their care makes patients even more cooperative and comfortable. After surgery, some preferred their spouses to be around and others requested for their mothers to be given the opportunity to stay with them for some time.

They like lying down still, and they want their relatives to be around them. And when they request for a relative to be around and you allow it, they become very happy and relaxed. –NM-5

Mm, at times, the adolescents don't talk, they don't tell anybody anything but will be there quietly but she will tell the mother easily that she is in pain. I don't know maybe they fear that you're going to shout at them or may be during the pregnancy, the way people talked to them...NM-8.

You know women, sometimes it's just attention seeking, after talking to them for a while, we need to continue with our work in the ward, so we allow their relatives to come and be with them, preferably the mother or husband to have conversations with them and then they're good to go. –NM-10

A few frustrations were also recounted by some participants as some patients refuse to respond to any questions you ask, and lie down quietly meanwhile they may be in pain and rather report the pain to their relatives.

Some patients are quiet the whole time, and when you approach they won't say anything meanwhile they may have a problem. So if the ward is busy, that person may not be given any attention and she will give a bad report to the relatives that nobody is attending to her. – NM-8

Normally, they don't tell us they are PUD clients, ulcer patients and are not supposed to take NSAIDS, so, after giving the medication, they will tell you that they don't take Diclo. You now have to look for the attending doctor to prescribe new treatment for them especially if you don't have Pethidine and they will be complaining of pain at the same time. NM-2

For some of them they will be crying, shouting and exaggerating the pain unless they are given Pethidine before they relax. I feel this is sometimes intentional so if you are not careful, you can run into problem-NM-13

4.4 Perceived Nurse/Midwife Skills

The second objective of the study was to look at the practices of assessment and management of post-operative pain at the Greater Accra Regional Hospital. The main theme of perceived nurse/midwife skills sought to answer the objective question "how do nurses/midwives conduct POP assessment and management after CS at the GARH?". The sub-themes for this main theme are assessment and treatment.

4.4.1 Assessment

Almost all participants (14) know about the existence of pain assessment tools from school, through in-service training, or from what they see others do (numeric rating scales and the visual analogue scales). However, they had no in-depth knowledge or practical training on the usage of these pain assessment tools. Most of them thus resorted to the use of the numerical rating scale. Secondly, the post anaesthesia care unit and the lying-in wards did not have

available tools to assess pain or conventional protocols for assessing post-operative pain at the time of this study.

Participants described how they learnt and carried out pain assessment in the ward using the numerical rating scale, though they had little knowledge on how to use it for decision making in the care of the patient.

> *We have no formal training. so sometimes we ask them that from a scale of 1 to 10, where does your pain fall. Does it fall within 1, is it within 10? When patient tells you that my pain is 8, 9, 10, then you should know that patient is in severe pain and you have to intervene. -NM-6*

> *It's just on the job that we saw seniors do and we also grew up to be doing the same thing in assessing and managing patients after CS on the ward. So usually you ask the patient that if a pain scale has 0 to 10, you can ask the client to choose from the scale based on how she's feeling with 10 being the highest pain and then you can do your scoring. NM-7*

Other participants acknowledged using the facial expression and observing patients' behaviours during movement to assess for pain rather than their complaints.

> *Okay, I cannot speak for everybody but I use observations more than the client's complaints because when the clients come back from theatre, we monitor them closely and in that period, I observe the facial expressions whether she keeps squeezing the face and her way of doing things to tell if she is in pain. –NM-3*

> *Myself I pick it from the time they're being transferred from the theatre trolley to the bed. The way some of them will shout, some of them will cry, so that should signal that she is really in pain. And sometimes too, you know they're caesarean*

section mothers, so you want to fix the baby to the breasts, but because of the pain, you have to help her with something before she breastfeeds.

-NM-8

A participant acknowledged using the level of activity such as getting out of bed or early ambulation to assess the level of pain of patients when they return to the ward.

Sometimes in the morning some wouldn't want to get out of bed at all and even their facial expressions could tell you that there is something going on. So we assess to see where exactly the pain is coming from. Is it from the incision site? or she is bleeding? or she has taken something that maybe causing the discomfort? You'll assess to see where the pain is coming from and then you call a doctor to review. NM-9

Other participants assessed pain using basically patients' complaints. Some patients tell you exactly how they feel and the level of pain they are experiencing.

In the absence of formal assessment tools, we go by the patients' words. They verbalize when they have pain. you know when they are in severe pains, sometimes they can't even voice out loudly, but others will be screaming and calling you every minute that they're in pain. NM-1

One participant said she only goes according to planned treatment schedule but not based on pain assessment tool or the complaints from the patients.

Well, I don't really do an assessment, but rather go according to the plan on the system. Okay, so I give them the pain medications based on prescription but don't wait until they complain of pain. –NM-4

A few participants spoke about the variations in the vital signs when a patient is in pain but not always because others also reported no change in the vital signs but patient will be complaining of severe pains.

> *The vital signs like the BP will be fine, (110/80, the pulse will be ok, it's not even up to 80bpm, the respiration and SpO2 everything will be fine but the patient will be crying that she's in pain. But sometimes too you'll see the BP high, and when you give the pain medication, you'll see that the BP gradually comes down. NM-2*

> *When the patient complains of pain, we check their vitals and you can see that the BP is high, temperature is high, and the pulse is rapid more than 80bpm so you can tell that there is something wrong with this patient so you take a critical look at her. NM-10*

One participant gave account of other causes of pain that may be picked out during physical assessment. These signs maybe as a result of complications such as bleeding from incision site or bleeding into the abdomen.

> *Sometimes if they have hematoma, it causes a lot of pain and they don't even want you to touch or palpate. And also when they get haemo-peritoneum, they become restless, sweat profusely and the BP drops and the pain is severe. NM-5*

For some of the participants, lack of adequate training on post-op pain assessment and the use of pain assessment were some of the major concerns raised. This affected their judgement in the assessment and sometimes, they give placebo to confirm the presence of pain.

> *As I told you, we don't have any specific tool to measure her pain, she says she's in pain and she is crying but whether she is crying of the pain or*

something else, you can't tell. You'll overhear the patient talking on phone then she becomes very emotional in the next moment complaining of pain. It's just a matter of knowing the real cause of the pain or crying so that we don't rush to give pain medications. –NM-2

Some of them too, you give medication to them and within the next 2 to 3 hours, they start complaining. So that is why most of the nurses will think that the client is exaggerating or give placebo to see whether they will be calm, but or they really have severe pain. – NM-7

4.4.2 Treatment

The management of post-operative pain at the Greater Accra Regional hospital is in two folds: pharmacological care, which consist of administration of opioids, NSAIDS, IV fluids, etc and non-pharmacological care such as reassurance, positioning, diversional therapy etc.

4.4.2.1 Pharmacological treatment

According to participants, the pharmacological management of post CS pain starts from the theatre where clients are given intrathecal morphine, and in the ward they continue with other pain medications.

Yes, in theatre they are given morphine and it works like magic so when they come from PACU they're able to sit up without much pain except for those who don't get it, they complain of severe pain till they are given Pethidine. NM-5

Within the first 6 hours after surgery, patients receive IV treatment until they start sips, then the oral pain medication is given to continue with the pain management.

When they start having pains, we give them IM Pethidine 50mg and IV p-mol 1G then sup diclo 100mg if she doesn't have ulcer and IV fluids like Dextrose

saline. But after the first 24hours, we only give the sup Diclo and P'mol tablet and allow the patient to start with liquid diet. NM-6

Here, after surgery we start with IV p-mol, 1g TDS. And then we also add suppository Diclofenac 100mg BD, and 50mg of Pethidine. Mostly, the Pethidine is given in theatre before they get here, but some of them their pain threshold is quite low, so what we do is that when they come here and you realize the pain is that bad, you still administer maybe 50mg or 100mg IM Pethidine. NM-9

Some patients receive alternate treatment or a combination of opioids and NSAIDS if the initial treatment is not relieving the pain depending on their pain threshold and the pain assessment.

Okay, we use suppository diclofenac, 100 mg, and suppository P'mol, 1g. At times we also use IV p-mol to also manage them depending on the level of the pain. If the pain is that severe, the doctor will prescribe Doreta and then we'll administer to the patient. So it depends on the level of the pain. But mostly they give Pethidine if its available and the pain goes down. NM-11

4.4.2.2 Non-pharmacological treatment

Participants recounted some of the non-pharmacological ways they employ in pain management at the facility depending on the level of pain and interventions given. They reassure the patients and sometimes chat with them till they sleep off.

We counsel them after given the medication that the pain is for a season, so they must try and bear with it because after some time, the pain will go away. NM-3

Sometimes, we reassure them, chat with them till the medication given starts working. NM-4

Some participants also allow the patients' relatives to spend time with them on the ward to chat with them when they are in pain till they sleep off, or turn on the television for them to watch.

> *And when there's television in the room, you put on the television for them, and you allow their relatives to be with them for some time and after some time you will realize that they have slept off. NM-5*

Some participants also described how they relieved patients' pain by assisting them to assume a comfortable position in bed, which reduces the pressure on the incision site.

> *The patients themselves tell you that 'when I lie this way I'm comfortable, so please assist me to lie this way', so we assist them to lie that way and then they are ok. Sometimes you elevate the head of the bed, or adjust the side with a pillow for her to lie comfortably. NM-5*

4.5 Challenges associated with assessment and management of POP

The third objective of the study sought to explore the challenges associated with POP assessment and management, which contribute to the outcome of good or ill-managed pain after CS. These challenges were divided into individual level challenge and structural level challenge. The individual level challenge consists of factors associated with the caregiver, which affects their decisions in pain management such as knowledge level, personal fears, personal experiences etc. The structural level on the other hand looked at the health system challenges, processes and protocols as well as policy related challenges.

4.5.1 Individual level challenges

Some participants shared their knowledge-gap with respect to assessment of pain after CS and the difficulties in the use of the pain assessment tools to adequately assess pain after CS.

Okay, we don't have any formal training on how to use the pain assessment scale, so we find it a bit difficult using that. NM-4

Because they are in pain, nothing you tell them will make them calm, so we find it difficult to assess the level of pain using the rating scale. NM-11

Okay, so I'll say there is knowledge gap, because for me, I've never been to any training on how to use pain rating scale or other tools, so I use my own discretion and what I was taught in school long ago, that's what I use since there's nothing like a protocol to follow. NM-12

A few participants expressed worry about their fears of addiction to pethidine especially for patients who personally requested to be given Pethidine when they were in pain.

Especially, one doctor came on admission and she brought lot of Pethidine, that we should be giving to her 4 hourly. We told her we cannot do that. We don't know her history if she's been addicted to Pethidine already, so she left here with the complaint that we don't manage pain well, yeah. NM-4

Those of them that know Pethidine very well, they'll tell you that give me Pethidine. Some of them are addicted to Pethidine. And this comes from even staff, or somebody who is in the medical field, maybe a pharmacist, a nurse or doctor. They'll tell you specifically that they want Pethidine. NM-9

Some participants think that some of the patients exaggerate especially those who can easily afford their bills and buy extra pain medications, while those who do not have money to purchase their drugs rather comport themselves. This makes it difficult to ascertain the severity of the pain.

Sometimes some of the clients who have money express the pain differently from those who don't have. Those who are poor comport themselves because they don't want extra cost so we think some of our patients exaggerate when it comes to pain. NM-10

A participant reported how some patients refuse to use the suppository and demand that you give them injection. The education and assurances you give does not change their preferences to pain medication.

But there are instances you'll give the suppository and the patient will tell you that "I don't want to use it. There are patients, you'll find the morning, afternoon and evening tablets and suppository under their pillow. They will tell you that they want injection preferably pethidine. NM-8

Some participants are afraid of respiratory depression from overdose of opioids. A participant narrated an incidence which made her scared of the use of Pethidine for pain management.

I'm afraid of the reaction to opioids. Last time we gave somebody IV Pethidine instead of IM, the reaction the person had afterwards scared all of us. The way she was complaining of the pain, we decided to give her IV to make the onset faster, but she started having respiratory distress and fever all of a sudden. It became an emergency and we had to call for help and resuscitate her so we were all afraid. After that incident especially, I'm more afraid of opioids. NM-13

4.5.2 Structural level challenges

The structural level challenges are divided into health system challenges and health policy challenges. These challenges consist of the structure of the health system as well as the policies

in place in which the health care professional may not have any direct control, which contribute immensely to the standard and quality of care rendered to the patients.

4.5.2.1 Health system

Most participants recounted some of their deficiencies in pain assessment and management are as a result of lack of pain assessment tools in the facility.

> *So I think we should get maybe a physical scale like the cervical dilatation board, so that when the client comes, we'll show to them. We can use pictures as well to describe the level of pain. NM-6*

> *I ask them to choose from numbers 1 to 10, depending on the severity of the pain. So I use the numbers without the patient seeing anything physical to choose from and some patients struggle to understand or choose. NM-12*

Others attributed the challenges in the assessment and management to lack of adequate training in the facility on pain management after surgery.

> *The hospital management must organize some training for nurses and midwives and even doctors to review the pain management protocols because most of us haven't had any training on pain management for a long time. Some of our clients are afraid of going through caesarean section because of fear of pain. NM-3*

> *Yes, since I started working, I have never gone for any workshop on pain assessment. All we know is, there is a tool from 0 to 10, which you ask the patient to choose from. Even when they choose, we don't know what to do exactly for the patient or have protocols in the ward to follow. We just use the knowledge we have acquired from our seniors or maybe online reading. NM-7*

One participant complained about the hospital protocol of giving opioids in small quantities for patients (a maximum of 2 vials of pethidine per patient), which in their view was inadequate to manage pain.

> *Yes, it's really a challenge, especially the Pethidine, the patients are given a maximum of 2 vials, and sometimes one is used in the theatre so if patients can have access to more than what they have being serving, it will be helpful or if there are other pain medications that can be introduced.*

> *You know, here actually when you're going for surgery, the Pharmacy issues just 100 mg of Pethidine to you and in extreme cases, when you write for maybe 2 vials, then they serve it. NM-9*

Another participant commented on the absence of clear-cut protocols on pain management in the facility. There are no pasted pain management protocols in the ward to follow.

> *If there are protocols on pain management in the ward, you can immediately follow to know what to do. You'll know how to move from A to B or C. But since there is none, it's a very big gap and you have to wait for the doctor to prescribe something. NM-7*

Participants shared on shortage of certain pain medications in the pharmacy and delays from supply of drugs from the regional medical stores to the facility making the care more difficult.

> *Always, when you need certain drugs to give to the patient, the pharmacy is out of stock, so then it has to be sourced outside the hospital pharmacy and if Ernest*

Chemist, which is the closest doesn't have, then it means the patient's relatives have to move far to purchase the drugs. Recently there was shortage of morphine in the hospital and the situation was bad. NM-1

Heavy workload against staff on duty per shift was one of the challenges recounted by some participants. When the ward is full, the few skilled staff are not able to meet the pain management demands of some of the patients.

Sometimes there are basically a maximum of 3 qualified staff on the ward with auxiliary staff attending to a full capacity with a heavy workload, so we even have auxiliary nurses working like professional midwives just to fill in the gap and provide care to patients. NM-3

At times, you go to work and realise you have 4 caesarean sections and everybody is busy because the staff are few. You won't even have time to assess patients for post-operative pain so once the medication is available, you'll just give all without assessing. NM-10

4.5.2.2 Health policy

One of the common problems with service provision according to participants is the shortage of drugs and medical items. Often times, the drugs and medical items needed in the facility are in short supply and not enough to meet patients' demand leading to some patients having to get drugs from pharmacies outside the facility and borrow from other clients in the ward.

At times, the Pethidine and the suppository is not available in the facility. The patient has to buy from private pharmacies outside the hospital and if it is late in the evening, then the client is in trouble. We send relatives to go about looking for

drugs to buy or at times we borrow from other clients on the ward who have Pethidine or Diclo suppository. NM-5

Health financing was another challenge realized. According to participants, some patients are unable to purchase their drugs due to lack of funds. In worst cases, nurses and doctors borrow from the in-patient pharmacy or from other patients in the ward till relatives are able to mobilize money to pay.

It's a problem for us because some of the patients cannot afford the drugs and will be in pain. Those ones, if you take 10 cases, 2 will not be able to afford their drugs and most of the time, they come here alone without any relative and sometimes without even attending any antenatal clinic. NM-6

Some patients are not able to afford their drugs, so if the emergency stock is exhausted, unless we borrow it from other patients in the ward till they come to replace it, but at times, it is not easy because some in-patients do not feel comfortable releasing their drugs for others. NM-11

The third challenge on policy was on acquisition of study leave for further studies. Participants elaborated the difficulty in securing study leave for school as a result of the minimal study leave quota awarded to each region.

Okay, so I think there is a gap, because most nurses and midwives need to upgrade their knowledge on current practices in pain management. But when you apply for study leave, especially for degree or masters, they tell you the quota is small for the region and there are many facilities so you are not given and when you force your way to school, you will not be upgraded upon completion of the program. -NM-12

4.6 Summary of findings

The nurse/midwife related factors on post-operative pain assessment and management was described under the following sub-themes: nursing knowledge, nursing attitude and interpersonal communication. It was evident from the responses, that participants had adequate knowledge of the nature of pain after CS such as the intensity, quality, expression, aggravating and relieving factors. Most nurses and midwives exhibit positive attitude and good interpersonal communication which contribute immensely to good assessment and management outcomes of POP after CS. On the hand participants also recounted some negative attitude and poor interpersonal communication of few nurses and midwives, which adversely affected POP assessment and management after CS.

Perceived nurse/midwife skills was also sustained under the sub-themes; assessment and management. Responses from participants showed that nurses and midwives had limited knowledge in the use of the pain rating scales in assessment of POP but adequate knowledge in pharmacological (administration of opioids, NSAIDS and other pain medications) and non-pharmacological (change of position, social support, diversional therapy) management of POP after CS.

Challenges associated with assessment and management of POP after CS was also described by participants under individual and structural level challenges. Some of the individual level challenges included fears of addiction and respiratory depression from opioid usage and knowledge gaps in assessment and management of POP after CS. The structural level challenges, was divided into health system challenges such as inadequate trainings, lack of assessment tools and lack of pain management protocols on the wards, and challenges with health policy such as shortage of essential drugs, lack of funds for health financing, inadequate high skilled staff.

The detailed discussions on the main findings from the study are presented in the next chapter.

CHAPTER FIVE

DISCUSSIONS

The findings of the study have been discussed in this chapter. This study focused on exploring the perspectives of nurses and midwives on pain management after caesarean section at the Greater Accra Regional Hospital (GARH). Guided by the constructs of the Pain Transaction Model, three themes emerged as factors that influenced the management of pain post-caesarean section. These themes were nurse/midwife related factors, perceived nurse/midwife skills, and challenges associated with the assessment and management of post-operative pain. To situate the study findings within the appropriate theoretical and empirical context, the discussion was carried out by making reference to literature. Findings were discussed in line with the following key objectives to:

1. Explore nurses/midwives related factors influencing the assessment and management of POP after C-section at GARH.
2. Identify the perceived nurse/midwife skills in the assessment and management of POP after C-section at GARH.
3. Explore the challenges faced by nurses/midwives in the assessment and management of POP after C-section at GARH.

5.1 Nurses/Midwives Related Factors Influencing the Assessment and Management of POP after C-section

In line with exploring the nurses/midwives related factors influencing the assessment and management of POP after C-section, nurses/midwives' knowledge was found as a factor. Responses from the study participants demonstrated adequate knowledge regarding the phenomenon that pain is a subjective feeling. Also, participants knew that CS pain must be assessed to know its severity, predisposing factors, excruciating factors, and relieving factors.

Similar findings were reported among nurses in other studies (Dessie et al., 2019; Teshome et al., 2022; Wurjine & Nigussie, 2018). The adequate knowledge regarding management of POP among this study population could be attributed partly to the fact that the participants are working in a regional or tertiary hospital, which may have made them come across a number of such cases which helped them to build on their experience and knowledge. Additionally, four of the participants had undergone CS, which was a reason they were able to demonstrate better understanding in areas such as precipitating, excruciating, and relieving factors of POP after CS. This implies that hospital managements should prioritize the subject of pain and put in pragmatic measures that will ensure the continuity of in-service trainings, workshops and seminars to help nurses and midwives to be abreast with contemporary trends in the management of POP.

However, contrary to the findings of the study, some previous studies in Ghana revealed inadequate knowledge of nurses about POP (Adams et al. 2020; Menlah et al., 2018). The discrepancies between the previous findings in Ghana and this study could be accounted for by the different study designs and measurement approaches that were adopted in each of the studies. Most of the previous studies used quantitative approaches as opposed to the qualitative approach that was utilized in this study. That notwithstanding, the exploration of nurses' knowledge regarding POP using the qualitative approach provided a wider scope for participants in this study to express themselves without restrictions. For instance, the participants described the roles of multiple surgeries, anesthetic agents, and cultural differences in the severity of POP after CS, with some of them supporting their answers with personal experiences. These variables could not have been explored in detail if a quantitative design was used. The implication of this finding to future research in the area of pain is that, researchers need to consider more comprehensive approaches in exploring knowledge of nurses regarding various aspects of pain, rather than strictly adhering to validated tools, although the usefulness of these tools cannot be underrated.

Another nurse/midwife related factor that influenced the assessment and management of POP after CS as described by participants in this study was nurses/midwives' attitudes. This study found both positive and negative attitudes toward the assessment and management of POP after CS among the participants. Positive attitudes found among this study population include their ability to recognize the presence of post-operative pain, willingness to help alleviate pain, response to calls from patients and communicating regularly with patients. Positive attitudes toward management of POP among this study population is consistent with the findings of Menlah et al. (2018). The similarity in findings could be attributed to the fact that both studies were conducted in Ghana. Also, positive attitudes among this study participants could be explained from the perspective that, adequate knowledge regarding POP influenced the affective, cognitive and behavioral dimensions of their lives, and served as positive mediating factor on their attitudes toward POP management, although it is not always the case. There is the need for hospital management to identify these key positive POP management attitudes of nurses and tailor reinforcement strategies to help build on these positive attitudes.

Notwithstanding the positive attitudes demonstrated by the study participants toward management of POP, some negative attitudes were also found among them. In tandem with the findings of previous studies, negative attitudes of nurses toward POP is common and widespread (Dessie et al., 2019; Habte Wurjine & Girma Nigussie, 2018; Kiekkas et al., 2015; Rasmi Issa et al., 2017; Shakya & Shakya, 2016). Negative attitudes toward management of POP after CS such as thinking patients exaggerate pain, ignoring calls and complaints from patients, and giving placebo instead of pain medication were found among this study population. Although not a good justification grounds for such negative attitudes among this study population, several reasons might have accounted for such attitudes. For instance, workload and lack of adequate staffing have been enumerated by participants in this study as reasons for some of their negative attitudes. This implies that, future studies may have to explore from nurses' perspective to identify specific

reasons that account for their attitudes toward POP. Findings will be relevant to inform recommendations on useful psycho-behavioral interventions to help nurses unlearn negative attitudes and replace them with positive attitudes.

This study found communication between nurses, patients and their relatives as one of the nurses/midwives related factors that contributed immensely towards management of POP among puerperal women before and after CS. Participants ensured that they communicated cordially with patients through reassurance, listening to them, educating them on pain, and providing them with counselling to help prepare them psychologically to adapt to the pain. Several evidence exist to corroborate the finding of this study particularly regarding the role of effective communication in the management of POP (Reaza-Alarcón & Rodríguez-Martín, 2019; Sugai et al., 2013; Vacek et al., 2021). This study finding could be explained from the perspective that puerperal women who had undergone CS care in Greater Accra Regional Hospital mostly have enough contact time with nurses, midwives, anesthetists, and surgeons prior to their surgeries, although there may be some cases of emergency. Through prior contact, patients are mostly engaged in series of perioperative communications to explain to them what is expected, and in relation to pain, what will be done for them. Thus, through series of interactions and education on pain, patients' anxieties tend to be allayed. What this implies is that, nurses and midwives need to prioritize communication with patients especially regarding pain-related topics in order to achieve significant outcomes when it comes to POP management.

5.2 Nurse/Midwife Skills in the Assessment and Management of POP after C-section at GARH.

Assessment of POP requires some useful skills that need to be displayed by the nurse/midwife in order to identify pain, rate its severity, assess its nature, and intervene accordingly.

Participants in this study recounted the main skills they deployed in the assessment of POP. Mostly, they assessed pain through numerical rating, direct observation of patients' body language, facial expression in relation to pain, changes in vital signs, and patients' subjective

complaint of pain. Thus, these pain assessment tools can be largely categorized into three main groups namely Visual Analogue Scale (VAS), the Verbal Rating Scale (VRS) and the Numerical Rating Scale (NRS). Similarly, these methods of pain assessment have been extensively utilized in previous studies (Ismail et al., 2012; Kintu et al., 2019; Munsaka et al., 2021). The similarity in the findings could be explained on the basis that these pain assessment skills have been largely documented with enough evidence on their effectiveness in characterizing pain. Also, these assessment tools may have been taught in schools and practiced by some nurses in the health settings, which is a reason this study population are well acquainted to them.

Nonetheless, major emphasis needs to be place on the effectiveness of these assessment tools and their appropriateness in assessing different pain types. For instance, although all pain assessment tools may be effective and valid in pain assessment, the choice of one pain assessment tool over the other should be based on factors such as ease of use, comprehension, reliability and validity. Although the systematic reviews by Baamer et al. (2022) and Karcioglu, Topacoglu, Dikme, & Dikme (2018) found no evidence on the superior measurement properties of any one pain assessment tool over the other in assessing pain, Karcioglu et al., (2018) further argued that there is difficulty in using the VAS compared to the other pain assessment tools. The implication of this argument is that, nurses and midwives need to be critically concerned about how to comprehensively integrate all three pain assessment tools in the assessment of pain. Also, efforts are required on their side to get abreast with each of these tools through continuous practice in order not to monopolize the use of only one tool.

Participants in this study, as part of their skills, deployed two approaches in the management of POP for puerperal women after CS. Thus, both pharmacological and non-pharmacological approaches were commonly used by the participants. As part of pharmacological management of pain, nurses/midwives administered opioids, NSAIDS, IV fluids et cetera. This finding is consistent with previous studies (Ismail et al., 2012; Loomis et al., 2022; Munsaka et al., 2021;

Sangkum et al., 2021). Primarily, pharmacological measures aimed at alleviating pain are widely used in most healthcare settings for the management of POP. In most cases, pharmacological anesthetic agents are required for the surgery itself but sometimes, these agents may not be enough to cater for pain after the surgery, and this is why other pharmacological interventions are required. There is no present evidence that pain can be cured. Rather, the evidence suggest that pain can be identified, and managed or treatments given to the underlining cause of the pain (Hylands-White, Duarte, & Raphael, 2017; Raffaeli & Arnaudo, 2017; Sarzi-Puttini et al., 2012). This implies that, nurses and midwives may have to demonstrate enough understanding about pharmacological managements of pain and collaborate with prescribers in making best choices regarding the pharmacological agents that may work for each surgical case at any given time.

Aside from the pharmacological approaches utilized by the nurses/midwives in the management of POP, they also deployed some non-pharmacological skills, which include reassurance, positioning, diversional therapy among others. Similar findings have been reported in previous studies among nurses in other countries (Bayoumi et al., 2021; Belay & Yirdaw, 2022; Kia et al., 2021). In addition to that, a study in Ghana by Konlan et al. (2021) found non- pharmacological pain management interventions such diversion therapy, reassurance, and change of positions among nurses and midwives who provide care to women in labour. The similarity between findings of this study and that of Konlan et al., (2021) confirms the prevalence of use of these non-pharmacological interventions among the nurses in Ghana since both studies were conducted in Ghana. This implies that nurses in Ghana need to be encouraged and equipped with strategies needed for effective management of pain through non-pharmacological means. This will ensure that nurses and midwives can intervene for patients in pain even in the absence of pharmacological prescriptions.

5.3 Challenges Faced by Nurses/midwives in the Assessment and Management of POP at GARH.

Nurses and midwives' POP assessment and management efforts are fraught with several barriers that impact the quality of POP care rendered to clients. From the perspectives of the study participants, knowledge-gap in the assessment of POP was an individual-level challenge they faced. This finding is consistent with other studies (Francis and Fitzpatrick, 2013; Shoqirat et al., 2019; Mędrzycka-Dąbrowska et al., 2016). Despite the similarity in the study findings, participants in this study earlier demonstrated adequate knowledge regarding the assessment of the severity, predisposing factors, excruciating factors, and relieving factors of pain. Thus, there seem to have been some inconsistencies in their responses as to whether truly, knowledge gap was a challenge to their assessment of POP. Nonetheless, the possible explanation to this finding could be that the nurses felt they may not have received the necessary training and learning opportunities that could have equipped them to better assess and manage POP. This finding implies that management of GARH should make in-service training on POP a priority in order to get nurses and midwives abreast with contemporary POP assessment and management skills.

Although false concerns about addiction and overdosing were found as physician-related barriers to assessment and management of POP (Shoqirat et al., 2019; Mędrzycka-Dąbrowska et al., 2016), participants in this study outlined fear of addiction to pethidine as an individual barrier to POP assessment and management. Addiction to pethidine and other medicinal agents among healthcare providers is a problem that is gradually gaining increasing attention in the literature (Annagür, 2012). In Ghana, anecdotal evidence suggest that several nurses are actively engaged in pethidine abuse. Interestingly, participants in this study recount how some female puerperal nurses who had undergone CS requested for pethidine as their only means to relieve pain when they are in pain post-operatively, although other options may have been available to them. Thus, nurses need to keep eyes on their colleagues in identifying potential pethidine abusers and report

them to higher authorities accordingly in order for such abusers to be taken through the necessary rehabilitation strategies.

Aside from individual-level factors that served as barriers to the assessment and management of POP, some structural-level challenges were also found in regards to health system and health policy. As was found in previous studies (Mahama & Ninnoni, 2019; Mędrzycka-Dąbrowska, Dąbrowski, & Basiński, 2015; Zuccaro et al., 2012), lack of pain assessment tools, absence of clear-cut protocols on pain management and opioids administration have been similarly perceived by the participants in this study to influence their assessment and management of POP. Although various pain assessment tools exist and could have been used in the clinical setting for the assessment of pain, it is incumbent on hospital managements to come clear with choices regarding which tools best suit their context for the assessment of POP. Thus, nurses may find their way out to utilize pain assessment tools that they are most familiar with but this practice does not ensure uniformity in pain assessment, as each nurse may decide to use a particular tool based on their subjective perception about its effectiveness and ease of use.

Another health system challenge that influences nurses' management of POP as perceived by this study participants is the lack of adequate training opportunities provided by the health facility for nurses. Adams et al. (2020) found that some nurses in Ghana have never received training on POP management, and this perhaps is due to lack of training opportunities. The lack of training opportunities is further compounded by inflexibilities in health system policies on acquisition of study leaves ((Sarre et al., 2018). Youngcharoen & Aree-Ue (2023) emphasized a positive influence of pain management training on the practice of nurses. Thus, the provision of training opportunities to nurses and midwives through workshops, incorporation of pain management courses in training curriculum (Lydia Aziato & Adejumo, 2014a), and a flexible study leave opportunity for nurses may help advance their knowledge in the assessment and management of pain and improve their overall delivery of quality healthcare.

In line with the findings of this study, shortage of certain drugs in the pharmacy due to insufficient financing is a health system challenge to pain management and this has been largely documented in the literature (Boateng, Renner, Petricca, Gupta, & Denburg, 2020; Rawal, 2016; Sabogal De La Pava & Tucker, 2022). In Ghana, instances of this sort put nurses and midwives at a critical cross road in effectively managing pain. It is either clients may have to secure the medications by themselves or they are denied of pharmacological pain interventions. This practice is a recipe for negative pain management outcome especially if non-pharmacological interventions have been exhausted and patients are left to no other option than pharmacological interventions. This finding implies that health systems in Ghana need to collaborate with pharmaceutical companies to ensure that vital medications required for the management of POP are secured. A possible approach could be to secure funding through governmental and non-governmental organizations.

CHAPTER SIX SUMMARY, IMPLICATIONS, LIMITATIONS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the study, its implications, limitations, conclusions and the recommendations.

6.1 Summary

This study aimed to explore from nurses and midwives' perspective, factors that influenced the assessment and management of POP for mothers who have undergone C-section at the Greater Accra Regional Hospital. The researcher employed a descriptive-exploratory qualitative design and an interpretivism approach to conduct the study. Guided by the constructs of the Pain Transaction Model, an interview guide was utilized in interviewing 16 nurses and midwives who were purposively sampled, after obtaining ethical clearance from Ethics Review Committee of Ghana Health Service. Interviews were audio-taped, recorded and transcribed, and thematic analysis conducted using the Braun and Clarke's (2006) approach.

The analysed data revealed three main themes which include nurse/midwife related factors, perceived nurse/midwife skills, and challenges associated with the assessment and management of POP. All three themes were consistent with the constructs of the Pain Transaction Model. In addition to the three themes, seven sub-themes emerged through content analysis. Findings in relation to each theme and sub-theme were supported with verbatim quotes.

6.2 Implications

The findings of this study have several implications in the areas of nursing education, nursing practice, nursing research, and policy formulation.

6.2.1 Nursing education

Nurses and midwives' knowledge, attitudes, and interpersonal communication were seen as major influential factors in the assessment and management of POP in this study. Adequate

knowledge, positive attitudes, and effective communication had positive influence on the assessment and management of POP for patients after CS. These qualities need to be encouraged through the integration of lessons on pain assessment and management, and effective communication skills into nursing curricula at the level of training. Thus, nurses and midwives will be equipped with knowledge on the contemporary evidence available on the assessment and management of POP.

6.2.2 Nursing practice

Nurses and midwives in their course of practice encountered some nurse-related and health system related factors that influenced their assessment and management of POP. The unavailability of clearly defined hospital protocols on pain management and pain assessment tools imposes the need for nurses and midwives to make efforts toward spearheading the integration of a standard pain assessment tool into their practice. This can be done through organizing workshops to get abreast with the tools and through consultative meetings that will initiate the idea of developing a comprehensive protocol to guide the assessment and management of POP.

6.2.3 Nursing research

With emphasis on each theme and sub-theme that emerged as factors influencing nurses' assessment and management of POP, there is the need for further studies to be conducted taking into account each of the themes. A separate study on each of the theme will provide an in-depth knowledge on the subject matter and help to fill research gaps in those areas. Also, nurses need to prioritize and master research skills in order for them to gain the competencies in discovering empirical evidence on pain assessment and its management.

6.2.4 Policy formulation

Shortage of drugs for pain management, lack of policies on administration of analgesics and unavailability of protocols on management of POP have been outlined as system challenges to the management of POP. This implies that policies should be implemented to facilitate the development of comprehensive protocols and policies to guide the management of pain. Also, policy strategies should focus on addressing inadequacies in nurses' skills through the organization of workshops and in-service trainings.

6.2.5 Limitations of the study

This study explored from nurses and midwives' perspective the factors that influenced their assessment and management of POP with emphasis on mothers who had undergone caesarean section. However, caesarean section may not be the only surgical procedure for which nurses and midwives could have managed POP. Thus, there is the possibility that the responses provided by the participants would be influenced by their experiences of working with other patients who had undergone other surgeries than their experiences in managing POP for only CS cases. Nonetheless, the findings of the study may not be influenced by this limitation because the study scope was narrowed to POP after caesarean section and questions were specific on that subject.

The study was conducted in one tertiary hospital, that is the Greater Accra Regional Hospital. This makes it difficult to generalized the findings district hospitals in Ghana with limited human and material resources. This is therefore important for further studies in the district hospital. This will integrate wider and more varied sample of nurses and midwives managing POP after CS, to achieve a broader understanding of this phenomenon.

By virtue of the fact that a qualitative paradigm was used, although the findings are relevant, it cannot be generalised because of the sample size of the study.

6.3 Conclusions

Post-operative pain management of patient have been a major concern in the healthcare sector recently. Poorly managed pain of surgical pain have both psychological and physiological ramifications on the health off the women. Again, poorly managed surgical pain result in longer hospital stay, increase financial burden, and poor patients satisfaction of healthcare (Ferdoush et al., 2021;Murthy et al., 2013; Negash et al., 2012).

The purpose of the study was to explore the POP management of women who underwent caesarean section at the Greater Accra Regional Hospital. All the findings of this study were consistent with the constructs of the Pain Transaction Model. Nurse/midwife related factors, perceived nurse/midwife skills, and challenges associated with assessment and management of POP were all found to influence nurses'/midwives' assessment and management of POP.

Nurses' knowledge, attitudes, and interpersonal communication were found as nurse related factors that influence the assessment and management of POP. Also, nurses/midwives' perceived skills in the assessment and treatment of POP were vital factors. Individual and structural level factors were also found as factors that influenced nurses and midwives' treatment and management of POP.

6.4 Recommendations

The findings of this study informed recommendations that will be relevant to the Ministry of Health, Ghana Health Service, Greater Accra Regional Hospital, and Nurses.

6.4.1 Ministry of Health (MOH)

The MOH should:

a. Foster mutual collaboration with government stakeholders in the finance and health departments to ensure that claims of National Health Insurance Scheme are reimbursed

early enough. This will enhance the continuous and regular supply of vital analgesics that are covered by the health insurance.

b. Formulate comprehensive pain assessment and management policies to guide the assessment and management of pain in health facilities.

6.4.2 Ghana Health Service (GHS)

The GHS should:

a. Engage leadership and management of Greater Accra Regional Hospital to discuss and come out with a validated and effective pain assessment tool that is culturally and context specific for pain assessment in Ghana. This tool can be piloted in GARH and subsequently recommended for use in other health facilities in Ghana.
b. Revise study leave protocols to ensure that nurses who wish to advance their knowledge in specialty areas, or take special courses on management of pain are not denied on the basis of years of work experience.
c. Collaborate with leadership and management GARH to organize workshops and in-service trainings for nurses and midwives on the subject of pain assessment and management. Attendance to these workshops and trainings can be rewarded with high Continuous Professional Development (CPD) points to motivate nurses and midwives to patronise such training opportunities.

6.4.3 Greater Accra Regional Hospital (GARH)

The GARH should:

a. Engage nurses and midwives in regular trainings and workshops on the assessment and management of POP.
b. Institute strict but tangible sanctions to be applied on healthcare providers who abuse pethidine.

c. Collaborate with Accra Psychiatric Hospital to ensure that healthcare providers who are engaged in pethidine abuse are taken through series of psycho-behavioural rehabilitation interventions.

d. Engage the services of nurse researchers to conduct systematic reviews and meta-analysis to come out with best evidence on pain assessment tools that will be useful, effective and appropriate for pain assessment.

6.4.4 Nurses/Midwives

Nurses should:

a. Make conscious efforts to get abreast with current trends in the assessment and management of pain.
b. Involve themselves in research activities to improve their knowledge, attitudes and practices toward the assessment and management of POP.
c. Patronise workshop and training opportunities to help them advance their skills in assessing and managing pain.

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APPENDIX

Appendix A: Ethical clearance letter

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

In case of reply the number and date of this Letter should be quoted

My Ref: GHS/RDD/ERC/Admin/App 22/3/18
Your Ref: No

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Digital Address: GA-050-3303
Mob: +233-50-1530896
Tel: +233-302-681109
Email: ethics research@ghsmail.org
29th August, 2022

Philance Gyapong
School of Nursing and Midwifery
P. O. Box LG 43, Legon

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	**GHS-ERC: 054/06/22**
Study Title	Exploring Perspectives of Nurses and Midwives on Pain Management After Caesarian Section at the Greater Accra Regional Hospital
Approval Date	29th August, 2022
Expiry Date	28th August, 2023
GHS-ERC Decision	**Approved**

This approval requires the following from the Principal Investigator

- Submission of a yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months.
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report after completion of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.

You are kindly advised to adhere to the national guidelines or protocols on the prevention of COVID -19

Please note that any modification of the study without ERC approval of the amendment is invalid.

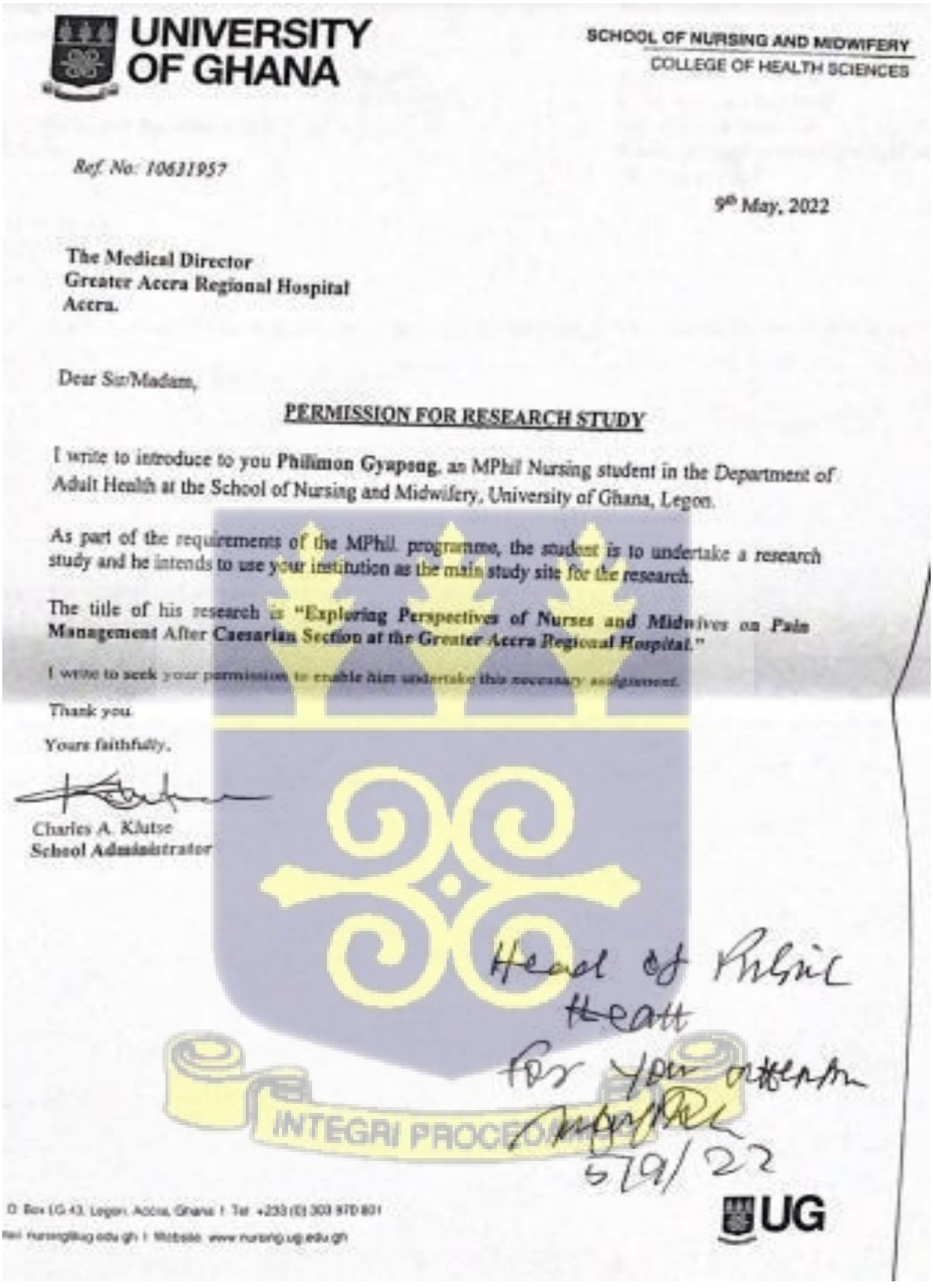
The ERC may observe or advise to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED
Mr. Kofi Wellington
(GHS ERC Vice Chairperson)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra

Appendix B: Permissions for research study



UNIVERSITY OF GHANA

SCHOOL OF NURSING AND MIDWIFERY
COLLEGE OF HEALTH SCIENCES

Ref. No: 10631957

9th May, 2022

The Medical Director
Greater Accra Regional Hospital
Accra.

Dear Sir/Madam,

PERMISSION FOR RESEARCH STUDY

I write to introduce to you **Philimon Gyapong**, an MPhil Nursing student in the Department of Adult Health at the School of Nursing and Midwifery, University of Ghana, Legon.

As part of the requirements of the MPhil. programme, the student is to undertake a research study and he intends to use your institution as the main study site for the research.

The title of his research is "**Exploring Perspectives of Nurses and Midwives on Pain Management** After **Caesarian Section at the Greater Accra Regional Hospital.**"

I write to seek your permission to enable him undertake this necessary assignment.

Thank you.

Yours faithfully,

Charles A. Klutse
School Administrator

Head of Public Health
For your attention
579/22

P. O. Box LG 43, Legon, Accra, Ghana | Tel: +233 (0) 303 970 801
Email: nursing@ug.edu.gh | Website: www.nursing.ug.edu.gh

UG

UNIVERSITY OF GHANA
DEPARTMENT OF ADULT HEALTH
SCHOOL OF NURSING

Ref. No.: 10631957

9th May, 2022

The Medical Director
Greater Accra Regional Hospital
Accra.

Dear Sir/Madam,

PERMISSION FOR RESEARCH STUDY

I write to introduce to you **Philimon Gyapong**, an MPhil Nursing student at the School of Nursing and Midwifery, University of Ghana, Legon.

As part of the requirements of the MPhil. programme, the student is to undertake a research study and he intends to use your institution as the main study sites for the research.

The title of his research is **"Exploring Perspectives of Nurses and Midwives on Pain Management After Caesarian Section at the Greater Accra Regional Hospital."**

I write to seek your permission to enable him undertake this necessary assignment.

Thank you.

Yours faithfully,

Prof. Lydia Aziato
Supervisor

UNIVERSITY OF GHANA
DEPARTMENT OF ADULT HEALTH
SCHOOL OF NURSING

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I write to seek your permission to enable him undertake this necessary assignment.

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Yours faithfully,

Mr. David Tenkorang Twum
Co-Supervisor

Appendix C: Letter of introduction

UNIVERSITY OF GHANA

SCHOOL OF NURSING AND MIDWIFERY
COLLEGE OF HEALTH SCIENCES

Ref. No: 10631957

9th May, 2022

The Chairperson
Ghana Health Service Ethics Review Committee
Accra.

Dear Sir/Madam,

LETTER OF INTRODUCTION – ETHICAL CLEARANCE

I write to introduce to you **Philimon Gyapong**, an MPhil Nursing student at the School of Nursing and Midwifery, University of Ghana, Legon.

The Scientific Review Committee of the School has approved the thesis topic: **"Exploring Perspectives of Nurses and Midwives on Pain Management After Caesarian Section at the Greater Accra Regional Hospital."**

As part of the school's requirement, the student is required to obtain ethical clearance before embarking on data collection.

I hope that the Committee will consider the proposal and grant him ethical clearance to enable him to undertake the study.

Thank you.

Yours faithfully,

Charles A. Klutse
School Administrator

Appendix D: Support letter

UNIVERSITY OF GHANA
DEPARTMENT OF ADULT HEALTH
SCHOOL OF NURSING

10631957

Ref. No.:.....

9th May, 2022

The Chairperson
Ghana Health Service Ethics Review Committee
Accra.

Dear Sir/Madam,

SUPPORT LETTER - ETHICAL CLEARANCE

This letter is to support the application for ethical clearance of **Philimon Gyapong,**, an MPhil Nursing student in the Department of Adult Health at the School of Nursing and Midwifery, University of Ghana, Legon.

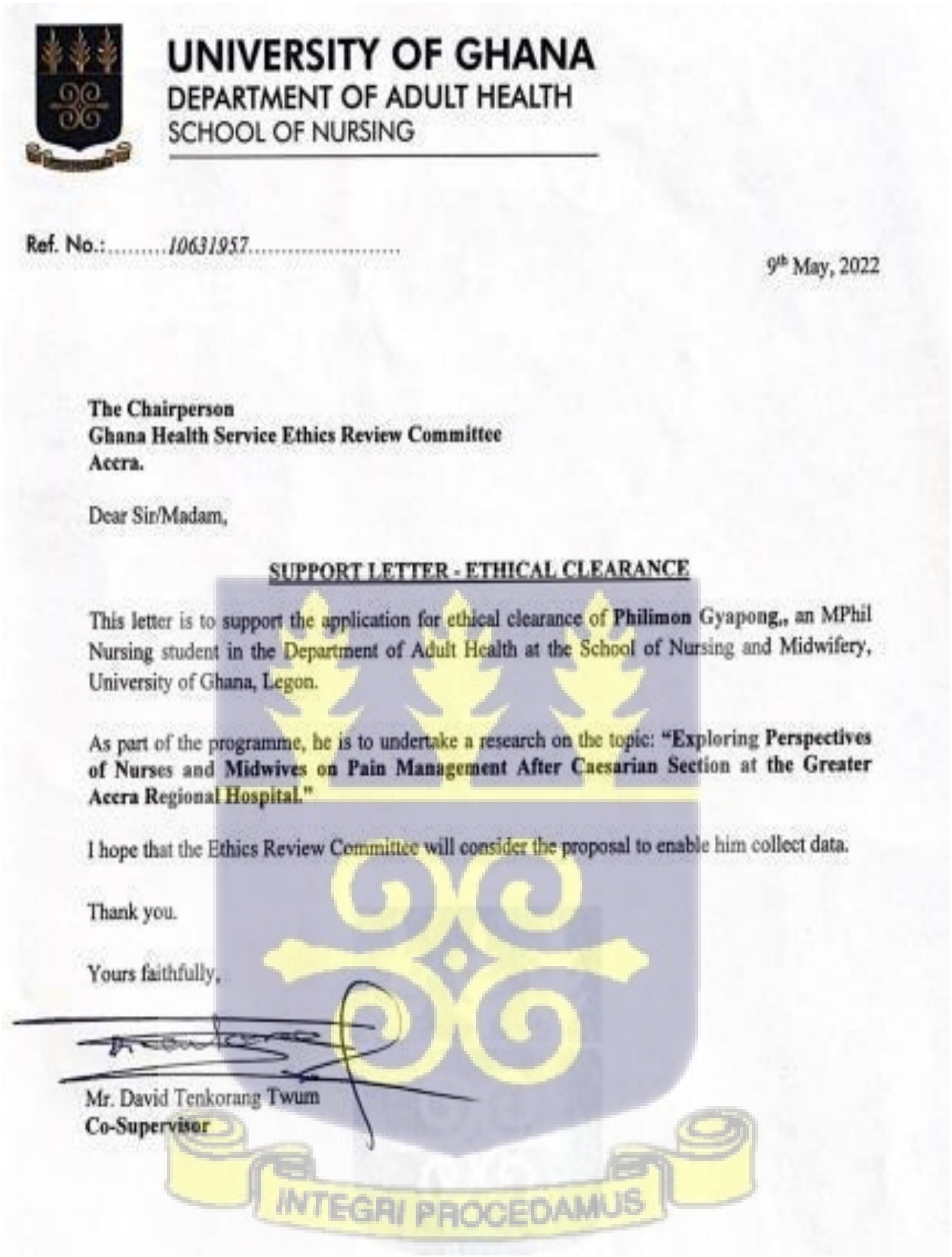
As part of the programme, he is to undertake a research on the topic: **"Exploring Perspectives of Nurses and Midwives on Pain Management After Caesarian Section at the Greater Accra Regional Hospital."**

I hope that the Ethics Review Committee will consider the proposal to enable him collect data.

Thank you.

Yours faithfully,

Prof. Lydia Aziato
Supervisor



UNIVERSITY OF GHANA
DEPARTMENT OF ADULT HEALTH
SCHOOL OF NURSING

Ref. No.:.....10631957.....

9th May, 2022

The Chairperson
Ghana Health Service Ethics Review Committee
Accra.

Dear Sir/Madam,

SUPPORT LETTER - ETHICAL CLEARANCE

This letter is to support the application for ethical clearance of **Philimon** Gyapong,, an MPhil Nursing student in the Department of Adult Health at the School of Nursing and Midwifery, University of Ghana, Legon.

As part of the programme, he is to undertake a research on the topic: **"Exploring Perspectives of Nurses and Midwives on Pain Management After Caesarian Section at the Greater Accra Regional Hospital."**

I hope that the Ethics Review Committee will consider the proposal to enable him collect data.

Thank you.

Yours faithfully,

Mr. David Tenkorang Twum
Co-Supervisor

INTEGRI PROCEDAMUS

Appendix E: Statement of compliance

STATEMENT OF COMPLY WITH ETHICAL PRINCIPLES

I, PHILIMON GYAPONG, Principal investigator (PI) of this study and on behalf of my collaborators write to state that we will comply with all ethical principles and guidelines throughout the conduct of the study.

I shall conduct the study in accordance with the approved protocol.

NAME OF PI PHILIMON GYAPONG Signature

DATE (dd-mm-yyy) 16-05-2022

NAME OF SUPERVISORS

1. PROF LYDIA ASIATO Signature

2. DATE (dd-mm-yyy) 16-05-22

3. DAVID TETTEH Signature

DATE (dd-mm-yyy) 16-05-22

Appendix F: Data collection instrument

INTERVIEW GUIDE

You are being invited to take part in a study on how nurses and midwives manage post- operative pain after caesarean-section delivery at the Greater Accra Regional Hospital. This will help us to know the level and gaps in knowledge on assessment and management, as well as the challenges faced by nurses and midwives in the assessment and management of post- operative pain after

C-Section. The interview is expected to last forty-five (45) to sixty (60) minutes and it will be recorded. Thank you.

SECTION A: Demographic Data

1. Gender Male [ ] Female [ ]
2. Age: _____years
3. Profession : a. Nurse [ ] b. Midwife [ ]
4. Level of education

   a. Diploma [ ] b. Degree [ ]

   c. Masters [ ] d. PhD [ ] e. Membership [ ]
5. Marital Status

   a. Single [ ] b. Married [ ] c. Divorced [ ]

   d. Widowed [ ] e. Cohabiting [ ]
6. Years of work experience: a. 1-5 years [ ] b. 6-10 years [ ] c. 11- 15 years [ ] b. 16-20 years [ ] d. Above 20 years [ ]
7. Religion: Christian [ ] Muslim [ ] Traditionalist [ ] Other (specify) ----------
8. previous CS ( ) yes ( )no

SECTION B: Guiding questions

1. **Knowledge on POP assessment and management**

   - Please share with me what you know about post-operative pain among women after CS.
     - Perceived pain behavior – verbal, non-verbal, physiological indicators
     - Coping mechanism – position, self-medication, prayer
   - What do you know about assessment of postoperative pain?

- ✦ Probes (formal training, personal observation, patient complains, others)

○ How is pain managed after CS?

Probes (use of pain medication, non-pharmacological methods, others)

2. Assessment and management of POP

i. How do you assess pain after CS in your facility?

- ✦ Probes (Pain assessment tools, observations, vital signs, patient complaints, other)
- ✦ How do you feel when patients express pain on your ward? – worried, disturbed, indifferent?

ii. What pain medications do you use after CS in your facility?

Probes;

- ✦ opioid and non-opioid analgesics
- ✦ Oral/ parenteral/rectal/epidural routes of administration
- ✦ Dosage and frequency of usage
- ✦ Use of placebo

iii. What non-pharmacological ways do you employ at work to manage pain after CS?

Probes;

- Cold application,
- distraction,
- positioning

iv. In what other way(s) do you manage pain after CS at the workplace?

- Believes – prayer, family support,

v. What informs your choice of pain management?

- Evaluation of given pain medication

3. Challenges to POP assessment and management

i. What challenges do you face with assessment and management of pain after CS?

ii. Gaps in knowledge, skill, confidence level

iii. Challenges with pain assessment tools

- Probes (Knowledge on use, availability, time constraint, other)

iv. Access to medications

- Probes (Availability, affordability, others)

vi. Challenges with Doctors

i. Probes (willingness to prescribe pain medications, collaboration, other).

vii. Challenges with clients

i. Probes (Attitude, Comorbidity, post-operative condition, others)

viii. Personal fears

- Probes (addiction, respiratory depression, drug reaction, others)

ix. What other challenges do you face with pain management after CS?

x. Do you have any other things you wish to share?

THANK YOU!!!

Appendix G: Informed consent

CONSENT FORM

TITLE: EXPLORING PERSPECTIVES OF NURSES AND MIDWIVES ON PAIN MANAGEMENT AFTER CAESARIAN SECTION AT THE GREATER ACCRA REGIONAL HOSPITAL PARTICIPANTS'

STATEMENT

I acknowledge that I have read or have had the purpose and contents of the Participants' Information Sheet read and all questions satisfactorily explained to me in a language I understand (English). I fully understand the contents and any potential implications as well as my right to change my mind (i.e. withdraw from the research) even after I have signed this form.

I voluntarily agree to be part of this research.

Name of Participant…….. Participants' Signature ……...

Date:…….

Do you permit us to record the interview? (Please tick) Yes □ No □

INVESTIGATOR STATEMENT AND SIGNATURE

I certify that the participant has been given ample time to read and learn about the study. All questions and clarifications raised by the participant have been addressed.

Researcher's name……

Signature …….

Date……