UNIVERSITY *of the*
WESTERN CAPE

FACULTY OF COMMUNITY AND HEALTH SCIENCES

SCHOOL OF NURSING

A TRAINING PROGRAMME FOR NURSES ON THE MANAGEMENT OF PREOPERATIVE ANXIETY AND INFORMATION NEEDS OF PATIENTS IN ASHANTI REGION, GHANA

A thesis submitted in fulfilment of the requirements for the degree of PhD in Nursing

in the School of Nursing, University of the Western Cape

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May 2022

DECLARATION

I, Sawan Dankyi, do hereby declare that this thesis: **A training programme for nurses on the management of preoperative anxiety and information needs of patients in Ashanti Region**, **Ghana,** submitted to the School of Nursing, University of the Western Cape, is the outcome of my own work under supervision and that no such work has previously been presented to this University, or elsewhere. Information or works by other authors, which served as sources of reference, have duly been acknowledged.

SAWAN DANKYI MAY 2022

SIGNED:……

DATE:……17/05/2022……

DEDICATION

This piece of work is dedicated to Almighty God, who has been the source of my strength, physically, socially and mentally. It is also dedicated to my wife Mrs. Lily Fofie Dankyi, who has been the driving force that has propelled me to complete this work.

ACKNOWLEDGEMENTS

This study was made possible by the special grace of Almighty God to whom words are inadequate to express my appreciation.

My special thanks go to my supervisors, Professor Million Bimerew and Professor Jennifer Chipps, for their advice and rich guidance during the research proposal preparation and, eventually, the final presentation of this thesis.

I thank my family, especially my wife, Mrs. Lily Fofie Dankyi; my parents, Mr De-Lawrence Dankyi and Madam Mary Ansomaa, as well as my siblings, Mrs Lydia Dankyi Acquah and Elvis Owusu Dankyi. These persons have been my source of encouragement in times when it was difficult to continue this study.

Special thanks go to Dr Anita Fafa Dartey, who has been a pivotal figure in my efforts to achieve this feat. May God richly bless her for her words of encouragement and priceless contributions towards the completion of this study.

My appreciation goes to the national and regional directors of Ghana Health Service (GHS) and the administrators and management boards at the various hospitals that were used for this study. Their permission paved the way for this study to be conducted.

Thanks go to all the nurses and patients at the surgical wards / suites at the hospitals who were involved in this study. I thank them for participating in this study as the information they provided yielded the results of this study.

I thank Solomon Abanga, Dr Eric Simpe, Jonathan Boakye Yiadom, Dr Genesis Chorwe Sungani and Eunice Berchie (aka Adwoa Sakai) for their assistance when I called on them.

Lastly, I thank all the authors whose information I used to produce this work.

ACRONYMS AND ABBREVIATIONS

APAIS	Amsterdam Preoperative Anxiety and Information Scale
DNS	Director of Nursing Services
EN	Enrolled nurse
ENT	Ear Nose and Throat
GHS	Ghana Health Service
HAC	Health assistant clinical
HARS	Hamilton Anxiety and Rating Scale
ICT	Information and Communications Technology
IT	Information Technology
NMC	Nurses and Midwifery Council
PN	Perioperative Nursing
PNO	Principal Nursing Officer
POPI	Protection of Personal Information
PPS	Probability proportionate sampling
RGN	Registered General Nursing
RM	Registered Midwife
SN	Staff Nurse
SPSS	Statistical Package for Social Sciences
SNO	Senior Nursing Officer

SSN	Senior Staff Nurse
SW/SS	Surgical ward/surgical suite
WHO	World Health Organization

ABSTRACT

Background: Studies reveal that preoperative information hastens recovery, reduces postoperative complications and improves patients' satisfaction. It is expedient to explore the preoperative information needs of patients as assumptions cannot be employed to identify said preoperative information patient needs. It was discovered in a study in the Ashanti Region of Ghana that few of the nurses follow steps to explore the anxiety and information needs of patients. The study investigated how preoperative anxiety and information needs of patients are explored and managed by nurses at district hospitals in the Ashanti Region of Ghana.

Methods: The study employed an explanatory sequential mixed method design in which quantitative data collection and analysis were first conducted and followed by qualitative methods. Quantitative sample size was determined by multi-stage cluster sampling with probability proportionate to size, to select 210 patients. Purposive sampling was used to select 11 nurses and 12 patients for qualitative study. For participant observation, 28 nurses were selceted using a checklist and field notes, respectively. Quantitative data collection was done with a self-administered questionnaire, Hamilton Anxiety Rating Scale (HARS) and a 16-item 5-point Likert scale to determine the factors that make patients become anxious before surgical operations. Qualitative data collection was done through a semi-structured interview with audio tape recording and participant observation using a checklist and in-depth field notes. Quantitative data were analysed with descriptive statistical analysis by using SPSS (24th version). Qualitative data were analysed through thematic content analysis using computer data analysis package (Atlas.Ti version 7.1.7). The Delphi method was used to select 15 experts in the clinical and academic field to develop the training programme.

Results: Quantitative data revealed that 73.0 per cent of patients undergoing surgery were severely anxious. Type of surgery ($\beta = .220$, $p < .004$), postoperative pain ($\beta = .218$, $p < .005$), and possible complications from the procedure (3.42, ±1.33) were the factors that caused

anxiety among patients. Qualitative findings were put into three categories namely: One, Two, and Three which obtained data through face-to-face individual interviews and participant observation with checklist. The main themes from these categories include: assessing patient's preoperative information needs, setbacks in assessing patient's preoperative information needs and managing patients with information needs

Conclusion: Section Two considered the development of the training programme. Findings from the the qualitative data afforded the development of the training programme. The steps involved in the Delphi method were used to develop the training programme.

Key words: District hospital, management of information, patient, preoperative anxiety, preoperative information needs, preoperative, surgery nurse

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

This chapter gives an overview of the study. It is arranged into five parts. First, it provides the background of the study and the rationale. The second part emphasises the problem statement, followed by the purpose and the objectives of the study. The third section focuses on the significance of the study and the definition of terms as used in the study. In the fourth section, the researcher highlights the theoretical framework used to underpin the study. The fifth section provides an outline of the thesis.

1.2 Background to the Study

In 1809, the very successful laparotomy was performed by the pioneer surgeon, Ephraim McDowell after previous failed attempts in which patients died from sepsis and bleeding in the postoperative period. For over 200 years now, millions of patients still develop complications and die despite improved surgical practices (Foss et al., 2016). According to the World Health Organization (WHO, 2009), surgical safety has raised significant global public health concern in that reports indicate that almost seven million patients develop complications yearly while one million deaths are recorded. Recent studies attribute such complications to the burden of emotional stress that is mostly experienced by patients waiting to undergo surgical procedures (Bansal & Joon, 2017; Derewianka-Polak et al., 2017).

The WHO defined surgery as ‘any procedure occurring in the operating room involving the incision, excision and manipulation or suturing of tissue that usually requires regional or general anaesthesia or profound sedation to control pain’ (WHO, 2009). For patients waiting to undergo surgery of any kind, education is crucial in their recovery in that it is a major way of informing patients about the condition, the procedure and their recovery (King et al., 2014).

Prior to surgery, patients trust their lives into the hands of doctors and other healthcare workers, which must be handled with respect to ensure meeting their expectations (Marxe, 2014). Most importantly, they need information at the time they are being prepared. Information that is trustworthy and easily understood by the patients is vital in enabling them to cooperate and participate in their care (Andersson et al., 2014).

1.2.1 Overview of Preoperative Anxiety Related to Surgery

Surgical operations can be a source of emotional distress to patients being prepared, during which time they go through anxiety and/or depression with a range of effects on their physical, psychological and postoperative recovery (Colcear et al., 2017). Preoperative anxiety is linked to pathophysiological responses including hypertension and dysrhythmias, which may lead to increased anaesthesia administration (Abate, Chekol & Basu 2020), postoperative adverse effects such as vomiting and an inability to empty the bladder (Bansal & Joon, 2017). Anaesthesia, surgical procedures and their outcome are some of the main factors that trigger preoperative anxiety in patients (Mulugeta et al., 2018).

Preoperative anxiety is managed in the preoperative nursing care stage. Patients are taken through the necessary procedural activities before the commencement of surgery to ascertain the sustainability and safety assurance rate of the patient for the planned surgery (Ismael et al., 2016; Barkhori, Pakmanesh, Sadeghifar, Hojati & Hashemian, 2021). Conscious efforts to prepare patients physically are important to combat complications that can occur during the postoperative period, but not enough to make the patient ready for surgery (Mulugeta et al., 2018). It is necessary to take care of the psychological needs of patients during the preparations for surgery owing to their relationship with the physical aspect (O'Donnell, 2016).

One of the effective psychological measures in the management of preoperative anxiety is the provision of information. Studies have revealed the effectiveness of using information to

manage preoperative anxiety (McNair et al., 2016; Pereira et al., 2016; Eberhart, 2020). It has also been documented by Ali and Abdallah (2020) that information is the essential part of managing preoperative anxiety, which must be done on an individual basis requiring a thorough examination of patients for their preoperative anxiety and information needs.

1.3 Background

Patients' needs in the context of surgery include education and teaching on the surgical procedure, anaesthesia, what is expected of the patient and / or what the patient expects at the end of the surgery (Aranha & Dsouza, 2019). Studies demonstrate that information on pain and its relief, knowledge of the illness and surgery, and possible complications are important steps in resolving the patient's anxiety (Andersson et al., 2014; Klaiber et al., 2018; Aranha & Dsouza, 2019; Burgess et al., 2019).

Exploration of the preoperative information needs of patients is described as an attempt to find out the information a patient expects to receive and sometimes asks for at the time of being prepared for surgery through an interactional interview (Dankyi & Adejumo, 2014). The information may not be significant to a patient unless it concerns surgery and meets his or her information needs directly. According to Alligood (2014), 'need is a requirement of the patient which, if supplied, relieves or diminishes his immediate distress or improves his immediate sense of adequacy or well-being' (p. 287). Thus, preoperative information needs refers to information that patients require in order to be relieved of anxiety owing to an impending surgical operation.

1.3.1 Rationale of the Study

Nursing education and practice in Ghana started before a standardised curriculum was drawn up in the pre-independence era. British sisters trained people to become nurses through in-service training at the hospitals. Students were given fundamental lessons including surgical

nursing (Bell et al., 2013). Currently, most nurses in Ghana are educated at the Nursing and Midwifery Training Colleges (NMTCs) or institutions, some of which are affiliated to teaching and non-teaching hospitals (Bell et al., 2013). Acquiring the skill of nursing is not obtained through a haphazard or random process but, in part, through a systematic approach toward understanding and reproducing essential activities of patients' care (Atakro et al., 2019).

The Nursing and Midwifery Council of Ghana (NMC) is the statutory body that regulates training programmes for nurses on the care of patients undergoing surgery, including peri-operative nursing (PN), registered general nursing (RGN), registered midwifery (RM), and nurse assistant clinical (NAC) (N&MC, 2018). The course outlines used in these training programmes clearly emphasise assessing and providing patients with information during preoperative nursing care (N&MC, 2015). Theory governing the preoperative nursing care of patients precedes the course outlines of the aforementioned programmes. These include the nursing process (Osman et al., 2021), therapeutic communication (Fite et al., 2019) and the deliberative nursing process (Orlando, 1972) theories.

The nursing process theory consists of steps to identify and manage the patient's problems. These are listed as assessment, nursing diagnosis, planning, implementation, and evaluation (Osman et al., 2021). Through these steps, the nurse is able to identify the actual problems of the patient and to plan, implement and evaluate specific care for the patient's recovery (Osman et al., 2021). The therapeutic communication theory emphasises nurse–patient interactions which are focused on the patient's concerns and working together to solve the patients' problems (Stuart, 2017).

Students who complete the above-mentioned programmes successfully are expected to be able to identify and provide the actual information needs of patients in order to undergo successful surgical operations. Elaborating on the job description of nurses, Careers in Ghana

(n.d) states that, prior to surgery, nurses are supposed to assess and educate patients and family members in the ward.

Globally, several studies have been conducted on periopertative nursing care. A current study by Xa et al. (2021) compared the efficacy and safety of the existing preventive measures for managing postoperative delirium. Odor et al. (2020) in a previous study identified, appraised, and synthesised the best available evidence on the efficacy of perioperative interventions to reduce postoperative pulmonary complications in adult patients undergoing non-cardiac surgery. In Africa, Kifle et al. (2021) conducted a study in Ethiopia to provide an update overview of perioperative facilities' status to facilitate the identification of future focus areas. And in Ghana, Aziato and Adejumo (2014) sought to have an in-depth exploration of the preoperative experiences of Ghanaian general surgical patients to inform effective preoperative care. Similarly, the reviewed studies intended to identify evidence-based interventions to decrease patient anxiety in perioperative practice. However, the scope and focus were different as compared to that of this study.

Ashanti Region is densely populated and the fastest-growing region in Ghana with a population of 5,440,463 (Ghana Statistical Service, 2021). The health system in the region comprises traditional healers and hospitals/clinics (Government of Ghana, 2018). The region contains 527 health facilities. Ghana Health Service (GHS) operates 33 per cent of these facilities and the rest are managed by missions, quasi-health and private institutions (Ghana Health Service, 2010). There are ten Nursing and Midwifery Training Institutions in Ashanti Region manned by the Ministry of Health (MOH), missions and private bodies (Nurses in Ghana, 2022). These hospitals are spread across the 30 districts of the region (Ghana Health Service, 2021), which are furnished with nurses from the NMTCs both inside and outside the region (Kwamie et al., 2017).

Students at these institutions go through a period of training during which they are taught and allowed to practise on how to identify and give information to patients, including those going for surgical operation (Nurses and Midwifery Council (NMC), 2015). The code of professional conduct of NMC on nursing practice in Ghana (Arko, 2017), states that patients have the right to receive information about their condition, which should be accurate, truthful and easily understood.

Figure 1.1: Map of Ashanti Region Showing the Various Districts

With fresh knowledge and ideas from the training colleges, it is expected that nurses should be able to prepare patients adequately prior to their surgical operation. But nurses may not be aware of patients' preoperative information needs and this leads them to assume the preoperative information that patients need (Burgess et al., 2019). It has been concluded that,

to be able to explore the preoperative anxiety and information needs of patients, an individualised and patient-centred approach must be used (Andersson et al., 2014; Molony, et al., 2018). In the ward, nurses form the majority of healthcare workers (HCWs) and have the advantage of observing and examining patients for preoperative anxiety and information needs (Price, 2017).

In her theory of deliberative nursing process, Ida Jean Orlando (1972) states that the duty of the nurse is to identify and meet the immediate needs of the patient (Gonzalo, 2021). Nurses should be able to recognise both physical and psychological signs (behaviours), such as sweating, aggression, agitation and depression (Gonzalo, 2021) which have causes that must not be assumed but rather explored with the patient for the cause (Peterson & Bredow, 2013). The nurse–patient interaction runs through all ward activities of patient care (Faust, 2021). During interactive procedures, abnormalities in the patient's vital signs and behaviour, which may indicate that the patient is anxious and is in need of information, must be observed (Faust, 2021). This demonstrates the existence of preoperative anxiety and information needs and gives cause for observation and identification through interaction (Aranha & Dsouza, 2019). After establishing what are perceived as the causes of the preoperative anxiety and information needs of the patient, confirmation and validation are done with the patient to ensure that what is perceived is correct and is what the patient really needs. Alligood (2014) states that it is not appropriate to make conclusions based on perceptions of observed behaviours of the patient, but that it must be validated with the patient for confirmation.

Some studies and documents reviewed on patient care in Ghana, such as the study of GHS (2006), NMC (2018 of Ghana, and Aziato and Adejumo (2013), that nurses have the responsibility of assessing the needs of patients. But these documents do not describe how preoperative anxiety and information needs of patients should be explored and managed. In an attempt to 'describe the practices of nurses on exploration of preoperative information needs

of patients in Ashanti Region, Ghana, Dankyi and Adejumo (2014) discovered that the majority of nurses do little to validate their thoughts and perceptions on the observed signs and symptoms of preoperative anxiety of patients. Even though the majority (97.6 per cent) of the nurses indicated that they explore the preoperative information needs of patients, the results of the study also showed low responses of the nurses in the process of identifying preoperative information needs of patients (Dankyi & Adejumo, 2014). Ultimately, patients are sent to the theatre with high levels of anxiety, which affects the surgical procedure and the outcome (Bansal & Joon, 2016; Pereira et al., 2016).

1.4 Statement of the Problem

Preoperative anxiety is a reaction of emotional and physical difficulties (Navarro-Gastón & Munuera-Martínez, 2020) caused by external or internal stimuli and manifests in a variety of ways, including physiological and psychological forms (Mulugeta et al., 2018). Providing patients with information has been found to reduce preoperative anxiety (Gröndahl et al., 2019). Preoperative information focusing on the surgical condition, the operation, and postoperative care reduces anxiety (Hounsome et al., 2017). Literature has established that it is expedient for all patients scheduled to undergo surgery to be assessed for preoperative anxiety and information needs before the administration of anaesthesia and the surgical procedure is performed (Aziato & Adejumo, 2013). Exploration of preoperative anxiety and the information needs of patients includes identifying psychological and social determinants, considering their health literacy, preferences, and developing an information provision plan (Dunn & Milheim, 2017). Exploration also helps nurses to provide patients with information that relieves them of preoperative anxiety (Andersson et al., 2014). A study in the Ashanti Region of Ghana indicates that nurses do not explore patients adequately enough to obtain patients' preoperative information needs for the accurate management of preoperative anxiety

(Dankyi & Adejumo, 2014). In another study, Hidayat and Kes (2015) stress that nurses lack the expertise and the systematic process to explore and manage the preoperative anxiety and information needs of patients before undergoing surgery. Patients, in turn, undergo surgical operation with high levels of anxiety, which influence surgical procedures such as the need for increased anaesthesia administration (Abate et al., 2020) leading to poor outcomes such as vomiting, and slow and painful postoperative recovery (Pereira et al., 2016; Bansal & Joon, 2017; Melchior et al., 2018). A previous study by Ali et al. (2012) revealed that seven patients who were scheduled to undergo surgery were brought back from the operating room (OR) as a result of inappropriate assessment. Exploration and management of preoperative anxiety are done with certain measures. Several studies (Xa et al., 2021; Kifle et al., 2021; Aziato & Adejumo, 2014) show evidence of such measures in relieving or reducing anxiety among surgical patients which is similar to the focus of this study. However, the focuses of the aforementioned studies were different from that of the current study.

1.5 Aim of the Study

The aim of the study was to develop a training programme for nurses on the management of preoperative anxiety and information needs by investigating how preoperative anxiety and information needs of patients were explored and managed by nurses at district hospitals in Ashanti Region of Ghana.

1.6 Objectives of the Study

The objectives of the study were to:

1. determine the extent to which patients become anxious before undergoing surgery at district hospitals in the Ashanti Region of Ghana;
2. identify the factors that make patients become anxious before surgical operations at district hospitals in the Ashanti Region of Ghana;

3. explore and describe how preoperative information needs of patients are explored and managed by nurses at district hospitals in the Ashanti Region of Ghana;
4. explore and describe the practices of nurses in terms of how patient preoperative information needs are managed at district hospitals in the Ashanti Region of Ghana;
5. explore and describe the type of preoperative information that patients need before they undergo surgery and the type of information they receive from the nurses at district hospitals in the Ashanti Region of Ghana;
6. develop a training programme for nurses on how to explore and manage preoperative information needs of patients at district hospitals in Ashanti Region of Ghana.

Table 1.1: Phases and objectives of the study

Phase	Objective	
Phase 1	Objective One	To determine the extent to which patients become anxious before undergoing surgery
	Objective Two	To identify the factors that make patients become anxious before surgical operations
Phase 2	Objective Three	To explore and describe how preoperative information needs of patients are explored and managed by nurses
	Objective Four	To explore and describe the practices of nurses on how preoperative information needs are explored and managed
	Objective Five	To explore and describe the type of information that patients need before they undergo surgery and the type of information they receive from nurses
Phase 3	Objective Six	To develop a training programme for nurses on how to explore and manage the preoperative information needs of patients

1.7 Significance

Findings of the study would be used to develop a training programme for nurses on preoperative information needs of patients during the preoperative period at the district hospitals in the Ashanti Region, Ghana. Thus, the study would add to the existing world's knowledge on perioperative nursing care, especially on exploration and management of preoperative anxiety and information needs of patients with a patient-centred care approach, which would aid in the achievement of the ultimate goal of the MOH and GHS on patient care in Ghana. This, in turn, would aid in the psychological preparation of patients with the use of the preoperative information that would meet the needs of surgical patients. The study would present to all nurses who work in the surgical wards (SWs) or surgical suites (SSs), other HCWs, and all stakeholders a document on preoperative nursing care that would be developed in this study to be adopted by the MOH, NMC, and GHS.

1.8 *Operational* Definitions

An operational definition is a definition that describes the meaning of the basic concepts used in a study. The following are some of the definitions found during the course of this review that, in whole or in part, represent the important constructs included.

1.8.1 Preoperative information needs

The information that patients desire from a nurse to relieve him/her of anxiety and emotional stress caused by an impending surgical operation.

1.8.2 Patient

A person who receives surgical attention, care, or treatment from healthcare persons.

1.8.3 Surgery

This is a branch of medicine that uses instruments and medical manoeuvres to cure diseases and correct deformities. The concept of surgery in this study encompasses people who are booked and admitted to undergo surgical operations.

1.8.4 Preoperative

It is a period between the preparation of a patient for surgery and the surgical operation. This period is characterised by various levels and manifestations of anxiety that are experienced and exhibited respectively by patients who have been booked and admitted to be prepared to undergo surgery.

1.8.5 Preoperative anxiety

This comprises of both physiological and psychological disturbances experienced by a patient prior to undergoing surgery owing to lack of information. Psychological effects are often manifested in signs such as insomnia, restlessness and apprehension. Physiological disturbances are always triggered by psychological effects which are manifested in higher values of vital signs such as the blood pressure and heart rate.

1.8.6 Nurse

A person who has received education for a specified number of years and is qualified and registered with the nursing regulatory board of Ghana to provide nursing care, including perioperative nursing care to patients. The nurse reacts to explore preoperative anxiety and information needs and takes actions to provide information needs of patients.

1.8.7 District hospital

A health facility that serves as the first line of contact for people with various kinds of health conditions in Ghana. A district hospital has estimated bed capacity of 25 and is capable of providing medical services to people who suffer from conditions that require surgical operation such as herniorrhapy, laparotomy, and appendectomy (Mould-Millman et al., 2015).

1.8.8 Management of information

Professional actions that a nurse takes to provide patients with the information they need to be relieved of anxiety before undergoing surgery.

1.9 Theoretical Framework

During the development stage of this study, the researcher encountered the nursing process theory, theory of planned behaviour and the deliberative nursing process theory. The deliberative nursing process theory was chosen due to the following reasons: its application ensures that each patient receives individualised information and actively participates in his / her care; it requires nurses to continually discuss their reactions with patients, thereby preventing false identification of information needs and unnecessary management strategies; and asserts the autonomy of nursing as a profession and the conviction that this autonomy must be grounded in a reliable theoretical framework (Nursing Theories, 2022). The weakness associated with this theory is that Orlando thought that nurses should make their own decisions in the management of information neeeds of patients rather than merely carrying out tasks as instructed by others (Kogo & Kennedy, 2019).

This study used deliberative nursing process theory as the theoretical framework. This theory was developed by Ida Jean Orlando in 1961. It focuses on the interaction between the nurse and the patient, the patient's behaviour, the nurse's reaction and the nurse's actions

(Faust, 2002). Orlando further described nursing as a process of assisting the patient to indicate the causes of his/her behaviours to enable the identification of his/her actual needs (StudyCorgi, 2020). The researcher's purpose was to apply this theory in guiding the exploration and management of information needs of patients before undergoing surgery to obtain findings to develop a training programme for SW/SS nurses in the Ashanti Region, Ghana. Orlando came up with the following concepts, which were used in the study:

Information need is information that a patient wishes to have, which has the tendency to relieve his/her emotional stress before surgery.

Interaction is a communication process that ensues between a nurse and a patient during the performance of procedures in preparation for surgery. According to Wayne (2014), one important thing nurses do in interaction is converse with patients and spell out the plan of care he or she is going to receive. However, patients need help to communicate their needs because they become uncomfortable and ambivalent about their dependency needs (StudyCorgi, 2020).

Patient's behaviour (anxiety) is a cue displayed by a patient indicating lack of information. When patients are unable to cope with the uncertainty that accompanies impending surgery, they become distressed by feelings of helplessness and exhibit signs of preoperative anxiety (UK Essays, 2020).

Reaction is the response and interpretation a nurse gives to a patient's behaviour through his/her five senses. According to the theory, a nurse's reaction to each patient is unique and should not compound the distress of the patients. If nurses use automatic responses to patients' distress, the responsibility of nursing is not fulfilled; rather, this happens through self-reflection (Alkilani, 2017).

Exploration is when the nurse searches with the patient for preoperative information needs by discussing in detail his/her thoughts and feelings about a patient's behaviour. The theory explains that the role of the nurse is to explore and manage the patient's immediate needs for

preoperative information. According to the theory, all patient behaviours at the preoperative stage can be indications for preoperative information needs (Wayne, 2014). However, the patient is unable to state the nature and meaning of his or her distress without the help of the nurse (Gonzalo, 2019). The nurse's job is to identify the factors that cause preoperative anxiety and to provide the corresponding preoperative information needs (Wayne, 2014). In the process, the nurse focuses on the patient with a mind free from distracting thoughts to be able to recognise the factors of preoperative anxiety (Alkilani, 2017).

Verification/validation: the nurse shares with the patient his/her thoughts about the patient's preoperative information needs for confirmation. Together with the patient, they make a plan to provide the patient with preoperative information needs (Alkilani, 2017).

If the nurse uses a dynamic approach to validate the patient's distress or unmet preoperative information needs, a helpful, trusting relationship will be established. If this validation does not occur (an automatic action as opposed to a deliberative action), the patients may be unable to state their needs or to have their distress lessened or alleviated (Nursing Essay, 2020).

Nurse's actions are measures that a nurse takes to manage identified preoperative information needs.

1.9.1 Application of Theory in this Study

The researcher applied the theory in this study by aligning the concepts with the method of inquiry to obtain data to achieve the objectives of the study. This enabled the researcher to ascertain nurses' practices on exploration and management of preoperative anxiety and information needs of patients as described in the theory. The description below illustrates the process of investigation conducted by the researcher. The nurse interacts with the patient when the patient has been admitted to the ward to be prepared for surgery. During this interaction,

the nurse observes the patient who exhibits manifestations of preoperative anxiety and emotional stress (patient's behaviours), such as aggression, palpitations, and insomnia as a result of the impending surgery. The nurse reacts immediately upon seeing patient's behaviours by developing thoughts, perceptions and opinions on factors that could be the causes of the patient's behaviours. The nurse begins to explore the causes of the patient's observed behaviours with the patient through an interactive process.

The nurse then validates or verifies his/her perceptions, opinions and thoughts developed on the patient's behaviours by revealing them to the patient. If the patient confirms to the nurse that the perceptions, thoughts and opinions developed are the reasons for the patient's behaviours, it indicates that the patient's preoperative information needs have been identified. If not, the nurse has to continue to explore with the patient to identify the causing factors. After the identification of the patient's preoperative information needs, the nurse has to provide the patient with corresponding information either by him/herself or by coordinating with other HCWs.

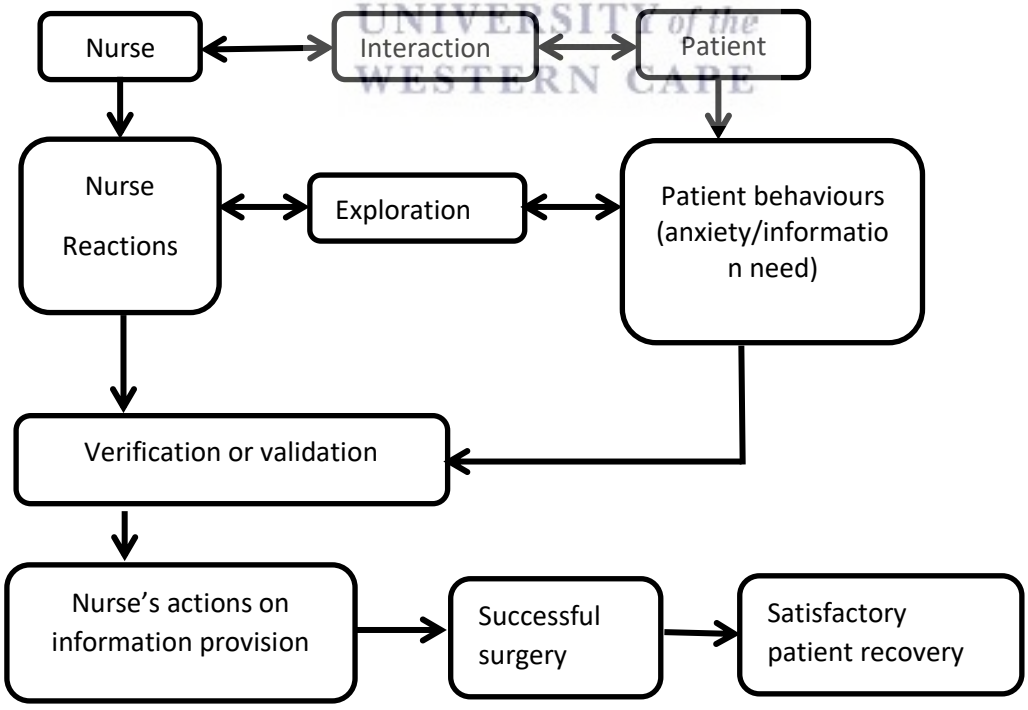

Figure 1.2: Diagram on Application of Deliberative Nursing Process Theory

1.10 Outline of the Thesis

This thesis is divided into seven chapters, as outlined below:

Chapter One: This chapter presents an overview of the study in terms of the background of the study, the problem statement, the aim and objectives of the study, the significance of the study, the operational definition of key concepts, theoretical framework, and the outline of the thesis.

Chapter Two: This chapter presents literature review and the philosophical (paradigm) perspective of the study.

Chapter Three: The third chapter deals with the research methodology undertaken to reach the objectives of the study, discussing in detail the research design, study population, sampling, data collection instruments and techniques, and the methods to analyse the various data.

Chapter Four: The fourth chapter presents the findings and a discussion of the quantitative data of the study.

Chapter Five: This chapter presents the findings and a discussion of the various phases of qualitative data.

Chapter Six: The sixth chapter presents the process of developing a training programme for nurses on the exploration and management of preoperative anxiety and information needs of patients.

Chapter Seven: This chapter presents the final document of the training programme developed with the panel of experts.

Chapter Eight: This chapter provides a summary of the main findings and the relevant recommendations as well as the limitations of the study.

1.10.1 Conclusion

This chapter has provided the general background of the study, the aim, objectives and the significance of the study. The chapter has also provided a brief background to the Training Programme on the Exploration and Management of Preoperative Anxiety and Information needs of Patients and, in particular, to surgical ward or surgical suite (SW/SS) nurses. The chapter has argued that SW/SS nurses are unable to examine patients to identify and manage preoperative anxiety and information. The chapter has demonstrated that patients who are booked to undergo surgical operations become anxious as a result of factors such as the surgical procedure, anaesthesia, postoperative pain, and fear of the unknown. It has illustrated that the training programme is a document that would offer SW/SS nurses the knowledge and skills to assess and manage patients for preoperative anxiety and information needs before undergoing surgery. The following chapter presents a review of literature relating to preoperative anxiety and information needs and the philosophical (paradigm) perspectives.

CHAPTER TWO

LITERATURE REVIEW AND PHILOSOPHICAL (PARADIGM) PERSPECTIVES

2.1 Introduction

Chapter one outlined the background of the study as well as the problem statement, the aim and the research objectives. This chapter intends to review literature on the concepts of preoperative anxiety and information needs of patients scheduled to undergo surgical operation at surgical wards (SWs)/surgical suites (SSs). Literature was reviewed in accordance with the objectives of the study. Thus, to determine the extent to which patients become anxious before undergoing surgery; to identify the factors that make patients become anxious before surgical operation; to explore and describe how preoperative information needs of patients are explored and managed by nurses; to explore and describe the practices of nurses in terms of how preoperative information patients needs are managed; and to explore and describe the type of preoperative information that patients need before they undergo surgery and the type of information they receive from the nurses at district hospitals in the Ashanti Region. Articles were identified by searching the following electronic databases: ScienceDirect, Cumulative Index of Nursing and Allied Literature (CINAHL), MEDLINE, PubMed, PsychARTICLES, EBSCOHost and Google Scholar. Search terms used include: preoperative anxiety, preoperative information needs of patients, and management of preoperative information needs.

2.1.1 Surgery

Surgery is a new reality that causes profound changes in the life of every individual and has a significant impact on the well-being, health, and essential living standards of patients and their families (Gonçalves et al., 2017). It is described as the medical speciality essential for treating and managing various health conditions including disabilities resulting from road

traffic accidents, pregnancy and related complications, infections and congenital defects (Weiser et al., 2016). Surgical procedures require the use of instruments to create incisions in the operation room/theatre under the administration of some form of anaesthesia (Eurostat, 2017).

Surgery is performed on an in-patient, outpatient, day- and in-emergency basis. For the purpose of this study, the researcher has focused on surgeries performed on in-patient basis. During in-patient cases, patients are formally admitted into the ward for specialised care or preparations that mostly last from one night to over 24 hours before surgery. The patient is discharged from the hospital after recovering successfully from the surgical procedures (Eurostat, 2017). The World Health Organizations (WHO) and the World Bank established that, since surgery is an essential component that aids in global health development, skilled human resources and specialised caregivers are needed to make it successful (Weiser et al., 2016). It is also established that patients must go to the theatre fully prepared physically and emotionally to have successful procedures (Adugbire er al., 2017).

2.1.2 Preoperative Anxiety

Anxiety experienced by patients prior to surgical procedures is termed preoperative anxiety (Wilson et al., 2015). Studies indicate that anxiety is a common phenomenon that surgical patients generally experience, which is considered to be a usual response (Ismael et al., 2016; Mulugeta et al., 2018). Other studies have recorded that preoperative anxiety mostly affects or influences surgical processes and outcomes, patients' expectations and satisfaction (Ismael et al., 2016; Musa & Ali, 2018). The researcher accepts that preoperative anxiety differs from 'anxiety', which is mostly a disorder, while the former occurs owing to impending surgical procedures, which are often precipitated by fear.

2.2 The Extent to Which Patients Become Anxious Before Undergoing Surgery

Surgery has been established as being a traumatic event, in that patients waiting to undergo procedures face varying forms of psychological and physiological disturbances (Seyedfatemi et al., 2014). Such discomforting experiences land patients in anxiety states. Mulugeta et al. (2018) define anxiety as a feeling of unease, worry, fear, tension and apprehension in response to external or internal stimuli that cause behavioural, emotional, cognitive, and physical manifestations. In addition, Melchior et al. (2017) describe anxiety as a vague and unpleasant feeling of fear and apprehension, characterised by tension or discomfort derived from the anticipation of danger or something unknown. These definitions are both relevant to the study in that the authors describe anxiety as a disorder in relation to an ensuing threat to life. The authors also include the manifestations exhibited by anxious patients.

2.2.1 Prevalence of Preoperative Anxiety Among Patients Scheduled for Surgery

Literature reviewed under both the quantitative and qualitative approach of the study discovered several studies describing the prevalence of preoperative anxiety among patients scheduled for surgery. Abate et al. (2020) found differing results on the prevalence of anxiety in various settings. The study postulated the European region showing aprevalence of 27 per cent to 80 per cent, with the highest observed in Spain and the lowest in Holland. In Asia, preoperative anxiety in India ranged from 47 per cent to 70.3 per cent, while that of Pakistan ranged between 62 per cent and 97 per cent. In the Americas, the United States of America showed a prevalence of preoperative anxiety as high as 20.2 per cent, while in Brazil, 24 per cent was recorded. The study evaluated 45 articles, of which 28 accounted for 14,652 participants. A systematic review and meta-analysis aimed to provide evidence on global prevalence and the determinants of preoperative anxiety among surgical patients.

A previous study, intended to assess the prevalence and associated factors of preoperative anxiety among patients waiting for surgery in Ethiopia, compared results of studies in other African countries. This study employed an institutionally based cross-sectional design with 237 patients and was conducted from 13 March to 12 May 2018, using a systematic random technique (Takele et al., 2019). The study found an overall prevalence of high preoperative anxiety of 56.12 per cent in Ethiopia. In the same study, the authors compared the results of studies conducted in Rwanda and Nigeria, which discovered a significant level of preoperative anxiety of 72.8 per cent and 51 per cent, respectively.

Takele et al. (2019) also report that the study conducted in Rwanda indicated a clinically significant incidence of preoperative anxiety of 72.8 per cent among surgical patients. In Nigeria, prevalence of preoperative anxiety in adult patients was 51 per cent, while studies conducted in different settings in Ethiopia discovered varied findings of preoperative anxiety of 70.3 per cent and 59.6 per cent. Comparatively, studies by Abate et al. (2020) and Takele et al. (2019) indicate that Africans had the most preoperative anxiety, followed by Asians.

In my opinion, preoperative anxiety in Africa could be attributable to the inclusion of various African and Asian studies. I argue that most people on the African continent may be unaware of anaesthesia, surgery, and postoperative pain treatment alternatives since they may live in rural areas with inadequate infrastructure and access to health information. Additionally, I attribute the prevalence of preoperative anxiety found by Bedaso and Ayelew (2019) to the lack of good social support.

Under the qualitative review of literature, Carleton (2016) describes that patient become anxious before undergoing surgery. Additionally, Abate et al. (2020) discovered anxiety among patients scheduled for surgical operation. I support the findings of these studies in the sense

that patients perceive surgery as a threat to their lives, even though the aim is to cure them of their conditions.

2.2.2 Effects of Preoperative Anxiety

Preoperative anxiety has effects on the well-being of a wide range of patients before, during, and after surgical procedures (Melchior et al., 2017; Cevik, 2018). Review of literature in the quantitative approach discovered the aforementioned effects on the psychological and physiological status of patients in the perioperative period (Ghimire & Poudel, 2018; Gautam, 2019; Navarro-Gastón & Munuera-Martínez, 2020). In the qualitative part of the study, literature reviewed indicates similar consequences on patients' emotional status, confined to psychological factors.

2.2.2.1 Psychological Effects

Studies reviewed under quantitative aspect of this study show that preoperative anxiety affects the psychological status of patients, which leads to behavioural changes. These effects have been documented in the form of nervousness, worry, tension, crying, anger, behavioural or verbal unrest (Cakir & Gursoy, 2017; Zammit et al., 2018; Chow, 2020). These findings postulate that anxiety stimulates the autonomic nervous system in the sense that, when individuals feel threatened by a perceived danger, hormones such as adrenaline is secreted causing these effects.

From the qualitative perspective, literature discovered that the main psychological effect on patients is fear (Ghimire & Poudel, 2019). The researcher believes that, as long as patients perceive surgery as a threat to their lives, they will always harbour fear. This evidence of fear indicates that these particular patients lack accurate information to be convinced that surgery is required for the relief of surgical conditions rather than being a threat (Ghimire &

Poudel, 2019). In other words, patients become afraid when they are unable to meet information needs about ensuing procedures. Ultimately, this deficiency results in the activation of the autonomic nervous system leading to a neuroendocrine shift in the body (Ginsberg et al., 2022).

2.2.2.2 Physiological Effects

In a cross-sectional study of 200 obstetrics patients, Bansal and Joon (2017) compare two groups in terms of the effects of preoperative anxiety on patients' haemodynamic status using blood pressure and pulse as parameters. It was identified that, Group I had a mean systolic blood pressure of 104.65 ± 9.75 mm Hg in contrast to 119.81±10.15mm Hg in Group II. A statistically significant difference was observed ($p < 0.001$). Additionally, the mean diastolic blood pressure in Group I and II were 73.53 ± 6.62 mmHg and 92.69 ± 6.03 mm Hg, in that order, which means there was a statistically high difference ($p < 0.001$). The pulse rate recorded a mean of 70.24 ± 11.20/min in Group I, while it was 85.89 ± 8.52/ min Group II ($p < 0.001$). Then, a study by Akinsulore et al. (2015) discovered cardiovascular disturbances such as tachycardia, hypertension and arrhythmias.

These studies (Bansal & Joon, 2017) and (Akinsulore et al., 2015) both recorded significant levels of anxiety among patients. On the other hand, they recorded varying findings on cardiovascular effects. With the former study assessing anxiety in pregnant women scheduled for caesarean sections (CS), the findings show that, physiologically, blood pressure and pulse rate were within the normal range (Bansal & Joon, 2017). In the case of pregnant women, there is the likelihood of mixed feelings, that is, anxiety and joy. Both have effects on the heart in that anxiety, which can cause depression, can reduce heart rate, while joy can increase it (Ahmetovic-Djug et al., 2017). Therefore, these feelings would be antagonistic to each other making the output of the heart within a normal range. The latter study recorded

disturbances in the heart functions because respondents were undergoing various surgical operations excluding CS.

Review of literature in the qualitative phase of the study establishes the effects of preoperative anxiety by vital signs of patients (Gee, 2015). It is suggested that the autonomic nervous system is stimulated whenever there is a threat to the body, which is a normal response. However, extremes of haemodynamic effects such as constantly high blood pressure and pulse readings and cardiovascular conditions, such as arrhythmias and hypertension, require attention from nurses and other health professionals (Celano et al., 2016). The researcher agrees with these findings that patients become afraid because they have no idea what will happen and are unfamiliar with nurses, surgeons and other health professionals who attend to them.

2.2.2.3 Effects on the Perioperative Period

It has been proven that surgery generates various forms of effects on patients during the perioperative period. Several studies describe that preoperative anxiety affects anaesthesia techniques including higher demand, delayed jaw relaxation and coughing during anaesthesia induction, surgical recovery and its results, and the worst postoperative pain (Erkilic et al., 2017; Ryamukuru et al., 2019). It is evident from these findings that the effects of anxiety as a result of higher autonomic fluctuations causing anaesthetic demand, increased incidence of nausea and vomiting, and heightened pain during the postoperative period have all been linked to perioperative anxiety.

In another study, Ocalan et al. (2019) discovered a significant relationship (< 0.001) between patients' preoperative anxiety and postoperative pain both in the immediate and late periods of hospitalisation. It is correct that there is a strong link between preoperative anxiety and postoperative pain. Anxiety has been postulated as a possible source of pain potentiation

in that patients become more conscious of this discomfort. This makes them worried and become anxious.

Gürbulak et al. (2018) report findings that anxiety is a significant factor in procedures needing just light sedation, and that the level of pre-procedural anxiety and the requirement for deep sedation medicine would rise. The researcher would like to offer some objection to this finding that the persistent existence of anxiety influences anaesthesia (Gürbulak et al., 2018). This indicates that the higher the anxiety, the higher the anaesthetic agent administration.

In summary, literature reviewed under both quantitative and qualitative approaches of the study record the prevalence of preoperative anxiety among patients awaiting surgical operations. It has been established that anxiety has effects on patients' psychological and physiological status as well as certain activities in the perioperative period including anaesthesia administration and postoperative pain.

2.3 Factors That Make Patients Become Anxious Before Undergoing Surgery

Preoperative anxiety varies among patients as it may be influenced by multiple factors (Gonçalves et al., 2017). Factors relate to the information that patients need in order to manage their anxiety (Kennedy et al., 2017; Poland et al., 2017; Cevik, 2018). 'Factors' is used interchangeably with phrases such as predictors of preoperative anxiety, causes of preoperative anxiety, influence of preoperative anxiety, determinants and concerns of preoperative anxiety (Nigussie et al., 2014; Dagona, 2018; Wada et al., 2018; Abate et al, 2020). The rationale for the use of different names comes from the different words and/or phrases used to denote factors demonstrated in the reviewed studies. All denote factors that make patients anxious before undergoing surgery.

Literature classifies factors that cause preoperative anxiety as external and internal. External factors encompass ensuing danger in patients' environments, such as the type of surgery, anaesthesia, and postoperative pain, while internal factors include the traits of the person, including demographic characteristics such as age, gender, and personality (Sepúlveda-Plata et al., 2018). Components of the aforementioned words or phrases that determine preoperative anxiety indicate the areas in which patients need information.

2.3.1 External Factors of Preoperative Anxiety

Review of literature in the quantitative phase of the study discovered that fear is a major factor in the cause of preoperative anxiety. Several studies identified fear among patients in connection to surgery and other procedures. Woldegerima et al. (2018) established that the most common reason for preoperative anxiety in patients is fear of being unable to recover from anaesthesia, postoperative pain, family issues, dependency, death, complications, and disability. Abate et al. (2020) agree with some of the factors outlined above and add fear of medical mistakes, awakening in the middle of surgery, financial loss, fear of an unexplained origin, and unexpected outcomes of the operation. I agree with the authors on their findings that fear comes about when the patient fails to obtain information about the impending surgical operation. The patient then perceives the aforementioned factors or concerns as threats to his or her comfort, which triggers the fear response.

Further studies reviewed under the quantitative approach discovered surgery as another major predictor of preoperative anxiety. The studies of Erkilic et al. (2017), Woldegerima et al. (2018), and Ryamukuru et al. (2019) indicated that the type and magnitude of surgery predicted high levels of anxiety among patients. High levels of anxiety were found among patients undergoing orthopaedic surgery (71.4 per cent), patients with general surgery (67.7 per cent) and those with oncologic and gynaecologic surgeries (Woldegerima et al., 2018).

Additionally, clinically significant preoperative anxiety was identified in patients awaiting orthopaedic surgeries (87.5 per cent), ear nose and throat (ENT) (77.8 per cent), general surgery (73.2 per cent), gynaeco-obstetric surgery (60.0 per cent), urology surgery (60.9 per cent), and plastic surgery (57.1 per cent) (Ryamukuru et al., 2019).

The studies indicated above were conducted in Ethiopia, Turkey, and Rwanda, with cross-sectional and descriptive design using 178, 186, and 151 respondents respectively. These studies did not just record surgery as predictors of preoperative anxiety; rather, the type and magnitude of surgeries. The type of surgery refers to whether it is major or minor, or from emergency to elective surgical operations. The magnitude of surgery, as discovered in the reviewed studies, mainly pertains to the complexity of its nature and the risk of adverse effects on the patients. Orthopaedic surgery is a major surgery, which is performed after individuals have had traumatic injuries. Undergoing such procedures causes high levels of fear owing to residual post-traumatic experience, and anticipation of severe pain and disability (Woldegerima et al., 2018; Ryamukuru et al., 2019). The researcher agrees that, while patients with traumatic injuries should be operated upon, nevertheless, patients become afraid of severe pain and disability after the surgery.

Furthermore, literature discovered that other external factors such as postoperative pain, anaesthesia, and domestic factors predicted preoperative anxiety. In a study to determine the prevalence of preoperative anxiety and postoperative pain in foot nail surgery, Navarro-Gastón and Munuera-Martínez (2020) discovered a moderately direct and significant correlation of $r = 0.429$ ($p < 0.001$) between the subsections which measure anxiety about anaesthesia and anxiety about surgery. In a previous study too, Ghimire and Poudel (2019) discovered that, the majority (85.3 per cent) had concern sabout family and 79.4 per cent about financial crises owing to surgery and hospitalisation. The researcher's view conforms with these findings. It can be argued that, patients who have had a bad anaesthetic experience become more anxious

prior to subsequent surgeries while those who have had a good anaesthetic experiences become less anxious.

Literature reviewed from the qualitative approach indicates that patients become anxious owing to fear of the unknown, and lack of accurate information. Fear of the unknown is described as patients' tendency to fear as a result of perceived lack of information (Carleton, 2016). However, there is a relationship between information and worry, with patients experiencing preoperative concern if they have little or no awareness of their ailment or the surgical therapy (Althobiti et al., 2020).

In the researcher's view on fear of the unknown as the major cause of preoperative anxiety, the first hours of hospitalisation are an adjustment period, during which time the patient is surrounded by feelings and fears when he or she enters the hospital. Information is needed for patients to eliminate fear. When they fail to obtain information, there is the perception of threat leading to complications and possibly to death. Therefore, because patients do not know more about activities leading to surgery and the surgery itself, they become anxious. The researcher believes that fear as a result of inability to care for self or family, undergoing surgery, complications, and disability are often as a result of patients lacking the information needed for the relief of anxiety.

2.3.2 Internal Factors of Preoperative Anxiety

Studies under the quantitative literature review discovered that socio-demographic and or psychosocial characteristics of patients constitute internal factors that predict preoperative anxiety (Khalili et al., 2020; Navarro-Gastón et al., 2020). Other studies found patient-related factors like age, sex, gender, the level of education and economic status affect preoperative anxiety levels (Vadhanan et al., 2017; Salzmann et al., 2017). In contrast, Erkilic et al. (2017)

detected that, high school graduates had lower anxiety levels than primary school graduates (preoperative trait anxiety score; 42.6±8.2 vs 38.0±8.0, P=0.030).

Specifically, Erkilic et al., (2017) found that patients under 30 years of age had a substantially higher preoperative state anxiety score than patients over 45 years of age (P < 0.001), while patients between 31 and 45 years of age had a significantly higher preoperative state anxiety score than patients over 60 years of age. Preoperative state anxiety was observed to increase by gender, female (B=7.988 [95 per cent CI: 2.917–13.060], P=0.002) and by shorter sleeping times (B=-2.069 [95 per cent, CI: -3.552–0.586], P=0.006). Preoperative characteristic anxiety score dropped as educational level increased (r=-0.261 and P<0.001). Preoperative trait and state anxiety levels were greater in female patients (P<0.001). Employees and retirees had considerably higher preoperative trait anxiety ratings than housewives (P<0.001). In contrast, Woldegerima et al. (2018) found that age had a negative relationship with preoperative anxiety. The prevalence of preoperative anxiety reduces as people become older and was shown to be higher in people aged 30 to 45.

The combined findings of these studies seem to indicate that there are variations in the influences of age on anxiety. The reviewed studies established that the majority of the respondents between the ages of 20 and 30 had anxiety. The majority of the respondents identified with anxiety had at least a secondary education (Woldegerima et al., 2018; Ryamukuru et al., 2020). Again, these studies established the relationship between age and anxiety. With respect to educational status and anxiety, it can be argued that anxiety increases with higher educational level because patients with a higher degree of education and knowledge are more likely to be aware of the risks and adverse effects of anaesthesia and operations, putting them under a higher anxiety state.

It follows that women are identified as being more anxious than males. The reason for that is that the majority of females recruited in the study were housekeepers and their ability to earn an income depended on their good health. It is thought that their worry was about their inability to preserve their homes and family (Celano et al., 2016). Additionally, women are sensitive to terrifying events, experience hormonal fluctuations, and easily verbalise their concern and the impact on them of isolation from their family members (Heyningen et al., 2017). It is interesting to note that the gender of respondents in the various studies contributed to the high level of preoperative anxiety. In the study of Melchior et al. (2017), there were slightly more females (52.5 per cent) who were anxious than males (47.6 per cent). High anxiety levels recorded related to educational status indicate that those who were not educated constituted 12.2 per cent, while the rest were educated; moreover, the majority of the respondents within the age range between 20 and 30 had graduated at least from secondary school (Melchior et al., 2017).

In summary, factors that make patients anxious before undergoing surgery were classified as external and internal. External factors comprised events that caused a perceived threat among patients. These factors are mainly about surgery, that is, the type or magnitude of surgery that patients undergo. Internal factors constitute traits of patients that predispose them to preoperative anxiety. Major internal factors comprise gender and educational level.

2.4 Exploration and Management of Preoperative Anxiety and Information Needs of Patients

The key to effective exploration and/ or assessment of preoperative anxiety and information needs is a multi-pronged approach that includes assessing and identifying psychological and social determinants of preoperative anxiety and information needs, understanding patient learning preferences, considering health literacy and an information delivery plan (Dunn & Milheim, 2017). Additionally, Galal et al. (2017) state that preoperative

assessment and preparation as a process involves primary care, anaesthesia, and other specialties. The patient must communicate all relevant information about their disease or ailment, which may require the disclosure of sensitive information that could be embarrassing or harmful if other persons knew it. The promise of confidentiality permits the patient to trust that information revealed to the physician will not be disseminated further (Nwafor & Nwafor, 2016). Exploration of preoperative anxiety and the information needs of patients involves a series of activities. The literature review in this context only used the qualitative approach of the study. These are described below:

2.4.1 Nurse–Patient Interactions

Literature demonstrates that the nurse–patient relationship forms the core for exploring preoperative information needs (Salehe & Njine, 2016). In another study, Stuart (2017) describes nurse–patient interactions as a mutual learning and corrective emotional experience for the patient, which is based on the humanity of the nurse and the patient, mutual respect, and the acceptance of sociocultural differences. In recent literature, Vujanić et al. (2020) describe the nurse–patient interaction as a professional and therapeutic relationship based on the planning, assessment, and provision of care that satisfies individual patient needs. These definitions apply to the responsibilities of nurses in their attempt to identify information needs. Additionally, the definition of Vujanić et al. (2020) ascribe essential terminologies aligned to the duties of nurses in exploring preoperative anxiety, such as therapeutic relationship, planning, assessment, and provision of care. The terms demonstrate the trust and confidence that nurses need to build in patients in order to obtain necessary information.

Several studies indicate that nurses require certain qualities such as social skills, expertise and experience, and priority settings to interact with patients (Kieft et al., 2014). First, the authors describe the qualities listed as essential for nurses to explore the information needs

of patients. Second, they establish that knowledge, technical skills, and communication skills are major characteristics of competency. And third, nurses need to prioritise the type of information required to be offered to patients.

Allinson and Chaar (2016) mention that competence in knowledge, social/communicative skills, honesty, confidentiality, caring and showing respect are ways to establish the nurse–patient relationship. A report compiled by Registered Nursing (2020) indicates that nurse–patient relationships have been shown to influence a patient's health outcome. This signifies that showing empathy, creating trust, advocating for the patient, providing informative feedback, and responding to the patient's unmet needs are examples of excellent therapeutic interactions.

In contrast, Kwame and Petrucka (2020) found environmental and work-related factors to impede nurse–patient interactions. Noise, work overload and patients being new to the hospital setting affect nurse–patient communication; as do burnout, work overload, inadequate nursing staff, and other resource constraints. Additionally, Kieft et al. (2014) disclose that nurses report a significant administrative workload and feel pressed in their practice to explore and manage patients' information needs. They claim that these challenges would not increase patient perceptions of nursing care quality.

Findings of reviewed studies (Kieft et al., 2014; Allinson & Chaar, 2016; Bennett, 2020), are in conformity with each other as the authors found similar points relevant in establishing nurse–patient interactions. In contrast, challenges discovered in the studies of Kieft et al. (2014) and Kwame and Petrucka (2020) point to managerial impediments and environmental factors impeding the free flow of nurses' practice. Setbacks outlined by Kieft et al. (2016) stress additional tasks causing stress in the nursing activities of exploring and managing the information needs of patients. Kwame and Petrucka (2020) emphasise

environmental issues such as noise and concerns of poor communication between nurses and patients. It can be agreed that conditions that favour nurse–patient interactions should supersede the challenges.

2.4.2 Assessing/Identifying Preoperative Anxiety and Information Needs of Patients

Undergoing Surgery

Studies describe assessment as the process of identifying preoperative anxiety and gathering information about patients' needs in a systematic and continuous manner (Anumala, 2019; Toney-Butler & Thayer, 2020). This definition implies that nurses who receive patients into the SW/SS have a mandate to extract information needed for their care. Failure to assess and identify information makes it impossible to manage the information needs of patients. Studies assert that, during assessment, nurses must consider patients' bio-psychosocial and emotional concepts, spiritual needs, growth and developmental process, the pathophysiology of diseases, family systems and culture, and the value of their beliefs (Hidayat & Kes, 2015; Gonçalves et al., 2017). My opinion supports the reviewed studies in that many patients perceive surgery as a threat to their lives. Patients' spiritual and cultural practices and support from their families enable them go through surgery successfully (Gonçalves et al., 2017). Therefore, it is critical for nurses to be well versed in the growth and developmental process which aids in the interpretation of human behaviours during the period while patients are being prepared to undergo surgery.

Gonçalves et al. (2017) documented that nurses need to possess skills in communication. Shabestari and Parizad (2014) added that nurses could perform assessment based on their knowledge and evaluation of the patients with other healthcare team members. The combined conclusions of these studies indicate that knowledge alone is not enough to

identify the information needs of patients since they add that nurses need constant practice to complement their acquired knowledge in order to be skilful in assessing patients.

The reviewed literature establishes the settings, periods, health professionals and the means by which patients are assessed. O'Donnell (2016) stresses that assessment of patients usually takes place in focused preoperative clinics, run jointly by nurses, doctors and anaesthetists. Traditionally, patients are admitted a day before surgery for all forms of assessment. This implies that patients afflicted by diseases are referred to surgeons, nurses and anaesthetists/anaethesiologist for a thorough assessment of preoperative information needs. Surgery is performed under various circumstances including emergency, elective, and on a daily basis (day surgery). Patients operated under elective and day surgery benefit from preoperative clinics.

Regarding health professionals designated to assess patients, Sillero-Sillero et al. (2019) emphasise that nurses stand out among other members of the healthcare teams because they play a key role in direct patient care and an important role in the detection and prevention of adverse events before and after surgical procedures. In agreement with this, Reiter (2014) states that nurses need to explore patients' information needs and the ability to comprehend and retain information; because health information can be complex and it is best to start by identifying what the patient needs to know before the process begins.

This means that the face of nursing is changing from the period when nurses' duties solely depended on orders from medical practitioners to an era of independently assessing and planning care for patients. It is therefore expedient for nurses to assume an independent role in assessment, in that they form the majority of health professionals and are always with the patients at the SWs/SSs. Studies have established various means by which nurses can explore patients' preoperative anxiety and information needs. The studies of Kuzminskaitė et al.

(2019), and Celik and Edipoglu, (2018) describe that preoperative anxiety and information needs can be assessed by using anxiety questionnaires such as the Amsterdam Preoperative and Information Scale (APAIS).

However, Kuzminskaitė et al. (2019) emphasise that it has been realised that using anxiety questionnaires is not widely accepted in clinical practice, possibly owing to high workload and time restrictions. Irrespective of these restrictions, the use of anxiety questionnaires is not common among nurses at SWs//SSs. Nevertheless, nurses can be oriented in terms of their use to enhance their efforts to explore preoperative anxiety and information needs. Gonçalves et al. (2017), on the other hand, state that there is no universally accepted approach to explore preoperative information needs of patients. They added that the approach used to explore preoperative information needs of patients should be appropriate, to identify the factors for which patients are anxious and need information. Ghimire and Poudel (2018) suggest that an easy and commonly used approach is an interactive method. Literature describes appropriate steps on how patients can be examined for information needs. Additionally, interactions have enabled nurses to identify preoperative anxiety and information needs.

Several formats have been established for exploring the information needs of patients. Stonehouse (2017) states that information is gathered through a subjective or objective means, and through a primary or secondary format. In most cases, subjective data confirm objective data. The reason is that nurses observe patients under emotional stress, which they need patients to confirm (Stonehouse, 2017). Primary data always provide appropriate and timely evidence of information needs, against secondary data, which provide records on data that might have been used (Zhu et al., 2016). Consequently, it is useful to obtain primary data in addition to objective and subjective data.

Relating to the sources of information needs, several studies describe a review of the patient's case notes, a detailed history and clinical examination, additional tests and investigations (Akhtar et al., 2013; O'Donnell, 2016). Clinical examination, tests and investigations provide evidence for information obtained through history (Akhtar et al., 2013). However, if not purposeful, it can lead to a waste of time and collection of information that patients may not need (O'Donnell, 2016). Another study postulates that information needs can be obtained by observing psychological manifestations, systematic and vital signs observations, verbal and nonverbal communication tactics (Hidayat & Kes, 2015).

Psychological manifestations lead to the identification of the preoperative information needs of patients (Aranha & Dsouza, 2019). However, it is irrational to attribute the same or similar manifestations to the need for information of all patients (Peate, 2015). Patients are individuals who have unique and different needs. Therefore, it is required of nurses to treat psychological manifestations of patients individually in order to obtain their actual information needs. Challenges nurses mostly encounter in assessment pertain to a lack of clarity for data analysis, a lack of systematic process and space to record nursing analysis, and the use of terminologies (Alamri & Almazan, 2018). The age-old challenge in nursing is nursing interventions being dependent on physicians' orders. Much nursing research has been carried out and theories and models provided for making nursing independent, yet this challenge lingers on (Hidayat & Kes, 2015). Nursing leaders and policymakers must instil discipline in the profession by making sure that nurses practise activities to make nursing independent.

2.4.3 Validation of Information Needs of Patients

Validation is described as the collection and evaluation of the predictors of preoperative anxiety with evidence that is capable of helping the nurse and the patient select and deliver quality preoperative information to manage anxiety (Bonthagarala et al., 2015). Validation

provides nurses with the opportunity to ensure that appropriate information needs of patients have been identified (Rivas et al., 2019). It requires the ability of nurses to interact successfully with patients concerning their (nurse) thoughts about the presenting behaviour of patients concerning preoperative anxiety (Rivas et al., 2019). Validation becomes unsuccessful when communication barriers exist between nurses and patients, such as language barriers, use of terms unfamiliar to patients, and the effects of the condition of the patients (Dantas et al., 2017). It is therefore required that measures would be put in place to enhance communication between nurses and patients for successful validation.

Literature suggests that nurses need to possess certain qualities to enable them to validate the information needs of patients (Krakau et al., 2021). Such qualities include knowledge and skills, critical thinking, the ability to understand potential factors causing preoperative anxiety and the ability to communicate their perceptions on the predictors of preoperative anxiety for patients' understanding (Shin & Kang, 2019; Krakau et al., 2021). This leads to the identification of tailored responses to the information needs of patients. However, nurses who are not knowledgeable, are unable to understand the predictors of preoperative anxiety, and have communication setbacks would not be able to validate the information needs of patients (Herdman & Kamitsuru, 2014).

Studies posit that, to perform validation, the nurse needs to employ critical thinking in clinical judgment to assess and evaluate identified factors with patients, to communicate his or her perceptions to patients, to ask them to alter or validate the findings, and ito nvolve them in their own care plan to manage preoperative anxiety (Herdman & Kamitsuru, 2014; Abdoli & Safavi, 2017; Shin & Kang, 2019). This implies that nurses should be familiar with the process of validating to be able to identify information needs, and failure to stick to the process would lead to the discovery of information that patients do not need (Herdman & Kamitsuru, 2014). In turn, this will aggravate patients' anxiety status.

2.5 Management of Information Needs of Patients

The process of managing the informing needs of patients is an essential element in preoperative preparations for surgery (Watson & Davis, 2015). It involves teaching the patient about the nature of the specific surgery and the reasons it needs to be done, the risks and benefits, preparations involved, expectations before and after the procedure, and strategies for preventing potential postoperative complications (Engelke et al., 2017). This means that every patient scheduled to undergo surgery, irrespective of the number of times operated, needs to have information about activities concluding the preparations, activities in the operating room such as anaesthetic induction, and the procedure and activities during the postoperative period (Wunderle et al., 2017).

Informing patients influences anxiety states in that information can eliminate or reduce, or heighten anxiety levels (Gröndahl et al., 2019). Patients may not desire to be informed about probable complications that might follow the procedure; instead, they may want to be briefed about favourable outcomes (Hounsome et al., 2017). Therefore, management of information needs is the provision of information desired by patients and which, when provided, relieves them of preoperative anxiety and allows them to undergo successful surgical operations devoid of any adverse effects or complications and to go through postoperative care for a successful discharge.

2.5.1 Information That Patients Need

Information needs or requirements are described as the need for additional information on a specific subject, expressed vocally or by active information-seeking to help patients take better care of themselves (Clarke et al., 2016). This definition depicts the desire of patients for extra information to supplement information which is already in their possession. The researcher feels that information need in this context refers to information patients desire

which, when given, would provide solutions to their doubts, concerns and worry, and would relieve them of anxiety.

Literature reviewed in the quantitative phase of the study describes the information patients need. It has been established in literature that patients undergoing surgery have anxiety about the surgical procedure (3.43, ±1.36), complications (3.42, ±1.33), postoperative pain (3.38, ±1.20), anaesthesia, awakening in the middle of surgery, and concern about their family (85.3 per cent) financial loss (79.4 per cent) and death (Mulugeta et al., 2018; Bedaso & Ayalew, 2019; Ghimire & Poudel, 2019; Marinelli, 2020).

Most patients become anxious the moment they are informed to prepare for surgery. The major factor of anxiety is fear (Mulugeta et al., 2018). When patients become afraid of certain elements relating to surgery, it suggests the concern they have for which they need some level of information from nurses, the surgeon, anaesthetist and other health professionals (Girmay et al., 2018). In most cases, patients' anxiety levels and fears are eliminated and /or reduced when nurses and other health professionals inform them or clarify the surgical operation and its elements. This implies that the areas of patients' concerns become the information they need.

In the qualitative phase, the review of literature discovered surgical conditions and their corresponding procedures as major areas of information needs of patients. According to Laferton et al. (2017) and Girmay et al. (2018), patients need information about their surgical conditions, surgical procedures, and their outcomes. All patients desire to be informed about the ensuing surgery and their related components irrespective of whether thay have been operated on before or not (Burgess et al., 2019). Patients' desire for information is generated by emotional disturbances that often accompany the decision to undergo surgery (Laferton et al., 2017).

As a matter of fact, the concern of most patients is to be relieved of their fears and anxiety, and to be assured of a successful procedure (Bedaso & Ayalew, 2019). In like manner, surgical conditions and surgical procedures always remain the major areas of information needs because most patients feel they do not have adequate information (Cole et al., 2017). However, most patients do arrive at the wards with information, which may be accurate or inaccurate, provided by friends, family members and some self-acclaimed health professionals (Lazar & Deneuve, 2013).

2.5.2 Multidisciplinary Approach and Knowledge Upgrade

Providing patients with preoperative information requires employing a multidisciplinary approach (Yagasaki & Komatsu, 2011). The term 'multidisciplinary' is described as a group of different health disciplines with concepts integral to the functioning of the multidisciplinary care provided to patients (Alanazi, 2014). This implies that the management of information needs is not the sole responsibility of SW/SS nurses, nor of the surgeons, anaesthesiologists/anaesthetists and other health professionals, but that it is a collective effort of these health professionals that form a surgical team (Musa & Ali, 2018; Kwame & Petrucka, 2020).

Studies indicate that the multidisciplinary approach is not a one-way transfer of information, but that it requires harmonisation of knowledge or information between nurses, other health professionals and interpreters to coordinate the process of managing patients' information needs (Alanazi, 2014; Musa & Ali, 2018; Kwame & Petrucka, 2020). The authors in the reviewed study made a convincing case for nurses in contributing their quota to manage information needs because they form the majority of the health professionals and they are with patients at every hour of the day despite surgeons being the ones who attend and book patients for surgery at the consulting rooms. I agree with the inclusion of interpreters to teams at the

SWs/SSs because patients, most of whom are not familiar with local languages, travel from various places to seek surgical care.

Sources assert that a multidisciplinary approach employs the use of electronic and digital devices, audio visual aids, internet and other methods, such as demonstrations (Kim et al., 2015; Liebner, 2016; Mariza, 2019). It is evident from these findings that technological advancement has made it easy for information to be provided to patients in a variety of forms. However, the challenge with the use of this approach is a lack of technical know how and maintenance.

Literature reviewed in terms of the management of the information needs of patients discovered the surgical procedure, complications, postoperative pain, anaesthesia, awakening in the middle of surgery, and concern about family as the common areas where patients need information (Mulugeta et al., 2018; Bedaso & Ayalew, 2019; Ghimire & Poudel, 2019; Marinelli et al., 2020).

2.6 Setbacks in Assessing Patients' Preoperative Anxiety and Information Needs

A closer look at the literature on the exploration of preoperative information needs, however, reveals a number of setbacks. Several studies suggest that role confusion, traditional ward culture, change repelling behaviour of nurses, communication lapses, poor nursing etiquette, and knowledge lapses are setbacks in assessing information needs of patients (Mahfouz et al., 2013; Wolf et al., 2017; Khoran et al., 2018; Wurjine & Nigussie, 2018).

Role confusion is described as the frequent belief of nurses that they are practicing outside of their scope of practice, in part because it is difficult for them to define their responsibilities within the confines of the law and professioan (Feringa et al., 2020). This leads to them being unclear about what they are and where they belong, and feeling disillusioned

about their life's direction (Cherry & Block, 2021). My view agrees with this description in that role confusion is described as a situation when SW/SS nurses are bemused and unable to perform an assessment of patients with the view that it is not within their job description (Cherry & Block, 2021). The researcher suggests that nurses at the SWs/SSs should be enlightened about their role in assessing patients to identify the information needs of patients.

With respect to ward tradition as one of the factors limiting the assessment of patients, Maben (2013) states that nurses develop certain traditions at the ward owing to the high demand of work with little control, job satisfaction and the ability to deliver high quality care. Braithwaite et al. (2017) affirm that positive ward tradition is believed to be related to positive patient outcomes, such as reducing the length of stay at the hospital and decreased pain. I would like to support the study of Maben (2013) in that, certain tasks, which are not related to patient assessment, are regularly performed, occupying the time allocated for nurses to assess patients. However, I do not support the affirmation of Braithwaite et al. (2017) owing to the fact that tasks tagged as ward tradition are always substituted for tasks aimed at identifying the information needs of patients. I propose that surgical ward nurses should be coached to carry out tasks in relation to patients' problems.

A closer look at the literature on communication, however, reveals a number of gaps and shortcomings. Norouzinia et al. (2016) establish that, one of the greatest communication impediments at the ward is the use of use of informal languages. Wittenberg et al. (2019) add that communication challenges identified between nurses and patients were language barriers and patients with less education. Davies (2020) establishes that nurses often find it difficult to release information concerning care to patients or relatives when patients are not aware of their right to be informed. Owusu-Dapaa (2016) indicates that, Ghana's patient population is unaware of their rights to information during clinical encounters with healthcare workers.

The studies of Norouzinia et al. (2016) and Wittenberg et al. (2019) offer the same factors, that is, the language barrier. Informal language uses casual words but medical terms are most of the time difficult for patients to understand (Norouzinia et al., 2016). Additionally, patients may want to be addressed as individuals and by their titles, which informal language often does not permit that (Owusu-Dapaa, 2016). The language barrier mentioned in the study of Wittenberg et al. (2019) may refer to different languages existing in Ghana. Akan is the most widely spoken language in Ghana; however, not every person from different tribes would be able to communicate in a common language.

The researcher is in agreement with the findings of the studies of Davies (2020) and Owusu-Dapaa (2016) on communication barriers relating to the intent of nurses to provide information. Patients who are unaware of their right to information do not press nurses and other health professionals for information and clarification of doubts, sometimes compelling nurses to withdraw their efforts to provide the information (Owusu-Dapaa, 2016).

Literature reviewed show that poor time management is a setback in assessing patients. It has been established that poor time management includes nurses spending much time on less pressing tasks, and frequent ward meetings (Ghiasvand et al., 2017; Barua et al., 2019). These findings provide some reasons that certain tasks aimed at assessing patients are left undone. Pertaining to the nurses' duties in preparing patients for surgery, the researcher believes that assessing patients to identify information needs supersedes other tasks during the preoperative period. Therefore, the reviewed findings are a confirmation of poor time management of nurses at the SW/SS.

Poor nursing etiquette has been identified as destroying nurse–patient interactions. Wurjine and Nigussie (2018) found that some nurses often approach patients with a negative attitude. Greg (2017) stresses that every ward has one or two nurses with whom no one wants

to work and that there is no one name to characterise them. Grissinger (2017) states that disrespectful behaviour of nurses is a determinant that continues unabated and is commonly witnessed among nurses at SWs/SSs.

These findings describe different cases of the poor attitude with which nurses approach patients in their care. The researcher deduces that this poor nursing etiquettes culminates from the innate nature of some of the nurses, poor time management, and domestic challenges. The findings outlined by Wurjine and Nigussie (2018) depict that nurses are confronted with domestic issues, while those of Greg (2017), and Grissinger (2017) indicate that some nurses naturally possess a bad attitude. It can be argued that, if nurses manage their time well by attending to prioritised care, patients' actual information needs would be attended to and managed without nurses being tagged as being irresponsible. Lapses in knowledge are considered a critical factor that affects preoperative assessment of patients. Wayne (2019) describes knowledge deficit as a lack of cognitive information or psychomotor competence required for health restoration, preservation, or promotion.

It has been established that amny nurses are unable to upgrade their knowledge through structured educational programmes owing to the expense of fees (Fawaza et al., 2018). The study of Bvumbwe and Mtshali (2018) suggests that nurses are unable to upgrade their knowledge through any knowledge-improving programmes, such as structured and unstructured nursing educational programmes including specialised courses, workshops, in-service trainings and seminars. Bvumbwe and Mtshali (2018) further provide reasons for nurses being unable to further their studies. Nursing education involves a cost, which nurses are not often able to cater for by themselves.

This section reviewed studies on the setbacks of assessing patients to identify their information needs prior to undergoing surgical operations. The major setbacks reviewed

include role confusion, traditional ward culture, communication lapses, poor nursing etiquette and knowledge lapses.

2.7 Setbacks in the Management of Preoperative Information Needs

Studies have confirmed the existence of obstacles in the administration of preoperative information as poor formats for providing information, lack of guiding principles, and incompetent nurses in terms of information provision (Heggland & Hausken, 2015; Malley et al., 2016; Christalle et al., 2019).

2.7.1 Lack of Guiding Principles

Guiding principles are described as a collection of concepts that nurses use to improve the quality of care they give to patients (Sales et al., 2018). In a study to understand the role of adherence versus lack of adherence to protocol in the precipitation of nursing care, Krishnan et al. (2014) assert that protocols, which are typical examples of guiding principles, are a set of written norms that specify proper behaviour and processes to follow in formal situations. The reviewed definitions by Sales et al. (2018) and Krishnan et al. (2014) show similarities which pertain to actions that nurses are expected to carry out. The authors (Sales et al., 2018; Krishnan et al., 2014) estimate that nurses at the SWs/SSs ought to be guided in assessing patients to enable them to manage information needs of patients appropriately.

The reason for the lack of guiding principles is that they are absent in the wards (Rauh et al., 2018). Nevertheless, Krishnan et al. (2014) illustrate that protocols have been proven to be useful armory when utilised together with the required fundamental theories. Similarly, Kelly et al. (2021) found that, in certain hospitals, nurses use protocols once a month and their concern is that it takes a long time to complete. Krishnan et al. (2014) stress that, the use of

protocols has been questioned in that it is believed that they would replace the clinical judgment abilities of nurses.

The researcher agrees with Krishnan et al. (2014) that protocols have been tested and found to be useful. Kelly et al. (2021) found that nurses at certain hospitals seldom use the guiding principles. In the researcher's view its poor usage is due to the cumbersome nature the guiding principles appear to have. It is, however, not a surprise that its use is in doubt despite it having being tried and tested. It is also not surprising that it is poorly used, as Kelly et al. (2021) discovered nurses finding its use difficult. This signifies that nurses must be taken through a comprehensive training about its use.

2.7.2 Inappropriate Staffing Norms

The Technical Working Group (2013) describe inappropriate staffing norms as a state in which nurses who lack knowledge and skills are sent to work at SWs/SSs under the pretext of favouring them. This definition paints a picture of some nursing leaders who place nurses at the SW/SS based on being biased towards competent nurses on merit (Technical Working Group, 2013). I put forward that nurses who enjoy such favours are mostly inexperienced and lazy.

Malatji et al. (2017) established that putting incapable nurses in the wards causes burnout. I support the assertion in this study in that inexperienced and lazy nurses always shove their responsibilities onto the competent ones because they are not able to perform tasks as expected of them.

Other factors contributing to inappropriate staffing norms include nursing managers lacking specific training in quality improvement, and a knowledge deficit in critical areas of the managerial role (Kakyo & Xiao, 2018), challenges in posting nurses to hospitals (Kwamie et al., 2017), a poor road network and difficulty in accessing utilities like telecommunications

and electricity. I believe that nurses who did not have the opportunity to understudy their leaders in their management positions and did not attend managerial workshops always lack the experience to manage their resources well.

In my view, public administration standards, labour market forces, political dynamics, professional authorities, human resource management systems, and accountability mechanisms are involved. With the aforementioned bodies playing a part in the postings, the halo effect is likely to set in, which would place nurses at hospitals they prefer and not where they are needed (Kwamie et al., 2017). Many prefer to remain in big towns and cities making such places crowded with nurses while district hospitals become deficient (Kwamie et al., 2017). Technological advancement has made the world a global village. However, places that lack such amenities become unattractive for young and qualified nurses to accept postings.

2.7.3 Teamwork Lapses

This section reviews literature on lapses in teamwork among nurses and other health professionals including surgeons, anaesthetists and laboratory technicians, which affects the management of the information needs of patients. According to Babiker et al. (2014), most teams involving nurses, doctors, and anesthetists fail to function in managing the information needs of patients owing to factors such as nurses' one-on-one interactions with their patients, a lack of clear role descriptions, explicit coordination, and other miscommunications. Aberese-Ako et al. (2015) found that doctors are vested with the authority of using their discretion in certain decisions over those of nurses. The authors also say that nurse–anaesthetists believe that doctors are mistaken in assuming that, because they were trained as nurses, they should obey their orders.

I agree with the authors in their findings that doctors have always felt proud and supreme over other health professionals, especially nurses. Peruzzo et al. (2018) also

discovered that conflict and poor relationships, personality issues, overwork, and a lack of resources all hamper teamwork from flourishing among health workers. These two studies present different factors that impede the functioning of teams. The study of Peruzzo et al. (2018) employed both nurses and doctors, and their findings pertained to the ill relationship between nurses, surgeons, and anaesthetists.

I concur with the study of Aberese-Ako et al. (2015) and argue that there have been many times when conflicts develop between nurses and physicians, which result in nurses being reprimanded and made to feel intimidated. In addition, doctors intimidate nurses to carry out their orders even when nurses have their own duties to attend to. Doctors are the prescribers, while nurses are the implementers of the orders or prescriptions. The line of duty make doctors feel able to lord over the nurses. The moment nurses try to resist, conflict ensues. The study of Babiker et al. (2014), an editorial report, focused on the negative impact of heavy workload and unclear role definitions. Overtasked members of a group become stressed. This becomes worse when the majority of members do not know their core duties. These findings illustrate that, when group members are not on level terms, when there is poor knowledge of job descriptions and, when there are adverse effects from the workload, this creates lapses in teamwork.

2.7.4 Nurse–Patient Interactive Defects

A closer look at the literature on nurse patient interactive defects, however, reveals a number of gaps and shortcomings. Chan et al. (2013) describe lack of sufficient time to attend to numerous patients in the ward affecting interactions between nurses, patients and their families. This is an indication that time is a limited resource, and inadequate communication between nurses and other healthcare providers is likely to lead to patients obtaining inadequate information.

Price (2017) notes that nurses are unable to establish a rapport with their patients. Objections to the opinion of Price (2017) bear in mind that nurses are the first health professionals that patients meet before seeing other health professionals. Despite the fact that nurses form the majority of health professionals and that they spend much time with patients, establishing rapport may not go down well with patients, which the Price (2017) study identified.

2.7.5 Knowledge Deficit of Nurses

Patients' conditions necessitate the application of knowledge in the management of their information needs, and nurses are expected to function accordingly (Oyira et al., 2016). Lack of knowledge is a clear impediment to adhering to guiding principles in the management of preoperative information needs (Dilie & Mengistu, 2015).

Khoran et al. (2018) found that lack of competence, specialisation, and working experience render nurses incapable of managing information needs. In contrast, Fereidouni, Sarvestani, Hariri, Kuhpaye, Amirkhani and Kalyani (2019) describe nurses as competent in information need management, but not competent in ensuring quality teaching of patients. Alternatively, Istomina et al. (2011) indicate that nurses with higher education in courses focused on professional development possess information management expertise. It is argued that the study of Khoran et al. (2018) speaks of newly qualified nurses, freshly posted to the SWs/SSs, who lack the requisite competence to manage the information needs of patients.

Before nurses are posted, they offer a-one-year internship or national service or rotation. They spend approximately one month in each department which, in the researcher's view, is not enough to obtain the needed experience. Istomina et al. (2011) describe in their study that the majority (90 per cent) of nurses had finished courses in clinical skills; 63 per cent

had completed the most popular courses and 8 per cent of them had a bachelor's degree certificate, while the rest had general practice nurse's licences.

The knowledge that nurses acquired in the mentioned courses equipped them with the competence to manage information needs but not the competence to ensure the quality of the patient's information. To ensure quality, nurses need knowledge, and to obtain the skill in applying the knowledge, there should be practice. Therefore, it is clear that nurses acquire the necessary knowledge, but lack the practical use of the knowledge to provide quality information to the patients.

Interestingly, Eslamian et al. (2015) found that most nurses are not interested in updating their knowledge, stating that workshops have no quality impact on their knowledge base because sessions are scheduled around their shifts. Eslamian et al. (2015) identified conditions that deter nurses from upgrading their knowledge to include: nurses claim topics treated are irrelevant, exhaustion from shifts, loss of attention, disturbances, and family responsibilities. Objections have been expressed to the opinions expressed by Eslamian et al. (2015). It is believed that nursing leadership at the hospitals would not opt for workshops that are irrelevant to the practice of nurses. It is acceptable to cite reasons such as being engaged in night duties and other duties that collide with times scheduled for the workshops. Irrespective of these reasons, nurses can still attend such programmes when they obtain permission from their charge nurses and other leaders in the nursing profession.

2.8 Improving Identification of Preoperative Anxiety and Information Needs

Several research studies support the usefulness and necessity of identifying patients' preoperative anxiety and information needs in order to provide suitable information (Dunn & Milheim, 2017; Nwafor & Nwafor, 2016; Galal et al., 2017). In this regard, Wyatt (2019) confirms that preoperative patient assessment is a critical step in establishing strategies for

providing accurate information. The reviewed studies discovered that factors that improve the identification of preoperative information needs includ: establishong guidelines on assessment and establishing appropriate staffing norms.

2.8.1 Establish Guidelines on Assessment

It is of interest to know that nurses' assessment abilities are evolving to the point where they can be incorporated into nearly all preoperative assessment (Lloyd & Craig, 2007). Assessment guidelines are defined as a collection of concepts from a care domain translated into clinical practice (Curtis et al., 2016). This definition confirms that nursing theories such as Ida Jean Orlando's Deliberative Nursing Process have been propounded to assist nurses in assessing patients for information needs. The combined assertions of the authors in the reviewed studies indicate that guidelines are the distillation of knowledge, which is the synthesis of data from theories translated into specific themes and converted into systematic reviews and guidelines, then presented to nurses as practice guidelines or information sheets. To enhance the support of established guidelines and theories on nursing practice, knowledge and motivation are paramount. Zamanzadeh et al. (2015) affirm that acquiring adequate knowledge on using guiding principles can improve the quality of preoperative assessment on patients. The researcher agrees with the authors on the need for nurses to have comprehensive knowledge about the nature of the guiding principles, without which, they would be insignificant to the nurses. However, knowledge alone is not enough to ensure the effective use of the guidelines, but skills are also needed.

In an attempt to encourage nurses to adhere to assessment principles, Nebiat (2014) emphasises the use of remuneration as the most important commodity to influence nurses. Motivation of nurses is a major booster for getting the job done in the wards. I agree with Nebiat (2014) that most nurses are satisfied when they have been successful in achieving their

objectives and they are greatly motivated by the presence of the devices they need to execute their duties. However, nurses are demotivated in the absence of the requisite devices when they have to improvise (Jaeger et al., 2018).

2.8.2 Establish Appropriate Staffing Norms

One way to improve nursing assessment is to establish appropriate staffing norms at the SWs/SSs. Literature show that having the right number of nurses at the SWs/SSs enhances the effective assessment of patients for preoperative information needs (Sharma & Rani, 2020). In an attempt to address the problem of poor staffing, the Ministry of Health (MOH) in Ghana decided to develop an evidence-based Staffing Norm based on the WHO Workload Indicator for Staffing Needs (WISN) in 2014 (MOH, 2014). The WHO WISN gives healthcare policymakers a method to make staffing decisions in a systematic way to allow for better management of their nursing staff (MOH, 2014). This implies that there must always be systems and policies in place to follow in order to place nursing staff in wards, especially SWs/SSs, where they are needed.

In the same way, Johnson (2018) states that, to achieve appropriate posting of nurses, strategic leadership is essential to ensure that brilliant nurses should be identified, recruited, developed and retained at the SWs/SSs. It is therefore essential that human resource personnel at district hospitals should be involved in helping to fill the gaps in the SWs/SSs. In contrast, the MOH does not have official posting or transfer authorities; rather, Ghana Health Service (GHS) headquarters determine quotas that should be posted to the regions, but it has no posting or transfer authority over specific district hospitals. It is therefore recommended that ward managers receive training in staffing management to help recruit nurses to the SWs/SSs.

From the dimension of maintaining distinctive nurses who are capable of assessing preoperative information needs of patients, studies suggest that nurses caring for deaf and dumb

patients should learn sign language and use a range of methods to increase communication between team members and patients (Machado et al., 2013; Allen et al., 2017). Over the years, nursing curricula have been reviewed frequently and sign language is now part of the subjects taught (Adu-Gyamfi & Brenya, 2016). In view of this, nurses would no longer have difficulty in communicating with people who only sign. Nevertheless, patients may not only be signing; there could also be patients who are not familiar with the common languages. In cases of this nature, relatives, friends or other nurses could be used who may speak the patient's language.

2.8.3 Improving Provision of Preoperative Information Needs

A well-established system for informing patients should be capable of producing accurate and timely information on preoperative anxiety and its determinants, as well as for assessing the information's usefulness to patients (Patmon et al., 2016). This allows nurses to assess patient's progress, challenges, and requirements in order to make evidence-based recommendations based on their preoperative experiences (Mutale et al., 2013). According to Gerlitz (2017), enhancing the delivery of preoperative information needs of patients requires nurses and other healthcare staff to work together. According to Musa and Ali (2018), preoperative information provision is a multidisciplinary method that requires nurses, surgeons, anesthesiologists, dieticians, and physiotherapists to harmonise their expertise to inform patients. Some factors have been established to improve on the delivery of preoperative information needs. They include maintaining skillful nurses in the ward and stimulating teamwork.

2.8.4 Maintaining Skilful Nurses in the Ward

Nursing is a subject that requires both theoretical and practical knowledge (Borji et al., 2018). The nature of nursing education brings to bear individual nursing abilities and needs, provides job satisfaction, and meets the ultimate goal of the hospital (Maru et al., 2013). These

studies support the notion that nursing trains individuals in the cognitive, affective, and psychomotor domain to become competent enough to identify and provide for patients who need information in order to undergo surgery.

In addition to these, Drenan et al. (2018) are of the view that there should be enough nurses with the requisite abilities to organise and provide the information patients desire to meet their preoperative information expectations. This asserts that training of nurses should be increased to staff district hospitals adequately that are in short of staff. In Ghana, there are over 125 nursing and midwifery training institutions, which train over 100 nurses annually, yet there seem to be a shortage of nurses in most of the wards with SW/SS being no exception.

Nonetheless, studies indicate that nurses who are skillful in communication (i.e., good at listening and speaking), and well oriented in information technology and the ability to use IT and sophisticated devices should be maintained at the SWs/SSs (Darvish et al., 2014; Cornell & Vaughan, 2020). It can be argued that the aforementioned areas of competency are what will help nurses to be able to manage the information needs of patients, though components like IT and some sophisticated devices are mostly not found at district hospitals.

Some of the major setbacks impeding the assessment and identification of information needs include role confusion, resistant to change, poor nursing etiquette, and knowledge lapses. Additionally, major factors that hinder the management of information needs include poor formats for the provision of information and lack of guiding principles. Ultimately, it has been established that steps to improve the assessment of information needs include establishing guidelines on assessment and establishing appropriate staffing norms. Finally, it was reviewed that maintaining skillful nurses in the ward and stimulating teamwork are steps to improving the management of information needs of patients.

2.9 Strategies to Manage Preoperative Anxiety and Information Needs of Patients

Management of preoperative anxiety and information needs is defined as the provision of educational intervention prior to surgery, aimed at improving patients' understanding, anxiety and surgical outcomes (Edwards et al., 2017). Several studies have described strategies such as multimedia, leaflets, explanations, and appropriate periods in the management of preoperative information needs (Edwards et al., 2017; Gerlitz et al., 2017).

Literature indicates that preoperative information should be provided before a patient is admitted into the ward. The study of Gerlitz et al. (2017) emphasises that the information provided to patients during their first visit to the hospital is very useful to allow enough time for them to absorb information and formulate questions prior to undergoing the procedure.

Engelke and Woten (2017) suggest that providing information about preparing for abdominal surgery frequently begins in the outpatient clinician's office or in a preoperative work-up clinic and continues after admission into the ward. The researcher agrees with these studies in that patients would have the opportunity to know more about their condition and the procedures, which is enough to eliminate or reduce anxiety and to foster decision-making about their care.

With regard to the medium of providing information, Gerlitz et al. (2017) emphasise the use of leaflets and multimedia in conjunction with explanations and the rationale for the procedures. In a randomnised controlled trail study, Alanazi (2014) indicates that only two trials showed reduced anxiety after providing information through short videos. The author revealed in the same study that video clips did not reduce anxiety in the control group of the study. However, in a recent study, Rajput et al. (2020) found that multimedia, in the form of video, reduced anxiety. Alanazi (2014) discusses that the conflicting outcomes in the study were due to the high risk of intervention heterogeneity. On the other hand, participants in the

study of Rajput et al. (2020) had similar characteristics. Owing to these findings, the researcher is convinced that differences in participants' characteristics should be considered in the provision of information.

It important to provide information through leaflets, which must be easy to read and can serve as a source of reference for patients (Engelka & Woten, 2017). However, the researcher is of the view that patients' literacy level must always be considered because patients who are unable to read would not benefit from printed information (Edwards et al., 2017). Edwards et al. (2017) state that one-on-one sessions of providing information to patients can be employed when sensitive and private issues need to be discussed, which can be quite time-consuming. However, the authors continue that provision of information to a group of patients is beneficial in that patients hear responses to questions from other patients and support groups, and are exposed to group modeling of behaviours. Gerlitz et al. (2017) indicate that it is critical to consider patients' level of health literacy in addition to characteristics such as education, cultural and language barriers, and age. The researcher agrees to the assertions of Edwards et al. (2017) that patients handled individually are better informed than in groups. Additionally, nursing theories such as patient-centred care postulate that patients should be provided with individual care (Chapman, 2017).

This section reviewed literature on the strategies to manage the preoperative information needs of patients. Review studies disclosed that patients must be provided with information on the day prior to having the surgery. It was further revealed that printed information, explanations, and the use of multimedia such as videos can be used to send information to patients.

2.10 Philosophical (Paradigm) Perspectives

In the course of unfolding answers to a problem, researchers need to consider the approaches and steps involved, which are dependent on their thoughts, to present credible findings not only to themselves, but also to other readers. Views governing truths about problems are different among researchers. These truths guide the thinking, beliefs and assumptions about society and ourselves, which formulate individuals' views of the world (Chilisa & Kawulich, 2015). These beliefs and assumptions are termed paradigms or worldviews. Referring to Schwandt (1989), and Guba and Lincoln's (1994) excerpts on paradigms, Dieronitou (2014) describes paradigms as 'worldviews' consisting of beliefs about nature or reality, and knowledge that guides researchers. Rehman and Alharthi (2016) also define paradigms as established rules and regulations with defined boundaries that determine steps to undertake to be successful.

Creswell et al. (2013) outline some philosophical worldviews to include postpositive, social construction, advocacy/participatory and pragmatic. In this study, the researcher considered the application of a pragmatist philosophical worldview. This is because the researcher shares the opinion with Creswell et al. (2013) that pragmatism does not restrict to a single system of philosophy and reality and that its methods are applied in quantitative and qualitative assumptions. In this study, both quantitative and qualitative approaches of inquiry were used to achieve the objectives.

Pragmatism is substituted for positivism, which emphasises results and the meaning of issues. It focuses on using communication and shared meaning-making to develop practical answers to social problems. It is grounded in the fact that theories can be contextual and generalisable by analysing them for 'transferability' to another situation. Pragmatic researchers

are able to hold on to subjectivity in their thoughts and to be objective in data collection and analysis (Shannon-Baker, 2016).

The above descriptions of pragmatism indicate that steps involved in unfolding solutions to research objectives under pragmatism are aligned both to positivist and constructivist assumptions. In this study, the positivist's assumptions were followed to address the objectives: *to determine the extent to which patients become anxious before undergoing surgery*; *to identify the factors that make patients anxious before surgical operation; and to identify demographic variables that influence preoperative anxiety of patients*. The constructivist's assumptions were applied to achieve objectives under the qualitative phase: *to explore and describe how preoperative information needs of patients are explored and manage by nurses*; *to explore and describe the type of preoperative information that patients need before they undergo surgery and the type of information they received from the nurses; and to explore and describe the practices of nurses in terms of how preoperative information patients need are managed*.

Positivist assumptions are aligned to philosophies of quantitative methods (Gray et al., 2013). It has been established that positivist techniques are a traditional 'scientific method' that uses a set of orderly, disciplined procedures to obtain information (Park et al., 2021). Positivists assert that reality exists in a form that is objective and can be achieved. They denote a broad spectrum of thought and have the assumption that reality is fixed and measurable and enables the researcher to obtain and interpret social realities objectively (Kivunja et al., 2017)). The positivists also believe that reality must be identified by following scientific procedures and tight control measures (Polit & Beck, 2013).

On the other hand, constructivists do not believe that objective reality exists. They believe that realities are socially constructed in the mind and that every individual has access

to their own constructions though many such constructions may not be the same, but are similar (Rehman & Alharthi, 2016). This assertion was supported by Kamal (2019), who states that individuals build their own understanding and knowledge of phenomena through experience.

2.10.1 Researcher's Assumptions

In a research trajectory, certain rules and regulations are beyond the control of the researcher but they must be adhered to in that their absence makes the study insignificant (Adom et al., 2016). It becomes necessary for the researcher to be guided by assumptions in the course of achieving the objectives of his study. Moon and Blackman (2014) state that assumptions govern paradigms and it is necessary to define assumptions clearly in a research study to clarify the phenomenon under study succinctly. For example, in a survey, the researcher must assume that respondents recruited would be a true representation of the population and would respond truthfully to the items in the questionnaire (Moon & Blackman, 2014). It is also necessary to clarify assumptions used in research methods (Adom et al., 2016) in that assumptions are appraised in order for results to be accepted (Kirkwood & Price, 2013). The researcher's stand on the use of mixed methods is pragmatism. Quantitative and qualitative assumptions are used in pragmatism (Creswell et al., 2013). In this study, the researcher's assumptions were based on the perspectives of *ontology* and *epistemology*.

2.10.2 Ontology

Ontology studies the nature and structure of reality (Islam, 2017). It focuses on the make-up of reality; in other words, it expresses the question of *what is* (Moreno-Conde, 2019). From the positivist's perspective, the study of ontology focuses on what people claim to exist (Andrews,2016). Ontology assumes that reality is objective to the researcher and is represented by symbols that are in place Realities have independent meanings and can be observed with the senses (Kamal, 2019).

The ontological position of positivism is realism. Realism believes that object existence is not dependent on the knower. This means that identifiable realities exist independently to the researcher. Thus, most positivists are of the view that reality is not brought about by our senses (Islam, 2017) and that there is a real world driven by natural causes (Polit & Beck, 2018). Quantitative researchers aligned to positivist ideology use deductive reasoning to obtain findings that are appraised. They (positivist researchers) tread in an orderly and systematic fashion and adopt mechanisms designated to control the study to avoid or lessen biases (Polit & Beck, 2018).

From the perspective of the positivist, the researcher has defined the nature of the reality under study, and selected concepts which helped him to focus on the course of the study. This was made possible by reviewing literature about the nature of the reality, determining and designing the methods to follow in order to uncover the nature and structure of reality, and to collect objective information to delineate reality and its causes. The researcher employed the measures outlined in the positivist worldview to construct instruments used in determining the nature and structure of preoperative anxiety of patients undergoing surgery.

Kamal (2019) postulates that the constructivist's view on ontology is that reality is constructed instead of being static. It is subjective, such that each individual constructs his/her own reality by denoting meanings and actions to certain occurrences. The constructivist also places a heavy emphasis on understanding the human experience as it is lived, usually through the careful collection and analysis of qualitative materials that are narrative and subjective (Polit & Beck, 2018).

From the constructivist's perspective, the researcher believes that numerous factors come into play in making the patient anxious before undergoing surgery. As it has been explored in the literature review, perceptions harboured by patients prior to surgery usher them into a period of preoperative anxiety. From the ontological mindset, each of the patients waiting

to have surgery constructs their own factors that make them experience anxiety. These factors are attributed to a strange hospital environment, surgical and other procedures in the theatre, and fears of being socially dissociated from others.

According to the practices of nurses in the preparation of patients for a surgical operation, each nurse has his/her own experiences regarding how they go about it. The researcher therefore developed questions that allowed the nurses to express their views on how they explore and manage the preoperative information needs of the patients before undergoing surgical operation. To achieve this, the following questions were asked: *Please tell me, how do you explore patients to know the information they need before surgery*? and *Please tell me, how do you provide patients with information they need before surgery*?

The researcher anticipates that in the midst of preoperative anxiety, patients must be examined to obtain the actual causes through which specific and precise information could be provided. In the period of preoperative preparation for surgery, patients construct their experiences with respect to their perceptions about surgical experiences and the kind of preparation they receive from nurses. In this view, the researcher developed questions that enabled the patients to share their experience in terms of how the nurses examined and managed their preoperative information needs. Questions asked included: *Please tell me, how did the nurses examine you to know the information you needed*? *Please tell me, how did the nurses provide you with the information you needed before undergoing surgery*? *Please tell me, what information did you need from nurses which make you less anxious?* and *Please tell me, what information did the nurses give you before you had surgery*?

2.10.3 Epistemology

Epistemology is the study of the nature of knowledge including the defining components and their sources (Salviano et al., 2016) and how to obtain it (Boon & Baalen,

2018). Epistemological assumptions emphasise the means of creating, acquiring and communicating knowledge. An epistemologist asks the question: What is the nature of the relationship between the researcher and the knowledge that is being obtained? (Moon et al., 2021). In another study, Olum (2016) establishes that positivists assume that the methodology of natural sciences must be used to study reality. They also state that truth can be acquired in that knowledge is rooted in firm, undoubted, verified facts out of which beliefs may be deduced. The author added that knowledge is objective and is deductively generated.

From the positivist standpoint, the researcher believes that, in patients who exhibited signs of preoperative anxiety, these did not occur out of the blue, but that here were deep-rooted causes which needed to be identified and described. In the light of these, he followed a systematic process in the course of determining the extent to which patients become anxious before undergoing surgery, identifying the factors that make patients become anxious before surgical operation, and determining the demographic variables and their relationship to anxiety. The researcher adhered to control measures to avoid biases by using a multi-stage cluster sampling technique to select respondents to ensure that the population under study had been truly represented. A structured and validated instrument was used to collect data.

The researcher made sure that he did not interfere with the data collection process by allowing respondents to respond freely to the items in the questionnaire and he also used blinded research assistants to distribute and collect the questionnaires. Measures were followed to analyse the data by sorting, coding and entering data using the Statistical Package for Social Sciences.

Using the participant observation method, the researcher used a validated checklist to obtain data on *the practices of nurses on how preoperative information patients needs are assessed and managed*. In this process, the researcher remained independent and adhered

strictly to observation and the ticking of the steps involved in assessing and managing the preoperative information needs of patients as listed on the checklist.

The constructivist philosophical paradigm is an approach that says that people construct their own understanding and knowledge of issues by experiencing and reflecting on them. People construct much of what they learn through experience, according to the analogy. As a result, the constructivist believes that constructing meaning is the only type of learning available (Adom et al., 2016).

From the constructivist view, the researcher created a conducive atmosphere by ensuring that participants had privacy and confidentiality to enable them to express their views during interviewing. Questions such as: *Please tell me, how do you examine patients to know the information they need before surgery*? *Please tell me, how do you provide patients with information they need before surgery? Please tell me, how did the nurses examine you to know the information you needed*? *Please tell me, how did the nurses provide you with the information you needed before undergoing surgery? Please tell me, what information do you need from nurses which makes you less anxious?* and *Please tell me, what information did the nurses give you before you had surgery*? These questions were followed by probing to enable participants to express deep-rooted issues. The following questions were used to extract the experiences of nurses and patients, respectively: *Please tell me, how do you examine patients to know the information they need before surgery? Please tell me, how do you provide patients with information they need before surgery?* and *Please tell me, what information do you need from nurses which makes you less anxious?* Furthermore, the following are some of the items on the checklist used to observe nurses as they prepared patients to undergo surgery: *Nurse probes patient for the causes of patient's manifestations of preoperative anxiety* and *Nurse takes steps to provide patient with information*.

2.11 Conclusion

This chapter reviewed literature on the concepts of preoperative anxiety and information needs, and their effects and consequences. It also focused on the extent, the manifestations, and the effects of preoperative anxiety. Literature was reviewed on nurses' practice and activities at the SWs/SSs on assessing for preoperative anxiety and its causes, and the identification of information needs in an attempt to eliminate or reduce anxiety. The literature review further looked at the setbacks in the assessment and management of preoperative anxiety and information needs and factors to improve assessment and management of preoperative anxiety and information needs of patients. Additionally, this chapter reviewed literature on the information patients expect from nurses and the information patients receive from nurses before undergoing surgery. Lastly, this chapter described the researcher's assumptions by delineating his philosophical stance in this study. The following chapter presents the research methods and designs employed in the study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

Chapter Two presented a review of literature on both quantitative and qualitative aspects of the study and the researcher's assumptions by describing his philosophical stance in this study. Chapter Three presents the research methodologies used in the various phases of this study. It begins with a description of the approaches, their justifications and how they were used in this study. This chapter is divided into four parts, namely: phase one comprises quantitative data collection and analysis and phase two consists of qualitative data collection and analysis. Phase three is further divided into four categories including: category one – face-to-face individual interviews, category two – participant observation with a checklist and fieldnotes, category three – face-to-face individual interviews of nurses and category four – face-to-face individual interviews of patients. Phase four is made up of strategies used in the development of the training programme. Furthermore, this chapter describes the ethical considerations and the rigours applied. This included validity, reliability and trustworthiness, respectively, as applied to the approaches.

3.2 Research Methodology

This study employed the mixed-method approach to achieve the research objectives. Mixed-method study is the process of combining and integrating qualitative and quantitative research methodologies into one study (Molina-Azorin, 2016). Mixed methods enable researchers to present a total account of the problem instead of using only the quantitative or qualitative research approach; it also enables researchers to implement all data collection tools available rather than being restricted to those that pertain to quantitative or qualitative research; and it helps to find solutions to research problems that cannot be achieved with only qualitative

or quantitative design, which allows the use of multiple worldviews or paradigms (Creswell et al., 2013). The major limitation of mixed methods is the lengthened time taken to finish the entire investigation, especially when using sequential designs (Whitley et al., 2020). The three major types of mixed method designs are explanatory sequential, exploratory sequential, and convergent (Vedel et al., 2019). This study employed explanatory sequential design. In this design, quantitative data is first collected and analysed followed by qualitative data collection and analysis. Data from both phases are integrated at the interpretation stage (Warfa, 2016). The researcher of the current study espouses quantitative method to obtain the existence of preoperative anxiety among patients whereas qualitative method was adopted to establish the need for exploring and managing preoperative anxiety and information needs of patients (Subedi, 2016).

The pragmatist philosophical worldview was applied in this study. Pragmatism is a research paradigm that is founded on the application of philosophical and / or methodological assumptions that is effective for the specific study (Kaushik & Walsh, 2019). Pragmatism was applied in this study because it frequently applies to the mixed method design (Creswell et al., 2013). It acknowledges the existence of either a single or several realities that are amenable to empirical investigation. Pragmatists believe that objective realities exist aside from human experience that is grounded in the environment and can only be discovered through human experience (Kaushik & Walsh, 2019). The major philosophical underpinning of pragmatism is epistemology that is of the belief that knowledge is independent on experience (Kaushik & Walsh, 2019). However, ontology is the most overlooked part of the pragmatic philosophy in that pragmatism is typically viewed as epistemological and methodological (Maarouf, 2019).

Positivist assumptions were used to address objectives 1 and 2. Constructivist assumptions were applied to achieve objectives 3, 4, and 5. The positivist adheres to quantitative philosophies (Gray et al., 2013) and believes that reality exists and must be

identified with scientific procedures and tight control measures (Polit & Beck, 2013). On the other hand, the constructivist asserts that reality exists as a social construct in the minds of individuals and they build their own understanding and knowledge of the phenomenon through experience (Adom et al., 2016)

The researcher's assumptions were based on perspectives of *ontology*, *epistemology*, *axiology* and rhetorical. Kamal (2019) describes ontology as the kind of world researchers are looking at, the nature of existence, and the structure of reality as a whole. Moon and Blackman (2014) stress that ontology aids researchers in determining how confident they are about the nature and existence of the items they are studying. Moon and Blackman (2014) continue that ontological assumptions are those that answer the question, 'What is there to know?' or 'What is the nature of reality?' From the positivist's perspective, the researcher believed that there were factors that drove patients to develop preoperative anxiety whenever they were about to have surgery. From the constructivist's worldview, Moon and Blackman contend that ontology aids researchers in determining how confident they may be about the nature and existence of the items they are studying. They continue that there is no such thing as a 'real world' that exists irrespective of human activity or symbolic language. Constructivist research is useful for establishing contextual understandings of a particular topic or problem. Because of the constructivist's point of view, the researcher believed that numerous factors such as patients' environment and their surgical experience played a part in making patients anxious.

Epistemology studies the nature and availability of knowledge, by trying to know the nature of knowledge, opposing viewpoints, the possibility of having true knowledge, and the numerous obstacles to overcome (Wang, 2020). According to Kamal (2019), epistemologists seek to ask questions about what knowledge consists of, what knowledge is based on and, the extent of knowledge. From the quantitative approach, the researcher made sure he did not interfere with the data collection process by allowing respondents to respond freely to the items

in the questionnaire and he also used blinded research assistants to distribute and collect the questionnaires. From the constructivist view, the researcher created a conducive atmosphere by ensuring participants of privacy and confidentiality, which enabled them to express their views during the interview sessions.

Axiology is the study of value, or the theory on the nature of value. It is what is considered to be worthwhile in life and what is good (or bad). It includes different types of value together with the theories of ethics (the theory of mortality) and aesthetics (the theory of taste and beauty). Axiology asks the question "what ought to be" (Biedenbach & Jacobsson, 2016). From the positivist standpoint, researcher submitted the questionnaire to experts in the field of nursing and statistics and the researcher's supervisors for peer review (Deane, 2018). During the data collection, the researcher maintained objectivity and controlled his biases by conducting the research in a value-free manner (Park et al., 2020). In the qualitative data collection, the researcher respected individual values of the participants (Purba et al., 2022).

Methodology assumption refers to the approach used in the investigation. It asks question such as, how should we investigate the world and how does one go about obtaining knowledge (Kamal, 2019). The researcher employed the use of questionnaire and a checklist to obtain data for the quantitative research, while face-to-face individual interviews and participant observation with field notes were used to obtain data for the qualitative part of this study. The main focus of the rhetorical assumption is how researchers present their theses and articles, particularly the abstract, introduction, and discussion sections, in a way that is appropriate for audiences around the world (Arsyad et al., 2020). In this regard, the researcher constructed the abstract, introduction, and discussion sections of the thesis using the academic traditional presentation for thesis writing.

3.2.1 Research Design

Quantitative descriptive research design was used to achieve the objectives, *to determine the extent to which patients become anxious before undergoing surgery;* and *identify the factors that make patients become anxious before surgical operations.* In the quantitative study, descriptive design is used to give a detailed account of the nature and frequency of phenomena under study (Ingham-Broomfield, 2014). The researcher followed the descriptive design to achieve said objectives. In the qualitative study, exploratory design is used to investigate gaps in phenomena where little is known (Verhaegh, 2017). The researcher used exploratory design to achieve the objectives, *to explore and describe how preoperative information needs of patients are explored and managed by nurses; to explore and describe the practices of nurses on how preoperative patients' information need are managed;* and *describe the type of preoperative information that patients need before they undergo surgery and the type of information they received from the nurses*.

Explanatory sequential mixed method design was followed in the collection of data for this study. According to Hayes et al. (2013), explanatory sequential mixed method design first uses quantitative methods to collect and analyse data, followed by qualitative methods. The authors illustrate that the quantitative phase is prioritised and integrated with qualitative results at the interpretation stage of the study. In this study, quantitative data were collected to address the objectives, *determine the extent to which patients become anxious before undergoing surgery,* and *identify the factors that make patients become anxious before surgical operations*. The findings from the quantitative study informed the qualitative study. Qualitative data were collected to address the objectives, *explore and describe how preoperative information needs of patients are explored and managed by nurses*, and *explore and describe the type of preoperative information that patients need before they undergo surgery and the type of information they received from the nurses*. Participant observation is an opportunity to obtain

data in situations where it is necessary to capture the practices of nurses in their usual settings. It allows the researcher to observe the activities of participants and not only to depend on the accounts they give concerning their practices (Reeves et al., 2013). The researcher employed qualitative participant observation with a checklist and field notes to achieve the objective, *to explore and describe the practices of nurses on how preoperative patients' information need is managed.*

3.2.2 Research Settings

The study was conducted at district hospitals in the Ashanti Region of Ghana. The region consisted of one (1) metropolis, eighteen (18) municipalities and twenty-four (24) districts (Ashanti Region, 2020). The were 30 hospitals spread among the metropolis, municipalities and districts that served the inhabitants (Ghana Statistical Service, 2021). The hospitals had surgical wards (SWs) or surgical suites (SSs) (male and female wards) designated to admit adult patients (i.e., 18 years and above) in preparation for surgery. Common surgical procedures performed at the districts included: herniorrhaphy, laparotomy, and appendectomy (Ohene-Yeboah et al., 2016). The number of patients operated at each of the district hospital was estimated to be 44 (Mould-Millman, et al., 2015).

Categories of nurses who cared for patients at the SWs/SSs included: Registered General Nurse (RGN), Registered Midwife (RM), Perioperative Nurse (PN), Enrolled Nurse (EN) and Nurse Assistant Clinical (NAC). The courses in which these categories of nurses were trained included: surgery and surgical nursing and perioperative care (NMC, 2015). The number of nurses at each of the SWs/SSs within each district hospital was estimated to be 13 (N=390) (Dankyi & Adejumo, 2014). Akan, the native tribe, formed about 78 per cent of the population and Twi is the dialect, which was spoken by about 96 per cent of the population in the region (Modern Ghana, 2013). The Ashanti Region was chosen because it was where the

researcher practised as a clinical nurse and where he experienced the phenomenon under investigation. District hospitals were chosen because they were the first line of contact for patients with conditions that required surgical procedures (Abdullah et al., 2010). Figure 3.1 illustrates the phases involved in the study, delineating data collection and analyses and the use of the results.

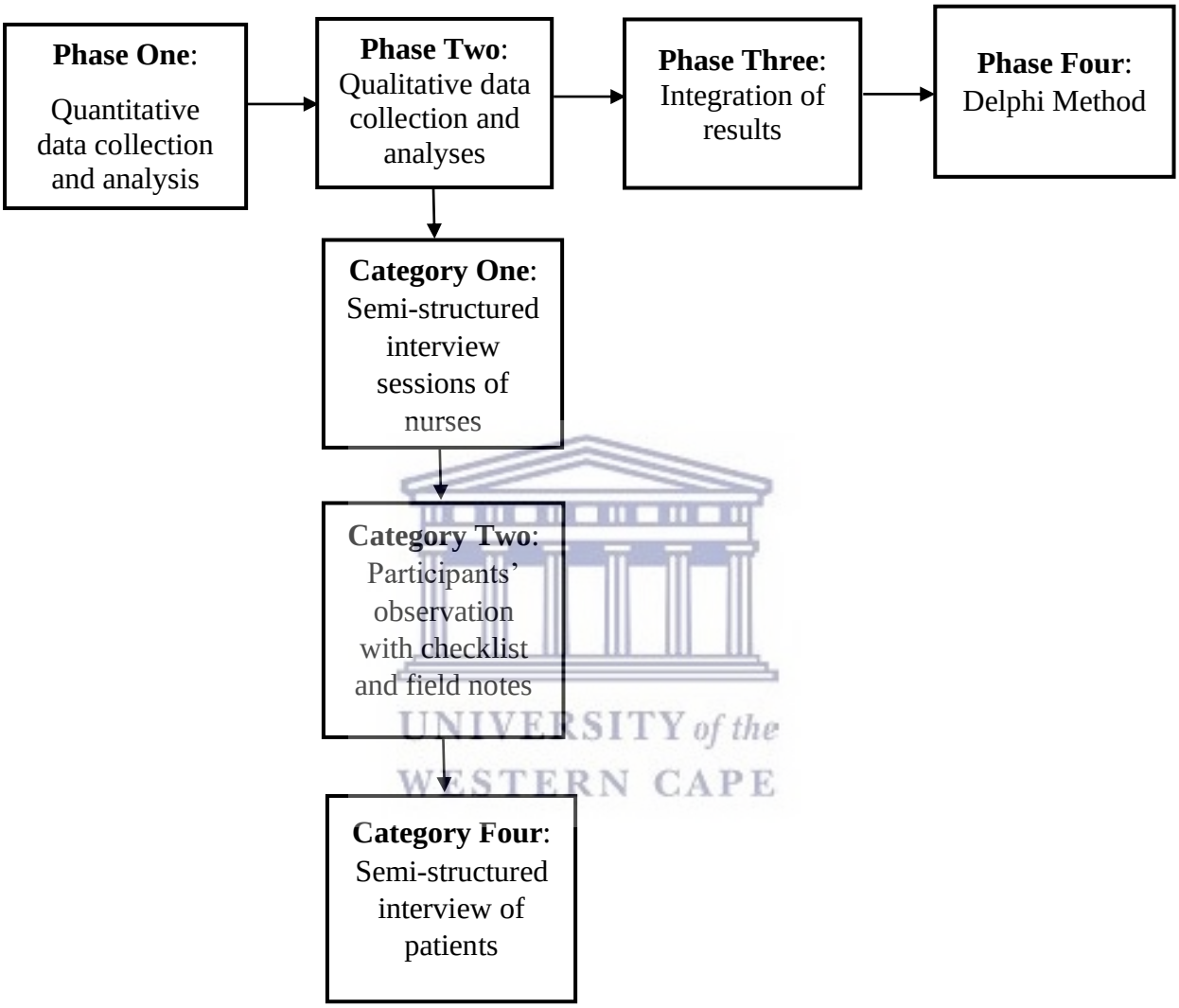

Figure 3.1: Diagram Showing Explanatory-Sequential Mixed Method Strategy with the Delphi Method

Table 3.1 demonstrates the application of the theory, Deliberative Nursing Process, in this study. The concepts of this theory guided the researcher to formulate items in the questionnaire

and interview guides to ascertain nurses' practice on exploration and management of preoperative anxiety and information needs in an attempt to achieve the objectives of the study.

Table 3.1: Application of Theoretical Framework through the Phases of the Study

Phase	Objective	Deliberative Nursing Process
One	**Objective 1:** To determine the extent to which patients become anxious before undergoing Surgery	Nurse reacts to patient's behaviour (anxiety/information need)
	Objective 2: To identify the factors that make patients become anxious before surgical operations	Nurse interacts (explore) with patient to validate causes of his/her behaviour (anxiety/information need)
Two	**Objective 3:** To explore and describe how preoperative information needs of patients are explored and managed by nurses	Nurse's reaction and nurse's actions on information provision
	Objective 4: To explore and describe the practices of nurses on how preoperative information needs are explored and managed	Nurse's reaction and nurse's actions on information provision
	Objective 5: To explore and describe the type of information that patients need before they undergo surgery and the type of information they receive from nurses	Nurse interacts (explore) with patient to explore the causes of his/her behaviours (anxiety/information need)
Three	**Objective 6:** To develop a training programme for nurses on how to explore and manage the preoperative information needs of patients	Findings from objectives 1, 2, 3, 4 and 5 were used to draft training programme

3.3 Phase One: Quantitative research (Objectives 1 & 2)

The researcher used a questionnaire to obtain data to achieve the following objectives: *to determine the extent to which patients become anxious before surgical operations,* and *to identify the factors that make patients become anxious before surgical operations*.

3.3.1 Research Setting

The study was conducted at the SWs/SSs at ten district hospitals in the Ashanti Region of Ghana.

3.3.2 Population

Majid (2018) defines population as the group of people the researcher intends to study or examine. The population for this phase comprised all patients who had been admitted into the SWs/SSs at the district hospitals and were being prepared to undergo surgical operations and/ or patients who had been operated on and were recuperating within the first 24 hours after operation. According to Oduro (2013), about 750 patients are admitted for surgery every month at the 30 district hospitals in the Ashanti Region. It was estimated that the population of patients admitted for surgery at 10 of the district hospitals was about 445.

3.3.3 Sampling and Sample Size

In quantitative study, it is unrealistic to recruit an entire population of interest for a study; rather, a sample to achieve generalisation of the findings (Majid, 2018). The multi-stage cluster sampling technique was used to obtain the sample size for this study. In cluster sampling, the entire population is divided into clusters or groups. These are randomly selected, then a subsequent random sample is taken from the clusters and all of them are included in the final sample. It is beneficial for the researcher whose population is spread over a broad

geographical area and it saves time and resources (Taherdoost, 2016). The multi-stage cluster sampling technique requires an initial listing and random selection of clusters followed by random sampling of participants from each of the selected clusters with a probability proportionate to size (PPS) (Bhandari, 2021).

First, the names of the 30 districts were listed, which was followed by a simple random selection (i.e., the lottery method) of 10. Second, the lists comprising patients who had been booked and admitted for surgery at the SWs/SSs at the selected hospitals were randomly selected with probability proportionate sampling (PPS). In Ghana, the Right to Information Bill Act was silent on the acquisition of personal information from research respondents. Therefore, the researcher stuck to the personal information section of the Protection of Personal Information (POPI) Act in South Africa.

The sample size calculation was based on the prevalence of preoperative anxiety (39 per cent) among patients undergoing laparoscopic cholecystectomy in Turkey by Ali et al. (2013). The formula for calculating sample size for a survey by Lwanga and Lemeshow (1991), was used to calculate the sample size as below:

Estimated sample size $n = \frac{(Z)^2PQ}{d^2} = \frac{(1.96)^2 \times 0.61 \times 0.39}{0.061 \times 0.061} = 246$

The confidence interval was set at 95 %. As such, *Z* was 1.96, where *Z* was the normal variate corresponding to the level of significance; *P* was the anticipated proportion of patients without preoperative anxiety, while *Q* was the proportion of patients with preoperative anxiety (1-p); *d* was the relative precision on both sides of anticipated proportion (10% of P). Random sample of 207 respondents was drawn from all 10 hospitals as sub-samples (Table 3.2). The researcher calculated the proportion of patients having surgery at each hospital by dividing the number of monthly surgical operations at each hospital (x) by the total number of surgical

operations for the 10 hospitals, 445. This proportion (x/445) was multiplied by the calculated total sample size (N) to compute sub-samples (x/445*N) for each hospital.

Table 3.2: Sub-Samples Drawn from the Ten Selected Hospitals

Hospitals	**Districts**	**Calculated total sample size (N)**	**Monthly surgical operations (x)**	**Proportion (x//445)**	**Sub sample (x/445*N)**
Agogo Presby Hosp	Ashanti-Akim North	207	62	0.10	30
Juaso Dist. Hosp.	Ashanti-Akim South	207	44	0.07	21
Juaben Dist. Hospital	Ejisu-Juaben Municipal	207	40	0.06	19
SDA Hosp., Asamang	Sekyere South	207	39	0.06	19
St. Patrick's Hosp., Offinso	Offinso-Municipal	207	50	0.08	24
St. Michael's Hosp., Jachie-Pramso	Bosomtwe	207	44	0.07	21
St. Martin's Hosp., Agroyesum	Amansie West	207	37	0.06	18
SDA Hosp., Dominase	Bekwai Municipal	207	32	0.05	15
Bekwai Dist. Hospital	Bekwai Municipal	207	48	0.08	23
Manhyia Dist Hospital	Kumasi Metropolitan	207	49	0.08	24
Total			**445**		**214**

3.3.4 Data Collection Tool

Data were collected with a self-administered questionnaire consisting of 5-point Likert scale items adapted from the Hamilton Anxiety Rating Scale (HARS) and 5-point Likert scale items on factors that make patients become anxious (Section B, see Appendix I, p.442). The items in the HARS were aligned with the first objective of the quantitative part of the study. An independent forward-backward translation of the questionnaire from English into the local dialect, that is, Twi, and from Twi back into English was performed by two professional

bilingual translators. This was to enable the respondents who could not read or write in English to respond to the items. The questionnaire was divided into three parts, which are: demographic information, objectives one, and two.

Demographic information – consisted of both closed- and open-ended items with questions on variables such as sex, age, ethnic group, marital status, and the type of operation to happen.

Objective one – this section consisted of HARS, which was developed by Hamilton (1959) to assess the severity of anxiety symptoms. It consisted of a 14-item 5-point Likert scale. The items were *to determine the extent to which patients become anxious*. Respondents were required to respond to the options, *not present, mild, moderate, severe,* and *very severe* to items on the questionnaire such as *anxious mood*, *tension*, *fears,* and *insomnia*. In an attempt to seek permission for the use of HARS, the researcher discovered that it had been put in the public domain (Thompson, 2015).

Objective two – this section was made up of 16 items and a 5-point Likert scale *to determine the factors that make patients become anxious before surgical operation*. Items in this section were developed from reviewed literature (Akildiz et al., 2017; Cakir & Gursoy, 2017; Colcear et al., 2017; Oh et al., 2017). Respondents were required to respond to options *not present*, *mild*, *moderate*, *severe,* and *very severe* on items such as *anaesthesia, surgical procedure* and *postoperative pain*. The researcher discovered in the review of literature (Bansal & Joon, 2017; Ali et al., 2021) that factors that cause preoperative anxiety in patients are similar to the need for information (Section C, see Appendix I, p.442).

3.3.5 Pre-Test of Instruments

Items in the questionnaire were pre-tested in a pilot study. Arunasalam (2017) describes pre-test as the test of items in a questionnaire on respondents within the target population. The researcher pre-tested the instrument using 20 respondents from two district hospitals.

Permission was obtained from the hospital administration. Patients who were in their right frame of mind and had signed the consent form were approached. The nature of the study was explained, after which the questionnaires were administered. The questionnaire was analysed and tested for internal consistency. After the analysis, the items in the questionnaire were amended through rewording to achieve reliability. This exercise helped the researcher plan for the main study and to deal with probable challenges that arose during the main study, such as retrieval of the questionnaire.

3.3.6 Data Collection Process

The researcher gained entry into the settings after the study was approved by the ethical committee at the University of the Western Cape and permission was received from the national and regional directors of the Ghana Health Service (GHS) and the administrators at the ten hospitals. At the wards, the researcher approached patients who were admitted and were being prepared to undergo surgical operation with the help of the nurses in charge. They were verbally briefed about the purpose, objectives and the nature of the study. Their rights as respondents were read and explained to them, after which permission was obtained of those who agreed to be part of the study by means of a written informed consent. The questionnaires were administered to the respondents in the evening before the day they were operated on. It took about 30 minutes to complete them. During the data collection, the researcher employed the services of five trained diploma- and degree nurses who were recruited outside the hospitals and were randomly selected for the study. The research assistants were fluent in both English and the local Twi languages (see Appendix I and II, p.442, 446).

3.3.7 Data Analysis

The researcher analysed the data with the help of a statistician using Statistical Package for Social Sciences (SPSS) 24. The researcher cleaned the data by going through the

questionnaires one after the other to detect wrongly answered ones and separated them from the fully answered ones. After this, the questionnaires were labelled with codes before the data entry began. Descriptive statistics including mean, frequencies, and standard deviation were used to describe the demographic characteristics of the respondents as well as ranking the information needs. Chi-square test was used to establish the relationship between the demographic variables and the extent to which patients become anxious prior to surgical operations. The standard regression test was used to assess the ability of demographic characteristics and information needs to predict preoperative anxiety levels. A multinomial regression was performed at a significant level of 5 per cent. Standard regression was used to assess the ability of two control measures, i.e., the demographic characteristics and factors that make patients anxious in predicting the levels of preoperative anxiety. The results were presented in tables, figures and narrative descriptions.

3.4 Rigor of Phase One of the Study

Rigor is simply defined as the quality or state of being very exact, careful or strictly precision, or the quality of being thorough and accurate (Cypress, 2017).

3.4.1 Validity

Validity is the test of the accuracy of an attribute that an instrument intends to measure (Gray et al., 2013). There are two broad measures of validity, i.e., internal and external. Internal validity comprises content-, criterion-related- and construct validity. Content validity measures the relevance and representativeness of items, such as individual questions in a questionnaire in the intended setting. Content validity measurement becomes necessary when the researcher intends to ascertain respondents' knowledge within a specified field or to measure personal attributes such as preoperative anxiety (Priest & Traynor, 2019). In this study, the researcher

applied content validity to ascertain the validity of the instrument in determining the extent to which patients become anxious and the factors that make patients anxious.

In trying to achieve content validity, the researcher consulted his supervisor in using the HARS. HARS is a known instrument, which was constructed by Hamilton (1959). It is purposely used to assess the severity of symptoms of anxiety in adults, adolescents and children. It has been used in studies to assess the anxiety of patients (Beck & Steer, 1991; Shear et al., 2001). In a previous study, it exhibited good construct validity, showing statistically significant relationships with independent self-reported measures of generalised anxiety and other anxiety variables (Clark & Donovan, 1994). The construction of Section C of the questionnaire was motived by the review of literature, which was reviewed by the researcher's supervisors. A presentation was done at the School of Nursing at the University of the Western Cape in which experts reviewed the proposal including the instrument.

Table 3.3: A Link Between Objectives and Questionnaire (Content Validity Table)

Objectives	**Questionnaire**
1. To determine the extent to which patients become anxious before surgery	Section B: Hamilton Anxiety Rating Scale (HARS) – 1–14
2. To identify the factors that make patients become anxious before surgery	Section C: a 5-point Likert scale consisting of 16 items

3.4.2 Reliability

The reliability of an instrument refers to a measurement that provides consistent results with equal values (Mohajan, 2017). The reliability of an instrument should be able to provide the same information if used by different respondents or if it is used at different times. Reliability tests such as the internal consistency of the individual questions in a questionnaire can be measured using statistical procedures such as Cronbach's alpha coefficient (Priest & Traynor, 2019). Using the internal consistency in this study, the 14-item HARS was tested for

reliability and it proved to be reliable with a record of 0.847, while the questions on the need for information and or patient concerns on the various factors which may contribute to preoperative anxiety was internally consistent (Cronbach's alpha = .856). The internal consistency showed a high reliability (Cronbach's alpha = .863) when it was tested on 20 patients at SDA Hospital at Dominase in a pre-test study. There are other types of reliability tests, including stability and internal consistency, but the internal consistency was used in this study in that it provides significant, precise, and efficient measurement (Hajjar, 2018).

3.5 Phase Two: Qualitative Research (Objectives 3, 4, and 5)

Results from phase one of this study informed the selection of the settings and participants. According to Edmonds and Kennedy (2017), when researchers want to follow up on quantitative results with qualitative data, they employ the explanatory-sequence strategy, which is a sequential approach. Data collected for the qualitative section involved a variety of techniques in addition to a series of interview sessions and have been divided into four categories. Category one included semi-structured face-to-face individual interviews of nurses to achieve the objective, *to explore and describe how preoperative information needs of patients are explored and managed by nurses*. Category two involved participant observation with a checklist and field notes of nurses to achieve the objective, *to explore and describe the practices of nurses on how preoperative patients' information needs are managed*. Category three involved a face-to-face individual interviewing sessions of nurses to compensate for data obtained in category two. This was also to achieve the objective, *to explore and describe the practices of nurses on how preoperative patients' information needs are managed*. Category four consisted of a semi-structured face-to-face individual interview of patients to achieve the objective, *to explore and describe the type of preoperative information that patients need before they undergo surgery and the type of information they received from the nurses*.

3.5.1 Setting

SWs/SSs at the 10 selected district hospitals in Ashanti Region were used for this phase of the study. The four categories of data collection were done at these hospitals.

3.5.2 Population

The population for this aspect of the study comprised nurses and patients in the four categories at the 10 district hospitals. Categories one, two, and three included all nurses, i.e., RGN and RM (estimated population was N=195), who were working at the SWs/SSs at the 10 selected district hospitals in the Ashanti Region. Category four consisted of all patients (estimated population is N=525) who were admitted and were being prepared to undergo surgery and / or who had undergone surgery and were recuperating within the first 24 hours in the SWs/SSs at the 10 selected district hospitals in the Ashanti Region (Murphy, 2016).

3.5.3 Sampling Technique

The researcher used the purposive sampling technique to select participants from the target populations for the four categories of this study. Also known as 'judgment sampling', purposive sampling recruits participants who possess experiences of a phenomenon under study and are capable of sharing them with the researcher (Lopez & Whitehead, 2013). The researcher considered purposive sampling the ideal technique because he needed participants who possessed quality information and experiencs on preoperative patients' information needs (Campbell et al., 2020). The sampling was based on the following inclusive criteria:

Inclusion criteria for population categories one, two and three – Nurses were eligible if they met the following conditions:

- Having worked at the SW/SS for at least one year;

- Having undergone courses including: workshops, seminars, and in-service training in addition to their certificate in diploma and degree programmes in general nursing and perioperative nursing;
- Must be present at the SW/SS at the time of data collection.

Nurses who fell within the above inclusion criteria were knowledgeable and provided information on preoperative preparation of patients undergoing surgical operations.

Inclusion criteria for population category four – Patients were eligible if they met the following conditions:

- Patients must be adults of at least 18;
- Patients must be admitted into the SW/SS at least one day before undergoing surgical operation;
- Patients must be booked for various kinds of surgical operation;
- Patients must have been operated and be recovering within the first 24 hours.

3.5.4 Sample Size

In qualitative research, sample adequacy refers to the appropriateness of the sample makeup and size. Samples are often small to allow for the depth of case-oriented analysis that is essential to this form of inquiry (Vasileiou et al., 2018). Settings and participants for the four categories were selected and recruited purposively. Four district hospitals were chosen, after which eleven participants were obtained as the sample size for category one. For category two with the checklist, the ten district hospitals already selected were used. Twenty-eight (28) nurses were approached and recruited to be part of the study (Table 3.4), but twenty (20) of them agreed to partake in the data collection using participant observation with checklist. For the participant observation with field notes, fifteen (15) nurses were recruited and eight (8) of agreed to take part. After this, all the fifteen (15) nurses were selected for a follow-up individual

interview sessions for the participants' observation, ten (10) of them agreed to participate. Lastly, fifteen (15) patients were purposively selected for a face-to-face individual interview and twelve (12) agreed to participate.

3.5.5 Recruitment of Participants

Participant selection for the four categories of data collection was done after the study had been approved by the ethics committee at the University of the Western Cape, the national and the regional directors of the GHS, the administrators at the ten hospitals and the participants who were recruited to be part of the study. For categories one, two and three, the researcher engaged nurses in the data collection. An initial selection of 10 of the 30 districts was done, after which purposive sampling and recruitment of 11 nurses occured. The nurse managers at the various hospitals were approached who, in turn, introduced the researcher to the nurses in charge at the SWs/SSs. The researcher explained the aim and the objectives of the study to the nurses as well as to those in charge of the wards. The forms of data collection were explained to them: individual face-to-face interviews and participant observation. The outline and inclusion criteria were also explained, after which potential participants were provided with information described in the information sheet (See Appendix IV, p.456). The necessary clarifications were made to clear up all the doubts and misconceptions harboured by the participants. Adhering to the inclusion criteria, all the nurses were approached on an individual basis to ascertain from them a convenient time and place for their interview. The researcher noted all this information in a dairy and scheduled the interviews accordingly. For category two, the researcher approached the nurses and explained the nature of the data collection through participant observation with a checklist and field notes. Before data collection for category four, patients who were booked and admitted to be prepared for surgical operations and or those who had been operated on and were recovering within the first 24 hours were

approached with the help of those in charges of the wards. The nature of the study, the aims and objectives were explained to them. Consent forms were given to prospective participants to complete (Appendix IX, p.463).

Table 3.4: Sub-Samples Drawn from the Ten Selected Hospitals (Participant Observation)

Hospitals	**Districts**	**Calculated total sample size (n)**	**Monthly surgical operations (x)**	**Proportion (x/445)**	**Sub sample (x/445*N)**
Agogo Presby Hosp	Ashanti-Akim North	20	62	0.10	6
Juaso Dist. Hosp.	Ashanti-Akim South	20	44	0.07	3
Juaben Dist. Hospital	Ejisu-Juaben Municipal	20	40	0.06	2
SDA Hosp., Asamang	Sekyere South	20	39	0.06	2
St. Patrick's Hosp., Offinso	Offinso-Municipal	20	50	0.08	4
St. Michael's Hosp., Jachie-Pramso	Bosomtwe	20	44	0.07	3
St. Martin's Hosp., Agroyesum	Amansie West	20	37	0.06	2
SDA Hosp., Dominase	Bekwai Municipal	20	32	0.05	2
Bekwai Dist. Hospital	Bekwai Municipal	20	48	0.08	4
Manhyia Dist Hospital	Kumasi Metropolitan	20	49	0.08	4
Total			**445**		**28**

3.5.6 Data Collection Tool

Three sets of interview guides containing questions for nurses (categories one and three), and patients (category four), an audio recorder, a pen and a notebook were used in the data collect process. Interview guides for category one, three, and four comprised Sections A, B, and C, respectively. The researcher was proficient in both the English and the local Twi languages and so conducted the face-to-face individual interviews. Therefore, the interviews

were done either in English or in Twi, according to the fluency and preference of the participants. Interviews in Twi were transcribed into the Twi language after which they were translated into English by the researcher. Data collection for category two comprised a checklist, a notebook and a pen.

3.5.7 Pilot Study

A pilot study is a small-scale version of a planned study performed with a small group of participants similar to those to be enrolled later in a larger study (Doody, 2015). Pilot research studies are often related to the quantitative approach to evaluate a specific research instrument. Consequently, the relevance of pilot study has been extended to include qualitative investigations done in preparation for the major study. It is vital to test the questions and to obtain the skills for interrogating participants. Pilot studies are useful in that they can be used to test research questions and to address prospective practical challenges embedded in research protocols. In addition, they aid in giving strength to interview protocols and in identifying flaws and limitations with the design of the interview for the researcher to be able to make any necessary modifications prior to the major study (Majid et al., 2017).

For categories one, three and four, the researcher involved two participants each in the pilot study. Findings from this small-scale study were used to assess whether the participants understood the questions and / or issues discussed in the interview sessions. The file of the audio recording of the first interview was sent to the researcher's supervisor, who made suggestions on questions and follow-up questions that needed to be among the questions on the interview guide, after listening to the audio file. This exercise enabled the researcher to adjust the individual interview sessions that took place in the main data collection of the study. English was used in the data collection. This is because English is the official language in Ghana as well as the language of command in all levels of education. Nurses, as participants,

were comfortable with the use of English and all nurses communicate in English in the wards. Two participants were used in the pilot study for population category two. The audio-recorded file was sent to the independent coder, who has achieved a doctorate in nursing, to listen for probable modifications in the questions. There were no major changes to the questions on the interview guide. However, it helped in the process of putting the questions before the participants, most of whom liked the questions to be asked in Twi because the majority of them had a low educational level. Category two employed participant observation. The researcher conducted a pilot observation with a checklist and field notes. This revealed probable challenges, which were addressed by the researcher before the actual data collection.

3.5.8 Data Collection Methods

Data collection for categories one, three, and four employed semi-structured face-to-face interviews complemented with field notes, while category two used participant observation with a checklist and field notes.

3.5.8.1 Semi-Structured Individual Interviews for Population Category One

Semi-structured individual face-to-face interviews were done among nurses in charge and junior nurses at the SWs/SSs of the selected hospitals to obtain data for categories one and three. Additionally, structured individual face-to-face interviews were conducted with patients undergoing surgery or who had undergone surgery and were recuperating within 24 hours postoperatively, under population category two. This was done to obtain data for category four. The quality of versatility of the semi-structured interviews enables the interviewer to ask more than a few open-ended questions requiring follow-up queries and also allows the interviewer to discuss spontaneous issues raised by the interviewee during the interview process (Coughlan, 2016; Liu, 2018).

Category one and three – the researcher used the interview guide to asked five predetermined questions (Appendixes IV, V, VI, and VII, p.456, 457, 458 and 459). The researcher was directed by the interview guide to moderate the interviews. A semi-structured interview was chosen to obtain data from the nurses in charge and the junior nurses because the researcher believed that the participants were capable of providing rich and in-depth information about their experiences on the preoperative preparation of patients (Coughlan, 2016). The researcher also believed that the participants had relevant information on the topic that could help in the development of the training programme. The interviews were conducted on a face-to-face basis and an audio recorder was used to record the interviews (DeJonckheere & Vaughn, 2019). The individual interview sessions lasted between 40 minutes and one hour. In category one, 11 of the 15 nurses who volunteered were interviewed. Four of the nurses declined to be interviewed after their rights as participants had been explained to them and knew that it was not compulsory for them to participate and that they could opt out of the study at any time they wished.

Category two – the researcher collected data from nurses using the participant observation technique. Two sessions of participant observation were conducted. First, 20 nurses were observed with a checklist, which was filled in by the researcher during the period nurses admitted and prepared patients to undergo surgical operations. Second, eight nurses were observed by taking field notes in a notebook while they admitted and prepared patients to undergo surgical operations.

3.5.8.2 Field Notes

Field notes are notes gathered duringthe process of data collection. These notes tend to capture points or issues, which may not have been catered for in the interview guides. Thus, field notes were gathered during data collection. The type of field notes gathered

wereobservatory in nature (Beck, 2016). A diary was used as reflective journal for daily activities of the data collection process. In addition, a trained research assistant was employed to assist with the documentation and sorting of field notes. These field notes were gathered from almost all participants. The notes included aspects of facial expression of sadness, regret, crying, pain in participants' voices and goose bumps. Most importantly, the filed notes ensured that reflective ideas that evolved during interviews and analysis of data were documented as a continuous process (Beck, 2016).

3.5.9 Data Collection Procedure

After the pilot study, the data collection instruments were reviewed in accordance with the observations made, after which they were prepared for the data collection in the main study for each of the three categories.

Category one and three – A meeting was held with all of the potential participants a day before the actual data collection days. First, the participants were briefed about the scope and nature of the study, the interview process, and the ethical issues. Their rights as participants, as outlined in the information sheet (Appendix VIII, p.460), were described to them. These include: the right not to participate in the study and the right to withdraw from the study at any point in time. The researcher then set up appointment dates and times convenient to the participants for the individual interviews. Prior to the commencement of the interviews, the researcher made sure that the rooms designated for the interviews were conducive, free from noise and commotion and of an appropriate temperature (Kvale, 2007). In each of the sessions, the researcher welcomed and encouraged the participants to speak freely as there were no right or wrong answers. They were assured of confidentiality, as described in the information sheet with which they were provided and they were asked to sign the consent forms (Appendix IX, p.463) In the interview process, the researcher first introduced the topic to be discussed and

then proceded to ask the participants questions for their response. Their responses were audio recorded while the researcher took notes at the same time about their non-verbal communication. Each interview session lasted between 40 minutes and one hour.

Category two – A meeting was held with the nurses who were interviewed during the category one data collection indicating that they would be observed while they admitted and prepared patients to undergo surgical operation. Other nurses, who did not take part during the category one interview sessions, were approached. The purpose of the study, objectives and the mode of data collection were explained to them. Their rights as participants were explained to them and those who agreed to be part of the study were given consent forms to fill in and sign. Participants were observed admitting patients into the ward and how they examined the patients for preoperative anxiety and information needs. While they were being observed, the researcher marked their performance according to the items on the checklist. At the same time, field notes were made on their activities. Each process last between two and three hours.

Category four – Similarly, pre-interview meetings were held for patients who had been admitted to undergo surgical operations on the following day. During the meetings, ethical issues and the information sheet concerning the study were explained to them. They were assured of anonymity and confidentiality and they were asked to sign the consent form following a vivid explanation (Appendix IX, p.463) (Polit & Beck, 2013). Some of the patients agreed to be interviewed on the same day they were admitted, while others opted for the day after they had been operated on, which was within the 24-hour criterion of recuperating. The interviews started as a social conversation in a relaxed and trusting atmosphere and gradually progressed to becoming an interactive event. Participants were encouraged to express whether they were anxious and to indicate how the nurses examined them for what made them anxious. The researcher conducted the interviews, solely. Interview skills employed in the study

included communicative techniques such as probing questions, clarifying a point, observing and expressing non-verbal encouragement and minimal verbal response as well as surmising in order to facilitate the interviews.

3.5.10 Data Analysis

Usually, data analysis in qualitative research starts effectively at the same time as data collection (Male, 2016). The analysis of data is a systematic search for meaning and a way to process qualitative data in order to communicate what has been learned to others (Dooly & Moore, 2017). Thematic content analysis was used to analyse data obtained for categories one, three, and four, with the semi-structured individual interviews. According to Vaismoradi and Turunen (2013), thematic content analysis is an independent process of identifying, analysing and reporting patterns or themes found in data. Dooly and Moore (2017) add that analysis includes the arrangement and interrogation of data in ways that allow researchers to see trends, recognise themes, uncover associations, establish interpretations, and criticise or generate theories. In the process of data analysis, the researcher followed the principles reviewed above by transcribing the data, reading to see the trends, recognising the themes, uncover associations and establishing interpretations. Data obtained with the checklist and field notes under the category two were merged and analysed. Findings obtained with the checklist were compared to the findings from the field notes and were interpreted according to the findings obtained under category one.

3.5.11 Validation of Data

Validation of data is the process of reporting information obtained from participants exactly the way they are seen and heard for confirmation (Hayashi et al., 2019). Data obtained from categories one, three, and four with the audio recorder were played for some of the participants to confirm whether they were exactly what they had said, to make any necessary

changes and to clarify new ideas. Those who could read were provided copies of the text produced after the interviews had been transcribed, to check for accuracy (Male, 2016). With this act, emerged changes were noted in a notebook and later added to the data during transcription. For cases in which the researcher needed clarification from the participants, the researcher made another appointment with the participants for an individual face-to-face interview. For population category two, the researcher played the audiotape for the participants to confirm the information they had provided. Some made clarifications and provided necessary additions, which were added to the data during transcription.

3.5.12 Transcription Procedure

Transcription is the process of transforming data obtained through audio recording into a textual format for further analysis (Brady, 2021). Transcription includes critical observation of data through repeated and careful listening to be orientated with the data obtained for analysis (Bailey, 2017). In this procedure, the researcher transcribed all the interviews obtained under categories one, three, and four shortly after conducting the interviews to ensure that all data obtained were intact. Transcription that includes translation from one language to another is a particularly intricate and difficult task. If the researcher were not a native speaker of the language spoken by study participants, it might have been necessary to hire interpreters and transcribers other than the researcher (Peraza, 2019). According to Jacobs (2019), transcribed data enables the researcher to quote the interviewee exactly and to cut and paste certain passages into other documents, so that this can assist in proving or emphasising a point or providing a better context for the findings. An interview transcription can also assist in identifying information gaps so that additional investigation can be conducted. Adhering to these techniques, the researcher transcribed the data all by himself to enable him to identify and recognise repeated ideas and patterns easily. Since the researcher's native dialect is the

Twi language, he was able to transcribe data from *Twi* language into English. This initial procedure in the analysis helped him to handle the bulk of data and, at the same time, to retain the quality (Creswell et al., 2013).

3.5.13 Data Cleaning

Data cleaning is the process of removing faulty records from a record set by finding and replacing or removing incomplete, erroneous, badly formatted, duplicated, or irrelevant records (Allen, 2017). Its goal is to improve data quality by detecting and eliminating mistakes and inconsistencies (Ridzuan & Zainon, 2019). The researcher read through the transcripts from categories one, three, and four numerous times to eliminate information which was not relevant to the subject under investigation. The field notes were compared with the data in an attempt to identify any unnecessary information, which was sorted out to make the data more countable and easy for coding. The checklist and the field notes, obtained through participant observations, were read through by the researcher to make corrections.

3.5.14 Coding

Coding is a key tool in the process of transforming raw qualitative data into a communicative and reliable narrative (Linneberg & Korsgaad, 2019). Coding is used to separate a variety of steps in expressing views and presenting the same information. Coding is commonly used to extract and categorise data with comparable meanings so that the researcher can discover and cluster related segments rapidly (Stuckey, 2016). The analysis in this study was enhanced by the use of a computer software program known as the ATLAS.ti. version 7.1.7. This was done by inputting the textual scripts into the ATLAS.ti. software. A laptop was used to obtain and keep the transcripts of all the interviews conducted under the three categories (population categories 1, 2 and 3). The researcher went through the process involved in thematic content data analysis by:

1. Reading through the document line by line;
2. Highlighting important phases and sentences;
3. Coding them accordingly and sorting information that relates to the objectives of the study; and
4. Assigning codes to each sentence to represent a meaningful unit.

Assigned codes were reasonably short: some were newly created while others were according to the original phrases from the data. Codes that had similar labels or colours were put together as families.

3.5.15 Creating of Themes

The researcher created themes by identifying patterns among the codes created. The codes were merged to form similar families of themes. After this, the researcher utilised an inductive approach to study the transcripts thoroughly in order to identify repeated patterns. To generate a rich description of the phenomenon, the researcher used an inductive reasoning approach to find themes and to categorise them (Polit & Beck, 2013). Memos were generated in addition to coding to assist the researcher with first conversations. Memos are notes taken during coding to help the researcher remember the reasons that some codes were or were not created. Themes and categories were arranged according to the research objectives at this point in the research.

3.5.16 Trustworthiness of the Study

Lincoln and Guba (1985), and Polit and Beck (2013), describe trustworthiness as the application of scientific rigor in qualitative study to achieve findings which depict the situation as experienced by individuals. Instead of focusing on the data, which would be described as quantitative in nature, qualitative research focuses on the data's reliability. Qualitative research is vital because it measures things that numbers are not able to measure, and rather discovers

trends before they appear in quantitative data (Devault, 2019). According to Nowell et al. (2017), the researcher becomes the instrument of analysis when conducting data analysis, making decisions regarding coding, theming, decontextualising and recontextualising the data. Each qualitative research approach has its own set of techniques for performing, documenting and evaluating data analysis processes, but it is ultimately the duty of the individual researcher to ensure rigor and reliability. The researcher used credibility, confirmability, and transferability to measure the trustworthiness of the qualitative aspect of this study.

3.5.17 Credibility

Authentic and accurate are key terms used in credibility to indicate the suitability of the findings to the phenomenon being investigated in the research study. It also considers the number, depth, and range of data as well as everything the researcher felt, heard, and saw to have credibility during the study (Ghafouri & Ofoghi, 2016). In this study, credibility was achieved by presenting the results of the study for participants to identify whether they were the true accounts given. Peer debriefing was done by having an independent coder and the supervisor examine the findings. Triangulation was achieved when data from the four categories of data collection, including the checklist and the field notes, were compared with the transcribed audiotape recording. The researcher had a prolonged engagement with participants in the wards and official methods were used to analyse the data.

3.5.18 Confirmability

Confirmability is the extent to which the research study presents conclusions that could be confirmed by other researchers. It is concerned with demonstrating that the interpretations of the findings are clearly derived from the data and are not the result of the researcher's imagination (Korstjensa & Moser, 2018). In achieving confirmability, the researcher went through the right processes to collect data under the four categories by presenting an audit trail

of the methods used and the processes involved in the data analysis for an external expert reviewer, who was introduced towards the end of the study. The researcher submitted printed transcripts to five nurses at the ward to read through to ascertain if they reflected the exact information they provided. The first three patients who had had surgical operation and were recuperating were approached at the ward in the same hospital to confirm the information in the transcript reflect the information they provided. Two of the patients who were able to read and write read through the transcripts by themselves while the other who was unable to read was assisted by the researcher who read and interpreted to her for a reflection of the information she provided. Additionally, the researcher submitted the thesis to his supervisors for member checking.

3.5.19 Transferability

Transferability refers to the degree to which qualitative research findings can be transferred to different contexts or settings (Kirk & Miller, 2020). A detailed description of the participants' characteristics and the phenomenon under study were provided. Detailed information was also given on the settings, steps involved in the data collection under the four categories, and general ideas about the research. The researcher reported on the exact findings of the study to enable readers and other researchers to transfer the results when necessary.

3.5.20 Dependability

Dependability refers to the consistency of results throughout time. It entails the evaluation, interpretation, and recommendations of the findings by the participants such that the data would be supported by readers and other researchers (Korstjensa & Moser, 2018). In ensuring data consistency and usability, the researcher presented data as it was. External audits were provided to assess the accuracy of the findings. Moreover, external audits were presented to the supervisor for frequent checks of transcribed data to ascertain applicability to the study.

An independent coder, who was grounded in qualitative study, was employed also to code the transcribed data to determine the consistency of the coding performed by the researcher.

3.6 Phase Three: Triangulation of Results from quantitative and qualitative studies

The study used explanatory sequential mixed method design to achieve the objectives of the study. Initial quantitative data were collected using self-administered questionnaire and participant observation with a checklist to *determine the extent to which patients become anxious before undergoing surgery, to identify the factors that make patients become anxious before surgical operations* and *to explore and describe the practices of nurses in terms of how patient preoperative information needs are managed*. Results indicated the prevalence of preoperative anxiety, factors making patients to become anxious and few nurses involved with the practices of how preoperative information needs are managed. These findings informed the collection of qualitative data using face-to-face individual interview sessions of nurses and patients on the objectives, *to explore and describe how preoperative information needs of patients are explored and managed* and *to explore and describe the type of preoperative information that patients need before they undergo surgery*. The findings supported and revealed the rational of the initial quantitative results. The triangulation of the findings from quantitative and qualititve studies are done in the metrics table form (see Table 6.1).

3.7 Phase Four: Delphi Method

This phase describes the steps espoused by the researcher in developing the training programme for the study

3.7.1 General Description of the Delphi Method

The word Delphi was inspired by the ancient Oracle of Delphi, which was regarded as a source of advice for the Greeks and Romans thousands of years ago when they consulted the Oracle for answers to important concerns in their lives. As the Oracle's predictions grew in popularity, individuals from all over the world began to consult it on a variety of public and private matters, such as the outcome of wars or the establishment of colonies (Massaroli et al., 2017). Since then, it was used to help groups set educational priorities, performance indicators, and therapeutic guidelines, among other things (Nasa et al., 2021).

Delphi is described as a tool for eliciting and refining collective decisions, which is used to facilitate structured group conversations in order to reach a consensus of expert perspectives in the face of complicated challenges, expensive endeavours, and uncertain consequences (Grime & Wright, 2019). It is a research methodology used for eliciting, distilling, and determining the options of a panel of experts from a certain field, seeking consensus among the experts, and making predictions or conclusions based on the expert opinions of the panelists participating in the study (Niederberger & Spranger, 2020). In line with this, Skinner et al. (2015) outlined strengths in the use of Delphi as consensus building, bringing geographically dispersed panel experts together, the anonymity and confidentiality of responses, and validity since the content is driven by panelists. The researcher's decision to use the Delphi method in the process of developing the training programme is justified by the aforementioned factors.

3.7.2 Method of Inquiry in the Delphi Rounds of Questioning

The methods of inquiry used in the Delphi technique were focused group discussions in the qualitative approach, and the administration of the questionnaire under the quantitative approach. There were three rounds of questioning, namely Delphi rounds one, two, and three

questioning. Massaroli et al. (2017) emphasise that the first round of questioning should be composed of open-ended questions to allow participants to express their opinions on the subject, with data analysed using the qualitative approach. During round one, the researcher conducted a focused group discussion to obtain the views of the panel of experts on the draft of the training programme. Brady (2015) states that qualitative research gives methodological tools for delving deeper into the meanings of complex phenomena and processes in the field of health sciences. The second round commenced after the participants had been given feedback on their inputs during the first round of questioning. Green (2014) states that the researcher gives the panelists feedback from the first round during the second round, and administers the questionnaire to commence the second round of questioning. The second round of questioning was marked by the formation and administration of the questionnaire to obtain consensus of the experts on the training programme. Warner (2017) agrees that the questionnaire is used to solicit for consensual responses of the experts.

The third and final round of Delphi questioning in this study was aimed at making decisions concerning the training programme. Data obtained were analysed to ascertain consensus on the items to which the panelists responded. Barrett and Heale (2020) state that the required level of consensus ranges from 51 per cent to 100 per cent since there is inconsistency across studies and authors. Vogel et al. (2018) add that consensus is achieved when over 70 per cent of participants agree or disagree to items in the questionnaire. Results of the quantitative survey obtained in the subsequent rounds were analysed and feedback was provided to the panelists using the central tendencies (mean). The questionnaire for the third round was based on the results and comments providedby the experts in the second round. Items on the questionnaire which had reached a consensus of 75 per cent and above were not included in the third round of questioning. For the items which scored below 75 per cent consensus, the experts suggested changes that should be made. Vogel et al. (2018) state that

items which failed to obtain the required consensus, but with comments from participants, are modified and added to the next round of the questionnaire. After effecting the changes, the questionnaire for the third round was constructed for administration. The experts were located and provided with the questionnaires together with feedback on the findings from the second round. The questionnaires were delivered by dispatch riders and were retrieved by the researcher.

3.7.3 Analysis of Data Obtained in the Delphi Rounds of Questioning

Data analysis of the three Delphi rounds of questioning used both a qualitative and quantitative approach. In round one, qualitative data was obtained through focused group discussion. Data obtained focused on changes and modifications, additions and subtractions of some of the components of the training programme draft. The inputs suggested by the panel of experts were effected. Round two made use of the questionnaire, which was developed after inputs from the round one had been effected.

In round two, data obtained with the use of self-administered questionnaires were analysed using the SPSS version 24. Protocols, such as data cleaning and coding involved in quantitative data analysis, were followed to obtain valid findings. A simple statistical descriptive technique was employed to present results using tables and frequencies. Items on the questionnaire that did not attain a 75 per cent or more consensus were used to construct the questionnaire for the third round. During the third round of Delphi questioning, the researcher collected the questionnaires himself. The researcher followed the same quantitative processes and protocols employed in the analysis of data obtained in round two. Data were displayed through tables and frequencies and percentages. All items in the questionnaire attained a 75 per cent or more consensus.

3.7.4 Rigors and Trustworthiness of the Delphi Questioning Instruments

The best ways to ensure rigor of instruments are through careful and deliberate preparation, persistent and consistent use of researcher reflexivity, and open dialogue between the researcher and the audience about the study findings (Johnson et al., 2020). Trustworthiness, credibility, dependability, confirmability and reliability and validity were used to ensure rigors and trustworthiness of the Delphi questioning instruments.

3.7.4.1 Trustworthiness

The researcher adhered to the use of confirmability, dependability, and credibility to ensure trustworthiness of the data obtained during the first round of Delphi questions, which employed qualitative approach. Elo et al. (2014) assert that in a qualitative investigation, the goal of trustworthiness is to back up the claim that the findings are 'worth paying attention to'. The subsequent rounds of Delphi questions used a quantitative survey to achieve consensual data from the participants. The researcher therefore used internal consistency and content validity to achieve rigor of the instruments. According to Skinner (2015), rigor is the foundation of quality data in which the researcher leaves an audit trail in the qualitative approach and reliability and validity from the quantitative aspect.

3.7.4.2 Credibility

After the analysis of data obtained from the expertise of the panelists, their recommendations were instituted with respect to the changes that needed to be made on certain components of the draft. The researcher then provided them with feedback on the changes made to ascertain whether the changes they suggested had been made. This gave the experts the opportunity to be briefed about each other's inputs. Peer review was achieved during the Delphi first round focus group discussion in which experts shared their independent opinions and counter opinions, based on the contributions each of the experts. Further peer review was

achieved when experts were provided with feedback on the effected recommendations. As indicated by Noble and Smith (2015), the researcher also kept a meticulous record of all the inputs recommended by the experts.

3.7.4.3 Dependability

The researcher followed and kept track diligently the methodology described in Delphi in the collection of data for the development of the training programme. Moon et al. (2016) indicate that the researcher should follow the methodologies used in detail and keep track of the design and execution, including the techniques used, and the specific data collected.

3.7.4.4 Confirmability

The capacity of current study findings to be validated by other researchers is known as confirmability (Korstjens & Moser, 2018). It also refers to the circumstances in which the researcher attempts to comprehend the significance of participants' experiences in the context of the study and to make sense of the phenomenon under examination from the perspective of the participants (Moon et al., 2016).

3.7.4.5 Reliability

To ensure reliability of data collected through the quantitative survey in both Delphi rounds and two and three, the researcher first conducted a pilot study before administering the questionnaire to the experts during the round one questions. It was aimed at eliminating any ambiguity related to the items in the questionnaire. The items in the questionnaire were measured for internal consistency with Cronbach's alpha, which is expressed as correlation coefficient. Gray et al. (2013) state that a coefficient of 1.00 indicates perfect reliability, whereas 0.00 indicates no reliability. A total score of 0.80 or higher is considered good, 0.70 to 0.80 is acceptable but marginal, and values below 0.70 indicate problems with the reliability

of the instrument (Gray et al., 2013). Table 3.5 displays the results of reliability after Chronbach's alpha test was ran:

Table 3.5: Reliability Test for Internal Consistency

Q 1-18	0.74	Accepted
Q 19-26	0.93	Accepted

3.7.4.6 Validity

To achieve validity of the items in the questionnaire, they were constructed by the researcher. They were submitted for review by the researcher's supervisor and experts in the field of statistics and nursing. The questionnaire was tested both for content- and face validity. According to Moule and Goodman (2013), validity is the ability of an instrument to measure correctly what it is intended to do.

3.8 Ethics

Ethical considerations include those that apply to both general scientific research and qualitative study. Research studies involving human beings are governed by a code of ethics that protects their rights (Beck, 2016). Ethics in research is referred to as doing what is morally and legally correct (Parveen & Showkat, 2017). In view of these, efforts were made to treat all respondents or participants with respect, appreciating the information or opinions they expressed. The researcher used ethical measures, techniques, and conventions to show that the participants and their perspectives were important to him. As part of ensuring that the study's ethics were followed, the researcher obtained ethical clearance from the research ethics committee at the University of the Western Cape (UWC) (Appendix X, p.464). The clearance letter from the UWC accompanied documents submitted to the office of the national director of the GHS. Additional clearance was obtained from the national director of GHS and the

Ashanti Regional office of the GHS (Appendix XI, p.471). Hospital administrators were also approached and copies of the proposal were submitted for their review before ethical clearance was granted (Appendix XI, p.471). The clearance letters from the UWC, and from the national and regional directors of the GHS were sent to the ten district hospitals that were involved in the study. The management of the hospitals provided clearance either through a new letter and / or through endorsement of the clearance letters presented.

3.8.1 Consent

Participants who agreed to participate in the study were provided with informed consent forms to sign. The researcher maintained a transparent approach while also being upfront about what he or she was trying to accomplish. As a result, the researcher sent each participant a copy of information sheet that explained the purpose of the study, the right to privacy, and the benefits and risks associated with this study. Participants were asked to sign a consent form indicating their desire to participate in the study. Participants were told that they had the option to stop participating in the study at any moment.

3.8.2 Confidentiality

Confidentiality refers to the practice of not disclosing any information about participants to the general public (Green & Thorogood, 2014). In this regard, every precaution is made to prevent the participants' identities from being revealed. To maintain anonymity, the researcher used fake names and / or coded identification to ensure that participants remain anonymous. Questionnaires, recorded audiotapes, and other research material were kept in a secure location with locks and code, and were only accessible by the researcher for a period of three years.

3.8.3 The Right to Withdraw from the Research

The researcher gave all the participants an equal option to withdraw their agreement at any time during the study. Participants were also informed that if they chose to withdraw from the study, there would be no repercussions in their professional or personal lives.

3.8.4 Right to Privacy

Participants in every study have the right to anticipate that any information submitted to the researcher would be retained as private data (Babbie, 2016). As a result, the researcher ensured that no one else would be able to link the participants' names to the questionnaires, interviews, checklists and field notes. As a result, the questionnaire, the audio recordings, checklist and the field notes were maintained in separate, secured and locked files, which would be destroyed three years after the study is over. Similarly, in the interview transcripts and the final report, participants' identities were replaced with numbers to preserve complete secrecy.

3.8.5 Principle of Justice

All participants of a research study have the right to receive fair and equal treatment before, during and after taking part in the research study (Damtew, 2018). The researcher treated the participants equally and did not collect any information outside the context of the study. During the selection of the participants, the researcher used the probability sampling technique for the quantitative study, while with the qualitative study the selection was devoid of discrimination and the researcher was fair. During the quantitative data collection and the qualitative data collection under the four categories, all appointment schedules were met and all participants were made to feel at ease.

3.8.6 Risk / Benefits

This study had no possible dangers for participants. Nevertheless, one participant was extremely emotionally stressed. He refused to undergo surgery and asked to be discharged, which was granted. The participants were urged to speak up about their concerns for redress. The researcher also made sure that items in the questionnaire, interview questions and in the checklist were carefully phrased, and participants were given the opportunity to ask questions at the end of the interview sessions and also after answering the questionnaire.

3.9 Conclusion

This chapter described the methodologies used in conducting this study. This study used the explanatory-sequential mixed method approach. It described the use of pragmatism, which focuses on the use of quantitative and qualitative techniques and other designs including descriptive and exploratory. This chapter also examined how quantitative and qualitative data were analysed, which helped to achieve the research objectives. In addition, this chapter described the Delphi method that was used to develop the training programme using the findings of the study. The following chapter gives the quantitative data analysis and discussion of findings obtained in the study.

CHAPTER FOUR

QUANTITATIVE DATA ANALYSIS AND DISCUSSION OF THE FINDINGS

4.1 Introduction

Chapter Three presented a description of the methodology used to achieve the objectives of this study. This chapter givess the results and discussion of the analysed quantitative data. It is divided into two sections. Section One presents the demographic information and results of data obtained through the quantitative survey in an attempt to achieve objectives 1 and 2: *to determine the extent to which patients become anxious before undergoing surgery*, and *to identify the factors that make patients become anxious before surgical operations*. Section Two displays the discussion of the main results in line with the aforementioned objectives, theoretical framework, and available literature (Figure 4.1). A descriptive tabular and figure analysis was principally employed for the presentation of the results. Data were analysed by using the Statistical Package for the Social Sciences (SPSS) (24th edition).

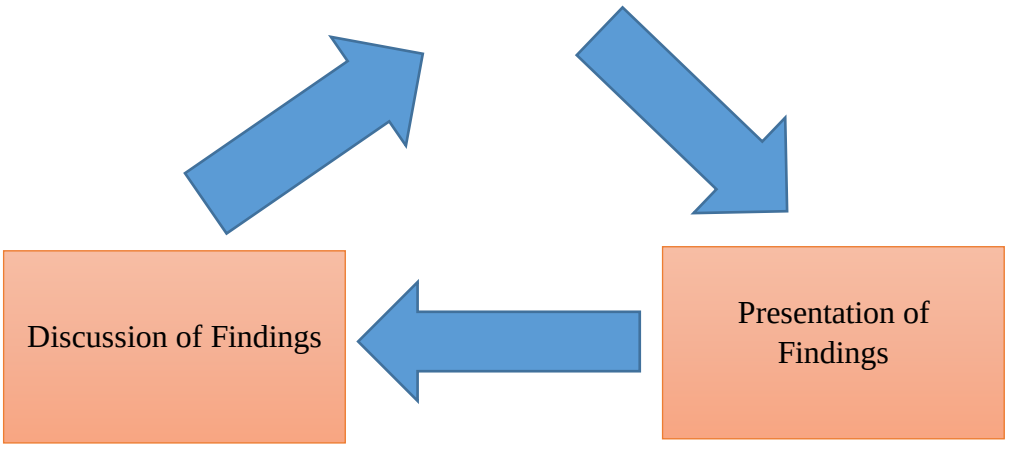

Figure 4.1: Diagram showing quantitative data analysis and discussion of findings

4.2 Section One: Results of Quantitative Survey

This section presents results of the quantitative study obtained from patients using self-administered questionnaire to achieve objectives 1 and 2 of the study.

4.2.1 Sample Realisation

During the study period, 230 patients were approached to participate in the study. Of these, 218 gave consent to participate in the study, while 210 questionnaires were fully completed. Reasons for non-completion of the eight questionnaires included cancellation of surgery for the day and / or week and procedures undertaken with anaesthetic induction.

4.3 Presentation of Findings

Findings obtained using the quantitative approach are presented in the script below.

4.3.1 Demographic Characteristics of Respondents

Of the 210 respondents, just over half (123, 58.57 per cent) were females. Of these, fewer than half (39.50 per cent) were between the ages of 30 and 39, while the elderly formed the minority (8.60 per cent). Christians formed the majority (81.00 per cent) of the religious groups, while traditionalists were the minority (7.60 per cent). Over half (58.10 per cent) of the respondents were married. Akan was the dominant ethnic group, realising 71.43 per cent of the total number of respondents, while other ethnic groups such as Frafra, Dagare, and Nzema comprised the minority (8.10 per cent). More than half (58.10 per cent) of the respondents were married. Concerning their educational level, a little over half (53.30 per cent) were secondary school graduates with a small group (3.80 per cent) of them being primary school graduates. A little more than half (55.70 per cent) of the respondents were casual workers, while just less than half (44.30 per cent) were breadwinners. The majority (75.20 per cent) were undergoing

surgical operations for the first time and almost a percentage below half (41.90 per cent) were undergoingabdominal surgery (Table 4.1).

Table 4.1: Demographic Characteristics of Respondents

Age Group	Frequency	Percentage
Gender		
Male	87	41.42
Female	123	58.57
Age		
Under 25	41	19.50
26–35	83	39.50
36–45	41	19.50
46–55	27	12.90
56 and older	18	8.60
Religion		
Christian	170	81.00
Islam	24	11.40
Traditionalist	16	7.60
Ethnic Group		
Akan	150	71.40
Ga	16	7.60
Ewe	14	6.70
Dagomba	13	6.20
Other	17	8.10
Marital Status		
Not Married	88	41.90
Married	122	58.10
Educational Status		
Primary	8	3.80
Secondary	122	53.30
Tertiary	90	42.90
Profession		
Unemployment	18	8.60
Civil Servant	75	35.70
Casual Worker	117	55.70
Status in family		
Student	42	20.00
Father	22	10.50
Mother	25	19.90
Bread winner	93	44.30
Type of surgery		
Abdominal Surgery	88	41.90
Non-abdominal Surgery	55	26.19
Gynaecological Surgery	67	31.90

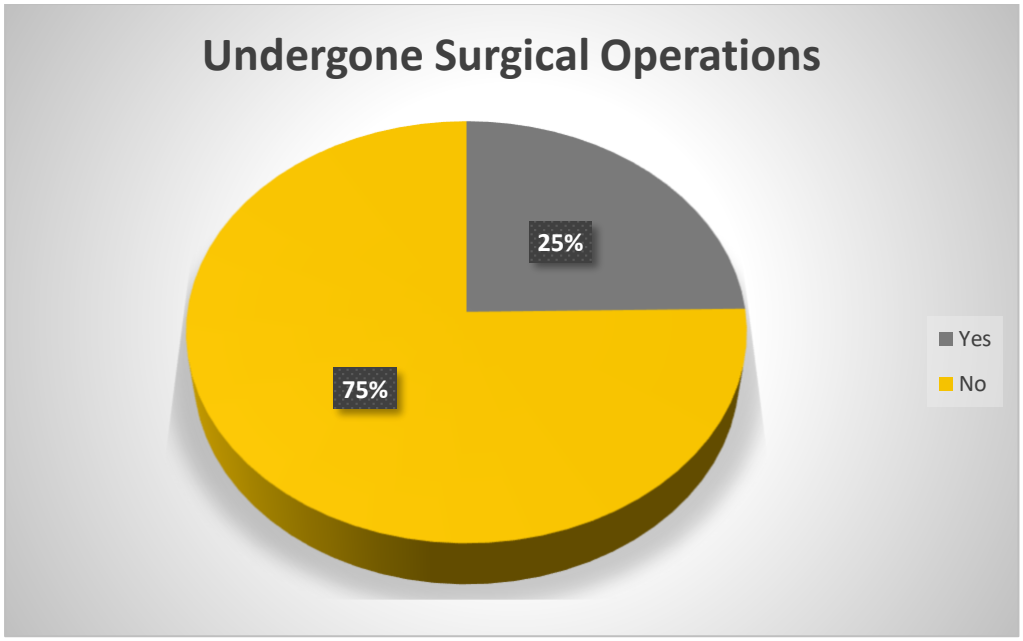

Figure 4.2: Percentage of Patients who had Undergone Surgical Operations Before

Figure 4.2 indicates that 75 per cent of the respondents had not had surgery before. This indicates that it was the first time they were undergoing surgery.

4.4 Preoperative Anxiety

Prior to the surgery, the extent to which each respondent was anxious was measured using the Hamilton Anxiety Rating Scale (HARS). while a tool comprising determinants of preoperative anxiety, which was developed through the review of literature, was used to identify the factors that make each of the patients become anxious before undergoing surgical operation.

4.4.1 The Extent to Which Patients Are Anxious Before Surgical Operation Hamilton

Anxiety Rating Scale

To answer the objective 1, *to determine the extent to which patients become anxious before undergoing surgery*, the HARS was used. Questions pertaining to the demographics of the respondents were included in the questionnaire and the results are presented in Table 4.2.

The results from Table 4.2 show the demographic variables of the patients to determine the extent to which they become anxious before undergoing surgical operations. Based on the findings (Chi-square analysis), there was no significant anxiety among the patients. It could possibly be confirmed that the demographic characteristics of the patients in the surgical ward (SW)/ surgical suite (SS) at the district hospitals in the Ashanti Region of Ghana do not have a significant influence on their preoperative anxiety before they undergo surgical operations.

Table 4.2: The Extent to Which Patients are Anxious Before Surgical Operations Hamilton Anxiety Rating Scale (25-30 and 0-4)

Variable	Mean	Std. Dev (±)
Anxious mood on observation	2.14 (±1.4)	1.44
Tension prior to surgery	2.00	1.35
Fears of surgery, anaesthesia and pain	1.75	1.46
Insomnia on the day before the procedure	2.0	1.31
Intellectual during interaction	1.64	1.29
Depressed mood on observation	1.60	1.23
Somatic (muscular) on observation	1.19	1.07
Somatic (sensory) on observation	0.95	1.08
Cardiovascular symptoms on observation	1.47	1.23
Respiratory symptoms on interaction	0.89	1.07
Gastrointestinal symptoms	1.18	1.16
Genitourinary symptoms on interaction	1.42	1.22
Autonomic symptoms on interaction	1.20	1.12
Behaviour interview on observation	1.09	1.21

Author's field survey (2017)

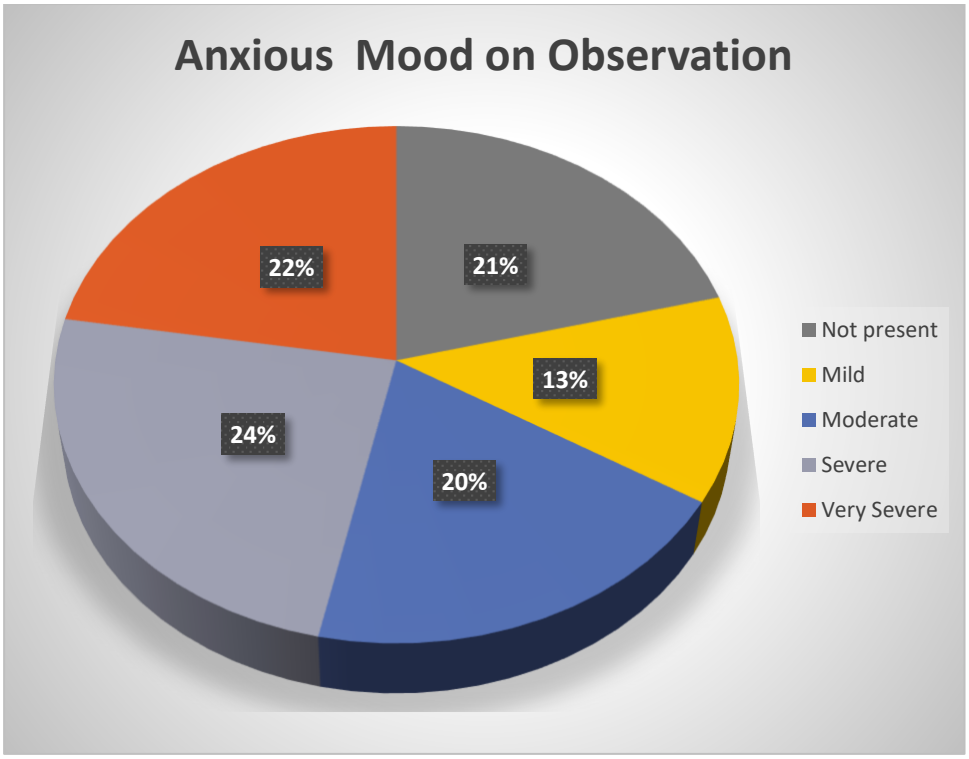

Figure 4.3: Anxious Mood on Observation

Results from Figure 4.3 show that, of the 210 patients recruited for this study, 24.0 per cent experienced severe anxiety, which was evident in manifestations such as anticipation of the worst, fearful anticipation, and irritability.

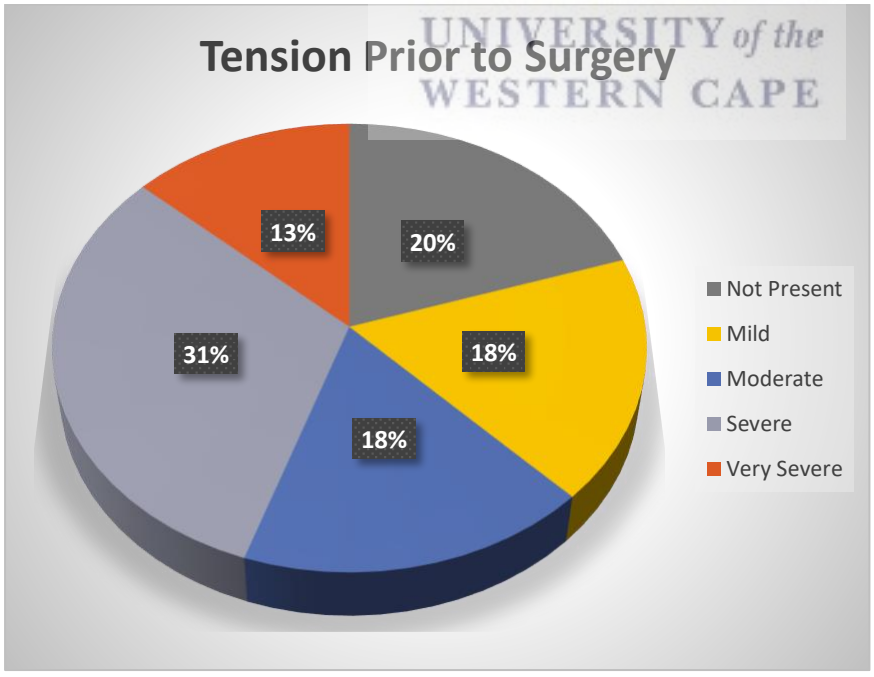

Figure 4.4: Tension Prior to Surgery

Figure 4.4 shows results of patients on the item, tension prior to surgery. Figure 4.4 displays that the 31.0 per cent of the patients had severe tension prior to surgery, in that they showed manifestations including moved to tears, feelings of restlessness, and an inability to relax.

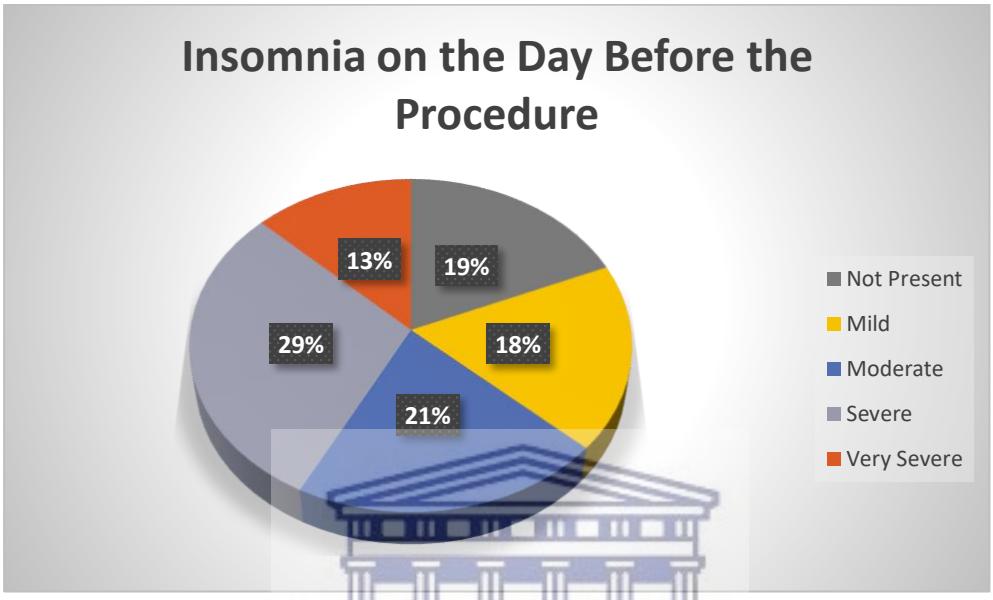

Figure 4.5 Insomnia on the Day Before the Procedure

From Figure 4.5, results of the study depicts that the 29.0 per cent of the patients experienced insomnia on the day before the procedure, which was made visible by manifestations such as difficulty in sleeping, broken sleep, and unsatisfactory sleep.

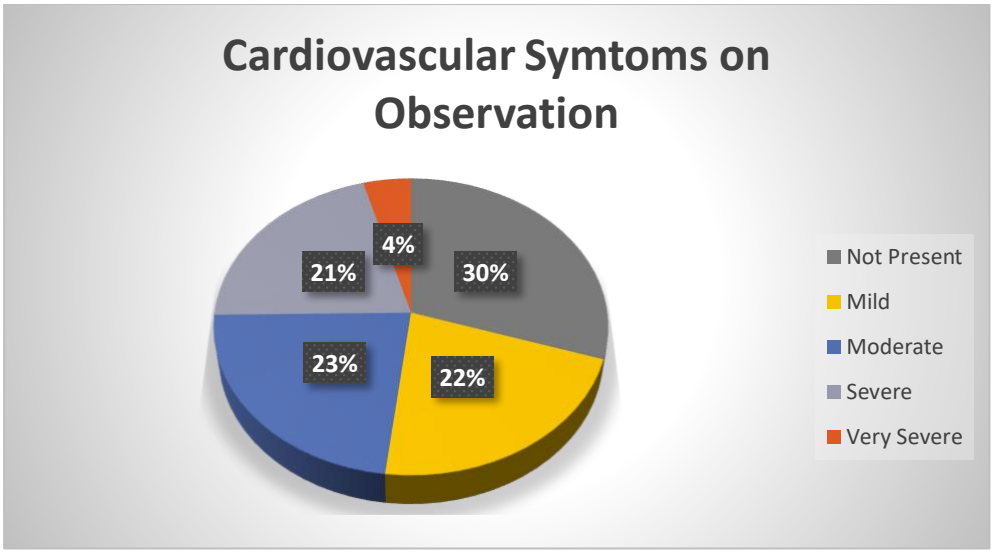

Figure *4.6: Cardiovascular Symptoms on Observation*

Results from Figure 4.6 reveal that the 30.0 per cent of the patients did not present cardiovascular symptoms, which included tachycardia, palpitation and fainting feelings. However, a minority (4.0 per cent) showed very severe symptoms of cardiovascular symptoms.

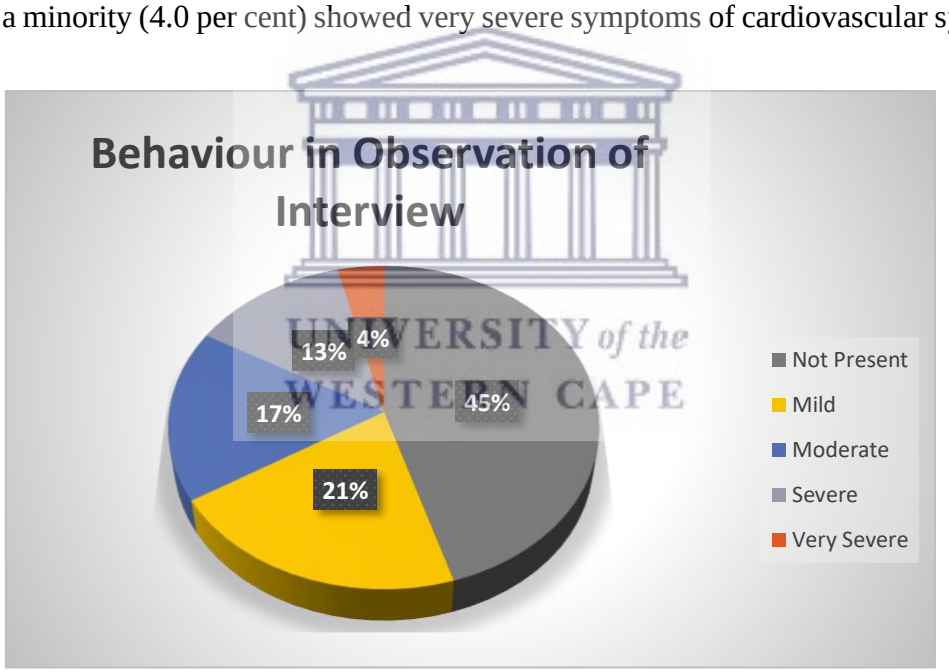

Figure 4.7: Behaviour in Observation of Interview

In Figure 4.7, results of the study show that the 45.0 per cent did not present severe behaviour in observation of the interview. Only 4.0 per cent presented with very severe behaviour, in that they manifested restlessness or pacing, sighing, rapid respiration, and facial pallor.

4.4.2 Correlation Analysis Between Demographics Variables and Factors That Influence

Preoperative Anxiety

To answer the objective, *the relationship between demographic variables and preoperative anxiety and factors that make patients become anxious*, results of the correlation analysis between demographic variables and factors that influence preoperative anxiety are presented in the subsequent tables. The results presented in Table 4.3 show that, of the 210 patients that underwent surgical operation, there was no relationship between the demographic variable of age and gender, and factors that make patients become anxious.

Table 4.3: Correlation Analysis Between Demographics Variables and Factors That Influence Preoperative Anxiety

Factors that influence preoperative Anxiety	Age Correlation coefficient	P-value	Gender Correlation coefficient	P-value
Anaesthesia	0.0818	0.2381	- 0.0051	0.9413
Surgical procedure	0.1555	0.0242	- 0.0907	0.1903
Postoperative pain	- 0.0034	0.9610	- 0.0150	0.8291
Physical disability	- 0.1514	0.0283	0.0558	0.4211
Job security	- 0.0325	0.6397	0.0116	0.8671
My family	- 0.0181	0.7938	0.0316	0.6493
Paying my medical bill	0.0908	0.1898	- 0.0705	0.3094
Complications	- 0.1656	0.0163	0.1565	0.0233
Results of the operation	- 0.1933	0.0049	0.0132	0.8487
Losing my life	- 0.2211	0.0013	0.1025	0.1389
Harm from doctor/nurse	- 0.0778	0.2618	0.0149	0.8301
Change of environment	- 0.1231	0.0751	0.0396	0.5681
Nil per OS	- 0.1930	0.0050	- 0.0596	0.3905
Blood transfusion	- 0.0477	0.4922	- 0.0059	0.9328
Fear of unknown	- 0.1000	0.1489	0.0098	0.8882
Getting stuck with a needle	- 0.0611	0.3787	0.0421	0.5445

Author's field survey (2017)

Table 4.4 demonstrates the correlation analysis between factors that influence preoperative anxiety and ethnic group and religion of the patients. Results presented in Table 4.4 show no correlation coefficient between ethnic group and religion of the patients and factors

that influence preoperative anxiety. This indicates that the ethnicity and religious affiliation of the patients did not have any influence on the factors that made them anxious.

Table 4.4: Correlation Analysis Between Demographic Variables and Factors That Influence Preoperative Anxiety

Factors that influence preoperative Anxiety	Ethnic group Correlation coefficient	P-value	Religion Correlation coefficient	P-value
Anaesthesia	0.0744	0.2834	0.0311	0.6538
Surgical procedure	- 0.0372	0.5918	0.0169	0.8073
Postoperative pain	0.0659	0.3421	0.0911	0.1884
Physical disability	0.0465	0.5032	0.1131	0.1020
Job security	0.0289	0.6771	- 0.0282	0.6841
My family	0.1031	0.1366	- 0.0090	0.8967
Paying my medical bill	0.0926	0.1812	0.1180	0.0879
Complications	- 0.1061	0.1253	0.0350	0.6136
Results of the operation	- 0.0608	0.3803	- 0.0184	0.7913
Losing my life	0.0347	0.6172	0.0353	0.6112
Harm from doctor/nurse	0.0711	0.3055	0.1025	0.1388
Change of environment	- 0.0492	0.4782	0.0629	0.3643
Nil per OS	0.0911	0.1885	0.0591	0.3940
Blood transfusion	0.0826	0.2330	0.1218	0.0782
Unknown	- 0.0940	0.1748	0.0680	0.3268
Getting stuck with a needle	- 0.0312	0.6532	0.1075	0.1204

Author's field survey (2017)

From the study, results of the correlation coefficient analysis between marital status and factors that influence preoperative anxiety are presented in Table 4.5. From Table 8, the results show no relationship between marital status and the factors that influence preoperative anxiety.

Table 4.5: Correlation Analysis Between Marital Status and Factors That Influence Preoperative Anxiety

Factors that influence preoperative Anxiety	Marital status Correlation coefficient	P-value
Anaesthesia	0.0912	0.1881
Surgical procedure	0.0651	0.3478
Postoperative pain	0.0916	0.1861
Physical disability	-0.0416	0.5484
Job security	0.0146	0.8337
My family	0.0060	0.9316
Paying my medical bill	0.0708	0.3075
Complications	0.0336	0.6278
Results of the operation	-0.1202	0.0822
Losing my life	-0.0804	0.2462
Harm from doctor/nurse	0.0239	0.7302
Change of environment	0.0029	0.9666
Nil per OS	-0.1379	0.0460
Blood transfusion	-0.0426	0.5395
Unknown	-0.0896	0.1961
Getting stuck with a needle	0.0076	0.9127

Author's field survey (2017)

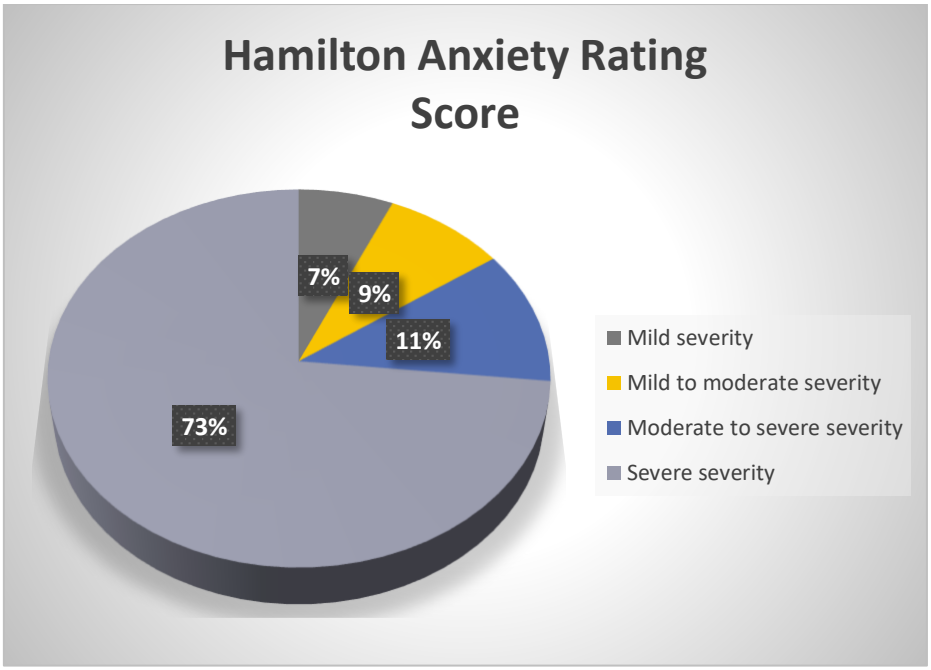

Figure 4.8: Hamilton Anxiety Rating Score

Scoring anxiety with the Hamilton Anxiety Rating Scale, each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0–56, where <17 indicates mild severity, 18–24 is mild to moderate severity and 25–30 is moderate to severe. Figure 4.8 reveals that 73 per cent of the respondents were severely anxious before undergoing surgical operations.

4.4.3 Correlation Analysis Between Demographic Variables and Hamilton Anxiety Rating Score

Table 4.6 presents results of the correlation analysis between demographic variables and the Hamilton Anxiety Rating Score of preoperative anxiety of the patients. From the results in Table 4.6, it is observed that demographic variables of ethnicity (0.0024) and religion (0.0014) scores are significant. These indicate that for Akan (71.43 per cent), the largest ethnic group, ethnicity and religion have an influence on the preoperative anxiety of patients.

Table 4.6: Correlation Analysis Between Demographics Variables and Hamilton Anxiety Rating Score

Demographic variables	Hamilton Anxiety Rating Score	P-value
Age	-0.0116	0.8669
Sex	-0.0079	0.9093
Ethnicity	0.2083	0.0024
Religion	0.2191	0.0014
Marital status	-0.0512	0.4607
Status in your family	-0.0909	0.1896
Level of education	0.0628	0.3654
Profession	0.1059	0.1262
Surgical operation before	-0.0397	0.5677
Type of surgical operation	-0.0679	0.3271

Author's field survey (2017)

4.5 Section Two: Discussion of Quantitative Results

This section presents the discussion of the main results of the analysed quantitative data obtained from patients prior to undergoing surgical operation to achueve objectives 1 and 2 of the study.

4.5.1 Demographics of the Patients

The study discovered that the mean age of the respondents was 35.90 years (SD 13.50), with the youngest being under 20 years and the oldest above 50 years. The study also found that over two-thirds (83, 67.50 per cent) of the respondents were between the ages of 26 and 35. This is contrary to the findings of Modern Ghana (2021) that the population of the Ashanti Region is skewed towards the youth. This is because the world governing bodies, such as the

UN and WHO have defined the youth as people between the ages of 15 and 24 (United Nations, 2019; World Health Organization, 2021). However, South Africa's National Youth Policy and its National Youth Commission Act (1996) have defined the youth as somebody between the ages of 14 and 35 (Lujabe, 2018). According to the standards of the world's governing bodies, it can be inferred that the nursing staff at the SWs/SSs in the Ashanti Region were not youth, but young adults.

Just over half of the respondents (123, 58.57 per cent) were females. This finding confirms that of Nyanteng, et al. (2013), which establish that females (2,464,328) slightly exceed the population of males (2,316,052) in the Ashanti Region. It was discovered in the study that Akan (150; 71.43 per cent) was the dominant ethnic group. According to Nyanteng et al. (2013), there are many ethnic groups in the Ashanti Region, including Mole-Dagbani (11.3 per cent), Ewe (3.8 per cent) and Gurma (2.8 per cent). Ashantis are the major indigenous tribe of the Akans in Ghana (Obiorah, 2018). Christians formed the majority (170, 81.00 per cent) of the religious groups in the Ashanti Region. UK Essays (2020) reveals that about 80 per cent of the population is Christian. Undocumented information reveals that Akans are much more affiliated to the Christian religion than the other tribes. This justifies why the majority of Akans belong to the Christian denomination.

Over half of the respondents were married (122; 58.10 per cent). In the Ashanti Region and in Ghana as a whole, marriage is considered under customary, Islamic, ordinance and cohabitation (Adeega, 2021). Even though the study did not investigate the types of marriages that the respondents were involved in, it can be inferred that the marriages they were in belonged to any of the aforementioned. The study discovered that nearly half (90; 42.90 per cent) of the respondents had acquired an education level of a diploma certificate. This finding is contrary to the findings of Modern Ghana (2021), which claims that between 40.0 per cent

and 50.0 per cent of the population either has no formal education or has only a pre-school education (Modern Ghana, 2021).

Abdominal surgical procedures (155; 73.80 per cent) constituted the majority of the procedures performed in the Ashanti Region. The abdominal surgeries include caesarian sections and upper abdominal surgical procedures such as appendicectomy and herniorrhaphy. Several studies suggest that abdominal surgical conditions and surgeries are more common than surgeries in other parts of the body. Ohene-Yeboah (2016) discovered inguinal hernia (95 per cent) as the most common surgical condition in the Ashanti Region. A recent study aimed at auditing hernia surgeries at secondary care centres revealed that males (71.8 per cent) with hernia underwent surgeries while only females (28.2 per cent) did (Mensah et al., 2020). In another current study to assess the prevalence and determinants of caesarean deliveries among child-bearing women aged 15–49 in Ghana, Seidu et al. (2020) found caesarean sections (18.5 per cent) were low in Ghana. These results support the findings of this study, which infer that abdominal surgeries are the most commonly performed procedures in the Ashanti Region of Ghana. Three-quarters of the patients (158; 75.20 per cent) were undergoing a surgical operation for the first time.

4.5.2 Extent to Which Patients Become Anxious Before Surgical Operations

Preoperative anxiety is a serious concern that nurses and surgeons working at SWs/SSs may need to do much to minimise its levels in order to enhance surgical outcomes (Ryamukuru et al., 2019). Orlando's deliberative nursing process theory described, that when a patient is denied preoperative information, he or she feels helpless and begins to develop anxiety (Gonzalo, 2021). Explaining further the mechanism leading to the extent to which patients become anxious in the deliberative nursing process theory, a report in Nursing Theory (2020) asserts that the patient responds internally to the perception of impending danger resulting from

the lack of preoperative information by using his or her five senses to discern the procedures he or she has been scheduled to undergo. The author continues that these impressions trigger automatic thoughts which, in turn, trigger an emotional feeling, prompting the patient to experience preoperative anxiety.

The study showed the prevalence of preoperative anxiety among patients undergoing various surgical operations as 90 per cent (189) with 21 (10 per cent) classified as no anxiety (score 0–7). This finding is found to be higher than similar studies conducted in Ethiopia and Brazil (Melchior et al., 2018) which recorded 61 per cent and 53.0 per cent respectively. The extent to which patients are anxious prior to surgical operations was identified with a mean score of 20.57 (±10.07) ranging from 0–56. These findings are similar and higher than the findings of Abate et al. (2020), on 'global prevalence and determinants of preoperative anxiety among surgical patients. The authors discovered that preoperative anxiety among patients was higher in Africa 56 mper cent (95% CI), which was followed by Asia, 54 per cent (95% CI), and the lowest in North America, 24 per cent (95% CI) and Latin America 24 per cent (95% CI).

Anxiety is known to create aberrant haemodynamics as a result of sympathetic, parasympathetic, and endocrine activiation, and it is also responsible for the patient's 'fight or flight' reaction in the face of danger (Ryamukuru et al., 2019). The current findings demonstrate that patients experience mild to moderate anxiety, which is illustrated in anxious mood (2.14, ±1.45), tension prior to surgery (2.00, ±1.35), and insomnia on the day before the procedure (2.00, ±1.32). These findings were confirmed by the study of Mulugeta et al. (2018) in discovering that preoperative anxiety is manifested externally and internally, affecting the behaviour, emotions, cognitive and physical activities of patients. Additionally, Chow (2020) describes that some psychological manifestations observed among anxious patients include nervousness, worry and tension, crying, angry behaviour, or verbal unrest.

As far as surgical patients are concerned, the mild to moderate anxiety observed in this study is similar to data reported from previous studies (Akildiz et al., 2017; Melchior et al., 2018; Menel et al., 2018), which found significantly ($p<0.05$) higher anxiety in patients given spinal anaesthesia, and moderate to severe preoperative anxiety among patients between the ages of 50 and 69 years (51.5% / n = 18). However, Du, Plas, Absalom, Leeuwen and Bock (2019) recorded that 25 (15.4 per cent) of patients showed mild or moderate anxiety, whereas 19 (11.7 per cent) showed light or moderate depression. Additionally, 5 (9.0 per cent) of the elderly patients showed mild or moderate signs of anxiety, compared to 20 (18.7 per cent) of the younger patients. Seven (12.3 per cent) of the elderly patients had mild or moderate signs of depression, compared to 12 (11.2 per cent) of the younger patients.

4.6 Factors That Make Patients Become Anxious Before Surgical Operation

Various studies describe the word, 'factors' as predictors, causes, determinants, influence and concerns of patients in terms of preoperative anxiety (Nigussie et al., 2014; Dagona, 2018; Wada et al., 2018; Abate et al., 2020). Other studies add that these factors pertain to the quality of information patients desire to eliminate or reduce anxiety (Kennedy et al., 2017; Poland et al., 2017; Cevik, 2018). Information needs are described as factors, predictors, determinants and / or the causes of preoperative anxiety (Nigussie et al., 2014; Dagona, 2018; Wada et al., 2018; Abate et al., 2020). Studies have established that information needs pertain to surgical conditions, surgical procedures, and postoperative care (Hounsome et al., 2017; Marinelli, 2020).

This study discovered that patients mainly become anxious as a result of the surgical procedure (3.43, ±1.36), complications (3.42, ±1.33) and postoperative pain (3.38, ±1.20). These findings were confirmed in previous studies conducted in Ethiopia, which identified factors including fear of postoperative pain 177 (50.1 per cent) (Mulugeta et al., 2018) and fear

of complication (76.4 per cent) (Bedaso & Ayalew, 2019). In another study, Abate et al. (2020) also found that preoperative anxiety is caused by the fear of surgery being postponed, the types of surgery, the fear of anesthesia, the fear of surgery, the fear of awakening in the middle of surgery, financial loss, fear of postoperative pain, fear of death, and fear of unknown origin. Additionally, Marinelli (2020) found that high anxiety levels are found to be associated with factors related to the settings of hospitalszation and the deficiency of information provision in enhancing the patient's psychosocial functioning in terms of cognitive, behavioural and coping strategies. From another perspective, Ghimire and Poudel (2019) found that the majority of patients' anxiety was due to concern about their family (85.3 per cent) and financial burdens (79.4 per cent) as a result of hospitalisation.

4.6.1 Predictors of Preoperative Anxiety

The term 'predictor variable' refers to an independent variable used in regression analysis that provides information on a dependent variable associated with a specific outcome (Salkind, 2010). According to Navarro-Gastón et al. (2020), the difficulty of the surgical procedure and anaesthesia, as well as not being adequately informed, are some of the predictors of preoperative anxiety. In this study, data analysed showed that relationships between the dependent variable, preoperative anxiety, and independent variables, job security and family, were found to have a positive linear association between the type of surgery ($p < .004$), postoperative pain ($p < .004$) and my family ($p < .002$). In parallel, similar results were seen in other studies conducted in Brazil and Ethiopia, where preoperative anxiety predictors included sex, occupation, and not having information about surgery (Melchior et al., 2018; Takele et al., 2019).

Woldegerima et al. (2018) established that the most common reasons for preoperative anxiety in patients are fear of being unable to recover from anaesthesia, postoperative pain,

family issues, dependency, death, complications, and disability. Abate et al. (2020) agree to some of the factors outlined above and add fear of medical mistakes, awakening in the middle of surgery, financial loss, fear of unexplained origin, and unexpected outcomes of the operation. In the same vein, Dagona (2020) lists negative expectations of what may happen intraoperatively or postoperatively, body mutilation, loss of control and freedom, as some factors that are believed to cause preoperative anxiety among patients

However, there were close relationships between preoperative anxiety and physical disability (.3), paying my bills (.3), change of environment (.3), nil per os (.3) and blood transfusion (.3). There was no multiple correlation between the independent variables as tolerance results were above (.10). Multiconllinearity was not recorded among independent variables as VIF values were less than 10. Form of operation ($p < .004$), postoperative pain ($p < .004$), and my family ($p < .002$) were found to have positive linear associations between the dependent variable, preoperative anxiety, and independent variables, job security, and family. Similarly, other studies conducted in Brazil and Ethiopia found that sex, occupation, and lack of awareness about surgery were all predictors of preoperative anxiety (Melchior et al., 2018; Takele et al., 2019).

4.6.2 Demographic Characteristics That Influence Preoperative Anxiety

Studies have established the relationship between demographic characteristics, such as gender and preoperative anxiety (Mekonen et al., 2020). Focusing on demographic factors including age and educational status, Akildiz et al. (2017) demonstrated how they have influence on the occurrence of preoperative anxiety. In this research, the impact of key factors on the level of preoperative anxiety was investigated. From the data analysed, age, gender, family support, and type of surgery were all found to be a major influence on preoperative anxiety among patients scheduled for surgery.

Regarding age as a demographic characteristic, Almalki et al. (2017) found significant preoperative anxiety among patients below the age of 50 and in those above 50, who had higher preoperative anxiety. These findings are similar to the finding of Mekonen et al. (2020), who identified that the most common association between demographic feature and preoperative anxiety was gender. In line with this, Khalili et al. (2020) demonstrates that the biggest predictors of the state of anxiety were the age and gender of the patients. Age was found to be a predictive factor, with each year of age resulting in a 5 per cent reduction in preoperative the state of anxiety (OR= 0.95, 95 percent CI= 0.93-0.97). Almalki et al. (2017) discovered that female patients' knowledge of the side-effects of anaesthesia had a negative influence, raising the probability of the state of anxiety.

With respect to family support, which is akin to the source of income of patients discovered in this study, and the type of surgery as an influence on preoperative anxiety, the study of Woldegerima et al. (2018) showed similar findings, which are demonstrated in association with preoperative anxiety. Additionally, Woldegerima et al. (2018) identified that patients without or with low income were observed to be three times more likely to be anxious AOR = 3.21, CI = 1.01–10.27) and (AOR = 3.06, CI = 1.18–7.93). However, the study of Almalki et al. (2017) found no statistically significant association between preoperative anxiety and previous experience of surgery.

4.7 Conclusion

This chapter presented the findings and discussions of data obtained through the quantitative approach of the study. Data were collected to achieve the objectives, *to determine the extent to which patients become anxious before undergoing surgery at district hospitals in Ashanti Region of Ghana*, and *to identify the factors that make patients become anxious before surgical operations at district hospitals in the Ashanti Region of Ghana*. Analysed data

discovered that the prevalence of preoperative anxiety was high as the majority (73 per cent) were severely anxious. Preoperative anxiety was discovered to be primarily caused by surgical operations, complications, and postoperative pain. In addition, some demographic variables, as well as the form of surgery and postoperative pain, had a positive linear relationship. The next chapter will present qualitative data analysis and a discussion of the findings.

CHAPTER FIVE

FINDINGS OF QUALITATIVE DATA ANALYSIS

5.1 Introduction

Chapter Four presented the findings and discussions of data obtained with the quantitative approach. This chapter presents the demographic characteristics of participants and findings obtained through the qualitative approach. Findings in this chapter is divided into four categories. This is because data collection for qualitative study described in phase two in Chapter Three were in four categories. Category one presents participants' demographic characteristics and findings obtained from face-to-face individual interviews of nurses to achieve objective 3, *to explore and describe how preoperative information needs of patients are explored and managed by nurses*. Category two displays participants' demographic characteristics and findings obtained through participant observation with a checklist and field notes to achieve objective 4, *to explore and describe the practices of nurses in terms of how preoperative patients' information needs are identified and managed*. Category three gives the demographic characteristics of participants and findings acquired through face-to-face individual interviews of nurses. This was to compensate for data obtained in category two to achieve objective 4, *to explore and describe the practices of nurses on how preoperative patients' information needs are identified and managed*. Lastly, category four presents demographic characteristics of participants and findings gathered through face-to-face individual interviews of patients to achieve objective 5, *to explore and describe the type of preoperative information that patients need before they undergo surgery*.

The explanation sequential mixed methods design was employed in this study because quantitative approach prefers positivism to describe actuality in the world, while qualitative approaches employ constructivist approaches to develop the meaning of the phenomenon under study (Subedi, 2016). It was essential for the researcher to adopt the quantitative approach to

investigate the existence of preoperative anxiety and the factors that make patients become anxious before undergoing surgery before studying the practices of nurses in exploration and management of information needs with the qualitative methodology. Quantitative results show that 75 per cent of patients become anxious before undergoing surgical operation. Surgical operation ($p < 0.02$), physical disability ($p < 0.03$), complications ($p < 0.02$), and losing my life ($p < 0.001$) are the factors that make patients become anxious. Qualitative study followed to provide more insight into the practices of nurses on exploration and management of information needs of patients (Warfa, 2016). Findings from the qualitative study are presented below.

5.2 Category One: Findings Obtained Through Face-to-Face Individual Interviews of Nurses

This phase presents the findings of data obtained on the objective, *to explore and describe how preoperative information needs of patients are explored and managed by nurses*. Participants comprised Registered General Nurses (RGNs) and the mode of data collection was by face-to-face individual interviews. Data collection occurred in 10 hospitals located within nine districts in Ashanti Region of Ghana. A total of 11 nurses (comprising seven nurses in charge and four junior nurses) were individually interviewed using semi-structured interview guides.

5.3.1 Demographic Information of Participants

In this phase, participants are described by their gender, age, ethnicity, religious affiliation, marital status, current position/rank, level of education and the number of years they had been working in the surgical wards/surgical suites (SWs/SSs). It is prudent to note the quantifying representation of the participants in order to bring more clarity and understanding

of the dynamics that unfolded during the data collection. This solidified the exploratory nature of the study from the approach used by the researcher.

The study participants were made up of five males and six females. Three of the males and four of the females were nurses in charge of three and four of the wards, respectively. Most of the participants were between the ages of 25 and 35 and all belonged to the Akan ethnic group. Eight of the participants were not married and all of them belonged to the Christian religious group. Seven of the participants had diploma certificates as their level of education. Seven of them belonged to the junior rank, that is, Staff Nurse, Senior Staff or Nursing Officer. Concerning the number of years they had worked at the wards, seven of the participants had worked there between two and nine years. This excludes their qualification as RGNs. Table 5.1 below displays the participants' characteristics.

Table 5.1: Demographic Characteristics of Participants (N=11)

Item	Number
Gender	
Males	5
Females	6
Age	
25–30 years	5
31–35 years	4
41 years and above	1
Ethnic group	
Akan	11
Marital status	
Single	8
Married	3
Religion	
Christian	11
Level of education	
Diploma	7
Bachelor's degree	4
Position/rank	
Principal Nursing Officer	1
Senior Nursing Officer	3
Nursing Officer	2
Senior Staff Nurse	3
Staff Nurse	2
Number of years worked at SW/SS	
0 – 1 year	3
2 – 5 years	4
6 – 9 years	3
10 years and above	1

5.3.2 Presentation of the Main Findings

Three main themes emerged from the analysis of the data collected from nurses as participants. They are: 1. Preoperative anxiety; 2. Assessing patients' preoperative information needs; and 3. Providing needed information. Each theme is divided into categories and sub-categories. Table 5.2 below displays a summary of the results according to the theme, categories and sub-categories.

Table 5.2: Summary of Themes and their Respective Categories and Sub-Categories

Objective	Themes	Categories	Sub-categories
Explore and describe how preoperative information needs of patients are explored and managed by nurses.	**Theme One**: Patients behaving differently	1. Emotional stress	a. Tension among patients
			b. Intellectual distraction
		2. Fear of the unknown	a. Lack of accurate information
			b. Fear of procedure
			c. Fear of environment, complications, death
	Theme Two: Assessing patients' preoperative anxiety and information needs	1. Nurse–patient interactions	a. Encourage patient to raise concerns
			b. Clinical observation of patients
		2. Validation of information needs	a. Importance of information to patients
			b. Feedback from patients
			c. Fear of complications
		3. Process to inform patients and family	a. Specific information patients need
			b. Reinforcement of information
			c. Introduce patient to recovered ones
			d. Use of patients' preferred language to provide information
	Theme Three: Providing needed information	1. Factors enhancing the provision of information	a. Multidimensional communication
			b. Knowledge upgrade
			c. Limiting preconditions and behaviours
			d. Time management
			e. Evaluation of information provided

Table 5.2: Summary of Themes and their Respective Categories and Sub-Categories

Objective	Themes	Categories	Sub-categories
		2. Challenges in informing patients and family	a. Inadequate time
			b. Staffing: inadequate and inexperienced staff
			c. Preconditions and behaviours of staff

5.3.3 Theme One: Patients behaving differently

This theme decribes different behaviours of patients who experience preoperative anxiety. Preoperative anxiety is a state of emotional distress, which patients who have decided, booked and admitted into the Surgical Ward/Surgical Suite (SW/SS) to be prepared to undergo surgery often experience. Most patients experience preoperative anxiety differently owing to factors including it being their first time to be operated and fear of undesirable consequences such as complications, pain after the procedure, inability to care for self, and even death. The thought of these aforementioned factors causes anxiety among patients prior to surgery in that they serve as threats to the wellbeing of patients. In this study, participants generally agreed that patients undergoing surgical operations experience preoperative anxiety. The study found that there were significant differences in the way participants described the preoperative anxiety patients behave differently. This theme is divided into the following four categories: 1. Fear of the unknown, and 2. Emotional stress. Nurses need to be aware of patients behaving in the aforementioned ways to enable them explore for information needs. The general views of participants concerning how patients experience preoperative anxiety are presented in the following quote:

> *Errm, preoperative anxiety that most patients experience in this ward has to do with fear. You know, fear moves with something, which one has never been experienced. And surgery itself carries fear due to factors associated with it, such as pain, anaesthesia, complications and sometimes the hospital environment itself. And so coming to the hospital alone puts some fear in him or her. For all you know, in the lifetime of the patient, he or she has never been admitted to the hospital. Another fear factor is about death. Sometimes, it is as if when you are booked for surgery, you have signed your death warrant.* N3

5.3.3.1 Emotional Stress

Stress is described as a normal reaction to the pressures of everyday life. Worry, fear, anger, sadness and other emotions are also all normal emotional responses that are part of life. However, if the stress that underlies these emotions interferes with patients' ability to listen to or to cooperate with the nurses or other health workers, and with the ability to remain calm and have enough rest to undergo surgery, it becomes unhealthy. The study recorded that emotional stress often affects patients' thoughts, their interactions, and makes them uncooperative with the nurses. These diverse forms of manifestations are presented in the following: a) tension, and b) intellectual distraction. However, the general experiences of patients regarding emotional stress is presented in the following quote:

> *So, generally patients are often unable to stand stress that comes with surgery, especially when the time for the procedure is so close. At that particular moment, you see them become tensed such that whatever you tell them falls on death ears because their attention is somewhere else and not on what you are saying. And sometimes they are unable to retain simple instructions and they keep asking you the same question a number of times.* N7

a. Tension among patients – Tension is the psychological strain experienced by patients usually before undergoing a surgical operation they consider as a threat to normal function and life. It becomes an emotional stress that causes the patient to experience some physiological manifestations. Participants described that some patients exhibit behaviours that mimic tension in the course of interactions. This is demonstrated in the following statements:

> *So some of them often become tensed that you virtually have to do everything for them. I was asked to help another man to sign a consent form. After explaining the reasons for the consent form and showed him where to append his signature, he told me that he*

preferred to thumbprint because his hand was shaking that he would not be able to hold the pen to sign. N3

And some become so tensed that they perspire a lot, others will be turning to one side, I mean their body language itself, the facial expression all suggest that they are really anxious. N6

I saw one woman who was scheduled to undergo myomectomy moving in and out of the ward. You know, one of her history at the time of admission was bleeding because she came in with fibroid uterus. When I saw her in that way, I even became a bit angry at the way she was going in and out of the ward. She told me that she couldn't sit when one nurse came to tell her to be ready to be sent to the theatre. Meanwhile, I thought she was going out to change her soaked pad. N8

b. Intellectual distraction – Intellectual distraction is a cognitive disorder that pre-surgical patients experience. It is characterised by the inability of the patient to concentrate on the topic of discussion or interaction. The preoperative period consists of eventful activities, which require the patient to cooperate in aid of the nurses attempting to identify and manage their preoperative information needs to eliminate or reduce preoperative anxiety. In such a situation, patients are observed as lacking the ability to focus their minds on the topic of interaction, are unable to make decisions, are not able to express their concerns and, at times, they only have their minds fixed on perceived undesirable outcomes of the operation. Continuous existence of intellectual distraction could lead to a rise in vital signs readings. Data from the study describe participants' responses in terms of how patients who are anxious exhibit intellectual distraction. These are described in the following comments:

Mmm… usually, when they are anxious, they would be giving you some non-verbal cues, that is when you are talking to them, they would be looking elsewhere or they'd be sighing and, you know, in between their words. N1

At times they keep asking us questions like, 'so will I be ok after the procedure?' and 'I heard that this person went through the procedure and there were complications'. N3

And then for the vital signs also, anxiety or nervous patient, who is previously or neither hypertensive begins to record high values of vital signs especially, the BP. When this happens, you can tell that the patient is anxious. N8

5.3.3.2 Fear of the Unknown

Fear is said to be an unpleasant feeling, which is caused by the perception of an impending danger. Patients who have never had surgical operations often develop fear of not knowing how the surgery would end, that is, whether they would be cured of their condition; how painful their incisional sites would be, and whether they would come out of the operating room successfully or would die in the process of the procedure. All these doubts and uncertainties lead to fear of the unknown. Sub-categories that emerged from the study include: a) lack of accurate information, b) fear of the procedure, and c) fear of the environment, complications, and death. The experiences of the participants regarding preoperative anxiety are unique, as presented in this study. These are illustrated in the following statement:

Well, err… anxiety… is partly caused by unknown outcome of the surgical operation and then… err knowledge deficit pertaining to the surgical procedure itself. N8

a. Lack of accurate information – In surgery, information comprises facts and realities governing the conditions necessary for patients to undergo the procedure. Patients who are provided with such information mostly receive the hope that the surgical operation will end

well. Patients who lack such information mostly develop uncertainties and doubts concerning the outcome of the procedures. Since patients are mostly with their family and friends rather than with nurses and other health workers, there is almost always a high probability of receiving inaccurate information from them. In the study, participants expressed how lack of accurate information could lead to emotional stress. This is illustrated in the following excerpts:

> *Sometimes they don't have enough information. Because they don't know, you know, that is what makes them anxious.* N1

> *…but mostly when you ask the patient whether they know something about the surgical procedure, they would tell you, 'I don't know how the procedure is going to be done'. Then some would ask you that, 'so when I go to the theatre, will I come back? Is it going to affect some of my body parts?* N7

b. Fear of the procedure – Most patients have fear for the surgical procedure pertaining to unforeseen facts and misconceptions about the procedure itself and the outcome. From the study, participants' responses on fear of the surgical procedures centred around patients' thoughts of the procedure having a 50 per cent chance of dying and a 50 percent chance of surviving, and of the uncertainty patients have towards the procedure. These are described in the following quotes:

> *The next thing is the surgical procedure itself, the intention we know is positive and it's intended to yield positive results, but because we are humans, we tend to think the other way round, meaning it can be a 50:50 situation.* N2

> *Uumm, the uncertainty about the outcome of the surgery, that's what makes them anxious, mainly. They are uncertain about the outcome. Yeah, basically, that's the main thing.* N4

Also, sometimes the mere mention of the surgery or the surgical procedure, sometimes the name itself scares them. And most of the time they don't get access to the theatre and ideally, the patient should have been to the theatre at least once or twice to see how the settings look like. But here is the case about 99 per cent of them don't get access to the theatre except on the day of surgery. N5

c. Fear of environment, complications and death – As has already been described, patients are generally afraid of the hospital environment which they find intimidating. Patients are often intimidated by the environment that is entirely different to the environment in their homes and also at their workplaces in terms of how they relate to their family and friends. In the hospital environment, family and friends are mostly not around and so there is a lack of a warm relationship. The sight of other patients in various states including pain or unconsciousness instills much fear in the patients. Upon seeing occurrences of such environments, most of them develop the thought of ending up like those they have seen. From the study, participants described how the environment creates fear in patients. This is found in the following excerpt:

The first thing is the environment, it's not the same as their domestic environment and the theatre itself, the gadgets that they use in the operation room also put some sort of fear in them. N2

Additionally, participants described how complications and the death of certain community members caused fear in other members of the community. This is illustrated in the following quote:

And in certain communities like here, if a pregnant woman comes and then for instance, maternal death occurs and you happen to book another patient for CS (caesarean section), she would be scared and because it's a small community, she might have heard about the death. N3

5.3.4 Theme Two: Assessing Patients' Preoperative Anxiety and Information Needs

This theme describes nurses reactions upon becoming aware of patients behaving differently to preoperative anxiety. Nurses react to patients' behaviours by assessing preoperative anxiety and information needs. Assessment and management of preoperative anxiety and information patients needs requires the collective efforts of both the nurses and the patients. This is achieved through nurse-patient interactions which is unavoidable activity that automatically ensues between the patient and the nurse. If it is carried out well, it will enhance the identification of preoperative information needs. Generally, participants disclosed in the study that nurse–patient interactions commence the moment patients arrive at the ward:

> *"So, when the patient gets to you at the ward, you read through the folder to understand or to get to know why the patient is coming there, what procedure is the patient coming to do. So, upon the admission process you can find out from a patient why he is even coming to the hospital for admission" (*N5).

a. Encourage patient to raise concerns – In an attempt to identify the causes of preoperative anxiety that are mostly observed, the nurse must encourage the patient to express what he or she is worried about and for which he or she presents the observable manifestations of anxiety. Various steps exist in encouraging patients to express concerns. They include: establish a therapeutic relationship, treat patients as individuals, interrogate patients, assess patients' knowledge of their condition and procedure, and observe patients. From the study, participants described how a therapeutic relationship is established. This is illustrated in the following quote:

> *Before you begin to talk to the patient, you need to introduce yourself that, 'I'm this, my name is that and this is what I do in this ward.' So, after introducing yourself to the*

patient, the patient may have the feeling that he or she is in the hands of a competent nurse in the facility. N7

Participants in this study stated that nurses must treat patients as individuals to be able to assess preoperative information that patients need. This can be seen in the following comments from the participants:

Mostly we address them by their names, we don't call them by their diseases or conditions and mostly because they are elderly you have to address them by a title or else some of them wouldn't mind you because you are not his or her age mate for you to call his or her name by anything or anyhow. N3

In trying to ascertain the causes of preoperative anxiety, an interrogation is one of the steps that participants reported to be using. This is illustrated in the quote below:

So, you see upon my questions to the patient, it will bring one or two responses from him. You will see that the patient would say it and you may respond as, 'aha ɛno na nka me bɛbusa wo no (yes, that is what I was going to ask you)'. Either the patient will come up with what he thinks is the problem or he will tell you. N5

On the other hand, participants reported that patients who are eager to know what is wrong with them do not wait to be interrogated by the nurses; they rather ask the nurses. This is seen in the following quote:

Yes, they ask, but not all of them do, some do ask. They are sick, and that's why they come to the hospital, but they don't know their diagnosis, they don't know what is worrying them. So, they first ask you that what is wrong with him, ahaa. So, you check their diagnosis and you educate them on their condition. N4

Another step participants reported to assess the preoperative information needs of patients is assessing patients' knowledge of their condition and of the surgical procedure they are willing to undergo. A response is seen in the following comment:

> *If you think everybody knows about their condition, it's a mistake. Upon that you can say, 'okay agya (father), you said you don't have a question, when you go to the washroom and after using the toilet what will you do?' You will see that the patient would say it. So, you try to get the patient's knowledge on what he is going to do and you base on it, make corrections, make additions, and I think it works.* N10.

b. Clinical observation of patients – Clinical observation is the process of learning about the condition and behaviours or manifestations that patients exhibit related to their conditions. It is an important skill that nurses depend on to identify the preoperative information needs of patients. As part of admission procedures and patients' preparations for safe surgery, it involves the use of vital signs, inspection, palpation and auscultation. When these skills are combined with interactive care, they help nurses to be able to identify preoperative information needs. From the study, participants described clinical observations as including: checking the vital signs, and observing patients for peculiar behaviours.

Checking vital signs – In the preoperative phase, vital signs are not only checked to serve as a baseline measure, but also as a measure to ascertain preoperative information needs. A participant's response in terms of vital signs observed is illustrated in the following quote:

> *So, as I check the vital signs and the figures are high, they are an indication that the patient is anxious.* N2

Observe patients for peculiar behaviours – Patients who are anxious exhibit behaviours to that effect. Participants reported such behaviours, which are normally observed among patients. This is illustrated in the comments below:

For some patients, their facial expression alone shows that they are anxious. So, we just go close to them and find out from them whether he or she knows about the condition or not. N6

and then sometimes you can rely on your clinical experience to identify some of the signs and symptoms of anxiety and then you try to deal with it accordingly. N8

5.3.4.1 Validation of Information Needs

Validation is the process of confirming the accuracy of the identified preoperative information needs of patients. It involves the presentation of these findings to the patient, by which their views are sought in accordance with the causes of preoperative anxiety. This process not only leads to the identification of actual preoperative information needs, but also identifies appropriate measures to manage preoperative anxiety. This category is divided into two sub-categories, which include: a) importance of information to patients; b) feedback from patients; and c) fear of complications. Generally, participants' responses on validation pertain to providing patients' information, which encourages patients to reveal their concerns related to the causes of preoperative anxiety. This is illustrated in the following quote:

The information we give to patients always makes them alert. Because they always look at the positive side and if they notice any negative signs, they easily report back to the facility to help us know early and manage those signs or dangerous conditions that would be happening. N2

a. Importance of information to patients – Patients accept information that is important to them and iscapable of meeting their information needs. From the study, participants assumed that the information nurses provide prior to surgery, on which they depend for validation, is important to the patients This is expressed in the comments below:

Yes, the information is important to the patients because even prior to the surgery, the person or the patient can even describe the whole procedure to somebody who he or she wants to share that information with. N2

Oooh, those teachings, they really need it because they mostly don't know how the operation is going to be done at the theatre. They also don't know whether they would survive or not and how they would be expected to live after going through the surgery. This is due to most of them lacking knowledge in all these things. So we assume that they need to be taught that. N7

If they are taught about how the surgery is going to be performed, it would help them know what surgery entails and that would help reduce or relieve them of their anxiety reduce. N9

So, you realise that when they understand the information we provide it makes our work go on smoothly and they also become relieved of anxiety and doubts. In addition, whatever they see and experience after they have had the surgery, they quickly report it to us to take quick actions. And this is how I think that the information are important to the patients. N10

b. Feedback from patients – Feedback is the provision of a response or responses in the process of interactions between the nurses and the patients. Feedback is necessary for validation and in decision making in terms of the kind of preoperative information to provide. From the study, participants indicated that nurses depend on the ability or inability of patients to understand information provided for validation. This is outlined in the following quotes:

The patient will really come out that, 'yes because I don't know what is going to happen at the theatre and I don't know what they are going to do, I don't know this, I don't

know that.' So, depending on these answers, you would know that the patient needs information on the surgical procedure. N2

If the patient really understood what you told him or her, the patient will give you the right answer, but if the patient does not understand, the person will say something else, please do you get it? N3

We give them room to be able to ask questions because it is questions on what is bothering their minds, that is what is causing the anxiety. So, we give them room to ask anything that is bothering them… N4

So, let's take a patient complaining about something like, 'oh I'm scared about the pain I would experience after surgery'. In that case we have to plan and inform him or her specifically on the pain management. So, if not because the patient has exhibited anxiety about pain, we would just give general information on the operation. N11.

c. Fear of complications – Some patients sometimes feel obliged to undergo surgery if they think that delay on their part would lead to complications. Participants indicated that nurses determine the kind of information to provide to patients based on patients' fear of developing complications. This is demonstrated in the following quotes:

A young lady that was going to have surgery on her reproductive system was so anxious and asked me that, 'will I be able to have babies after the operation?' Things like this make some of them curious. Sometimes they want to know and if we tell them, they become relieved. N1

And sometimes we are able to tell the specific information they need because there was a patient I was preparing to undergo surgery, I made him aware that it was necessary

that he undergoes the surgery to prevent the spread of the cancer and to improve the outcome. So, after speaking to him, he thanked me and then changed his mind and consented to have the surgery. N4

5.3.4.2 Process to Inform Patients and Family

This is the plan of action nurses that embark on to provide information to patients and their family members prior to their undergoing surgical operations. This is done with the aim of managing patients' preoperative anxiety. Such strategies are designed in many forms. In this study, strategies often used by nurse to inform patients are presented in the following sub-categories: a) specific information patients need, b) reinforcement of information, c) introduction of patients to recovered patients, and d) use of patients' preferred language to provide information. These strategies are supported in the following quotes:

Erm, you cannot just get up and say you are going to inform the patient about the condition or the surgery. You need to prepare, okay, you need to prepare else you would just go and compound the patient's anxiety state. So, first of all you need to know the patient's conditon and the type of operation he or she is going to have. You also need to know the literacy level of the patient, so you don't use jargons. So I think that you need to prepare in this manner to inform the patients. N3

a. **Specific information patients need** – This comprises information that is unique to the individual needs of patients. All patients do not need the same type of information at the same time and for the same purposes. From the study, participants indicated that patients normally desire to be informed about their condition, the surgical operation, and postoperative pain. This is shown in the quotes below:

The patients often need to be informed about their conditions as well as the surgical, the operation. After they had been admitted, most of them come to you asking us

questions concerning the success of the procedure. And we also give them reassurance. N1

Well, err, some of them are much more eager to know the outcome of the surgical operation and it means that they have knowledge deficit pertaining to the surgical procedure. N8

Generally, they anticipate pain since their bodies are going to be dissected and they become more concerned about pain if the procedure involves loss of body part in amputation. N11

b. Reinforcement of information – This is the act of strengthening or stating that information that patients have been given by the surgeon in the consulting room in a format that is easily understandable. This act is necessary in that surgeons only spend few moments with patients in the consulting room to be able to attend to a number of them waiting their turn to be seen. The quotes outlined below describe how nurses reinforce information:

Another thing is inter-professional collaboration. I might not have an idea about the condition under which the patient is going to be operated. And more so, I may not know the specific information the patient had been given by the doctor at the consulting room. So if you are not careful, you might contradict whatever the doctor had discussed with the patient. And so what I normally do is I refer the patient back to the doctor for reinforcement. N2

Yes, but because you are not the one that is not going to dissect the skin, you can't give specific details as to how the procedure will go. So we give a general overview of what the procedure is and that's all. N4

We just find a way to talk to the patient and also try and refer the patient to the appropriate health person who can explain things to him or her better. I think that one will help because most of us are general nurses and some of the cases are special cases, yeah. N6.

c. Introduction of patients to recovered patients – This act involves sending patients who are yet to be operated to meet those who have already undergone surgery and are recovering, to interact. This is done for them to share their experiences and also to inform the patient about the upcoming surgical procedure. The views of the participants are displayed in the following quotes:

The patient is also introduced to the staff. It should've been like he (patient) is booked three weeks before the surgery. You (patient) are booked three weeks ago and the surgery is scheduled to be performed the following day and then I see you the night before the surgery. It will be very difficult taking you through whatever you are supposed to know before undergoing the procedure. N2

And sometimes too if the patient is admitted before the surgery, you can take the patient to patients who have undergone similar or same surgery. Then you can allow them or you can introduce them and allow them to chat so that the one who has successfully undergone surgery can share the experience and upon doing that, he or she might feel more comfortable and have more understanding. N5

Also introduce the other colleagues and the patients who have gone through the procedure before, so that the patient may feel he is in the hand of competent health worker at the facility. N7

d. Use of patient's preferred language to provide information – Provision of information is much appreciated if it is done in the language that can be well understood by patients. This is significant with pateintrs of different ethnic and educational backgrounds. Participants' responses on the use of preferred language in the provision of information are demonstrated in the quotes below:

> *Mmm… mostly some of the patients that do come to our facility here are not Ashantis (indigenous people) and so language is the barrier, yeah. Most of them are French and some are Fulani. Because we can't speak French and Fulani, we look for someone who speaks these languages to be the interpreter*. N3

> *We try to be a bit detailed, adopt the medium, language or medium to help the patient to understand as much as possible and we leave it at that level and then we move on in the absence of patient seeking further clarifications or questioning or something of that sort.* N8

> *And we do have pictures and with inscriptions in languages like French, Hausa, Togolese languages and Fanti, yeah. So when patients who don't speak the local dialect come around, we show them these pictures according to their language to be informed*. N11.

5.3.5 Theme Three: Providing Needed Information

Providing information is an act of nurses actions to make patients aware of activities they would be engaged in response to preparations and management of anxiety prior to surgical operations. Information plays a major role in dealing with preoperative anxiety among patients and its provision is not only assigned to a category of health workers, but to all health workers. Nurses form the majority of health workers who are with patients at every moment of the

patients' admission. This puts nurses in positions to inform and /or to educate patients and family members. This theme is divided into two categories describing the steps nurses embark on in patients' education. These are: 1. Factors enhancing the provision of information, and 2. Challenges in informing patients and family.

5.3.5.1 Factors Enhancing the Provision of Information

Provision of preoperative information to patients by nurses requires certain conditions that could influence or contribute to its effectiveness. It is essential that nurses stick to these conditions to achieve the aim of informing patients because patients possess unique characteristics including age, ethnicity, and level of education that must be met in this process. Conditions that emerged from the study are moulded into the following sub-categories: a) multidimensional communication; b) knowledge upgrade; c) limiting preconditions and behaviours; d) time management; and e) evaluation of information provided. Participants' general comments on the aforementioned conditions are illustrated in the following quote:

> *Err, it is not good for only nurses to inform the patients because if we take the surgical team, it doesn't include only nurses. There are surgeons and anaesthetists as well. So these health professionals each have their roles to play in informing the patients. Another thing pertains to the process of informing the patients. You know, most of the patients have never been to school before and so, for such patients, you really have to come so low to their level to be able to make them understand whatever you are teaching them.* N7

a. Multi-dimensional communication – This is an interaction and a collaborative effort between a team of health workers such as nurses, surgeons and anaesthetists, in playing their unique roles to educate patients for a successful surgery. It also involves the use of systems such as information technology devices, protocols and policies governing procedures, and the

medium of communication, especially for patients who may need interpretation. Data from the study generally reveal that multidimensional communication includes the use of IT devices in transferring information to patients, a link between nurses and surgeons in the provision of information, the use of the preferred language of patients to convey information, and the role of hospital administration to enhance the education of patients. These are demonstrated in the following quotes:

> *… at times some of the nurses have these, err… err, medical series on their laptops and then I think some of them even have some on their phones, if the patient wants to have a look at how the procedures are done. At times, some of them are able to show that, 'his is what you are going to go through, and because it is a movie, they really get to know what they will go through because they are able to see something*. N3

> *Visually, audio visual gadgets… patients are able to appreciate it the more even if you are not able to explain it in a language the patient can understand. Once they are seeing it, it really enhances their level of understanding. N8*

> *And again, even if we don't have a one-on-one talk with the patients even on the wards, there should be videos, video clips for them to watch. So, if after watching, they have any questions, we can address them. So, I think seeing is also believing.* N2

> *I think we have to link up. The chain of care, it should be linked between nurses and other health workers. If we have surgeons on the surgical block, then ideally all the patients that they see and are preparing for surgery should be introduced to all the staff.* N2

> *And then sometimes we try to work in a teamwork, to use teamwork, where all the multidisciplinary team will come, so that everybody will bring some form of expertise*

and then whatever problem that one has specialised in, the person will be able to provide a solution to, with a particular problem being dealt with. N8

And again, performance management, because if you know the strengths and the weaknesses of your staff, I think you wouldn't delegate wrongly based on what the person is supposed to do or the strength the nurse. N2

Ok, inability to understand the patient's language or he/she unable to understand mine means I have to get someone who can translate whatever I say to him/her. Whatever I say, the person can translate it for the patient to understand; likewise what the patient says. That will make the communication simple for the patient and we the nurses. N7

b. Knowledge upgrade – Nurses acquire additional knowledge, which is modern information and the new trends in patients' care. These are achieved through further studies in higher degrees, attending in-service trainings, workshops on new trends in patients' care, seminars and the nurses' own effort to read during leisure periods. Knowledge forms the core of effective patient education. It was discovered that knowledge upgrade is a necessity and must involve the efforts of the individual nurses and the nursing/hospital administration. The participants' view on the necessity of nurses upgrading their knowledge is found in the following quote:

Day in; day out, we are saying let's make nursing dynamic, things are changing. So what are some of the things that have been added to the body of knowledge in pre-op preparations? You know the old things from completing school 15 years ago, but what is going on now? We should be reading. If we too acquire new knowledge, we can add up to the one we already have. N5

Concerning nurses' efforts to upgrade themselves, this is what participants had to say:

So, I think leadership also matters in this issue. And with good leadership, nurses' educational needs would be met. If it is time for you to go to school, your leader understands that you need a particular skill to work on the ward. So, by allowing those who are due to go to school, it would help us a lot. If not, we would just remain in our A B C, that is, come to work, close, and you go home or you come out and that ends the story. N2

On the other hand, participants indicated that nurses may not need to attend structured programmes to upgrade their knowledge; rather, they could do so while they are actively working at the SWs/SSs. This is illustrated in the following quotes:

Sometimes we have to Google and read. And if you are Google on the ward, some of your superiors, errm, as soon as they see that you are with the phone or you are looking unto it to check something, they become angry, but sometimes we need to research for new things and learn. Because there are certain procedures that we may not be familiar with, we don't know, we have never even heard of it before. So, you need to check and then get some understanding about it, but for majority of the cases, through experience on the ward, we are able to identify and then educate the patient on it. N4

With regard to efforts by the nursing/hospital administration to upgrade the knowledge of nurses, the following quote showswhat the participants expressed:

So, the nurse directors and the hospital administrators should come up with plans for these things, like let's say every month maybe two nurses from this unit will go for workshops and in-service trainings and they should finance that. Because when the output is good it helps raise the image of the hospital. N6

c. **Limiting preconditions and behaviours** – Preconditions mostly pertain to distressing situations nurses are faced with outside the domain of the ward setting. Behaviours in this

context refer to ill behaviour and / or poor attitude that nurses exhibit towards patients in terms of their preoperative care and responsibilities in general. As part of human life, it is normal for nurses to go through distressing situations both at the domestic level and also in the wards, which may be due to the burden of overwork. It becomes problematic when nurses are not able to handle their personal emotionally distressing issues and rather place the focus of their stress on patients under their care. Generally, it emerged from the study that preconditions and behaviours could be limited, as illustrated through the quotes below:

> *There are some nurses who are proactive. Even when the patient has not asked, they will approach the patient and give them some form of education about why they are there, especially during admission or even after admission.* N4

Confidentiality is vital in building a trusting relationship with patients. A participant's view on confidentiality is illustrated in the following quote:

> *… they should trust the nurses and the other healthcare professionals, you know. If you are somebody who talks too much on the ward, you talk about other patients, they will lose confidence in you, ok. So, assure them that, you know, 'the information you are giving me is confidential.' Nobody wants his or her diagnosis out there in the ward known by everybody. And that is why I said you act what you say: 'you are telling me that the information I am giving you is confidential', meanwhile you are discussing another patient with another nurse in front of me so that one I won't believe you, mmm. So, you know, we should be approachable first of all and let them build trust and confidence for the patients to be able to approach us.* N1

Nurses as humans have feelings, which must be controlled in the field of practice. Participants' responses concerning confidentiality are shown in the comments below:

So, I think, though you might be moody from your house or from your home, when you get to the ward, you are there because of your patients. So, as you are there because of them, you should create a warm environment so they can easily approach when they have any problem or that sort. N3

We should be able to keep our composure in stressful moments when the duty demands are so much because we really stand between the patient and probably some distressing situations. We are the ones the patients look up to, their only source of hope, you know. So, at any given point in time, we should be ready to answer in a manner that gives the patient some hope, so that they will be able to cope with whatever situation they find themselves in. N7

d. **Time management** – Time is a precious commodity when preparing patients to undergo surgery. Nurses work with time from when they report to the wards to begin their responsibilities to the time they leave. And with preoperative preparations for surgery, time management is vital in that surgeries are performed with time. Mismanagement of time can affect patients' preparations, induction of anaesthesia, surgical procedures, and the outcome. Participants provided their diverse views on how they manage time in the preoperative preparation of patients. It emerged that time management involves: planning of patients' care, developing the attitude of providing information, and dispelling misconceptions.

In managing time, participants responded that preoperative preparation must be planned. Participants' opinions are illustrated in the comment below:

Enough… hmmm, the word enough… at least if it is a planned case, the patient will stay on the ward for at least 24 hours. So, within that 24 hour I think it's enough time to, you know, tell the patient whatever you want to tell him or her. We have enough time. N1

Developing the attitude of providing patients with information becomes part and parcel of what nurses do. The following comments are what participants had to say:

> *… developing the culture of giving them the information they need even if they don't ask. I think that in a way will help us bridge the gap that we are having now.* N2

Most patients come to the hospital harbouring information which may usually be inappropriate. Participants' opinions are shown in the following comment:

> *Mostly, there are information centres in these communities, so the nurses should use them. And it's all about devotion, it's all about devotion because I think there should be some motivation for these nurses for going to make these announcements, and education. Because they are feeding the people with the wrong information, I think we the nurses and the health staff, we should also go there and then correct the wrongs. Because always they have been feeding them with the wrong information.* N3.

e. **Evaluation of information provided** – This is the process of obtaining feedback on patients' education. Education is given in the management of preoperative anxiety. Evaluating education determines whether patients' anxiety has been eliminated, reduced or is still existing. From the study, participants revealed that evaluation involves the feedback that nurses obtain from patients and patients being alert for adverse signs in the postoperative period. These are demonstrated in the texts and excerpts displayed below.

Participants asserted that feedback in the form of responses from the patient determine whether the patient has understood the information provided. This is found in the following excerpt:

> *First of all, they would paraphrase what you have said to them. You encourage them to tell you what you have told them by way of paraphrasing. They can't quote verbatim but they can paraphrase.* N1

It was described in the study that preoperative education is evaluated when patients are able to tell whether their condition is worsening or something untoward happens. This is illustrated in the following quote:

> *Mmmm, with my experience about clients undergoing surgery, those who are not given the needed education may sometimes attempt to remove the gadgets fixed on them when they regain consciousness. Example, a patient may have nasal prongs for oxygen, catheter and gadgets like that. When they are back to consciousness, they may try to remove them or they may even attempt to hold the incisional site and be fidgeting with it. So, when they are educated before undergoing the surgery, they will be well equipped with information to prevent that.* N5

5.3.5.2 Challenges in Informing Patients and Family

Challenges are limitations or circumstances that hinder planning and the need to inform patients prior to undergoing surgery. These challenges may pertain to limited time, the knowledge level of nurses and their communicative skills. Emerged sub-categories under this theme include: a) inadequate time; b) staffing: inadequate and inexperienced staff and c) preconditions and behaviours of staff. Generally, participants' opinions on challenges centred on circumstances denying patients from receiving information. This is illustrated in the quote below:

> *At times when they come because of the limited nurses at the ward, we just tell them, this is your ward, we don't take them through the psychological preparations and the preparations. No we don't, we just show them their beds, we tell them their medications and stuff, we don't even introduce them to someone who has gone through the procedure successfully and has recovered. We just don't do it at all.* N10

a. Inadequate time – As has been stated in the study already, time is precious in the preoperative management of patients' information needs. Inadequate time is demonstrated in the following quotes:

> *Enough… hmmm, the word enough… at least if it is a planned case, the patient will stay on the ward for at least for 24 hours. So, within those 24 hours I think it's enough time to, you know, tell the patient whatever you want to tell him or her. We have enough time.* N1

> *We don't get time for our patients to educate them. If they are informed well, they would see the need to come earlier or to stay on the ward…* N3

> *We don't have adequate time because the patients are many and we are few. But I think that if we plan patients' care, we would have enough time to care for them. Because with a planned care, you would be committed to care for the patient irrespective of the number of other patients that are at the ward.* N4

b. Staffing: inadequate and inexperienced staff – Staffing involves stocking the surgical wards/surgical suites with adequate staff, who are experienced and who exhibit good behaviour. Staffing challenges are illustrated in the quote below:

> *At times when they come, because of the limited nurses at the ward, we just tell them, this is your ward, we don't take them through the psychological preparations and the procedures. No, we just show them their beds, we tell them their medications and stuff, we don't even introduce them to someone who has gone through the procedure successfully and has recovered. We just don't do it at all.* N3.

It also emerged that some of the nursing staffs are inexperienced. This is found in the following excerpt:

Yes, nurses… and, you know, we have a number of nurses. We have enrolled nurses, diploma nurses, and we have degree nurses. So, it can be like, on a shift, because we are limited, two enrolled nurses will be on duty and, as I said earlier, for the enrolled nurses, they don't dive deep into surgery, theirs is to assist us. So, if you should have two or three enrolled nurses at a shift, they don't know much about the surgery or the surgical aspect. N3

c. Preconditions and behaviour of staff – Preconditions and behaviour of staff relate to disturbing and emotional issues that staff bring to the ward and to poor attitude of the staff. A participant's description of preconditions and behavioursof staff is seen in the following quote:

Yes, it's about our attitude. Some of the nurses are rude, it's… it's individual differences and this is my personal view. Some of us are rude. Even the… the patient approaching you is a responsibility. The nurse comes to the ward with a frowned face. So, such a person isn't easily approachable. N3.

On the other hand, some participants were of the view that some nurses behave poorly towards their patients owing to certain circumstances. This is illustrated in the following quote:

Individually, nurses' attitudes differ. I may have a nice way of talking to a patient and not all staff will have that kind of patience. Sometimes some staffs are under stress and so they talk to patients as such. So, a patient may feel like, 'oh this nurse doesn't have patience, I would have to approach and talk to the one who is patience'. N7.

The main findings obtained under this category described different behaviours of patients who experience anxiety, the nurses' reactions by assessing preoperative anxiety and information needs of patients and providing needed information to patients. Different behaviours of patients included emotional stress and fear of the unknown which are exhibited in forms such as tension and fear of procedure. Nurses react by becoming aware of patients'

behaviours and assess for preoperative anxiety and information needs by interacting, validating and delineating the process to inform patients and family.

5.4 Category Two: Findings Obtained from Participant Observation Using Checklist and Field Notes

Participant observation was conducted using a checklist and field notes to achieve the objective, *to explore and describe the practices of nurses on how preoperative information that patients need is managed*. This phase is divided into two sections. Section one observed 20 nurses with a checklist while they admitted and prepared 20 patients to undergo surgery. The checklist was constructed with literature and the Deliberative Nursing Process (DNP) theory, which underpinned the study. Section two observed eight nurses admitting eight patients to undergo surgery, after which field notes were made about the observed practices of the nurses.

5.4.1 Demographic Characteristics of Participants Observed with Checklist

Of the 20 participants observed, 13 were females, 10 were between the ages of 30 and 34, while eight had worked at the SW/SS for between two and four yearas. Fourteen of them were Registered General Nurses (RGN) and 11 had diploma certificate as their level of education (Table 5.3)

Table 5.3: Demographic Characteristics of Participants Observed with Checklist

Variable	Frequency
Gender	
Male	7
Female	13
Age	
20–24	1
25–29	5
30–34	10
35 and older	4
Years in practice	
0–1	5
2–4	8
5–9	6
10 years and over	1
Category of nurse	
General Nurse	14
Midwife	4
Health Assistant Clinical	2
Educational Level	
Health Assistant Clinical	2
Diploma	11
Degree	7

5.4.2 Demographic Characteristics of Participants Observed with Field Notes

Eight nurses were observed admitting and preparing eight patients to undergo surgery. Five of the eight nurses were males, five were between the ages of 25 and 29, while five had worked at the SW/SS for between two and four years. Additionally, seven were RGNs and five had diploma certificates as their level of education (Table 5.4).

Table 5.4: Demographic Characteristics of Participants Observed with Field Notes

Variable	Frequency
Gender	
Male	5
Female	3
Age	
25–29	5
30–34	3
Years in practice	
2–4	5
5–9	2
10 years and over	1
Category of Nurse	
General Nurse	7
Midwife	1
Educational Level	
Diploma	5
Degree	3

5.4.3 Presentation of Findings

This section presents the main findings of data obtained using participant observation with a checklist and field notes on nurses to ascertain their practices regarding nurse's reaction and nurse's actions in the exploration of preoperative anxiety and information needs of patients who were scheduled to have surgical operations.

5.4.3.1 Exploring and Managing Preoperative Information Needs of Patients

This section observed nurses' reaction and actions in exploring and managing preoperative information need sof patients. Nurses were observed and rated according to a checklist and observed by taking field notes. Results of both techniques have been comparatively merged. Of the 20 participants observed according to a checklist, 14 interacted with the patients during the admission process. Findings from the field notes revealed that seven of the participants interacted with the patients. However, the interactions centred on nurses asking patients for their particulars, including their name and profession.

From the checklist, it was discovered that five of the 20 participants observed patients exhibiting signs of anxiety. Findings from the field notes confirmed thoseof the checklist with three of the eight participants observing the patients to be anxious, thus being quiet or depressed and others asking questions depicting fear of surgery being unsuccessful. Three of the participants probed patients for the causes of the patient's manifestation of preoperative anxiety. In the same way, data from the field notes confirmed those of the checklist with only two of the eight participants trying to identify the reasons that patients were exhibiting signs of anxiety.

The checklist discovered that only one nurse asked a patient if his observed manifestations were as a result of the lack of information on surgery. Data from the field notes revealed similar findings with three of the eight participants trying to ascertain if the patients' anxiety was due to the lack of information on their condition and the ensuing procedure. In the process of identifying the information needs of patients, one of the 20 participants mentioned possible areas of surgical experience on which patient probably needed to be informed. Of the three who were observed to be probing their patients to identify information needs, one of them suggested that the patient needed to be given some form of education.

Three participants suggested to the patients they handled that they might need information on surgery, which they confirmed. However, one patient who did not receive any suggestions declared to the nurse that she wanted to be informed about the surgery she was going to have. From the field notes, none of the participants was observed to suggest to the patients that they might need information. From the checklist, eight of the 20 participants took steps to provide patients with information. However, from the field notes, two of the nurses made efforts to provide patients with information. Findings from the checklist discovered that four of the 20 participants provided patients with some form of information. However, five of the eight participants provided patients with information to relieve the patients of emotional

stress. Additionally, the information they provided included reassurance, competence of the surgical team and the success of the surgery (Table 5.5).

Table 5.5: Practices of Exploring and Management of Preoperative Information Needs

Item	Yes	No	Total (n=20)
Nurse admits patient into the ward	20	0	20
Nurse interacts with patient during admission and performs other procedures	14	6	20
Nurse observes patient exhibiting signs and symptoms of preoperative anxiety	5	15	20
Nurse probes patient for the causes of patient's manifestations of preoperative anxiety	3	17	20
Nurse asks patient if his/her manifestations observed are as a result of lack of information on the surgical experience	1	19	20
Nurse mentions probable areas of surgical experience on which patient is likely to need information	1	19	20
Patient responds to confirm what the nurse has asked	4	16	20
Patient tells nurse areas that he/she needs the nurse to provide him/her with information	5	15	20
Nurse takes steps to provide patient with information	8	12	20
Nurse evaluates patient by finding out if he is satisfied with information provided	4	16	20

These findings necessitated the researcher to conduct a face-to-face individual interviews of nurses to *ascertain the setbacks in exploring and managing preoperative anxiety and information needs of patients prior to undergoing surgery*. He also tried to explore the opinion of nurses on *improving exploring and managing preoperative anxiety and information needs of patients*. This was to compensate data obtained in this category.

5.5 Category Three: Findings Obtained Through Face-to-Face Individual Interview of Nurses

This category displays data obtained from nurses on the objective, *to explore and describe the practices of nurses on how preoperative patients' information needs are identified and managed*. A total of 10 nurses were involved in an individual interview sessions using a semi-structured interview guide. This session of data collection was motivated by the findings of data obtained through participant observation with the use of a checklist and field notes. Findings obtained under phase two contradicted the findings obtained under phase one. This compelled the researcher to collect data to explore the challenges involved in how nurses explore preoperative anxiety and information of patients.

5.5.1 Participants' Demographic Characteristics

The main characters in this phase were made up of seven males and three females, with four of them being betwen the ages of 30 and 35. Akans were the largest ethnic group, comprising none while all of them (10) belonged to the Christian denomination. Five of the participants were married, of whom nine belonged to the RGN category. The distribution of the participants' characteristics is displayed in Table 5.6.

Table 5.6: Demographic Characteristics of Participants

Item	Number
Gender	
Male	7
Female	3
Age	
25 – 29 years	3
30 – 35 years	4
36 – 39 years	2
40 and above	1
Ethnic group	
Akan	9
Dagomba	1
Religion	
Christian	10
Islam	0
Marital status	
Not married	5
Married	5
Category of nurse	
Registered General Nurse	9
Registered Midwife	1
Level of education	
Bachelor's degree	10
Rank	
Senior Nursing Officer	4
Nursing Officer	5
Senior Staff Nurse	1
Number of years worked at SW/SS	
0 – 1 year	1
2 – 5 years	5
6 – 9 years	3
10 years and above	1

5.5.2 Presentation of the Main Findings

Four main themes emerged from the analysis of data obtained from nurses as participants. Each theme is divided into categories and sub-categories. Table 5.7 presents a summary of the results according to the theme, categories and sub-categories.

Table 5.7: Summary of Themes and Their Respective Categories and Sub-Categories

Objective	Theme	Category	Sub-category
To explore and describe the practices of nurses on how preoperative patients' information need are managed	**Theme One**: Setbacks in assessing patients' preoperative anxiety and information needs	1. Role confusion	a. Doctor/anaesthetist's responsibility
			b. Ward tradition
		2. Communication shortfalls	a. Language barrier
			b. Literacy status of patients
			c. Time constraints
		3. Poor nursing etiquette	a. Proud and contemptuous nurses
			b. Ill-mannered nurses
			c. Idleness and negligence
			d. Redundancy of activities
		4. Knowledge lapses of nurses in patient's assessment	a. Poor reading habits of nurses
			b. Lack of skills
			c. Dependent on doctors' instructions
	Theme Two: Setbacks in the management of preoperative anxiety and information needs	1. Lack of guiding principles	a. No ward protocol
			b. No supervision
			c. Haphazard provision of information

Table 5.7: Summary of Themes and Their Respective Categories and Sub-Categories

Objective	Theme	Category	Sub-category
		2. Inappropriate staffing norms	a. Low nurse–patient ratio and heavy workload
			b. Posting challenges
			c. Wrong assigning of nurses to wards
		3. Teamwork gaps	a. Lack of partnership
			b. Clinical conflict
		4. Nurse–patient interactive defects	a. Lack of therapeutic relationship
			b. Pride and supremacy of doctors
		5. Poor time management	a. Misplaced priorities and lack of planning
			b. Lack of division of labour and supervision
			c. No value for time
		6. Knowledge deficit of nurses	a. Deficient information
			b. Incompetence
			c. Intimidation and inferiority complex
			d. Reluctance in upgrading knowledge
		7. Lack of evaluation	a. Laziness
			b. Busy schedule of nurses

Table 5.7: Summary of Themes and Their Respective Categories and Sub-Categories

Objective	Theme	Category	Sub-category
			c. Lack of planning
	Theme Three: Improving identification of preoperative anxiety and information needs	1. Precursor of effective patient assessment	a. Obtaining sponsorship for further studies
			b. Pursuance of further studies
			c. Pursuance of unstructured trainings
			d. Development of positive attitude towards assessment
		2. Establish guidelines on assessment	a. Definition of specific guidelines
			b. Adherence to assessment principles
		3. Establish appropriate staffing norms	a. Appropriate posting of nurses
			b. Maintaining distinctive nurses
			c. Reducing nurse burnout
	Theme Four: Improving provision of preoperative information	1. Maintain skillful nurses in the wards	a. Enlist speciality nurses
			b. Train nurses on use of audiovisual devices
		2. Stimulate teamwork	a. Form partnership

Table 5.7: Summary of Themes and Their Respective Categories and Sub-Categories

Objective	Theme	Category	Sub-category
			b. Dissemination of information among health workers
		3. Requirements for effective information provision	a. Building confidence
			b. Establish support systems
			c. Delegation and monitoring of duties
			d. Regular evaluation

5.5.3 Theme One: Setbacks in Assessing Patients' Preoperative Anxiety and Information Needs

This describes gaps in nurses' reaction intended to guide them to explore preoperative anxiety. Nures' reaction occurs when they observe patients behaving in ways which are evidence of preoperative anxiety. These gaps are presented in the setbacks described below. Setbacks are events and conditions that hinder the ability of nurses to assess patients to identify preoperative anxiety and preoperative information needs. As has been recorded in several studies, preoperative anxiety has an effect on surgical outcome for which it must be identified and managed. However, patients often undergo surgery without the identification of preoperative anxiety and information. The general views of participants in the study have been put into emerged themes. The themes are further divided into categories, which include: 1. Role confusion; 2. Communication shortfalls; 3. Poor nursing etiquette; and 4. Knowledge lapses of nurses in patient assessment.

5.5.3.1 Role Confusion

Role confusion comprises the uncertainty that exists among nurses regarding the performance of their duties. Assessment of patients for preoperative anxiety and information needs involves many activities. Nurses often fail to practise these activities in that they are often confused about whether they are within the domain of their job description. This category is further divided into sub-categories, which are: a) doctor/anaesthetist's responsibility, and b) ward tradition. Participants' views, in general, concerning the above category is displayed in the following quote:

> *... who is supposed to do this? It's whose responsibility? Is it every nurse that can engage any patient and identify anxiety and the causes of anxiety? So there are no clearly defined role for us,* N7.

a. Doctor/anesthetist's responsibility – This explains the condition in which nurses perceive that certain practices are outside the domain of their job description and are the responsibilities of doctors and / or anaesthestists. Generally, participants' responses centred on reserving assessment tasks for doctors and anaesthetists to perform, which they think are not part of their duties. These are explained in the following quotes:

> *We don't assess the patients because we think that it is the responsibility of the surgeon or the anaesthetist to do that. So we reserve most of those activities for them. We think that with the explanation of the procedure to the patient must be done by the surgeon and therefore the surgeon should be the one to do the assessment for the preoperative information needs of the patient, whether the anxiety is due to anaesthesia, pain or whatever.* N1

> *In fact, we don't do that kind of assessment because we think that it is the doctors' duty which they do at the consulting room. And once they've done that, that is it, there is no need for it to be done when the patient comes to the ward. N3*

> *So from the onset it is only the vital signs that are checked and the other observation skills are left for the other healthcare workers such as the anaesthetist and the doctors to do it.* N4

> *Most of the time we think that there is nothing to assess the patient to identify what is causing their anxiety because the doctor had already done it which is their responsibility. So we doing it would be like we are going outside the domain of our responsibilities.* N6

b. Ward tradition – This refers to the culture of practice nurses have developed on the ward other than what they have been taught to practise according to the curriculum in the nursing

training colleges and their job descriptions. Nurses are often content to carry out their own invented practices rather than sticking to what conforms to their job descriptions. Participants' views on ward tradition have been demonstrated in the following quotes:

> *So mostly because of this tradition at our wards, some of us refuse to conduct those tasks even though they're important. Example is listening to the heart sounds, the breath sounds and auscultation. Because traditionally when we came into the profession, we saw none of the nurses performing those tasks as we were taught during our nursing training and so there is no motivation to also do it because of the traditional way they've been doing things and so there is no motivation….* N4

> *The next factor is ward tradition in which nurses have their own practice other than what they have been taught in school. So the nurse would just go to the patient and tell him or her that, 'maame, we are sending you to the operation room now, they are going to operate on you'. That's the usual ward practice over here instead of finding out about what the patient's concerns are. That's what he or she had come to meet the old nurses doing and so would join in to do the same.* N8

> *The third point is that they leave behind what they have learned in school and practice what they see on the ward, which are not appropriate. They throw them away. And so when it comes to the moment of carrying out certain tasks, they would say, 'oh that is how we do it over here'.* N9

5.5.3.2 Communication Shortfalls

This refers to flaws in interactions that ensue between nurses and patients. Communication is an automatic activity that begins when nurses come into contact with patients for preoperative preparations for surgery. However, certain conditions distort the smooth flow of communication between the two parties. Participants' general comments on

communication shortfalls have been grouped into the following sub-categories: a) language barrier; b) literacy status of patients, and c) time constraints. The following quote illustrates the general thoughts of the participants:

> *One is our health system; it is such that patients are not very much aware of their rights even though there are documents that have spelt out the rights of patients. So sometimes the patients are afraid to approach a nurse to ask questions about the care they receive from the nurses. There is that fear and because of that, nurses take advantage of those fears. And it means that once the patients are not asking about their condition, the nurses would also not go to the patients to identify the cause of their anxiety*. N9.

a. Language barrier- Communication between the nurse and the patient becomes successful when the medium involved is common. However, communication fails when the nurse and the patient do not share a common language. The general responses of the participants on language barrier focused on the absence of a common language. The following quotes provide illustrations:

> *The second thing is language barrier at the ward. In a ward where there is language barrier, interacting with the patient becomes difficult.* N1

> *The next thing is that you might meet a patient with language barrier. You can meet a patient who is from the northern part of the country and may only speak and understand the 'Frafra' language and is supposed to go for surgery. You might not be able to communicate well with him or her to obtain the needed information to provide the information he or she needs.* N8

> *For the language barrier, it is a challenge in that it is difficult to learn a language in a short period of time to be fluent.* N9

b. Literacy status of patients – This describes the ability of patients to read and write. Patients' literacy status is advantageous in their care in that they are able to access and make informed decisions on preoperative nursing care meted out by nurses. Generally, participants' concerns on literacy status of patients focused on the low level of patients' knowledge of their rights and provision of disjointed information. These are explained in the following excerpts:

> *We hardly see patients taking up cases in the court of law, challenging their rights in court. The average patient doesn't know his or her rights and so we (nurses) just do things anyhow and get away with it. So at the end of the day, nobody is taking it up if we become negligent in our duties, nobody is reporting us to any authority even if situations like this come up, it would be the normal resolution that goes on to cover up the matter and it dies naturally*. N2.

> *So the consistency of the information we obtain from the patients is sometimes lacking because what the patients tell us not related to what they present. So we tend to have doubts and so we mostly do not attach much importance to what the patient needs to know*. N4

> *And then concerning other gaps in the system in which the average patient is, permit me to say, illiterate, it comes back to our commitment and then the belief of our professionalism*. N9

> *But here in Ghana, the illiteracy rate is quite high and so you can have a high number of patients scheduled for various surgical operation without having knowledge of the condition and the surgery they're going to have. Because of this, they may not try to even ask the nurses about their condition and the surgery they're going to have*. N10

c. Time constraints – This refers to the limitation of the time that is required by nurses to assess patients for preoperative anxiety and information needs. Preoperative preparation of patients to undergo surgery requires ample time to identify anxiety and appropriate information needs. From the data obtained, the general agreement of the patients points to the issue of heavy workload that prevents nurses from having enough time to assess their patients. These are elaborated in the following quotes:

> *Another time-consumption challenge at the ward is numerous meetings. Meetings within the duty. Sometimes you will only be aware of ward meetings on the day you get to work. We would be having meetings while patients who need our attention are unattended to.* N2

> *And the main reason why we fall short of this is that as I said early on, it is the heavy workload that prevents us from making enough time to employ these techniques.* N5

> *Another reason on limited time at the ward is critically ill patients. When you have critically ill patients at the ward, they would consume all your time and you may not have enough time for the other patients undergoing surgery and entirely forget to assess them for anxiety and information they need information to undergo surgery.* N8

5.5.3.3 Poor Nursing Etiquette

Etiquette refers to the code of conduct that nurses must portray in discharging their duties. When nurses fail to exhibit these codes of conduct in their behaviour in the line of their duties, it is believed that there has been a breach of etiquette. From the study, the following sub-categories were observed to emerge from poor nursing etiquette: a) proud and contemptuous nurses; b) ill-mannered nurses; c) idleness and negligence, and d) redundancy of responsibilities. In general, participants focused on the poor attitude of nurses that impede communication. The following quote illustrates the general view of the participants:

With attitude, I have always said it that nurses are not rude because they are nurses. Nurses are rude because where they are coming from, that is how they were brought up. Charity begins at home. So for me, I don't think people are rude because they are nurses. So I always say that if you bring up your child well, he or she can fit well wherever he or she goes. Because at the nursing training college, they teach us ethics, they teach how on how a nurse should talk, how a nurse should behave. They teach us all these things. N10

a. Proud and contemptuous nurses – This demonstrates nurses that possess and display a high sense of egocentrism and disrespect towards their patients. These impediments obstruct the process of exploring preoperative anxiety and information needs of patients. Participants generally said that nurses' display of pride and contempt towards patients mainly points to being rude, pompous and having lack of respect. These are explained in the following excerpts:

At times our attitude is bad. Some of us feel too pompous to interact with the patients. These are all the challenges we do experience at the ward because some of my colleagues are not approachable and so after checking the patients' vital signs, that would be all that would done on the patient. Some of us feel too big to talk with the patients. N1

There is also the issue of respect. Some of us do not respect our patients. There are some who respect the patients, but for them to consult the patients, it mostly does not happen because we think that the patients are in our care meaning they need us and not we that need them. N3

…they mostly come with the expectation that, 'I'm going to meet a nurse who is rude'. Our attitude makes them become afraid of us. N10

b. Ill-mannered nurses – This depicts the state in which nurses display behaviours that are not conducive for patients to open up to be examined for preoperative anxiety and information needs. Participants' general concerns focused on poor relationship, fear and an unfavourable atmosphere that deters patients from opening up to nurses. The following quotes give more illustrations:

> *Some patients are sometimes afraid of us. They feel like they are not fit to ask us questions and they don't know how we would respond or react to their questions and that deters some of them from asking further questions. So they mostly resort to responses like, 'oh I'm okay, I've understood everything', whereas it may not be that the patient has had the right information. So, fear from the patient in terms of the kind of relationship we build with them prevents them from asking us questions and tell us their concerns on the cause of their anxiety.* N4

> *The patients may know that it is their right for them to ask us to tell them about their condition, but they are afraid to approach us to ask. This one comes down to our professionalism. We create the atmosphere in which patients are afraid to approach us with their concerns.* N9

> *And it is a big problem for us that are in the clinical setting. Nurses don't have a good relationship with their patients. Some work like they are robots. And so for me when you come to the OPD, I tell you that you are like a receptionist. 'It is you that is going to receive the patient into the ward. And so you have to do this and do that'.* N10

On the other hand, participants disclosed that the attitude of some of the patients often puts fear in nurses thereby preventing them from approaching patients to deliver care. This is demonstrated in the following quotes:

But based on your findings, the patient may say that what you have identified is not what is happening to him or her, but you may be so sure that what you have identified about the patient are exactly what is causing the preoperative anxiety, hope you understand? Your findings may be true, but the patient also would say that it is never like that. N7

We the nurses, we are sometimes afraid because the patient may be offended if you try to present to him or her what have been identified to be the causes of preoperative anxiety. So the patient may be like, 'the nurse has told me that this is what is making me to be anxious' and this can generate issues or will make patient become more anxious. Some patients may even tag you the nurse that, 'this nurse has told me that this is what is making me to be anxious'. And he or she would be telling other health professionals or even relatives a different thing all together which would look as if you didn't do a good work. N8

c. Idleness and negligence – Idleness refers to a condition in which nurses feel lazy and reluctant to carry out designated nursing care to patients. Negligence is described as the failure of nurses to care for patients appropriately. Idleness and negligence frequently occur simultaneously. In these two conditions, patients are often denied rightful care while on admission in the ward. From the study, participants described that idleness and negligence manifest in the form of laziness and negligence. These are explained in the following excerpts:

We sometimes feel lazy to go to the patient and talk to them about things like this. There is the problem of negligence on our part and the lack of knowledge. N3

Just as you would have hard-working people in the system, it is the same way you would have lazy people also in the system. And so patients may fall into the hands of lazy nurses. If the person is lazy then it means that those patients would be denied of a lot

of the care, you get it, aha. And so that aspect is there. Some nurses are lazy and so then, they won't do it. And that one we all know that in every feared organization we have those people in the system, yes. And that's why I'm saying that some people will not do because of laziness, yes. N7

Some of them (nurses) also know how to use these skills, yet they don't want to use it to assess the patients. And I don't know whether it is negligence or laziness. You know, using those skills involves a lot and are quite cumbersome. And so they always prefer to check the vital signs and that is all, they are done. N8

For you to be trained as a specialist nurse and be equipped with the knowledge and skills in assessment and still you don't practise it on the ward for reasons best known to them, then I can say it is negligence. N9

d. Redundancy of responsibilities – Redundancy is described as a state in which nurses no longer regard certain activities in the process of delivering care to patients as needed or useful. This compels nurses to avoid steps necessary to identifying preoperative patients' information needs. From the data obtained, participants' general view focuses on assessment as unnecessary. These are explained in the quotations below:

Sometimes we sit at the nurses' station and instead of going to the patient's bedside. There is an anxious patient lying in bed and we sit at the nurses' station writing and documenting things that is not a priority instead of engaging the patient in interactions. So it is like abandoning the patient to be on his or her anxiety state. So we spend more time documenting than engaging the patient in interactions. N1

In fact we don't assess our patients because we think that it is not necessary. N3

Most of the time we think that there is no need to assess the patient to identify what is causing their anxiety because whatever happens, the patient would be operated and so there is no need to do that. N6

5.5.3.4 Knowledge Lapses of Nurses in Patient's Assessment

Knowledge comprises information and skills. They form the basis of accurate assessment for preoperative anxiety and information needs. Without knowledge, nurses would fail to achieve this aim. Nevertheless, knowledge lapses encompass the lack of nurses' information and skills in the assessment of patients to identify preoperative anxiety and information needs. Generally, participants' thoughts on factors that lead to knowledge lapses have been divided into sub-categories, which include: a) poor reading habits of nurses; b) lack of skills; c) dependence on doctors' orders, and d) strenuous process in upgrading knowledge. The following excerpt explains the general view of the participants:

The first is lack of knowledge in the sense that, even though we check the vital signs and omit the other clinical observation measures, sometimes they do not contribute to the clinical decisions we make on our patients. A lot of us may have difficulty in understanding the kind of observation skills to use and even if we use it, how to interpret it becomes a problem. So majority would avoid using the other observational skills other than checking the vital signs because of the lack of knowledge, we don't normally know. In addition, we lack competence and definitely if there is lack of knowledge there is lack of competence as well to do the observation. N4

a. Poor reading habits of nurses – Nursing practice demands constant reading to keep abreast of the new trends in patients' care. Even so, nurses often develop poor habits in reading, which may be due to factors such as stress and heavy workload. But in the study, participants generally

expressed the poor reading habits of nurses to encircle the absence of zeal or willingness to read and forgetfulness. These have been illustrated in the following comments:

> *This is because when you ask a colleague on why the observation was not done, the response mostly is that "eeii!! I forgot of!!" And when you probe further to ascertain the reasons why he or she forgot, they would say that 'y'ankyer3 me' (I was not taught that). It is not as if we were not taught in school, but we learn and we forget.* N3

> *They (nurses) don't read, after completing nursing training colleges, that's it, workshops they would not attend, okay, yes and a whole lot. Those are the challenges, the nurses are not reading.* N7

> *... we fail to read and if you fail to read, you feel that whatever the doctor writes are final, it's the right thing and there is nothing to be added*. N9

> *When it comes to attending in-service training, the HACs (health assistant clinicians) and some of the midwives don't attend because we are not always ready to learn.* N10

b. Lack of skills – Skills is one form of knowledge that is required in the assessment of patients prior to surgery. Largely, nurses possess the required information to carry out an assessment, but become deficient in the expertise to assess patients. From the study, participants responded that nurses simply lack the skill to assess patients. This is found in the following quotes:

> *If the patient says he or she has pain, because we lack the skill to probe for more information, we just stick to the superficial manifestations. We lack the skills to probe for more information. And then, you know, sometimes the information we receive are subjective in nature which requires that we probe much further*. N4

I think that is not the best because it must be done before the patient undergoes the surgery to ascertain if the anxiety has reduced. And so for that I think I fall short, I don't know how to go about it. N5

You yourself, you are not informed about the process of assessment, you don't know how to go about it, you get it! That would not mean that you are lazy. You don't know how to do it and so then, you can't do it and it will look as if you didn't do it and it's not like you don't want to do it. N7

Some also lack the skills to assess and interpret the information obtained from the patients because communication is in various forms. And a nurse may have information, but how to interpret it to be significant enough for a clinical decision to be made may be lacking. N6

c. Dependence on doctors' orders – Doctors and nurses have their distinct job descriptions, some of which are interdependent. In addition, doctors prescribe treatment and nurses are required to implement them. However, certain nursing activities are independent of those of the doctors. If nurses refuse to carry out their designated duties and stick to those of the doctors, it indicates that nurses are depending on doctors' orders rarher than carrying out their duties independently. Participants generally agree that nurses solely stick to doctors' orders to care for the patients. This is illustrated in the quotes below:

Most of us nurses do not read after completion of our training and so we tend to go by written orders by the doctors. N2

The rotation and student nurses are not so experienced to administer care unto the patients but then they also follow the doctors' orders and attend to the patients that may sometimes end in complications. N6

Those lazy nurses don't worry themselves to plan any care for the patients. So they just follow the orders that doctor has written in the patient's folder. And that to me is very poor, because in the nursing schools, we are taught how to plan care for our patients. N9

d. Strenuous process in upgrading knowledge – This relates to the frustrations that nurses encounter in the process of furthering their education in higher institutions. The nursing profession has developed to the level that several courses are available for the nursing staff to upgrade their knowledge. Nurses, on the other hand, are met with difficulty in the process of obtaining permission to undergo further studies. Participants generally described the frustrations nurses go through to further their education. These are further explained in the following excerpts:

It is not easy for most of the nurses working in the districts to be granted the permission to further their education in that the approval would have to come from the regional office and it is always problematic for the bosses to give the approval. N2

If someone sits at the regional office and decides on the number of nurses to be given the slot to further their education, it will always be a problem. N3

Now I know that there are several courses that nurses can offer to upgrade their knowledge. But it is not easy for nurses to be given the permission to offer such programme. Over here in our facility, if any nurse wants to further his or her education, he or she has to attend an interview, which is organised by the administrator together with the medical director. In fact, it is very stressful and I don't think that the school that offers the programme will scrutinise the nurses the way they do to us. N6

5.5.4 Theme Two: Setbacks in the Management of Preoperative Anxiety and Information Needs

This section presents a description of the gaps associated with the intended nurses' actions nurses are required to employ in the management of preoperative anxiety and information needs of patients. Management of patients identified to exhibit preoperative anxiety is done with appropriate information. Previous data obtained in an aspect of this study revealed that management of preoperative information needs requires several factors, which include reinforcing information that patients had already received from doctors, multidimensional communication, introduction of patients to those who had gone through successful surgical operation, and evaluation. Nevertheless, data obtained through participant observation proved that nurses do not practice what was discovered in the previous data. This theme presents data that emerged to be the factors that impede the management of preoperative information needs by nurses. These factors have been categorised to include: 1. Lack of guiding principles; 2. Inappropriate staffing norms; 3. Teamwork lapses; 4. Nurse–patient interactive defects; 5. Poor time management; 6. Knowledge deficit of nurses, and 7. Lack of evaluation.

5.5.4.1 Lack of Guiding Principles

Principles are fundamental measures that underlie the practice of nurses in the management of preoperative information needs of patients. These principles serve as a yardstick for the management of preoperative information needs. The absence of these principles indicates that nurses would care for patients in a haphazard manner. From the study, this category was further divided into sub-categories, which emerged as part of the factors that impede the management of preoperative information needs. They are: a) no ward protocol; b) no supervision; c) haphazard provision of information and invasion of patient's privacy. The general comment of participants concerning this category is found in the following excerpt:

Well, for me, I would say that one, as a factor, it is that there are no protocols of such thing in our ward to follow. There are no existing protocols, you know, regarding how we are supposed to inform patients who are anxious. It is also due to time constraints because we are mostly overwhelmed with many cases and we don't usually have time to sit down with the patients to ascertain what is going on with respect to their anxiety. N7

a. No ward protocol – This describes the absence of measures needed to be followed at the surgical wards in the management of preoperative information needs. Nurses are then forced to develop their own principles for relieving patients of anxiety. Generally, participants' responses on this sub-category focused on a complete lack of protocol on the ward in terms of the process of informing preoperative patients. These are seen in the following excerpts:

All these lapses bulk down to the lack of protocols in the ward. So even if there are protocols on the ward, we don't read them. N3.

There are also no existing protocols on showing pictures, video clips and models concerning surgery to patients and we are not enforcing or reinforce them. N7

It is important we inform the patients, but again we don't do it. Nurses are not doing it because of there are no protocols on that, the patients themselves don't know that nurses are supposed to provide them with information concerning the surgical operation and other procedures at the operation room and nobody is also supervising that they are doing it, aha. And so they will not do it. N8

b. No supervision – Supervision is the act of overseeing the performance of a nurse in the provision of preoperative information. The nurse in charge of the ward or a senior nurse mostly supervises subordinate nurses. In this context, there is no supervision when a nurse in charge

assigns a subordinate and fails to oversee to the performance of the activity. Data obtained in the study present a general response of the participants indicating a complete absence of supervision at the ward. This is demonstrated in the following quotes:

> *Inability for us to have time to educate the patients is due to the lack of policies concerning time management at the wards and the lack of supervision from the ward in charges and the nurse managers.* N1

> *As for me, I always talk about the fact that in every environment when there is no supervision and monitoring, people do what pleases them, they do their own thing.* N3

> *Nobody superior nurse supervises us. We are not checking on them. So no monitoring, no supervision and they do it anyhow, but it is very essential especially if it comes to children, the pictures teach them a lot.* N5

> *I also think that we lack supervision, who is actually doing the assigned responsibility…? And if there are assigned duties, who is supervising that whether we are doing the right thing or not?* N7

c. Haphazard provision of information to patients – This refers to the provision of information to patients in an unplanned and less calculated manner. This usually results when nurses lack knowledge on the condition and surgical operation patients are scheduled to undergo. From the study, participants generally declared that nurses are unable to inform patients owing to a lack of adequate and appropriate information, faded knowledge, and avoidance of patients. This is explained in the following excerpts:

> *But in this case, nobody watches what we do, so even with the information provision, we do it haphazardly because we don't assess the patient and we don't plan also*. N1

And most of us don't have the right information to inform our patients and so we feel that if the patients ask us questions concerning their condition and the surgical operation, they would just want to embarrass us and so we avoid them. N2

There are so many surgical procedures we learnt in school and we don't usually come across them here in our ward. They are always seen in the tertiary hospitals. We those at the district hospitals don't see such cases and so most of us forget about them. So when the patients are booked and admitted here for such procedures and we are to provide them with information, we are unable to inform them well because we lack the necessary information. N5

The patient has to be provided with information in a series of presentations and must be given the opportunity to ask questions and be provided with answers that they would understand and not like you would just send the patient to the ward and give information haphazardly. N8

5.5.4.2 Inappropriate Staffing Norms

This encompasses circumstances that affect the rightful allocation of nurses to wards. Nurses are assigned to wards that are lacking enough experienced staff to help relieve the heavy workload and also to foster adequate and appropriate management of preoperative information needs. Nevertheless, certain factors have emerged as contributing to inappropriate staffing at the wards. These include: a) low nurse–patient ratio; b) posting challenges and c) wrong assigning of nurses to wards. The general belief of the participants is described in the following quote:

Firstly, I would say that the number of patients we admit into our ward are too many because over here in my ward, we are just four running the three shifts. Then the second thing is that some nurse managers assign some inexperienced and lazy nurses to the

ward as a way of punishing them, that is, to make them work and not idle about in the other ward which are less busy. N3.

a. Low nurse–patient ratio and heavy workload – Low nurse–patient ratio is described as a few nurses preparing a large number of patients in the surgical ward to undergo surgical operations. Heavy workload is described as conditions at the surgical wards in which nurses are overwhelmed by their activities in the care of patients. Nurse–patient ratio depends on the number of patients and the magnitude of the patients' conditions at the ward. Patients who are critically ill at the intensive care unit would require a ratio of 1:1 or 1:2. In the surgical ward, the required ratio is 1:3 indicating that a nurse is capable of informing three patients about to undergo successful surgery. Heavy workload occurs when the number of nurses does not correspond to the required ratio. Participants' experiences on low nurse–patient ratio and heavy workload have been described in the following quotes:

As I said, at times it is because of the heavy workload, and the number of nurses on the ward do not permit us to do that. Because sometimes, we are about two nurses caring for 20 patients. So if there are a lot of things to be done for the patients, there is no time to carry out those duties such as explaining things to the patients especially if the following day is the day of the surgery, we mostly need more time to prepare them to undergo the surgery. N2

And the heavy workload has a part to play, the stress involved is too much because every patient would like to be attended to. The nurse patient ratio is a problem because you go to a unit and there are about two nurses taking care of about 20 patients. The maximum of nurses you can have caring for patients in this ward would be about five as against 20 patients. So in this case, imagine the kind of attention these patients would have with these few nurses. It is even recently that there has been the addition of

rotation nurses and sometimes student nurses who come here for their clinical, the workload was overwhelming. N6

In the Ghanaian setting, the nurse patient ratio is somehow inadequate. So let's say three nurses are preparing about 10 patients that have been scheduled for surgery, they may not have enough time for them. So one of the factors is shortage of staff. N8

Then the third factor is due to the heavy workload. In an environment of heavy workload, nurses are likely to forget to interact with patients to know their anxiety levels and its causes to give appropriate information because the nurse may be the only person on duty and the number of patients at the ward may overwhelmingly be many. So there is the possibility that one might forget to interview the patient and know the concerns prior to surgery. N9

b. Posting challenges – This refers to the period in which nurses are appointed to hospitals after completion of nursing education and rotation or national service. This exercise helps hospitals to eliminate the challenge of inadequate nursing staff. From the study, participants' general focus on the challenges associated with the posting of nurses was on poor social amenities, language and cultural differences, and equity in posting. These are elaborated in the following comments:

Lack of social amenities prevent some of us nurse from accepting postings to certain places. Some are posted to remote areas, which lack electricity, mobile network services, poor road network, housing and lack of portable water supply. So if I have stayed in the urban area all my life and have been posted to such places with houses like mud one, I would not be comfortable to live in such houses. N2

So if you post me to a place where I am deficient in their language, how would I be able to teach the patients, I can't. And so it is a challenge when it comes to that one. But having said that, if one wants to remain in the Ashanti Region, socially and culturally, we won't be able to mingle, we won't be able to be balanced in terms of ethnic distribution. N7

There are times nurses are posted from those places to work over here and you would have to know their culture to be able to work with them. In a critical perspective, we should be considerate because if nurses are being posted to areas they are not familiar with, there will always be challenges. N8

And so I think that is how it is supposed to be done. It shouldn't be that we have been trained in Ashanti Region here and all of us have to be posted to the north. I think that something should be done about such postings so that we would not face those problems. N9

c. Wrong assigning of nurses to wards – This explains the state of inappropriate allocation of nurses who possess qualities such as knowledge, experience and good attitude to surgical wards. Participants generally believe that knowledge, working experience and favouritism are the cause of wrong assignment of nurses to the surgical wards. This is highlighted in the following quotes:

And so if we have a number of nurses on the ward at a shift, we would be able to do the right thing. The kind of surgery the patient is going to have determines what needs to be done. For instance, if a patient is going to have thyroidectomy and a student nurse or a newly posted nurse is assigned to give information to allay his or her anxiety, the nurse may be capable of informing the patient, but may be missing the core information that is capable of relieving the patient of fear and anxiety. N2

So staffing, yes, in terms of number, the number of patients and that of the staff may look okay, but they don't consider what goes into the work itself. So that's why most of us complain about adequate staffing, yes, and it's not necessarily about our number which is not enough. To some extent, it should be, but on technical grounds, it is not enough considering the state of the patients' conditions. N4

And the way people are recruited into nursing these days is also somehow not right. You have a lot of people, a lot coming into the nursing training not that they have passion for the profession. And so that is what has brought in all these? When we came into the nursing profession, there were a lot of experienced nurses we could learn from. Nowadays nursing is like you just 'open the flood gates and everything was entering'. It wasn't like that. You know, applicants went through a lot of screening and so you realise that the right people were admitted into the nursing training colleges to be trained into the nursing profession. But these days there are a lot of people applying to be in the nursing profession who don't deserve it. N7

And there are times when nurse managers and administrators receive gifts from nurses to place them at wards they prefer and it won't help the system. With some of these things when you are done with the research you send it to them. But the unfortunate thing is that this canker at the ward is really making it difficult to provide patients with information. N8

5.5.4.3 Teamwork Lapses

Preparation of patients for surgery involves a team of health professionals including nurses, anaesthetists, doctors and others. Each of these health persons plays a unique role, which is significant in informing patients prior to surgery. During the preoperative management

of information needs of patients, it is expedient for these members to work as a team to achieve the goal of patients undergoing successful surgery. Nonetheless, circumstances prevent the existence and functioning of teams like this in the surgical wards. These factors have been developed into sub-categories, which include: a) lack of partnership, and b) clinical conflict. By and large, participants' comments focused on absence and a non-functional team. This is found in the following excerpt:

> *The first thing is teamwork. There is no teamwork at the wards. There is no teamwork at all. The problem is that the anaesthetists don't work as a team, but for the nurses, we can delegate our responsibilities, but for the anaesthetists, delegation doesn't normally happen that way because they are few.* N10

a. Lack of partnership – This spells out the inability of individual health professionals, consisting of nurses, surgeons and anaesthetists, to come together and work as a team. In certain surgical ward settings, there may be the existence of such a team, whereas in other places it may not exist. From the study, participants generally agreed to the lack of adequate and experienced health professionals at the district hospitals to form a team and to cope with the heavy work schedule. These are explained further in the quotes below:

> *You get a surgeon at a particular district hospital who is supposed to perform between five and six surgical procedures in a day, the time for him to be in a team to inform the patient will be limited.* N2

> *The first contributing factor is the urgency of the surgery which is that the patient needs to have an urgent surgery. Some of the team members may not be present to ensure that it is done. If it is an elective surgery it is mandatory that all of them should be present to ensure that the patient receives the necessary information. You know our system is*

structured such that there is no cordial relationship among us the nurses and the various health professionals. N4

Another factor is that doctors may be available, they may not be busy and yet may not attend to the call. I have had experiences in which the doctor refused to attend to the call. Some of the doctors feel so superior with the mindset that, 'on what basis should a nurse call me to ward for, refer the patient to me at the consulting room?'. That is another reason. N5

Before you call the doctor, you yourself you have done your assessment, you have gotten somewhere and you have given the doctor a very vital information as to why he or she would have to come and attend to the patient, you understand. And so in the situation where the nurse cannot do this, it becomes difficult to establish that link between yourself and the doctor, yes. And I think that is what is lacking. Nurses are not able to do as it is expected of them and therefore you are not able to clearly communicate your line of duty with the doctors and that's why they are not able to communicate with them, yes, aha. But when the doctors realise that you are not doing your work well, automatically, they won't even have anything to do with you. N7

b. Clinical conflict – Clinical conflict is a state of disagreement between health professionals. It often occurs when nurses fail to implement doctors' medical and surgical orders, when nurses and doctors do not reach an agreement on patients' treatment, and when doctors try to intimidate nurses. Experiences of the participants generally point to the aforementioned factors. This is demonstrated in the following quotes:

And with some of the doctors, it's not always that they have issues with the nurses, some don't know what they are also about. They also have challenges with caring for the patients. And so if you are a nurse and you have done your assessment and you are

even trying to make them aware that, 'do this bla bla bla', they think that you want to expose their ignorance or something like that. They would not want to have anything to do with you, aha. N7

Sometimes the nurses feel intimidated in that sometimes they call the doctor to see a patient who needs the doctor's attention and by the time the doctor comes the nurse had not done what he or she is supposed to do. This leads most doctors to be angry with the nurses and that put some fear in the nurse and make them feel intimidated and timid. N8

And when the doctors come and maybe asks you about something concerning the patient's condition and you are not able to tell, he may tell you, 'ah, so for these number of years you have practiced nursing, you still don't know how to do this?' Maybe for the number of years that the nurse had worked, he or she might have not encountered that condition before. So these encounters with the doctors really intimidate the nurses, especially if the person is the charge nurse at the ward. N9

5.5.4.4 Nurse–Patient Interactive Defects

Interaction is a reciprocal therapeutic action that ensues between a nurse and a patient. In the surgical ward, this form of communication is necessary in the management of preoperative information needs. Nurse–patient interaction becomes defective when certain conditions interfere with the smooth exchange of information. These conditions may comprise factors that relate to the nurses, patients and the health facility as a whole. From the study, the aforementioned defects are developed into sub-categories, including: a) lack of therapeutic relationship, and b) pride and supremacy of doctors. The following is a general excerpt from the participants:

The first thing is that, sometimes, we are so busy to interact with the patients. The next thing is that some surgeons admit a whole lot of patients at a time. And when things happen like this, we are unable to interact with them on one-on-one basis. N1

a. Lack of therapeutic relationship – Therapeutic relationship is the process in which nurses become acquainted with patients through interaction and the assurance of reliable health care. It requires good communicative skills to achieve a therapeutic relationship. The general participants' belief on the lack of therapeutic relationship comprises poor communication skills and lack of reception. These are illustrated in the following quotes:

At the ward, nurses are like receptionists, we receive the patients into the ward. If you fail to remember this and you fail to receive the patients as such, it would be difficult for the patient to put his or her trust in you. N1

As health professionals, we (nurses) are the majority and we spend much time on the patients and so we should be the ones that the patients must have trust because the doctor and the anaesthetist come to review them and leave, but we remain with them 24/7. So if there is lack of a trusting relationship, it's an indication that we are not communicating well with the patients. N2

In fact, at the nursing training college, we were taught communicative skills and we thought it was a waste of time because we learned that in the senior high school and so we didn't attach much importance to that subject. It is now that I have realised its importance. N5

b. Pride and supremacy – This is an egocentric situation that prevails among health professionals, especially, nurses and doctors. This occurs when one health professional feels he or she is the most important in the care of patients. This act of egocentrism makes other

health professionals, especially nurses, feel intimidated. From the study, participants' responses indicate that conflict ensues between nurses and doctors owing to disagreement in responsibilities. Th is is described in the following quotes:

> *There is also the issue of pride and doctor supremacy. They think that they know more than we do and so would not provide the needed information. So it is like the superior feeling reluctant to go to the subordinate to ask for information concerning the patient's care.* N3

> *Some of the doctors become angry when they prescribe treatment and you are not able to implement it right away. I had a confrontation with one doctor. I had planned for the care of one patient who was scheduled for surgery on that same day. He was angry that the patient I was preparing was not necessary. Meanwhile, there were other nurses he should have gone to tell to carry out his order. You know, he had fought with almost every nurse and he found it difficult to approach them and it is me that he could approach.* N4

> *Because most of the nurses don't know how to provide information to patients, any criticism from any other health professional makes him or her feel intimidated*. N8

5.5.4.5 Poor Time Management

This describes the allocation of time for activities by nurses at the surgical ward other than managing preoperative information needs of patients. Preparation of patients for surgery is done according to time because of the schedule of the procedures. Nevertheless, certain factors compel nurses to allocate time to perform non-prioritised care activities instead of managing patients' preoperative information needs. This category was divided into sub-categories, which include: a) misplaced priorities and lack of planning; b) lack of division of labour and supervision and c) no value for time. Generally, participants stressed that time spent

with patients is poorly managed as a result of the lack of empathy, how they fail to place value on time, and nurses seeking their own comfort. This is explained in the following excerpt:

> *It is the lack of empathy from some of the nurses. Some are not empathetic and if you don't have empathy, you would not even have time to care for the patient. Also the value we don't have for time contributes to poor time management. And if you don't value the time, you won't attach any importance to providing relevant information to the patients. Then selfishness, we always want to be in our comfort zone at the ward and not try to make our patients feel comfortable.* N3

a. Misplaced priorities and lack of planning – Misplaced priorities occur when nurses replace the provision of preoperative information needs with unwarranted activities. This act transforms into lack of planning, which refers to the inability to decide and prioritise preoperative care. This causes patients to be denied the information they need prior to undergoing surgical operations. From the study, participants generally believe that lack of planning impedes nurses' ability to provide patients with preoperative information needs. This is explained in the following quotes:

> *Inability for us to have time to educate the patients is due to the lack of policies concerning time management at the wards and the lack of supervision from the ward in charges and the nurse managers. But if nobody is watching us, we do what we want to do and do what we are not supposed to do.* N1

> *So it is lack of prioritisation in the care we give, that would eat up their time because whoever needs attention should receive urgent attention.* N4

> *One thing is that our salary is not enough for us. So you will find out that most of the nurses are doing extra jobs to earn additional income. Many are involved in many*

business activities including trading. So some come to the ward with their products to sell to nurses, patients and other health professionals. N8

But in this case, we just come to work, we don't plan our day, we sit idle and the time is up, we hand over and we close to go home. And one thing I have also seen is that we don't plan our day. As nurses we don't plan our day at all. So when we are on duty and take over from those who hand over to us, we just begin to work. And if we remember to do what is supposed to be done for the patient, fine, and if we don't do it, it means we have forgotten. N9

b. Lack of division of labour and supervision – Lack of division of labour describes periods in the ward when nurses are not assigned and monitored to perform specific activities to inform patients preoperatively. This allows nurses to carry out preoperative preparations of patients anyhow. Participants shared their general thoughts on the lack of division of labour and supervision. This is illustrated in the following quotes:

... and the lack of supervision from the ward in charges and the nurse managers. If the ward in charge is stringent and strict, we would be assigned to go and carry out designated care to the patients, but if nobody is watching us, we do what we want to do and do what we are not supposed to do. So if there is proper supervision, I think that we would have more time to be with our patients. But in this case, there is not proper supervision. N1

And then secondly, lack of division of labour, okay. Our job description is not well defined and so sometimes we don't know what to do at a particular time, but if we are able to have some sort of division of labour, cubicle nursing or functional nursing or whatever type of nursing they are using. N4

… and if there is no monitoring definitely there will be issues with time because nobody monitors anyone. So as to whether I'm supposed to use 20 minutes to do education and I use more than an hour nobody asks me for the reason for that amount of time. N4

c. No value for time – This is the disrespect nurses have for time. If nurses do not regard time, the quality of time and the information to be provided to patients prior to surgery are affected. Data obtained from the study revealed the concerns of the participants generally centred on respect for time. This is illustrated in the following quotes:

So when you come to work, you respect time because you need to work with time to make more money, but over here it is not like that, whether I come to work at 10 or not, the payment will still be the same. There are times we have the reporting book and people will come to work at 8:40am or 8:50am, they will still come and write 8:00am. N2

We have poor attitude and that is affecting the way we work, aha. And so with the issue about time, people don't respect time, because time doesn't monitor them. I know that in the developed countries, your duties begin when you have reported and clocked in the time and you will be paid according to the hours that you have worked. N7

Some of the nurses are living very far away from the hospital. And so by the time they get to work, the nurses that took over had already started working. And because the nurse who was late lives far away from the hospital, he or she would like to leave the ward early to get home early and that hinders the provision of quality of services to the patients. Because he or she lives far away from the hospital and probably there may be poor lighting system in the residence, there may be the fear of falling in the hands of thugs when it is late. And most of these places don't have good lighting system and makes it favourable for thugs to attack them. N8

As I said, a nurse may report on duty and decide to do absolutely nothing. But I have one nurse, when she reports on duty, she would move from bed to bed. She said that she doesn't like to sit at the nurses' table because she was in trouble when she sat at the nurses' table and gossiped about someone. So for her, she doesn't sit at the nurses' table when she comes to work. N10

5.5.4.6 Knowledge Deficit of Nurses

This comprises lack of knowledge of nurses in their attempt to provide preoperative information needs of patients. Nurses not only need knowledge in the routine preoperative care activities, but also knowledge of the conditions and surgical procedures that patients are often scheduled to have. However, certain factors contribute to the deficient knowledge of nurses in the provision of preoperative information. These factors emerged as sub-categories, which include: a) deficient information; b) incompetence; c) intimidation and inferiority complex, and d) reluctance in upgrading knowledge.

And lack of the skill to inform the patients will also contribute to that. And so that kind of zeal may not be there to add on because we assume the patient has got enough information and so there is little or nothing to do because the patient has all the necessary information. And sometimes we lack the willpower to also inform the patients. So we lack the skills, we are not competent enough and then inferiority complex, yes. So I think these are the basic factors that would make us shy away from that kind of responsibilities. N4

a. Deficient information – This describes the situation in which nurses have impaired knowledge of patients' condition as well as the surgical procedures to be performed. Participants generally expressed that nurses become deficient in information mainly owing to a lack of reading. This is demonstrated in the following quotes:

Inadequate knowledge is another factor that makes some of us neglect our duties. So talking about responsibilities like checking of the vital signs, we are able to do those ones, but not informing patients about their condition and the surgical procedures. N3

They are deficient in knowledge because they themselves they have not been challenged to provide patients with information as they have been taught in nursing school, the challenge is not there for them to actually learn, aha. N4

And when they complete their training, they don't learn. When they begin to practice, they just follow the routine practices done by the old nurses. So nurses are not building their knowledge capacity, they are not learning, aha, they are not leaning, they are not reading. You know if you are not learning, there is no way you can sit a patient down and say you want to inform him or her. And so of course, it is reassurance that they can only provide and with reassurance, everybody can give it. N7

And some of the nurses don't have knowledge on the procedures that the surgeons and the anaesthetist are likely to do and are unable to provide patients with information concerning that. To this effect, the nurse would just tell the patient that, 'maame (mother), you will be fine, the surgery would be successful'. N8

And with the lack of or deficient knowledge, he or she (nurse) would even not observe the patient to try and identify a problem to mess up trying to inform the patient. There is one nurse at the OPD; whenever she comes across something she doesn't have much knowledge, she would look for you wherever you are for explanation. You see, this is a very good nurse, but there are others who don't know, neither would they search for more information by themselves and would just abandon the patient. So, at the end of

the day, if it would be disadvantageous to the patient during the procedure, he or she doesn't care. N10

b. Incompetence – This comes about when nurses are unable to inform patients successfully of their condition and surgery. It is required for patients to be informed about their conditions and the surgical operations they have been scheduled for. Nurses, who form the majority of health professionals, spend more time with patients in the ward. This puts them in a position to inform patients by reinforcing information already provided by doctors and anaesthetists. From the study, participants indicated that their inability to inform patients successfully is generally as a result of the techniques involved. This is explained in the following excerpts:

Sometimes other staffs don't go through the patients' folder to be familiar with the condition the patient came to the ward with to be able to inform them. And because they don't know how to inform the patients about their conditions and the surgical operation, he or she would be interested in performing the routine preparations of the patient for surgery and it is when they start with the preparations that they would try to know the condition and of the patient. N3

Some of us may have the necessary information about the procedures, but the process of presenting it to the patients becomes difficulty for us. N5

And with most of the patients, right from the doctor at the consulting room, they are anxious and would not remember most of the things that the doctor might have told him or her. So we, who are with them at the ward all the time, should be able to provide them with accurate information that would reduce their anxiety level if not alleviate it entirely. But they come to the ward and we don't provide them the needed information simply because we lack the skill and the knowledge. N6

We are supposed to at least inform the patients on their condition and they surgery they are going to have, but we don't do it because we lack knowledge on how it is done. And so we would rather serve medication, check the patients' vital signs and then close and go home. I'm telling you, that is what is happening now. If she comes to work in the morning, she won't perform any task till 10am and goes to serve the patient with their medication and check their vital signs after which she would go and sit at the nurses' station. At 12 midday, medication and then would go and sit down, 2pm, medication and does handing over to incoming nurses and then goes home. N10

c. Intimidation and inferiority complex – Intimidation is the condition in which nurses and other health professionals cause fear and embarrassment in other nurses in an attempt to manage the preoperative information needs of patients. This act cause nurses to develop an inferiority complex, which is a feeling of low self-esteem regarding their ability to inform patients. Nurses are intimidated and develop an inferiority complex when they lack knowledge, skills and competence in performing their duties. The general responses of the participants indicate that nurses feel intimidated and develop an inferiority complex as a result of anger, ill comments and the feeling of bossiness from other health professional colleagues, lack of confidence. This is presented in the following quotes:

Though they have the training, inferiority complex makes them unwilling to practice it. So they will say that 'I'm not qualified to do it, somebody is more qualified and I should leave it for that person to do it', which is wrong. Because like he is saying, he's gone through the training as a specialist, then you have every right to use any assessment tool to carry out assessment on the patient. The ordinary nurse is always extra careful to avoid making a mistake. N3

A colleague nurse may be around and you may falter in the presentation of preoperative information to the patient and then instead of correcting your wrongs, he or she may be angry as to why you should be wrong in presenting the information. And this normally deters some of us from presenting the information to the patients because if it has to be done, it should be done in the presence of other nurses who may contribute. N5

The reason why doctors feel superior or look down upon nurses is that nurses, we lack confidence; secondly, we refuse to learn or even if we learn, we don't apply our knowledge and skills in our duties. N8

But because we often don't have much knowledge on our job description, we always rely on the doctors for information to carry out our duties. When things turn out this way, we give the doctors the power to lord over us because the signal we send them is that we are not knowledgeable, 'you have called me because of this small issue' is what they normally say to us. So, as he is coming to attend to the patient, he knows very well that the nurse is not knowledgeable. The doctors could even tag you, 'the good-for-nothing nurse'. N9

d. Reluctance in upgrading knowledge – This describes circumstances in which nurses refuse to upgrade their knowledge. There are several means by which nurses can upgrade their knowledge. These include attending workshops, further studies and personal studies during leisure time. The Nurses and Midwifery Council of Ghana, which is the regulatory body of nursing, requires that every registered nurses (including all categories of nurses) renew their personal identification number (PIN) annually after attending a number of workshops (NMC, 2022). From the study, participants generally shared their opinion that nurses do not have the

zeal or willpower to upgrade their knowledge. This is further explained in the following excerpts:

> *To be honest with you, most of us don't read to refresh our minds after we have completed our nursing training and qualified to work on the wards*. N2

> *Some nurses don't attend workshops because the topics may not be motivating enough and when they even come from the workshop they don't even implement what they learn and so what will be the use of attending the workshop. Others also think that they are busy to attend the workshop, they are busy and so they would not attend, mhmm*. N7

> *Nurses don't read, nurses don't read and they are not ready to read. So that is what is happening*. N10

5.5.4.7 Lack of Evaluation

This is described as the failure of nurses in making clinical judgments on the impact that information provided to patients has had on preoperative anxiety. Information is known to eliminate or reduce the preoperative anxiety of patients. As a requirement, nurses need to evaluate patients after the provision of information to ascertain whether preoperative anxiety has been relieved or reduced, and also whether patients' information needs have been met. Sub-categories that emerged from this category include: a) laziness; b) busy schedule of nurses; c) lack of planning. Generally, participants believe:

> *We are not able to evaluate the care we provide our patients because we lack the structures that determine how evaluation should be done. There is also the lack of will power and with this, even if there are structures in place to evaluate, it would be difficult for us to do because there is no that will power*. N4

a. Laziness – This refers to the unwillingness of nurses to put in the required energy to evaluate the effectiveness of information provided to patients. The general opinion of the participants is that nurses avoid evaluation of information provision because of laziness. This is found in the excerpts below:

> *Laziness and feeling reluctant does prevent us from evaluating the information we provide to our patients.* N3

> *The laziness among some of our staff spreads through almost every activity of patients' care, but with evaluation, they're so lazy to do because they feel that they would have to implement the procedure all over again. So to prevent that, they'd not try to do evaluation.* N4

> *Some nurses would just be working and there will be no evaluation. We have staff who carried out tasks without doing evaluation, they don't see the need to evaluate the patient to know if the information they provided has successfully eliminated or reduced the anxiety.* N8

b. Busy schedule of nurses – This refers to a period of time during which nurses have a lot of nursing or medical orders to implement in the care of patients. Nurses become engaged in implementing these orders such that they often forget to implement the information needs of patients. Participants' general responses to this sub-category are explained in the quotes below:

> *Ideally, there should be something like a care plan to plan and implement the care of the patients, yet we do not do it. And this is all because of the same workload and that is one of the reasons why sometimes our documentation is poorly done.* N2

> *The ward sometimes will be full of patients and that makes us busy to have time for evaluation and if the ward is less busy, that is when we would have time to do that.* P3

As you were saying, we were taught to do evaluation of our patients' care, but in this case, what I think is that mostly there is no time for evaluating the information provided to patients before they undergo surgery. N5

Already the nurses say they don't have time to work on the patients. So if they don't have time, then it means that they won't have the time to do the evaluation. And again, already they don't see the need to do so. N7

c. Lack of planning – It is the failure of nurses to set priorities in order to institute evaluation measures to identify the effectiveness of tending to preoperative information needs of patients. Participants generally agreed that nurses do not evaluate patients' preoperative care as a result of planning difficulties. This is elaborated in the following quotes:

But because we don't have the appropriate plan for evaluation, we leave it as such. N3

All that I am saying is that there are no measures to identify the anxiety and its causes and the provision of information in place. So it is difficult for us to do all these things. If we could have a spot card, after everything, you put the patient's name and all other particulars on it. I think it would help curtail the tradition of negligence and norm on the ward. N6

So for evaluation, from the word go, the nurses didn't plan to provide the patients any information, they didn't do anything and so they won't be able to evaluate. N7

Sometimes drawing the plans for evaluation is challenging because finding out about whether the patient's anxiety has been reduced is another set of work the nurse may have to go through. N8

5.5.5 Theme Three: Improving Identification of Preoperative Anxiety and Information Needs

This theme figures out participants' views on the steps nurses need to undertake to observe patients' behaviours and react to assess and identify preoperative anxiety and appropriate information needs for provision. It is of paramount importance that nurses identify preoperative information needs of patients to provide fitting information to relieve patients of preoperative anxiety. This theme further divides nurses' reaction into categories, which are: 1. Precursors of effective patient assessment; 2. Establish guidelines on assessment and 3. Establish appropriate staffing norms.

5.5.5.1 Precursors of Effective Patient Assessment

This is described as factors or conditions that enhance the knowledge base of nurses to assess and to identify preoperative information needs of patients. These conditions need to be in existence prior to the commencement of preoperative assessment to foster accurate identification of preoperative information needs. This category is divided into sub-categories, which include: a) obtaining sponsorship for further studies; b) pursuance of structured studies; c) pursuance of unstructured trainings, and d) development of positive attitude towards assessment. Participants' overall opinion focuses on upgrading nurses' knowledge. This is described in the following quote:

> *The first thing is the nature of our training, okay. You know, if you go into our system of nursing education right now, we have few people as specialist nurses. So the rest of us are educated to do everything in bits. So, I'm a general nurse and I'm doing a bit of perioperative nursing, a bit of ENT (ear nose and throat), a bit of nursing and a bit of surgery and so we actually do not go deep into one area. But if there are more specialised nurses like perioperative nurses in the system, I think their training requires*

that they go deep into all these assessments thoroughly before handing over the patient to the theatre staff. N9

a. **Obtaining sponsorship for further studies** – This is the process by which nurses seek financial assistance from authorities in charge of financing nurses' education. These authorities include the hospital administrator, district, regional and national directors of health. From the study, participants' responses indicate that nurses often expect funding to pursue specialisation programmes from government institutions. This is explained in the excerpts below:

… but specialisation comes with cost in which we may not be able to afford. Most of us won't be able to afford the cost involved in these specialisation programmes and so if the government could do something about it by sponsoring us or reduce the cost of upgrading our knowledge, it would help us a lot to care for our patients very well. N2

So, I think the decision to approve us to further our education must be brought to the district level and the district would know the course that would best suit them and the kind of nurses they would want to train in the specialised areas, so they would decide on the number of nurses they would sponsor for those programmes. N3

So, I think the government should do something about it to ginger most of us to upgrade our knowledge. So if we can't afford the cost involved in the training, we would not worry ourselves going through the training to acquire the requisite knowledge. N5

b. Pursuance of structured education – This is a period when nurses are offered the opportunity to attend block programmes in well-established health institutions with a two- or more-year duration. Nurses obtain the opportunity to attend these programmes when specific services are needed in specialised areas.

We may need to specialize in this area to be able to give appropriate care to the patients… N2

We really need further education in specialised programmes because what we learned at the nursing training colleges was about general nursing, which includes a bit of every area. So with specialisation in perioperative nursing, we would be taught preoperative, intraoperative and postoperative management of patients in detail. N5

But when we are trained as specialist, to deal solely with surgical cases and theatre services, we will know the importance of assessing the patient, going through the head-to-toe assessment and provide them with accurate information before sending the patient unto the theatre bed. N9

c. Pursuance of unstructured trainings – This comprises knowledge-enhancement programmes organised for nurses by the leadership of the hospitals, the government, and individual resource persons. This is done in aid of upgrading the knowledge of nurses about current trends in nursing practice. Data obtained in the study revealed the participants' general opinion on upgrading knowledge such as through workshops, seminars and website surfing. This is demonstrated in the following quotes:

Experts in communication should organise workshops and seminars for those of us that prepare patients for surgery. N4

As I said early on, if we have knowledge on the other observational skills you know, these are not usually taught during our trainings and you may not obtain that experience when you are on your own. And so I think nurses that are endowed with knowledge on these skills can teach the other nurses who do not possess such skills. So it is all about refresher courses and workshops. N5

So there should be workshops and also these webnets and seminars on issues like these. Through these webnets and workshops, these issues would be brought to the attention of the leadership of the nurses and they would direct on the right things to do. N6

Training, you see, training, training. We have to have training, we have to have training on these things. It wasn't everything that was taught during our nursing training and so when you come to the ward and you begin work, you would see that there are things that we were taught that the patients require us to do for them the more. So we should consider these things and organise workshops and training, training, training for them. N7

The ward in charges can organise a weekly ward reviews or meetings or monthly workshops for the nurses. So, in every week, there will be a review or mini workshops on current issues in nursing or new trends on information provision on some specific surgeries. N8

d. Development of positive attitude towards assessment – This is a state of developing a frame of mind towards ensuring the implementation of measures to assess preoperative anxiety and information needs of patients. Nurses need a positive attitude to energise their efforts to prepare patients for surgery. From data obtained in the study, participants' general responses focused on nurses developing a positive mindset, approach and energy about the nursing profession. This is explained in the following quotes:

So we have to change our mindset that nursing is not all about making money. It is not about coming all the time to look into our patients' faces. The patients' lives matter; it is a nice profession that we have chosen, a profession to sustain life, a profession to let people live, you get it, aha. N1

Once we know it is crucial for us to carry out our duties, we should always be ready to offer these care for patents to tell their fears. N3

And so I think that we need to change our mindset about the whole of the nursing practice. N7

So, it's up to us to know that things are changing, each passing day, people are becoming more and more educated and that should make us change our approach to patients' care in this context. N9

5.5.5.2 Establish Guidelines on Assessment

A guideline is a general rule or principle that determines how nursing care should be implemented. Establishing guidelines means setting up general rules or principles on the exploration of preoperative anxiety and the identification of information needs to guide nurses in preparation of patients towards surgery. Data obtained in the study came out with sub-categories, which govern the establishment of the guidelines. They are: a) definition of guidelines, and b) adherence to assessment principles. Generally, participants expressed their opinion:

The solution to this is self-discipline and then knowing the sort of profession we find ourselves in, knowing our guiding principles, knowing our code of ethics. Are these principles, are these code of ethics binding us to be able to assess our patients? If that is it, then go ahead and explore them for information. N9

a. Define specific guidelines – This is the description of a set of principles concerning the exploration of preoperative information needs of patients. There may be protocols at the ward concerning preoperative preparations of patients for surgery; hence, it is important for this particular guideline to be defined to guide nurses in terms of the preoperative assessment of

patients. Participants generally agreed that there should be guidelines like protocols and a checklist to guide nurses in the assessment of patients prior to surgery. These are explained in the following quotations:

> *If protocols are not pasted on the ward, we would not know exactly what we are supposed to do for our patients.* N3.

> *Secondly, there should be systems in place to guide us on activities that we carry out to detect the factors that make the patients become anxious. It should not be like just verbal steps that we would just go to the patient and be talking to him or her. Rather, there should be something like a checklist or questionnaire that even when a patient arrives at the ward to be prepared for surgery we would follow by ticking the steps to know whether they are anxious and if they are, what makes them anxious or I can go to the patient to interact with him or her to identify whether he or she is anxious and also to know what makes him or her anxious.* N6

> *Probably, there should be a checklist that we can follow or would guide us, yes, there can be a checklist for us so that we would use it to detect the anxiety of the patient.* N7

> *We should also set standards at the ward. Maybe for a patient that is going to have a type of surgery, 'this is how you have to ask him or her about what is making him or her anxious'. So we can have someone who will see to it that the actual causes of preoperative anxiety have been obtained from the patient.* N8

> *As nurses, it is our duty to make time and interact with the patient to identify their concerns. We should make it a regular practice and a protocol. So if a patient is undergoing surgery because it is a protocol, you will follow it and tell the patient to do*

this, do that and then there can be a checklist on these items before the patient is sent to the theatre. N10

b. Adhere to assessment principles – This is the process in which a nurse utilises guidelines established for the assessment of preoperative anxiety and information needs of patients. In order for nurses to put the assessment principles to use successfully, certain conditions must be ensured. It generally emerged from the study that conditions that would enhance the practice of the principles include delegation, supervision, reinforcement, and punishment. These are elaborated in the following quotes:

They must delegate responsibilities among us because if there are shared responsibilities, that is how the job would be well done. If we do not delegate and we all do the same thing, some would be lackadaisical. So if the duty is assigned among us that is how we would do the job well. N3

So that any nurse can be delegated to assess the patient to identify the information they need. They can also attach to our responsibilities something we call 'spot card' to keep in place measures that would determine whether we did what we were assigned to do or not. N6

So there should be reinforcement and also punishment for the nurses who intentionally refuse to do what is supposed to be done. N8

Because most of us don't know how to do it, we must be taught. Then delegate us to do the assessment. So, I think that the supervisors also have work to do because it is the duty of the supervisor to know what the nurses are capable of doing and then work on where each one of them falls short. N9

So we must be taught and after teaching, nurses must be supervised to practise it. We need to be supervised to see to it that everything is done well. N10

5.5.5.3 Establish Appropriate Staffing Norms

This demands the institution of principles to guide the allocation of nurses to surgical wards to consolidate staff strength and reduce the heavy workload. This exercise is necessary in that it is advantageous to ensure that nurses adhere to established guidelines on the assessment of preoperative anxiety and information needs. This category is divided into sub-categories. They include: a) appropriate posting of nurses; b) maintaining distinctive nurses, and c) reducing nurse turnover.

a. Appropriate posting of nurses – This illustrates the proper allocation of nurses to hospitals that need to boost their nursing workforce. Nurses are periodically posted to hospitals in all parts of the country after completion of rotation or national service. Participants agreed that nurses should be appropriately posted to hospitals that require more nurses to ease a heavy workload. This is illustrated in the following excerpts:

So there should be recruitment and training of staff and adequate staffing, let me put it that way. When there is adequate staffing, issues with time may not come up because everybody has a role to play, the workload is minimal, have enough attention for a patient, there will be holistic care. N1

Sometimes some of the ward lack enough nursing staff and so there should be recruitment and training of nurses for the various teams involved. N4

Concerning the nurse–patient ratio, the hospital administrators and the government must be involved in recruiting new ones to beef up the staffing at the wards. The hospital management can write to the labour and employment department or they can send the

required number of nurses that they need and I think it would help in stocking the wards with enough nurses. N6.

The hospital management must make sure that when they are recruiting nurses, they must not recruit only those from the area or the indigenes from the area, but nurses from other parts of the country so that if patients from their locality or regions come on admission, we would have nurses who could speak their language to help with interpretation. N8

b. Maintaining distinctive nurses – This is described as the act of keeping knowledgeable and skillful nurses at the surgical wards to help in informing patients about surgical conditions and operations. The participants generally shared their experience that hospital management must maintain nurses who possess unique qualities. This is explained in the following comments:

And so I think that the hospital can hire the services of people who have specialised in sign language to be available to help. N7

What we can do is find some of the nurses, who are fluent in languages like French, sign language to assist us communicate with patients who are only able to communicate in these languages. N8

In recent times, the ministry of health is doing their best. In the old system of training nurses, they were not teaching sign language and French. Now they're being taught. So when patients who are able to only communicate in these languages come to perform surgery, we would be able to do so. N9

Now sign language is taught in all the nursing schools and so the hospital management must make sure that the nurses they are recruiting can communicate in sign and the French language for them to help with patients who are death and dump. N10

c. Reducing nurse burnout – Burnout is a state of physical and emotional stress caused by heavy workload in the ward. Nurses often experience burnout when a few of them are faced with the task of caring for many patients in a particular ward. Reducing burnout describes the process of putting measures in place to reduce the heavy workload of nurses.

To address these factors, first of all, there should be a look at the nurse–patient ratio in our wards. If we are enough nurses at the ward, the workload would be reduced, and then we would be able to assess the patients to identify those things that make them anxious. N6

In finding solutions to these issues, I think that if the nurse patient ratio is rectified all these mishaps and stress among nurses on the ward would cease. All these stress and exhaustion are the reason a lot of things have been abandoned by the nurses including education and even education on discharge. N7

The hospital management can also employ more nurses or send more of them to the surgical wards for this purpose to improve the nurse patient ratio. This will prevent us from being stress and exhaustion. N8

So imagine two, three, four people managing the theatre and at the same time are attending to patients being prepared to undergo surgery, you know, the nurse is likely to become exhausted and may forget and may fail to find out from the patient whether there is any fears the patient may want to voice out about the possible outcome of the surgery. N9

5.5.6 Theme Four: Improving Provision of Preoperative Information Needs

This theme describes the steps through which nurses' action which is aimed to provide preoperative information needs of patients could be enhanced. It is necessary to improve the provision of preoperative information in that information is found to alleviate or reduce the preoperative anxiety of patients. Steps to improve nurses' action are put into the following categories that emerged from this theme include: 1. Maintain skilful nurses in the ward; 2. Stimulate teamwork; 3. Preservation of nurses' knowledge, and 4. Precursors of informing patients.

5.5.6.1 Maintain Skilful Nurses in the Ward

This is the act of keeping nurses who possess the mastery of surgical conditions and surgical procedures in the surgical wards to assist in the provision of the preoperative information needs of patients. Skilful nurses are resourceful in this domain in that they employ their rich knowledge and skill in the management of preoperative information needs. Emerged sub-categories under this category include: a) enlist speciality nurses, and b) train nurses in the use of audiovisual devices. The following quote provides a general overview of a skilful nurse:

> *This nurse would just be with the patients and interact with them till she closes from duty and goes home. She is the type of nurse that can help patients have their high BP medications cancelled. Because she would sit by patients and interact with them to ascertain their problems.* N10

a. Enlist speciality nurses – This is the act of identifying and allocating nurses who possess unique knowledge and skills in informing patients to surgical wards. Such nurses often acquire their knowledge and skill through further study, workshops and in-service training. It is always a necessity to keep this cadre of nurses in the surgical wards to make use of the knowledge and

skills they have obtained. Generally, participants expressed the desire to keep knowledgeable and experienced nurses in the surgical ward. This is illustrated in the following comments:

> *And with the human capital, they should post nurses with specialised knowledge and experience to the district hospitals to help.* N2

> *…there must be well-trained and experienced staff with whom we must work hand in hand.* N3

> *All the skilled, knowledgeable and experienced nurses and doctors have been kept at the teaching hospitals and the district hospitals have been made deficient of such experienced ones.* N6

> *In times when nurses are being employed, the management or the human resource personnel could find out from them about the languages they can speak. It is an additional quality; it will be an added advantage to be recruited, you get it, aha.* N7

> *I wouldn't say that some wards need more nurses than the others because we are all dealing with human lives and all human lives matter, but there would be that fairness and equity across the board. And then again there are wards that are very critical, you know, like the surgical unit and all. So that if you are allocating the nurses you should know, for instance, a unit that is not critical is receiving one nurse, the surgical unit might receive two and it is fair because we know that that place is 'hot' or very busy. So, they should be considering all these and that it can actually help other than that we are not going anywhere.* N8

b. Train nurses in the use of audiovisual devices – This comprises the use of sophisticated devices such as motion pictures, pictures, and models to inform patients. This is one of the

effective ways to inform patients in that patients have the chance of viewing what goes on in the operating room visually. The general response of participants on audiovisual technique focuses on:

> *There should be motivational package for nurses who use their audiovisual devices like the phones and the laptops to download clips on procedures to inform patients. A nurse may carry his or her laptop from his or her home to the hospital to provide information to the patients. For such nurses, there should be monies to motivate them, at least they can buy data with it to continue to inform the patients or at the end of the year, such nurses can be rewarded through end of year get together programmes for everybody to appreciate the work they had done.* N7

> *With respect to the audiovisual devices to be used in informing the patients, most of the district hospitals can generate few incomes for which they may not be able to buy them and such hospitals always look up to the government for such help.* N8

> *We had been asking them to fix a flat screen television at the OPD to show the patients clips on how surgical procedures are done and what they will go through when they arrive at the hospitals and ward. They just called me that they had now fixed it.* P9

> *So, as I said, stakeholders, NGOs, private institutions and the businessmen out there should come and help. Even with the government sectors, it really takes a long time for you to obtain things that you request from them. This really makes communication very difficult. Because it is easy to understand watching video clips on the processes at the ward than sometimes being informed verbally.* N10

5.5.6.2 Stimulate Teamwork

This is the process of initiating collaborative efforts of health professions such as nurses, doctors, anaesthetists, pharmacists and others in the provision of preoperative information needs. Different health professionals play unique roles, which are interdependent of each other. This is further divided into sub-categories, which are: a) Form partnerships, and b) Dissemination of information among health workers. Here is an overview of participants' comments:

a. Form partnerships – This is the process of linking up between health professionals, which is aimed at providing appropriate information to patients prior to surgery. Participants' general comments focus on the regular meetings of health professionals. This is explained in the following excerpts:

> *We should come up with modalities like once or twice in a week, the team would do a team ward rounds, which would involve the nurses, surgeons, pharmacists and anaesthetists and everybody will be in that team for the ward rounds*. N1

> *So, I suggest that after the surgical procedure has been performed all those health professionals that matters should come back to go through the process even though the case might have been done to do evaluation of each member's duties*. N4

> *Concerning the input of the hospital administration, there are a lot of doctors around, that is the surgeons and consultants who are not stationed in one hospital, but move around, the hospital administrators can liaise with them to come and assist to beef up the number of doctors in our setting to inform the patients*. N5

> *Actually, this is what I do at the OPD. If I ask you a couple of questions and you couldn't answer me, I will make you wait and I'll go to the doctor at the consulting room and*

ask the doctor that, 'is the patient aware of what you intend to do for him or her?' And sometimes the doctor would tell me, 'oh I forgot to tell the patient. Please tell him or her for me'. You see, in this way, we have coordinated. N10

b. Disseminate information among health workers – This is the process of sharing information among health professionals. Information often shared among nurses, surgeons and anaesthetists include the condition of the patients and the surgical procedure they have been booked for. Participants generally believe that information about the patients must be disseminated among the members for the provision of uniform information. This is explained in the following quotes:

I think that we nurses must be knowledgeable and must be well grounded in the conditions of our patients, so that we would be able to give a good accounts on them to the doctors when they come around to review them. N1

We as nurses must be able to do proper documentation. I mean proper documentation because sometimes when the doctors come around, they try to read the nurses' notes sheet to find out what we have done for the patients and this is part of how we share information. N3

The anaesthestists must always let us know the exact time they come to review the patients, so we can always make them ready because sometimes when they come around, we would be on the patients taking them through other preparation activities. N5

I think that the doctors must also do well to provide us with information about the patients. This is because, sometimes the patients come here and they give a different information they claim the doctors have given them, but if you try to confirm that from

the patient's folder, it is a different thing. So they can delegate us to give the right information to the patients when they arrive at the ward. N6

5.5.6.3 Requirements for Effective Information Provision

This describes the various conditions which are needed to give patients preoperative information effectively. Knowledge and skill form an important foundation in information provision, yet these conditions are needed for augmentation. Sub-categories that emerged under this category are: a) building confidence; b) available support systems; c) delegation and monitoring of duties; and d) evaluation of provided information. Generally, participants agreed:

So once there is available skills and knowledge to practise, you should be ready to do that. I think we can increase the confidence level of our nurses by giving them the exposure and constance support. So once you have the exposure and a colleague is with you, support him or her that, 'go and do it, even if you make a mistake, you are learning', okay. If you are given this kind of support, I think gradually the confidence would come up, yeah. N9

a. Building confidence – Building confidence is described as creating an atmosphere to enable the nurses to develop belief and faith to provide preoperative information by themselves. This is pertinent because nurses require confidence to add onto knowledge and skill in order to be competent. Participants agreed that continuous reading and being oriented to their job description would help build the nurses' confidence. The following illustrations give more explanation:

So we really don't have to sit down idle, we should read and even the surgical ward that we have been placed, we should know certain vital things that would help us carry out our activities without having to encounter ill confrontations with the doctors. 'We cannot say we can't do this or we can't do that and we always leave everything for the

doctors to attend to'. We have to build our confidence so that will enable us carry out certain responsibilities all by ourselves. N2

So, in-service trainings can be done to help equip us with knowledge on the current practices and that would give us the confidence to inform the patients. N4

So, we have to build our courage and confidence and we can do that through learning and updating our knowledge on our job description. N8

So, the confidence is key. I remember one doctor said something to me that, 'in training doctors and nurses, the only difference between the doctor and the nurse is the confidence of which doctors have that'. N9

b. Establish support systems – These comprise conditions and logistics that are put in place to enhance the implementation of nursing orders on providing for preoperative information needs of patients. Participants generally concluded that support, encouragement and logistics are what nurses need to implement their tasks. These are illustrated in the following comments:

I remember I once started something at my war., I realied that when it comes to ward rounds, the prescribers would come and have their way and all that the nurses would do is document whatever transpired without even giving their inputs. So one day I met with the nurses and said, 'no, I think we can also do it'. So what I did was to introduce them to the task round. And what we decided to do with the task rounds is that before the main ward rounds was started, they would first go and meet with the patient, know their concerns, their problems they had during the night. They would document them so that when it is time for the actual ward round, one nurse would just pick a patient and introduce the case based on what the person got from the task round by presenting the cases before the multidisciplinary team of health workers. N9

… our ward in charge must sit us down and find out from us the things or materials that we lack which when provided would help us do the work well. So our ward in charges must always give us the right information concerning particular patients' care, it would be difficult to carry out our duties very well. So the ward in charges must always update us on what is new on patients' care. N3

c. Delegation and monitoring of duties – Delegation is the act of assigning responsibilities to nurses while monitoring means keeping a continuous record of how the assigned responsibilities have been or are being implemented. These acts are instituted simultaneously to ascertain whether preoperative anxiety has been relieved or lessened. Participants' general responses revealed that nursing authorities should institute measures to monitor nurses' activities on the ward. These are further explained in the following quotes:

And also supervision should be intense because the doctor can delegate, the nurse can also delegate, and then the anaesthetist can delegate. But at the end of the day, we have to make sure the work is done, aha. N3

So there should be a committee to monitor nurses who have been assigned responsibilities to ensure that relevant information have been given to any patient who is supposed to receive it. Yes, it will help to solve the problem. N4

We had a meeting before I came on my annual leave. The hospital management are saying that they are going to install CCTV cameras in all the wards and at every part of the hospital to monitor nurses to see those that spend time on their mobile phones during working hours. And if you are seen on your phone during these working hours, they would deal with you drastically. N10

d. Regular evaluation – It is the process of making a clinical judgment on implemented orders on information provision. This is done to ascertain the effectiveness of preoperative information and whether preoperative anxiety has been eliminated or lessened. From the study, participants generally concluded that it is necessary to carry out evaluation as well as the measures put in place for appropriate evaluation. This is further explained in the following comments:

> *Training is key and for the patient, there should be very good interpersonal relationship between the patient and the nurse. And that's why we say that rapport establishment must be done before the beginning of every nursing care.* N4

> *I think the time the patient comes to the ward to be prepared for surgery must be enough for us to be doing all that we can evaluate. So if the time is enough, I think we would be able to inform the patients to reduce their anxiety levels and there would also be time to evaluate them to know how their anxiety has reduced.* N5

> *And evaluation is very important and we would know that whatever objective or what we intended to do for the patients it has actually gone down well with them.* N7

> *If we plan our day, such that we know that every activity ends with evaluation, we list our cases and knowing that every activity ends in evaluation, we should be able to remember to do evaluation to know what went wrong and right.* N9

This category figured out setbacks in nurses' reaction and action in assessing and managing patients' preoperative anxiety and information needs and ways to improve them. Some of the gaps identified to contribute to the absence of nurses' reaction include: role confusion, communication shortfalls and poor nursing etiquette. The main gaps that were found to impede nurses' action include: lack of guiding principles, inappropriate staffing norms and teamwork lapses. To improve nurses' reaction and action, establish guidelines on assessment,

establish appropriate staffing norms, maintain skillful nurses in the ward and preservation of nurses' knowledge were identified to be helpful.

5.6 Category Four: Findings Obtained Through Face-to-Face Individual Interview of Patients

This category displays findings obtained through face-to-face individual interview of patients to achieve the objective, *to explore and describe the type of preoperative information that patients need before they undergo surgery and the type of information they received from the nurses*. A total of 12 patients were engaged in an individual interview sessions using the semi-structured interview guide. Data collection ended when data saturation was achieved.

5.6.1 Demographic Information of Participants

This section describes participants by their gender, age, ethnic group, religious denomination, marital status, occupation, the type of surgery they were undergoing and the number of times operated. Qualitative methodology was applied in this aspect of the study. However, it is expedient to note and quantify the distribution of participants' demographic characteristics. Participants comprised eight males and four females. A little fewer than half of the participants were above the age of 51 with the oldest being 66. Only one of the participants was between the age of 46 and 50 years with the youngest being 32 years of age. Akans (10) were the dominant ethnic group, while Christians (10) were the dominant religious group. Eleven (11) of the participants were married, and six of them engaged in trading as their occupation. Six (6) of the participants were undergoing abdominal surgery, while nine were undergoing surgery for the first time. Details of participants' demographic characteristics are shown in Table 5.8.

Table 5.8: Demographic Characteristics of Participants

Item	Number
Gender	
Male	8
Female	4
Age	
30 – 35 years	3
36 – 40 years	3
46 – 50 years	1
51 years and above	5
Ethnic group	
Akan	10
Dagomba	2
Religion	
Christian	8
Islam	3
Marital status	
Married	9
Not married	3
Occupation	
Artisan	1
Farming	3
Teaching	2
Trading	6
Type of surgery	
Amputation	3
Caesarean section	1
Debridement	1
Haemorrhoidectomy	1
Herniorrhaphy	3
Laparotomy	2
Myomectomy	1
Number of times operated	
First time	9
More than once	3

5.6.2 Presentation of the Main Findings

Four main themes emerged from the analysis of the data collected. They include: 1. Preoperative anxiety; 2. Effects of preoperative anxiety; 3. Assessing patients' preoperative information needs; and 4. Managing patients with information needs. Each of the themes is divided into categories and sub-categories. These are illustrated in Table 5.9, indicating a summary of the results according to the theme, categories and sub-categories.

Table 5.9: Summary of Themes and Their Respective Categories and Sub-Categories

Objective	Themes	Categories	Sub-categories
To explore and describe the type of preoperative information patients need before they undergo surgery and the type of information they received from the nurses	**Theme One:** Factors related to patient's behaviour	1. Fright of unspecific cause	a. Absence of correct information
			b. Fear of inability to care for self
			c. First-time experience
			d. Eco-anxiety, adverse effects and thanatophobia
		2. Alleviating preoperative anxiety	a. Having been operated before
			b. Reassurance
			c. Compelling symptoms of the condition
			d. Religious beliefs
	Theme Two: Effects of preoperative anxiety	1. Psychological strain	a. Anxious mood of patients
			b. Depression prior to surgery
			c. Tension pending surgery
			d. Cognitive diverted patients
			e. Sleeplessness of patients
		2. Inability to come to terms	a. Refusing to undergo surgery
			b. Finding alternative treatment

Table 5.9: Summary of Themes and Their Respective Categories and Sub-Categories

Objective	Themes	Categories	Sub-categories
	Theme Three: Assessing patients' preoperative information needs	1. Interactivity between nurse and patient	a. Establish rapport with patient
			b. Clinical monitoring of patient
			c. Compassion for patients
			d. Clarity on condition and treatment
			e. Hindrances in obtaining clarity
		2. Inability to assess preoperative information needs	a. Poor nurses' attitude
			b. Patients' perceptions on condition and surgery
	Theme Four: Managing patients with information needs	1. Informing patients and family	a. Benefits information to patients
			b. Information on surgical conditions
			c. Information on preoperative processes
		2. Obtaining preoperative information needed	a. Information patients expect and receive from nurses
			b. Health workers involved in information provision
			c. Sources of information to patients

Table 5.9: Summary of Themes and Their Respective Categories and Sub-Categories

Objective	Themes	Categories	Sub-categories
			d. Patients' views on process of being informed
		3. Challenges in informing patients	a. Character of nurses
			b. Patients' perceptions about surgery
			c. Improve patient information provision

5.6.3 Theme One: Factors Related to Patient's Behaviour

This theme reveal out different behaviours patients exhibit when they are in the period of being prepared to undergo surgery. These behaviours are presented in the form of preoperative anxiety. It refers to a period of emotional distress experienced by patients when they perceive preparations and procedures such as anaesthesia and surgery as threat to their lives. Preoperative anxiety always has effects on the systems of the body such as the cardiovascular system, nervous, and gastrointestinal system. These effects compel patients to display clinical manifestations of anxiety, which are mostly evident through observations.

The general views of participants from the study concluded that they experience preoperative anxiety before undergoing surgical operations. The study discovered various ways in which participants behave when they are anxious at this stage, which have been classed into themes. This theme is divided into categories, which are presented as: 1. Fright of unspecific cause, and 2. Alleviating preoperative anxiety. Generally, participants' responses indicates that they experience some form of emotional stress before undergoing surgery. This is illustrated in the texts below.

5.6.3.1 Fright of Unspecified Cause

Most patients are afraid of the impending surgical operation when they are not sure of the outcome. This uncertainty leads to the build-up of thoughts including about complications and deaths. Participants in this aspect of the study described different ways in which they experienced preoperative anxiety. This theme is divided into sub-categories: a) absence of correct information; b) fear of inability to care for self; c) first-time experience; and d) ecophobia and thanatophobia. Generally, participants attributed the fright of an unknown cause to the lack of experience of hospitalisation and undergoing surgery. This is found in the following quote:

I think it is because those of us that become anxious have never undergone surgical procedure before. P7.

a. Absence of correct information – Every patient needs some form of information before deciding to undergo surgery. Before nurses and other health workers inform patients appropriately, most of these patients receive inappropriate information from various sources, which are mostly from outside the domain of the hospital. The study discovered a lack of accurate information as expressed by the participants. Their responses are found in the quotes below:

Some people at home told me that if I undergo surgery, I'd be weak and, eerr… again if one is operated there will be constant pain. P2

Some of us listen a lot to people who don't have the right information on the diseases and the operations. There is also a lot of wrong information out there because we have these self-acclaimed doctors who sell herbal medicines. I was once travelling in a bus and there was this man who was selling some herbal medicine and he claimed that he could cure haemorrhoids. He kept saying that if anyone had haemorrhoids, that person should not go to the hospital for the doctors to operate on him/her because, he/she could bleed to death. So if you have this information in mind, you would definitely be anxious if you are told you are going to be operated. P5

A lot of friends at home and at the workplace put some fear in me that a lot of people have been dying through surgery nowadays and for my case, they would say that people with fibroid normally are not able to give birth after undergoing surgery. P8

b. Fear of inability to care for self – This is the fear that most patients develop before undergoing surgery owing to information they receive from non-health workers. Some of the

participants were of the view that they would be incapacitated by undergoing surgery and might not be able to function as previously. This is found in the comments below:

> *I'm so much worried about it. How is it that my leg is going to be amputated? In this city of Kumasi, how am I going to fend for myself and my family?* P1

> *Because of what my friends told me, I was afraid that if I allow them to operate on me, I won't be able to pass stools*. P5

> *I have a friend who is not able to work like she was working previously before undergoing surgery. In fact, seeing her like that and the operation I was going to have, I became afraid that the same thing would happen to me*. P6

c. First time experience – Experiencing surgical operations for the first time involves fear and uncertainty. Patients possess this fear of not knowing whether they would survive or would develop complications. It emerged that some participants generally expressed emotional discomfort as a result of undergoing surgery for the first time. This is illustrated in the following quotes:

> *Errm, there are some who have not been operated in their lifetime before and for the first time, they would be anxious.* P2

> *Around the time I was admitted, there was some level of anxiety because I didn't know the nature of the surgery.* P4

> *Yes! I was very anxious. It was because I had not done surgery before. I had not been to hospital before and I had not been hospitalised before.* P9

Other participants expressed the opinion that some patients had undergone surgery more than once and were still anxious for no apparent reason. This is found in the following quote:

I know someone who was operated for the first time, the second time, and for the third time that he had the operation, he was very scared because he didn't understand why he was continuously undergoing operation. And so, he thought he was going to die. P2.

d. Ecophobia, adverse effects and thanatophobia – Ecophobia refers to the fear of an environment while thanatophobia refers to the fear of death. The general knowledge among most patients is that the hospital environment is scary because of strange building, but it is also caused by scenes like patients in agony, seeing blood from injured patients and the wails of relatives who have lost a relative. From the study, participants generally expressed fear of the environment related to the hospital environment, devices in the operating room and also devices fixed on patients. A comment of a participant who was afraid of the environment is found in the excerpt below:

The hospital is entirely different and scary environment especially seeing some patients having strange devices and gadgets fixed to certain parts of their body. I tell you that if you have not been to the hospital before, you will be scared. P7.

Additionally, those who were afraid of developing complications is illustrated in the quote below:

You know, the doctor told me he was observing me for improvement in my condition. Then after a few days of observation and he came to tell me that surgery was the only solution, I became so afraid that I developed some complications because I thought after the observation, he would tell me that my condition was improving. P3

Some of the participants were afraid of dying. This is presented in the following excerpt:

And with surgery, many times people who are operated don't survive, you understand. I do hear those stories like this a lot. My mother's younger sister died during surgery

in Yendi. And so, when I remembered that, I was very afraid to also undergo the surgery. P11.

5.6.3.2 Alleviating Preoperative Anxiety

Literature indicate that preoperative anxiety must be eliminated or reduced to enable patients to undergo successful surgical operations. This study emerged with some steps involved in alleviating the preoperative anxiety that is experienced by most patients. These steps are developed into sub-categories including: a) having been operated on before; b) reassurance; c) compelling symptoms of the condition, and d) religious beliefs. Generally, participants indicated that the step nurses take to alleviate preoperative anxiety is generally, reassurance. This is illustrated in the quote below:

They didn't give me any education concerning the surger; rather, they reassured me that the surgery was not scary and that the surgeon and his team were experienced. P11

a. Having been operated on before – Patients who have previous experience of surgical operations mostly have a low level of anxiety. The reason is that most of them have had experience of what it entails, except for patients whose surgical experience ended in complications and undesirable outcomes. From the study, participants revealed that they were relieved or their anxiety was reduced when they had had surgical operations before. Their comments are found in the following quotes:

Errm, since I had been operated before, I knew most of the preparations a patient goes through before surgery is performed and also what goes on at the operating room. P2

This is not the first time I am going to be operated. During my first experience, I think it was hernia. So I still remember what I went through, the things the nurses did for me

before the surgery was performed. I still remember everything even though it is quite some time now P3

b. Reassurance – Reassurance comprises words of assurance, which affirm the capabilities of the surgical team and the nursing staff in aiding patients to have a successful surgery. Patients are reassured to relieve them of anxiety. From the study, participants' response indicates that the nurses mostly reassure them to be relieved of anxiety. Participants' responses are found in the quotes below:

Mmm, the only thing they did when I was anxious was that they reassured me that I should not be afraid. And they added that they would soon finish the operation for me, and that nothing bad would happen to me. P4

They took it and checked it. There is something we call moral support, that is what they gave me that, 'surgery is not scary and it won't take much time for them to finish' and a whole lot. P10

They didn't give me any education concerning the surger, rather, they reassured me that the surgery was not scary and that the surgeon and his team were experienced. That was all that they told me. P11

In another dimension, participants revealed that some nurses convinced them to undergo surgery by trying to put fear in them. This is found in the quotes below:

So, once you have come to the hospital and you have been made aware of what you are suffering from and that you need to be operated on, you may not want to agree. Then one nurse told me that, 'because of fear you want to rescind your decision to avoid the surger, then you are willing to die.' And when she told me that I developed some hope that I would be well because once they have admitted me, they know best, ahaa!! P3

Additionally, participants revealed that nurses convince patients who seemed to try to seek alternate treatment. This is illustrated in the following quote:

> *One patient wanted to refuse to have surgery and go to a prayer camp for healing. I counselled him and then made him aware that it is important that as a Christian when you are sick you pray. So, he can be praying, he can have people at home and then at the prayer camp praying for him, but the surgery too is important.* N4

c. Compelling symptoms of the condition – Compelling symptoms denote the unbearable manifestations of the conditions from which patients suffer. These symptoms urge them to be operated on to be relieved of the condition. When a patient is in severe pain and cannot bear it, he or she would be very prepared psychologically to undergo surgery. Participants' responses on this sub-category are illustrated in the quotes below:

> *And the way I was suffering from the condition compelled me to undergo the surgical procedure. So, I was ready to have the surgery and I was ready for any consequences that were likely to happen.* P2

> *But because I was suffering from the condition, I wanted the procedure to be done in order to be relieved of the discomfort.* P4

> *Before the surgery, the nurses told me that this is (haemorrhoidectomy) one of the most painful procedures. Most of the nurses were saying it including the anaesthetist. So, to me, the pain was not so much of a concern, but my health. I knew that since they were going to operate on me, definitely I'd experience some level of pain, which I thought of it as a normal experience…* P5

d. Religious beliefs – In Ghana, most patients who are Christians commit themselves into the hands of God before undergoing surgery. It emerged that participants' belief in God compelled

them to undergo surgery despite the scary information they received from their friends. This is demonstrated in the following quotes:

> *They (friends) said after the surgery, I would not be able to pass stools and most patients do not come out successfully and you would end up having complications on passing stools and a whole lot. But I am a Christian and so I didn't give ear to that. So, I told them that I know the God that I serve and he would definitely take me through. So, I turned a death ear to what they were saying to me.* P5

> *And so, what was going through my mind was like, 'I would not return from the operation room alive', something like, 'I would die at the operation room'. Then I thought to myself that God said, 'I would not die, nothing bad would happen and He (God) would strengthen me to return from the operation room safely'. So, when these thoughts came into my mind, I prayed that, 'God help me to get the fear and these bad thoughts out, so I can be bold to undergo the operation. I know that you are with me. If you (God) are with me, you should send me there and bring me back safely'.* P8

5.6.4 Theme Two: Effects of Preoperative Anxiety

Preoperative anxiety mostly has an effect on patients. Anxiety only pertains to the mind, when the patient perceives the impending surgery as a danger to his or her health. When a patient is experiencing emotional stress, almost all the systems of the body are affected. These effects are mostly detected through observation of the patients. Generally, participants responded that preoperative anxiety has an effect on them, which the study recorded. This theme is divided into categories, which include: 1. Psychological strain, and 2. Inability to come to terms with what is going to happen. Participants generally responded to the effects of preoperative anxiety as it being fear.

5.6.4.1 Psychological Strain

Psychological strain pertains to the manifestations or behaviours of patients experiencing preoperative anxiety. It becomes observable when the level of anxiety is higher than the patient can bear. This theme is further divided into sub-categories, which include: a) anxious mood of patient; b) depression prior to surgery; c) tension pending surgery; d) cognitively diverted patients, and e) sleeplessness of patients. Participants' views on psychological strain were about anxiety and fear. This is shown in the following quote:

> *Eerm, with those of us that become anxious, I think what makes the nurses aware that they we are anxious is that we become apprehensive, that is, if we have not had surgery before.* P5

a. Anxious mood of patients – Anxious mood describes participants who look worried, irritable, and afraid. Generally, participants described patients experiencing an anxious mood before undergoing surgery. This is demonstrated in the quotes below:

> *Yes, I am very much anxious… I am very much anxious*. P1

> *So, I became anxious because I started thinking that if they go to operate on me and the fluid touches my intestines, they can be destroyed. P3*

> *Some are naturally full of fear. Whenever they are faced with certain situations like undergoing surgery, they become exceedingly afraid.* P6

b. Depression prior to surgery – Depression is described as a state of persistent lowering of a patient's mood as a result of an inability to obtain answers to questions pertaining to conditions that require a surgical operation. It is usually characterised by mood swings, loss of interest in the environment and activities, and extreme quietness. Patients may not be interested to undergo surgery and therefore may not cooperate with the nurses in the course of being

prepared for the procedure. From the study, participants described that some patients show some signs of depression. Participants' responses that indicate depression are shown in the illustrations below:

> *He kept thinking about the surgery and started thinking to himself that, 'am I going to survive this operation, will I die, can I come out successfully?'* P2

> *So at times I sat quietly and even didn't want anyone near me. I wanted to be alone. I have been suffering from this condition for some time now and when I came to see the surgeon, he told me to go and prepare for surgery. Since then, I could feel so down and that even led to the delay in coming for the surgery. I would have been operated a long time ago, but I was afraid and that made me feel so down.* P12.

c. Tension pending surgery – Tension is the expression of ensuing danger. Shivers and the feeling of something that is about to explode manifest it. Data obtained in the study revealed that participants, prior to undergoing surgery, experienced the manifestations of tension. Participants' responses are found in the following excerpts:

> *One woman who was supposed to be operated yesterday was so tensed that she had to be brought back to the ward for the nurses to talk to her before she was sent back to the theatre. Instead of her being the first person to be operated, she became the last person.* P4

> *There is this lady in my workplace who shared her experience with me before I came to be operated. She told me that she had had about three operations. And prior to each of the procedures, she was anxious and experienced tremors each time she thought of it.* P05

In the following morning when the nurse came to tell me that it was time to be sent to the theatre, I started feeling dizzy and it was like I was going to faint. P09

d. Cognitively diverted patients – Anxiety generally has effects on the cognitive or intellectual abilities of patients. Because most of them experience anxiety and other manifestations of emotional upset, their intellectual capabilities become distorted. From the study, participants described cognitively diverted patients as lacking attention span. This is presented in the following quotes:

I was not able to focus my mind on all that the doctor told me after letting me know that he would operate on me. Then again, because I didn't know exactly what they meant when they said my intestines could perforate, I was so scared it would occur indeed. P3

I became afraid to the extent that I didn't even hear or give ear to what the doctors and nurses told me to do before undergoing the surgery. P7

Instead of looking at the nurse's face and concentrating when she was talking to me, I looked elsewhere, my mind was far away from what she was saying and then I gave a very deep breath and sighed. In fact, my attention was completely off what they were telling me. P10

e. Sleeplessness of patients – Anxiety has been observed to cause lack of sleep among patients, especially on the night prior to undergoing surgery. Generally, participants' experience of lack of sleep centred around improper sleeping patterns. These are described in the following responses:

In the night before the operation was done, I had a nightmare that I was being operated and it had resulted in my death. P03

While sleeping, I woke up several times from my sleep. Again, at home, I sleep with my lights switched off, but when they switched off the lights, I didn't like it because I didn't feel comfortable. P04

The night before the day of operation, I couldn't sleep. I started praying and I tried several times, but I couldn't sleep. P09

5.6.4.2 Inability to Come to Terms with the Outcome

Inability to come to terms with the outcome refers to the state of denial in which patients refuse to accept surgery as the only treatment of healing. Patients in this state are mostly seen to refuse to undergo surgery and resort to other treatments such as divine or herbal treatments. From the study, it emerged that participants were generally not able to come to terms with surgery as the only treatment to be relieved of their condition. This theme was divided into sub-categories, which include: a) refusing to undergo surgery, and b) finding alternative treatment. The general view of participants on the inability to come to terms is displayed in the following text:

When the doctor told me he would amputate my leg, I didn't want to have the surgery. I decided that I would seek some herbal treatment because I thought that herbal medicine would make me heal with losing my leg. P3

a. Refusing to undergo surgery – This is when a patient denies suffering from a said condition and refuses to undergo a required surgery. From the study, it was discovered that participants refuse to undergo surgery after experiencing emotional upset. This is recorded in a participant's comment below:

The doctor just came and said that if he does not amputate my leg, it would spread upwards to the other parts of my leg. And so, he has to amputate it. And I also said to him that, 'I don't agree to that!!' I stood before him and said that I would not agree to

that and he went away. I haven't consented to it. Eeii!! You are going to amputate my leg in this Kumasi city; how am I going to fend for myself? P1

The participant, whose comment is displayed above, did not allow the surgical team to amputate his lower limb. He was discharged against medical advice and was taken home by his relatives. At home, his condition worsened and he was rushed to the hospital and died shortly upon arrival.

When I arrived at the ward, one other person was admitted. I don't know what happened. She just packed her things and left. The nurses tried to convince her to stay on to be prepared for the surgery. But she said, she would not undergo the surgery anymore and left. P10

b. Finding alternative treatment – The study recorded that participants make attempts to seek alternative treatment for fear of undergoing surgery. This is recorded in the following quotes:

I wasn't the only one who felt like this. One other patients said that he would rather go for divine healing because he had been having bad feelings that if he undergoes the surgery, he would die. The nurses and her family tried to talk to him, but he still decided to leave. P9

For me, when the doctor told me to prepare for the surgical operation, I said, 'no, I'd rather seek divine intervention', because for me, my pastor told us it's not good to undergo surgery and that we can be healed of any disease without going through surgery. P12

5.6.5 Theme Three: Assessing Patients' Preoperative Information Needs

This aspect of the study reveals participants' experiences of how nurses react to patients' behaviours to identify the preoperative information they needed. Information needs

are vital in the management of preoperative anxiety. It is inappropriate to assume that all patients who are anxious need the same information in that patients as individuals need different and unique information. Thus, it is required that patients are examined to identify preoperative information that would meet their needs. This theme is divided into categories, which are: 1. Interactivity between nurse and patient, and 2. Inability to assess preoperative information needs.

5.6.5.1 Interactivity Between Nurse and Patient

This is communication that ensues between the nurse and the patient in the process of rendering nursing care to the patient. Often initiated by the nurses, interactions exist in all aspects of preoperative preparations of patients. This involves the exchange of information between nurses and patients. Participants explored in this study shared their views on how nurses interact with them in an attempt to identify preoperative information needs to undergo a successful surgical operation. This theme is divided into the following sub-categories: a) establish rapport with patients; b) clinical monitoring of patients; c) compassion for patients; d) clarity on condition and treatment, and e) hindrances to obtaining clarity. Generally, participants' interactions that went on between nurses and other health workers referred to being given information. This is demonstrated in the quote below:

> *... the nurses made me aware of what I was suffering from and I had to agree to undergo the surgery.* P3

a. Establish rapport with patient – This is the first step in establishing interactions. It begins when patients arrive at the ward to be admitted. It continues with nurses welcoming patients, an exchange of pleasantries and introductions. From the data obtained, participants generally stressed that rapport is established through the introduction. Views of participants of the establishment of rapport is described in the quotes below:

From my research I know that before a nurse would come and attend to you, the person should introduce him/herself to you that, 'I am this and I'm going to take care of you from this duration to this duration'. P5

When I arrived at the ward with my sister, the nurse asked me what I was there for after she had collected my folder. P4

However, participants also expressed displeasure on their initial encounter with the nurses in the ward. This is illustrated in the quote below:

When I arrived, the nurses didn't even offer me a chair. Rather, they demanded for my folder and started asking for my residential address. P11

b. Clinical observation – Clinical observation involves all forms of observation, including checking vital signs, and physical examination all in expectation of manifestations indicating the presence of preoperative anxiety. According to participants' individual interviews, nurses employ the use of clinical observation skills in identifying preoperative information needs. This is demonstrated in the comments below:

At the OPD (outpatient department), when the nurse finished checking my BP (blood pressure), she asked me if I had hypertension and I said, 'no', and then she asked me if I had received any bad news or something and again, I told her, 'no'. But then my heart began to beat the more because I didn't understand the reasons for the questions she was asking me. Then she told me that my BP was a bit high and she wanted to be sure if I did not have hypertension. P7

Two of the nurses noticed that I was anxious. They came over to me and told me that it was not scary and there is nothing about surgery that is dangerous. They spent some time talking with me about the surgery. They told me that, in the operating room I would

be injected with medicine that would cause my lower limbs to become numb and prevent the feeling of pain in my lower limb. P9

In contrast, participants expressed disgust at the attitude of a nurse after checking her vital signs. This is found in the following excerpt:

When I arrived in this ward to be admitted, one nurse checked my blood pressure (BP) and realised it was high. Then in a loud voice, she asked me if I was a hypertensive patient and I said, 'no, I am not a hypertensive and there is even no trace of it in my family, but I think it is because of the impending surgery'. Then she said, 'your BP is too high'. Then I started feeling uneasy and I couldn't cooperate with the nurses in the process of being prepared for the surgery. P10

c. Empathy for patients – This is the ability of nurses to understand and share the feelings of patients in terms of their condition and the preoperative anxiety from the patients' point of view rather than the nurses' own. This enhances building of trust between the nurse and the patient, which aisd in identifying preoperative information needs of the patients. Participants generally expressed their views on empathic experiences in the preoperative period. Participants' responses have been demonstrated in the following quotes:

Errm, I think that when the nurses open up to us and feel for us, it will encourage us to ask questions. You know, most times we come here with wrong information about the conditions we suffer from. So, when they create an atmosphere that can make us feel comfortable around them, we will be able to ask questions. When I say, open up, I mean that when we are admitted, they should come to us and maybe introduce themselves to us that, 'I am here to care for you and so anything that bothers your mind, you are at liberty to ask and I will also do my best to help'. P4

There was one patient who has been discharged. Before he had the operation, the nurses were explaining something to him and he wasn't paying attention. Then I heard one of the nurses, on top of her voice, telling him that, 'if you don't pay attention, I'd leave you, I have other patients to attend to'. But I think it is not his fault, he was anxious. P5

They must bear in mind that it is not our fault to be sick and even they themselves can be sick and they can be in bed like me now. And so, the care that would not please you when you are a patient, you shouldn't do to us. If they have this at the back of their minds, they would care for us well. They should also have time for us, they should spend time with us so that we can also tell them our worries and fears. P8

d. Clarity on condition and treatment – Patients need clarity on their condition when they are not certain about the information they have received from family and friends, health workers and other sources. Obtaining clarity on conditions and healthcare is paramount in their decision-making. Generally, participants stated the necessity for obtaining clarity on information they have received and needed. This is displayed in the following quotes:

But it is good to ask to know the kind of injection you are going to receive. Mostly, we think that he (doctor) is not our enemy and he will not do any mistake unless maybe if the patients are many and he mistakenly injects you with a drug meant for some other patients. In that case it becomes a fault. When I was admitted to this hospital, I asked the nurse that attended to me to tell me her name and also the name of the surgeon who was supposed to operate on me. He was not around at that time and then another came to me at the ward, I asked about his name. But he told me he was not the one scheduled to operate on me and I became confused. P2

Eeehh, for me, as I have said of already, I didn't have much knowledge to ask them. But I became aware that I should have asked after I had gone through surgery. There were so many things that I didn't know about. I didn't know I would go through a lot to be operated. Also, I think other patients who don't ask questions about their condition is due to the fact that some patients don't know the details of what they would be going through. P8

Well, I would say that it is because of shyness. Me for instance, I am a very shy person. Even in the classroom, I find it difficult to ask questions. Since I came here, I have not been able to ask the nurses questions because I am a bit shy as I have said. And so, I find it difficult to ask. P11

e. Hindrances in obtaining clarity – Hindrances are conditions that deter patients from seeking clarity of information. Participants attributed hindrances in obtaining clarity on their condition and the surgical treatment to factors relating to nurses and patients alike. These are demonstrated in the quotes below:

Sometimes you could see that some of the nurses are angry from their homes and so when you add your burdens to theirs by asking them questions, they become more angry. P3

For those that are not able to ask, I think that sometimes they are afraid to ask the doctors/nurses because they might have heard that nurses don't talk to their patients well and even can even scold at them. A friend who was on an admission in another facility shared his experience that he constantly asked one nurse to tell him what was wrong with him and that drew the anger of the nurse who retorted on top of her voice that, 'why are you disturbing me like that?! Was I the one that admitted you into this ward?!' P4

I think it is because of the way some of the nurses handle we the patients. Some of them handle us like it is our fault to be ill. And it wasn't as though there was no nurse, there were nurses, but it was difficult to approach them. P12

Participants also ascribed hindrances in seeking clarity to information received from family members with surgical experience. The following quote demonstrates:

For some of us, it would not occur for us to ask about anything. For me, I am fortunate to have my son and brother operated before I came here. They had given me a lot of information about the procedure I went through and so I didn't feel like asking them. Anyway, I think I should have asked because their (brother and son) conditions were different from mine. So, I think I should have asked them. P7

Finally, participants stressed that nurses should encourage patients to seek clarification. An example of this is found in the comment below:

I don't know much about the work of the nurses, but I think that it will be appropriate for them to approach the patient and ask him or her if he or she is having some sort of fear. Because with what I told you, you could see that the person was very much afraid. So, they should get close to the patient and try to know what the person is afraid or worried about. P2

5.6.5.2 Inability to Assess Preoperative Information

Information is needed to plan patients' care. It is always possible to obtain the needed information to plan patients' care. Reasons pertain both to nurses and to patients. This theme is divided into sub-categories, which include: a) poor nurses' attitude, and b) patients' perceptions on condition and surgery. From the data obtained, participants generally attributed

circumstances in which nurses are unable to assess their preoperative information needs to nurses' attitude.

> *Other factors may also be as a result of the attitude of some of the nurses. Sometimes we see some of the nurses as not being friendly and in which case, it would be difficult for them to approach nurses with their problems.* P8

a. Nurses' attitude – It emanated from the study that the negative attitude of nurses exhibited in the process of preoperative care hampers the assessment of patients' information needs. This is illustrated in the following quotes:

> *Sometimes the nurses are so busy to attend to us. You would see them sitting by their table playing on their phones while we the patients would be here needing their help.* P2

> *Even when one nurse came here to check my vital signs, my hands were trembling and I could feel my heart beating hard. I really wanted to know the figures she had after checking my vital signs, but she didn't tell me. I think she wrote them on my chart, but I could not read it because I am not able to read well. It was later when one male nurse came here and he realised that I was anxious and he told me that I should relax.* P3

> *I don't know how the nurses do their work, but I think that if they are to make more time for us, it would help us receive the best of care from them. You would mostly see them by their table chatting and laughing.* P12

b. Patients' perceptions on condition and surgery – The perception of patients originates from information, whether right or wrong, received from both health workers and non-health workers. Perceptions that patients develop go a long way in either enhancing or inhibiting the exploration of preoperative information needs. It emerged from the data that patients'

perceptions developed from information they had received from people who were not health workers. This is demonstrated in the quotes below:

> *In my hometown, three people that had operation on hernia died continuously on different occasions that the chief decided that nobody would ever go there for an operation. It took the nurses to organise a meeting with the chief and his elders to brief them on the causes of death, which, I was told, were as a result of complications. It was for this that the chief was convinced and allowed the facility to be patronised.* P6

> *They (friends) said after the surgery, I would not be able to pass stools and also after the surgery, most patients do not come out successfully and you would end up having complications on passing stools and a whole lot.* P5

> *A lot of friends at home and at the workplace put some fear in me that a lot of people have been dying through surgery nowadays and for my case, they would say that people with fibroid normally are not able to give birth after undergoing surgery.* P9

5.6.6 Theme Four: Managing Patients with Information

This describes the participants' experiences on nurses' action in the management of preoperative information needs of patients. It involves informing and / or educating patients about areas of surgical experience that have been identified to cause preoperative anxiety. Areas in which patients are mostly informed include the condition, surgical procedures, the preparations, that is, routine preparations through which patients are taken to undergo surgery and postoperative activities. A team of health workers such as nurses, surgeons, anaesthestists, and sometimes clinical psychologists or counselors mostly do the education. This theme is divided into categories, which are: 1. Informing patients and family, 2. Obtaining preoperative information needed, and 3. Challenges in informing patients. Data obtained from the study

generally affirmed the aforementioned areas of information. This is described in the categories described below.

5.6.6.1 Informing Patients and Family

This is the act of providing information to patients and family members. The content of the information mostly includes the conditions under which the patient is to be operated, the surgical procedure, patient and family responsibilities and activities in the preoperative and postoperative period, and challenges that the patient and family may come across in the course of the patient's care. This category is divided into sub-categories and they are as follows: a) benefits of information; b) information on surgical conditions, and c) information on preoperative processes. Participants generally described the way in which nurses provide patients and their family members with information pertaining to undergoing surgical operation. These are illustrated in the following quotes:

> *They (nurses) told me that, 'if you are suffering from a condition and you do not seek medical attention, that you can die.* P3

> *I didn't know anything about operation, it was the doctor that I came to see me that told me that the only solution to the condition I was suffering from was surgery.* P7

a. Benefits of information – Information provided to patients and family is meant to be beneficial to them by upgrading their knowledge to participate in their care and decision-making and to relieve them of preoperative anxiety. It emerged from the study that the benefits of information must be made known to the patients. If this is done, it facilitates patients' acceptance of the information and helps in reducing their preoperative anxiety. Participants' responses are illustrated in the following quotes:

> *Yes, it is very necessary. The reason is that if you don't educate the person, he/she would not know what is going to go on. With the numerous operations performed in the*

hospitals, some of the patients may have an idea about it while others may not and even when the family members come and they try to find out the kind of procedure performed, they also don't know because they don't get answers from the patients or their relatives or the nurses. P2

So, it is very necessary they give us information because I have known that there are many things a person undergoing surgery needs to know, like when I was told not to take food and water in the morning I was operated. I didn't know this beforehand, but I think it would have helped me a lot if the nurses had given me this information earlier. I had really planned with my wife to bring to me my favourite meal [patient laughs]. It was when my wife asked them about the time that she was supposed to bring the food. That was when they (nurses) told her that I would not eat in the morning prior to surgery. If she had not asked, she would have brought the food and it would have gone waste. P7

I think everybody undergoing surgery needs to know what it is about, the things we need to do before undergoing the surgery and those that we are not supposed to do. They are important because, I remember one man (anaesthetist) came here alone to ask me some questions on whether I take alcoholic drinks, smoke and whether I am allergic to certain drugs. If he had not come to ask me about all these things, I wouldn't have known. And if there was something important for me to know, I would have preferred the nurses to tell me whether those things my friends and family told me about surgery, that it is scary and one can easily die, are true. P9

b. Information on surgical conditions – This is the process of giving the patient and family information about the conditions under which patient is going to be operated. This includes hernia, diabetes, and appendicitis. Data obtained from the study generally described that

education is commonly provided on the conditions with which patients visit the hospital. This is explained in the quotes below:

> *He (doctor) said I have diabetes and if he doesn't do the amputation, it would spread upwards to the upper part of my body.* P1

> *The doctor after examining me told me that it was hernia. He told me that if it stays for long and I don't undergo the surgery, it would lead to complications. And so he advised me to undergo the operation to relieve me of it.* P2

c. Information on preoperative processes – Before patients are operated, they are taken through routine activities that would make them psychosociologically, physically, and physiologically prepared to undergo surgery. Participants generally described that nurses educate them on preoperative processes, especially vital preoperative teachings. This is demonstrated in the following comments:

> *Okay, they told me that I shouldn't eat heavy food … And they told me that I will be doing enema and I shouldn't be eating heavy food because on the day before the surgery I won't eat at all and so I can eat light diet till the previous day and after that I would not drink water, I would not take in any food unless the surgery has been done. So that is what I went through before the procedure.* P5

> *During the evening before the day I was operated, one of the nurses came to me that he wanted to teach me how to breathe and cough which I would do after the operation had been done so that the sutures in my wound would not remove for the wound to be infected.* P7

> *At the time I was being admitted into the ward, I had a necklace. So one nurse told me that I would have to give it to my brother to keep it for me else I would have injuries*

during the time they are performing the surgery. And then she asked me if I had artificial tooth of which she said, I would also have to take it off. P9

5.6.6.2 Obtaining Preoperative Information Needed

This describes the sources from which patients obtain the information they need and. These sources include friends and family at home, and the health workers at the hospital, such as nurses, surgeons and anaesthetists. From the study, participants generally described two main sources from which they obtain information prior to undergoing surgical operation. These include the environment, comprising family and friends, which occurs before they arrive at the hospital for surgical treamentt. The other source is from health workers, that is, preoperative preparations for surgery. Their response emerged from the following sub-categories: a) information patients expect and receive from nurses; b) health workers involved in information provision; c) sources of information to patients, and d) patients' views on the process of being informed.

a. Information patients expect and receive from nurses – One way or another, a patient scheduled to undergo surgery would need some form of information from health workers, especially nurses, who are most of the time with the patients. It was discovered that patients expect various forms of information from the nurses. This is illustrated in the quotes below:

What I wanted them to make me aware was whether this procedure would be different from the first one I had, in terms of pain, painful it would be, whether it would be painful than my first experience and how the pain would be managed. P2

First, I was expecting the nurses to tell me the number of minutes or hours the surgery was going to last and also about the doctor who was going to operate on me. But I didn't get the opportunity to be taught and also to know the doctor. P5

I didn't really think of surgery at all. So, when the nurses checked my BP and it was high, I wanted them to tell me the cause of the high BP. P10

On the other hand, participants had this opinion to share:

Interestingly, I didn't really need the nurses to educate me. I thought after being admitted, they would just send you to the theatre the moment I arrived at the hospital. P11

b. Health workers involved in information provision – Health workers at the hospital comprise nurses, doctors, laboratory technicians, anaesthestists, and so on. These workers provide some form of information to patients during interactions. Data obtained described that nurses are the health workers who often provide patients with information. The following excerpts describe the health workers that are often involved in the provision of information:

They (nurses) told me that, 'if you are suffering from a condition and you do not seek medical attention, you can die. So, once you have come to the hospital and you have been made aware of what you are suffering from and that you need to be operated on, you may not want to agree.' So, one nurse said to me that, 'because of fear you want to rescind your decision to avoid the surgery, then you are willing to die?' So, when they told me that I developed some hope because once they have admitted me, they know best, ahaa!! Even some of the patients may not know what they are suffering from, but for me, the nurses made me aware of what I was suffering from and I had to agree to undergo the surgery. P3

One man, I think it was the anaesthetist, came here and asked me if I was scared and even one male nurse also came and asked, 'Agya, are you afraid?' and I responded, 'oh no, I am not afraid'. P4

So, when I came here and saw the doctor at consultation, he asked me questions concerning whether I have had treatment elsewhere and I told him that I was diagnosed of rectal prolapse at that hospital. P5

c. Sources of information to patients – This describes the persons and medium through which patients obtain information. As described already, these sources of patients' information include friends and family, health workers at hospital, and the media at large. From the study, it is known that patients' information sources are generally friends and family and health workers. These are demonstrated in the quotes below:

He (doctor) said I have diabetes and if he doesn't do it, it would spread upwards to the upper part of my body. P1

I heard from some friends that when someone is sent to the theatre for operation, that person can either survive or not survive. And since I was admitted, I've seen some patients who had been brought from the operating room successfully. P6

My son and brother have been operated before. So, they shared their experiences with me that, 'it is not dangerous to undergo surgery as most people think'. P7

e. Patients' views on the process of being informed – This describes the process through which information is given to patients. This include verbal and nonverbal processes. The verbal process comprises explanation and instruction coupled with demonstration and illustration. The non-verbal process includes gestures and signs. From the study, participants described that the process by which health workers provided them with information was solely verbal. This is demonstrated in the quotes below:

The nurses did not tell me anything concerning the operation I was going to do. All that they said was that I should allow them to amputate my leg and I would be free. P1

Erm… it wasn't really education, it was an advice the nurses gave me that I should relax and that the surgical procedure is not scary and that everything will be ok. So they tried to convince me to change my mind by reassuring me. They told me that, 'if you are suffering from a condition and you do not seek medical attention, that you can die. P3

5.6.6.3 Challenges in Information Provision

Providing education to patients prior to surgery often involves challenges encountered by nurses and other health workers. Challenges may pertain to lack of knowledge, logistics and conditions in the ward such as too few staff and a heavy workload, and the inability to interact with patients. Participants came out with certain challenges that hinder the provision of preoperative information to patients. This theme is divided into categories, which are: a) poor attitude of nurses; b) patients' perceptions about surgery, and c) improving patients' information provision.

a. Poor attitude of nurses – From the study, participants described poor nurses' attitudes, preconditions and behaviours of some nurses. This is illustrated by the following quotes:

Sometimes we are afraid to even ask the nurses certain questions because, we think that they would scold at us. You know, some are very rude, especially the young ones that don't have much experience. P6

Other factors may also be as a result of the attitude of some of the nurses. Sometimes we see some of the nurses as not being friendly and in which case, it would be difficult to ask them questions. Imagine the nurse coming to the ward with a frowned face or you call her and her response is cold. You would be afraid to ask anything. So you would just have to be quiet and pray that everything is over for you to leave. P8

As it occurred in my case when they checked my BP and it was high, their utterances and behaviour put much fear in me that I didn't have the gut to ask them what was happening to me. One said to the other that, 'her BP is too high'. And they looked like they didn't want to tell me and discussed it among themselves. I wanted to ask them, but then I became afraid that they wouldn't give me a favourable response. P10

b. Patients' perception about surgery – Participants explained their perceptions about surgery as inaccurate information they receive from family and friends, which made them more anxious. This is found in the following quotes:

Yes, I told you that my mother's sister died during surgery and other people told me how dangerous surgery is. And I have been thinking about this since I was told by the doctor that I would have surgery. P3

One day, I was travelling in a bus and a man selling herbal medicine came to sell his drugs on board the bus. He was saying that 'if you have piles (haemorrhoids) and you go to the hospital, the doctor would operate on you and you will die'. So from that day, it had been in my mind that operation is dangerous. And it was really not easy for me to make up my mind to come to be operated. P10

Most of them listen to people who are not healthcare workers and they give them wrong information about operation. Before I met the nurse to teach me about my condition and the operation, I had had similar information from friends that, 'operation is dangerous, the drug they would give to put you into sleep sometimes kills the patients, after the surgery, you will be weak and can't work' and when you are a male, you can't perform sexually [patient chuckles]. P12

d. Improving patient information provision – This is the process of developing new strategies in enhancing the provision of information that is beneficial to patients. From the data, participants suggested ways in which nurses can educate them on preoperative activities. This is illustrated in the following quotes:

> *Sometimes, we the patients don't understand the terms that the nurses use. So, when they come to educate us, they should break down the terms to a level that we can understand. If they don't explain things to us in that way, they make us nervous. Again, most of us have not had surgery before and so informing us will help us know what is going to go on at the theatre and what will become of us after the operation. If we know this, our fears will be cleared*. P4

> *I think that the nurses should inform us on what we are going to go through because most of us have not had surgery before and because of that we become so much afraid. So if they teach us to the level that we would understand, it would help us know very well what is ahead of us and we will be at peace.* P6

> *At the consulting room, the doctors are not able to inform us well and I think it is because of a lot of people in line to see him, but when we come here (ward), we have a lot of the nurses, but they don't come to us to teach us. So I suggest that they should make time and come to us to teach us. If they are not here, we are also not here*. P12

This category described participants' experiences on factors related to patient's behaviours and they mainly included: fright of unspecific cause. It was further described that effects of patients' behaviours mainly included: psychological strain, and inability to come to terms with what is going to happen. Regarding participants' experiences on nurses' reaction, it was mainly discovered that nurses interact with patients. Lastly, this category described participants' encounter with nurses' action in the management of preoperative information needs. The main steps included informing patients and family and obtaining preoperative

information needed.

5.7 Conclusion

This chapter dispensed the demographic characteristics of participants and findings of the qualitative study obtained under the four categories. These categories included: category one, employed a face-to-face individual interviews of nurses, category two, adopted participant observation of nurses with a checklist and field notes, and three and four espoused a face-to-face individual interviews of nurses and patients. All these data were collected to achieve objectives 3, 4 and 5 of the study. The next chapter will display discussion of the main results obtained with the qualitative approach.

CHAPTER SIX

DISCUSSION OF THE MAIN FINDINGS OF THE QUALITATIVE STUDY

6.1 Introduction

Chapter Five presented the findings of data obtained with the qualitative methodology. This chapter presents the discussions of the main findings of data gathered with the qualitative approach. Chapter Five, which was made up of the findings and discussions of the qualitative study, was split to obtain two chapters, Five and Six, due to its lengthy nature. This chapter have been grouped into two sections. Section One presents discussions of findings obtained from a series of interview sessions involving nurses and patients and participant observation of nurses with a checklist. Data collection of these findings were grouped into four categories in Chapter Three. Section Two displays triangulation of results from quantitative and qualitative studies. four categories. Category one discusses the main findings obtained from a face-to-face individual interviews of nurses to achieve objective 3. Category two discusses data gathered through a participant observation with a checklist and fieldnotes to accomplish objective 4. Discussion of findings in category three compensated data obtained in category two which espoused a face-to-face individual interviews of nurses to achieve objective 4. Lastly, category four presents discussions of the main findings of data acquired through face-to-face individual interviews of patients to achieve objective 5.

6.2 Section One

This section presents discussions of the main findings of all the qualitative data obtained under the various categories involving nurses and patients.

6.2.1 Category One: Discussion of Main Findings Obtained Through Face-to-Face Individual Interviews of Nurses

Three main themes emerged from the analysis of the qualitative data obtained through face-to-face individual interviews of nurses presented in category one under. Therefore, the discussion of the findings of the research concerns the following themes: patient behaving differently, assessing patients' preoperative information needs, and providing needed information. The three main themes with the corresponding categories and sub-categories that emerged from the study are discussed further below.

6.2.2 Theme One: Patient behaving differently

All participants in the study agreed that patients often behave differently when they experience some level of emotional upset prior to undergoing surgical operation. Pre-operative anxiety is a vague, unpleasant feeling induced by sympathetic, parasympathetic, and endocrine stimulation prior to any operative procedure, the source of which is sometimes generic and unknown to the individual (Dhungana et al., 2019). From the study, participants were of the view that fear is the most common factor patients display when they are anxious. Malley et al. (2015) stressed that the preoperative period is the first step in a surgical patient's care, which should be considered a key component of care transfer. The participants further explained that patients' fears often centre on the surgical procedure, postoperative pain, anaesthesia, environment and complications.

6.2.2.1 Fear of the Unknown

Fear is a common manifestation that surgical patients exhibit. Fear experienced during the period prior to surgery may either be due to nothing in particular or as a result of so many factors. Carleton (2016) describes fear of the unknown as a person's proclivity for fear as a

result of a perceived lack of knowledge at any stage of consciousness or point of processing. Participants described that patient's fears mostly centre on the lack of information, fear of the procedure, fear of environment, complications and death. The emerged sub-category, fear of the environment is supported by the findings by Joy and Cobb (2020), who define fear of the unknown as the inclination for an individual to be terrified of something about which he or she has no knowledge at any level. In a more current study, Wondmieneh (2020) establishes that fear of death, unknown cause, and postoperative pains are factors to consider in patients who harbour fear. However, links have been established between information and anxiety in that patients often develop preoperative anxiety if they have little or no knowledge regarding their condition and its surgical treatment (Althobiti et al., 2020).

a. Lack of accurate information – Generally, participants mentioned lack of accurate information to be the cause of fear of the unknown among the patients. Participants disclosed that patients who go through preoperative preparations towards surgery are often ignorant about information provided by doctors and nurses on the conditions they present at the hospital as well as on the corresponding surgical operation. Literature reviewed depicts that patients require information to manage preoperative anxiety (Poland et al., 2017; Cevik, 2018). In support of this, Althobiti et al. (2020) stress that providing patients with information on health-related and psychological support is aimed at reducing preoperative anxiety. Patients go to the hospital with information that they receive from family and friends, which may not be as accurate as that provided by health professionals. This was reinforced by the study of Wongtaweepki et al. (2021), who found that quite a few patients indicated friends and relatives as their source of information. In contrast, the authors discovered that majority of the patients receive their primary information from health personnel

b. Emotional stress – It emerged in the study that patients experience emotional stress before

undergoing surgical operation. In the study of Altaf et al. (2014), emotional stress is described as a state of tension or anticipation, as well as a variety of natural bodily responses (mental, emotional, and physiological) that are intended for self-preservation. Altaf et al. (2014) therefore support this finding that tension and intellectual distraction are often displayed by patients undergoing surgery. Participants mentioned that patients often exhibit the manifestation of emotional stress in the form of tension and, most commonly, intellectual distraction. Participants postulate that patients who are intellectually distracted lack attention span, which is evident in the number of times nurses ask them the same questions repeatedly. In support of these findings, Bedoso and Ayalew (2019) discovered that patients' cognitive function often deteriorates, affecting their ability to concentrate during preoperative instructional sessions. Consequently, participants revealed that emotional stress leads to deterioration of the patients' vital signs. In confirmation of these findings, Akinsulore, et al. (2015) agree that changes in the cardiovascular system of patients cause tachycardia, hypertension and arrhythmias.

6.2.3 Theme Two: Assessing Patients' Preoperative Information Needs

In the concept of nurses' reaction, participants established patients who have been admitted for preparation to undergo surgery need to be assessed to identify preoperative anxiety and the information they need. The responses were consistent among all the participants irrespective of their age, years of practice and the nature of their ranks. The theme assessing patients' preoperative information needs begins with the aim of identifying the causes of patients' anxiety. Malley et al. (2016) emphasise that the nurse's position in the preoperative assessment is that of an advocate, identifying the patient's needs and risk factors that may be impacted by the surgical experience. The main ideas of nurses' reaction that emerged under this theme include: 1. Nurse–patient interactions, and 2. Validation of information needs.

6.2.3.1 Nurse–Patient Interactions

Participants reiterated that nurse–patient interactions are the bedrock of the assessment of preoperative information needs of patients. Nursing Essay (2020) refers to nurse–patient interactions as therapeutic, which is based on mutual understanding between the nurse and the patient. In a previous study, Stuart (2017) specifically describes the nurse–patient interaction as a shared learning experience and a corrective emotional experience for the patient, based on the nurse and the patient's humanity, mutual respect and acceptance of sociocultural differences in a previous report. Participants believe that interactions are an automatic act, which begins the moment the patient arrives in the ward to be admitted and, for that matter, it must be well performed to be able to ascertain the patient's problems. This is supported by Kwame and Petrucka (2020), who explain that the quality of nurse–patient contact and communication influences patients' complete participation or non-participation in the sense of assessing information needs and taking personal care of their well-being to some degree (Kwame & Petrucka, 2020). With all these in play, the participants deem it fit for patients to be assessed and the information they need should be identified and managed. In the process of identifying the information needs of patients, participants emphasised encouraging patients to raise concerns even though clinical observation is part of their core mandate in observing the patients.

a. Encourage patients to raise their concerns – According to Orlando's deliberative nursing process theory, manifestations of anxious patients trigger nurse–patient interactions leading to the assessment process. During the assessment, the nurse shares his or her thoughts and feelings with the patient upon observing the patient's manifestations (Sampoornam, 2015). In addition to this, Vujanić et al. (2020) explain that nurse–patient interaction involves a professional and therapeutic sharing of information to plan and provide appropriate care for patients. Participants believe that, in an attempt to identify preoperative information needs, patients must

be encouraged to bring out their concerns with regard to their thoughts on the causes of preoperative anxiety. Dean (2017) agrees to this finding that hearing the patient's voice amounts to key decision-making in determining the predictors of preoperative anxiety.

6.2.3.2 Validation of Information Needs

Participants were of the view that validation involves providing patients with information to encourage them to express their concerns about the causes of preoperative anxiety. On the other hand, Bonthagarala et al. (2015) made an emphasis, which opposes the responses of the participants that validation is the gathering and evaluation of predictors of preoperative anxiety with evidence to assist the nurse and patient in selecting and delivering quality preoperative information. Deliberative nursing process theory, which was used as the theoretical framework for this study, described validation as the process of making clinical judgment about the identified predictors of preoperative anxiety, which are presented to the patient for confirmation (Gonzalo, 2021). Participants described that the process of validation involves the importance of information to patients, feedback from patients, and fear of complications.

a. Feedback from patients – From the study, participants described feedback from the patient as the period in which patients willingly express fear of the impending surgery, understanding of instructions from nurses, and opportunities given for patients to ask questions. Matthews (2021) describes feedback as information that the patient provides after receiving instruction(s) or order(s) from the nurse. Again, Orlando's theory argues that feedback is described as a period in which the nurse expects responses from the patient concerning identified information needs presented to the patient for confirmation, rather than solely concluding on the nature of the patient's problem (Gonzalo, 2021).

6.2.3.3 Process to Inform Patients and Family

This is an attempt, under the nurses' reaction, to provide preoperative information to patients and their relatives concerning the condition the patient is suffering from as well as the surgical operation the patient has been booked to have. According to Orlando, nurses provide information to those who are in need of it in the process of preoperative preparations in an attempt to reduce, diminish or eliminate patients' anxiety (Abyu & Agenagnew, 2019). Participants' views were that, to inform the patients, nurses need to prepare by knowing the kind of condition the patient is suffering from, the literacy level of the patient and family members, and the use of simple terms to inform the patients. The study of Engelke et al. (2017) shares a similar view with the findings of this study that informing patients involves teaching patients about the nature of the specific surgery. In a previous study, Kalogianni et al. (2015) stress that informing patients involves explaining the surgical processes to the patients. Emerging from the study, participants described that the process of informing patients and family includes: specific information, reinforcement of information, introduction of patients to recovered ones, and the use of patients' preferred language to provide information.

a. Use of patients' preferred language to provide information – With respect to this sub-category, participants responded that surgical wards that admit patients who are not indigenes and speak foreign languages such as French, rather than the local languages, require an interpreter for translation. They further stressed that nurses sometimes use a medium familiar with the patients such as pictures as means through which patients are informed. Reema (2017) disclosed that it is relevant to recognise patients' literacy level, cultural background and languages they speak before informing them. In another study, Kwame and Petruka (2020) describe the importance of interpreters and translators in times when patients do not speak the local languages or English. Additionally, Tollefson et al. (2020) establish that determining the knowledge level of patients is essential to the provision of information.

6.2.4 Theme Three: Providing Needed Information

Providing needed information describes the act of informing patients about the information needs that have been identified. McDonald et al. (2014) describe providing needed information as an educational intervention aimed at enhancing patient sensitivity, preoperative behaviours, and surgical outcomes. Nurses, who are the health professionals who spend the most time with patients, have enlarged their skills in the domain of the provision of information to patients (Gonçalves et al., 2017). The authors continued that, because of this, nurses should play an important role in disseminating preoperative information to patients. In deriving participants' opinions on the management of preoperative information needs, this theme was coined. Categories that emerged from this data include: factors enhancing the provision of information, and challenges in informing patients and family. Nurses interviewed in this phase of the study revealed that certain factors enhance the provision of preoperative information, which includes: multidimensional communication, knowledge upgrade, limiting preconditions and behaviours, time management, and valuation of education. However, the nurses revealed that the challenges involved are: inadequate time, and staffing (inadequate and inexperienced staff and preconditions and behaviours of staff). These categories and the corresponding subcategories are further discussed in phase three.

6.3 Category Three: Discussion of Main Findings Obtained Through Participant Observation of Nurses

This category gives a summary of the main findings from the analysis of data obtained through participant observation with a checklist and field notes. This was to achieve objective four. In an attempt to find out if nurses' practices on how preoperative patients' information needs are identified and managed, findings contradicted those obtained in category one. In category one, participants mainly claim that nurses assess preoperative information needs of

patients through interactions and validation. However, nurses were mainly observed to perform routine preoperative preparations of patients to undergo surgery such as, admission process, checking and recording vital signs, physical and physiological preparations. Deliberative nursing process theory profess that nurses react to patients' behaviours (preoperative anxiety) and begin to explore the causes through interactions and take actions to provide information to relieve anxiety (Gonzalo, 2021). Centre (2016) establish that nurses perceive their duties at the SWs / SSs to only include assessing the vital signs. Reader and Gillespie (2013) conclude that nurses lack knowledge to assess and manage preoperative anxiety and information needs. Reviewed literature affirm the perception of most nurses that certain practices regarding nurses' reaction and nurses' actions described by Gonzalo (2021) are not within their job descriptions. In this view, nurses only carry out the routine duties to prepare patients for surgery.

6.4 Category Three: Discussion of Main Findings Obtained Through Face-to-Face Individual Interview of Nurses

This category discusses the main findings of four main themes that emerged from the analysis of qualitative data obtained through face-to-face individual interviews of nurses. The discussion of the findings follows the following themes: setbacks in assessing patients' preoperative anxiety and information needs, setbacks in the management of preoperative anxiety and information needs, improving identification of preoperative anxiety and information needs, and improving provision of preoperative information. These findings were to compensate that of category two.

6.4.1 Theme One: Setbacks in Assessing Patients' Preoperative Anxiety and Information Needs

Assessment of patients preceeds nurses' reaction after observing patients behaving differently. It comprises auscultation, palpation, and percussion that are thought to prepare nurses appropriately for the identification of preoperative anxiety and information needs of patients (Zambas et al., 2016). All the participants in the study agreed that nurses are faced with challenges in assessing patients for preoperative information needs. Literature has established that most nurses do not conduct proper assessment of patients (Khoran et al., 2018). From the study, participants describe factors that impede the assessment of patients prior to surgery as including: 1. role confusion; 2. communication lapses; 3. poor nursing etiquette; and 4. knowledge lapses of nurses in patient assessment. The role these factors play in impeding the assessment of patients is described in the discussion below.

6.4.1.1 Role Confusion

Nurses must have a strong awareness of the roles they ought to play to have an impact on the assessment of the preoperative anxiety and information needs of patients (Raftery, 2016). Results from the study indicate that there are no clearly defined roles for nurses to carry out activities in assessing patients to identify preoperative anxiety and information needs. In support of this finding, Khoran et al. (2018) discovered that ambiguity in task description is one of the reasons nurses are unable to assess patients. Mahfouz et al. (2013) address the fact that role confusion is one of the most stressful aspects of nursing responsibilities, which is influenced by both role conflict and role ambiguity, and the nurse is affected by unclear roles and responsibilities. Furthermore, it emerged that the doctor's / anaesthetist's responsibility, monitoring and ward tradition were the factors that compel nurses to be confused about their roles.

a. Doctor's / anaesthetist's responsibility – Nestler (2019) highlights that nurses' responsibilities are independent from those of the doctors' treatment orders. However, participants in this study stress that activities associated with the assessment of patients' preoperative anxiety and information needs are the sole responsibilities of the doctors and anaesthetists. Contrary to the thoughts of the participants in this study, Malley et al. (2015) describe the recommended duties of nurses during preoperative assessment as an advocate in identifying the patient's anxiety and potential factors of anxiety. In support of the reviewed study, a document by Pacific Rim Outpatient Surgery Centre (2016) establishes the job description of nurses stationed at the SW/SS to include the assessment of vital signs, observation of patients for changes in condition and notification of the practitioner of such changes

6.4.1.2 Communication Shortfalls

Patients seeking surgical care at the hospital often encounter complex communication, which focuses on their movement, sensory, cognitive and language barriers (Norouzinia et al., 2015). From the study, participants proclaim that patients who seek surgical care often do not know their rights to information. The participants continued that patients perceive nurses to be unapproachable; thus, they refrain from seeking information about their condition from nurses. They concluded that nurses capitalise on this stance to avoid assessing patients for preoperative anxiety and information needs. Aligned to these findings, Wittenberg et al. (2019) report communication challenges between nurses and patients who do not speak a common language and patients with less education. The contribution of Davies (2020) reinforces the findings of this study that it is generally known that health professionals require strong reasons to release certain information to patients about their care. Davies (2020) continues to claim that patients may know they have a right to information while they may also be aware that they have an

equal right to information ignorance. The participants' opinions revealed that language barriers, the literacy status of patients, and time constraints culminate in the existence of communication shortfalls at the SWs/SSs.

a. Literacy status of patients – Generally, participants professed that most patients have low literacy rates and are not oriented to their rights, for which they could take legal action against nurses who fail to attend to their needs. Reinforcing these findings, Owusu-Dapaa (2016) expresses that a big portion of Ghana's patient population is mostly unaware of the rights available to them during their clinical encounter with healthcare professionals. However, in his study, Owusu-Dapaa (2016) discovered that the majority (85.6 per cent) of participants indicated that they were aware of the rights of patients. Reader and Gillespie (2013) discovered that failure of nurses to assess patients with respect to inadequate knowledge of their rights may be due to lack of concern on the part of nurses or to issues such as system failures and errors. In this regard, the participants claim that nurses fail to attend appropriately to patients to assess their preoperative information needs. Conforming to the thoughts of the participants, Wynia and Osborn (2010), and Seurer and Vogt (2013) describe literacy in the context of health as the ability of individuals who are seeking healthcare to obtain, process and understand fundamental health information and services required for health decision-making. Failure of a patient to put in more efforts to obtain knowledge about his or her condition signifies that he or she is health illiterate. Consequentially, Wynia and Osborn (2010) project that patients with little knowledge on health have a tendency to misunderstand health information and they struggle to cope with surgical instruction.

6.4.1.3 Poor Nursing Etiquette

Nursing is described as professional interactions among diverse persons in various circumstances (Molina-Mula & Gallo-Estrada, 2020). In the study, participants described poor

nursing etiquette as nurses who display poor attitude towards their patients. One participant indicated that nurses who exhibit poor attitude are naturally poor in attitude. In relation to these findings, Greg (2017) emphasises that every ward has one or two nurses with whom no one wants to work and that there is no single term to describe them. In support of current findings, Wurjine and Nigussie (2018) found that nurses display negative attitudes towards patients by often attending to them with poor etiquette including proud and contemptuous nurses, ill-mannered nurses, showing idleness and negligence and redundancy of responsibilities.

a. Ill-mannered nurses – Concerning ill-mannered nurses, participants revealed that unhealthy relationships often ensue between nurses and patients. This develops into patients harbouring fear in approaching nurses concerning their care. In response to this finding, Nursing Times (2015) describes ill-manner as the display of rudeness and discourteousness. In support of this, Haskins et al. (2014) detect in their study that nurses often develop poor relationships with patients, which is evident in verbal abuse, rudeness and neglect. Molina-Mula and Gallo-Estrada (2020) stress that an unhealthy nurse–patient relationship often develops from challenges that nurses encounter in assessing the patient's anxiety and information needs in the absence of clinical practice guidelines or evidence-based practice support, which ends in impotence when the patient does not obtain the desired attention. Cheruiyot and Brysiewicz (2019) add that nurses develop an ill-manner towards their patients when dealing with stressful patients. The authors continue that nurses ignore or exclude demanding or difficult patients from nursing care by building an emotional gap between themselves and the patients. This is evident in the following comment: *I don't ignore them every day; sometimes a minute and then check up on them. I don't ignore them the whole day, because sometimes today he calls you and is not a nuisance; he needs you seriously*.

6.4.1.4 Knowledge Lapses of Nurses in Patient Assessment

Lack of knowledge is observed as a crucial element that can affect both nurses and patients in care outcomes (Oyira et al., 2016). Data obtained indicate that nurses lack knowledge in the various forms of assessment. Nurses have been observed only to be able to check the vital signs of patients and to omit the other assessment measures citing reasons such as lack of understanding and interpretation and the skills in assessing patients. Literature (Redfield et al., 2016; Burgess et al., 2020; Rafii et al., 2021) states that knowledge lapses encompass factual knowledge, contextual knowledge, procedural knowledge, social knowledge, and pragmatic knowledge, which are vital in the assessment of patients. Participants' comments led to the discovery of sub-categories, which further explain the conditions under which nurses lack knowledge. In spite of these, it appears that poor reading habits of nurses, lack of skills, being dependent on doctors' orders, and the strenuous process of upgrading knowledge contribute to knowledge lapses of nurses in patient assessment.

a. Poor reading habit of nurses – The study describes nurses as possessing poor reading habits. Reasons participants gave are that some of the nurses claim that they forgot what they learned at nursing schools, while some feel reluctant to read to restore their knowledge. In addition to this, most nurses are unwilling to attend workshops pr in-service training programmes owing to financial constraints. This is supported by the report of Fawaza et al. (2018) that nurses are unable to upgrade their knowledge in organised educational programmes owing to the cost of fees involved. Booher (2019) supports the findings of this study with a shared experience that, *once nurses get past that point in college where we have to read books to pass exams, a lot of us fail to continue to read after graduation and that is a shame. Speaking for myself, after I finished nursing school, it was several years before I picked up any book to read for my own enjoyment*.

6.4.2 Theme Two: Setbacks in the Management of Preoperative Anxiety and Information Needs

All participants acknowledge the existence of setbacks in relation to nurses' action in the management of preoperative anxiety and information needs of patients at the SWs/SSs. Several studies confirm such challenges involved in the management of preoperative information, including poor provision of information in unfamiliar formats and incompetent nurses in the provision of preoperative information (Heggland & Hausken, 2015; Malley et al., 2016; Christalle et al., 2019). Participants' thoughts extracted from the data relating to nurses' action were used to form categories, which include: 1. Lack of guiding principles; 2. Inappropriate staffing norms; 3. Teamwork lapses; 4. Nurse–patient interactive defects; 5. Poor time management; 6. Knowledge deficit of nurses, and 7. Lack of evaluation. These are discussed in the texts below.

6.4.2.1 Lack of Guiding Principles

Sales et al. (2018) describe guiding principles as a set of principles that nurses utilise to improve the quality of care provided. From the study, participants generally agreed that the SWs/SSs lack the principles to guide nurses in providing preoperative information. In consequence, Vaismoradi et al. (2020) found that nurses who do not follow guiding principles in the care of patients do so as a result of the absence of guiding principles specifically for nurses: *These guidelines are for doctors ... I don't know much about them and doctors should stay up to date and update the clinical guidelines and our role as nurses to follow the order*. No ward protocol, no supervision, haphazard provision of information and invasion of patients' privacy are subcategories that emerged in the study.

a. Haphazard provision of information and invasion of patient's privacy – Findings generally show that nurses seldom encounter certain surgical conditions and their related

procedures at the SWs/SSs, thus making the knowledge they acquired in the nursing schools fade. In this regard, some participants assert that they are incapacitated in the provision of appropriate preoperative information to the patients who undergo said surgical procedures. Provision of information may be influenced by the value placed on it by nurses. Supporting these findings, Farahani et al. (2013) reveal that one of the main factors of poor provision of information is 'not considering patient's education as a value' during the preoperative period. A nurse said: *It is very important to focus on education. When all patient education activities are delivered through a crumbled pamphlet exclusively by the ward secretary at discharge time, we found that education may not be highly valued*. In another study, Oyatunde and Akinmeye (2015) agree that cultural demarcation, workplace culture, lack of time, heavy workload, insufficient staffing, and the complexity of patients' conditions are factors that affect appropriate provision of information.

6.4.2.2 Inappropriate Staffing Norms

Inappropriate staffing norms is described as the state in which SWs/SSs are stocked with inadequate nurses who are unequal in knowledge and skill, and this is partly due to misdistribution of staff resulting in gross understaffing of SWs/SSs (The Technical Working Group, 2013). Findings from this study indicate that there are always too few nurses to care for patients, that is, those who are admitted to be prepared to undergo surgery and those who have been operated on. The study demonstrated that such inappropriate placement of nurses affects the provision of information to patients. The studies of Dall'Ora et al. (2020) and of Haegdorens et al. (2019) were in alignment with the findings of this study with the discovery of the existence of inadequate staffing and the poor effects on the outcome of patients' care. Furthermore, the study reveals that nurse managers assign nurses who are inexperienced and lazy to work at the wards. As a result, Johnson (2018) explains that staffing is dependent on the number of nurses needed, the total number of patients in the wards and the state or condition

of patients at the SWs/SSs. In support of all these, Kakyo and Xiao (2018) reveal in their study that nursing managers lack specific training in quality improvement and hve a knowledge deficit in critical area of managerial role. Jaeger et al. (2018) add that, owing to limited resources and frequent absences, staffing is organised to cover primary programmed activities in the morning with a single nurse covering all nursing tasks for the entire hospital during the remaining time as part of a 24-hour work shift. In effect, this could contribute to the inappropriateness of staffing of the wards. Three sub-categories emerged under this category, which include: low nurse–patient ratio, posting challenges, and wrong assigning of nurses to wards.

a. Wrong assigning of nurses to wards – Participants complained that wrong assigning of nurses to the wards results in inadequate nursing staff, inappropriate recruitment, and bias in assigning nurses to the wards of their choice. Malatji et al. (2017) found similar findings in that wrongful placement of nurses to wards leads to burnout among nurses. A participant asserted: *I get overloaded with work due to shortage and staffing patterns. I have so many patients to care for and I am not managing.* Reiterating bias professed by participants, Sodeify et al. (2013) found similar acts of bias in their study. They presented the dissatisfaction with nurse managers who fail to recognise their professional qualities and expertise and, in turn, replace them with other nurses. An individual nurse shares her experience as: *I had been a head nurse for six years in a hospital ward. I passed several workshops and training courses for this purpose but suddenly they took my responsibility with no reason and replaced somebody else from somewhere with no experience even as a staff nurse in that ward.* Again, the authors revealed an intriguing opinion from one of the participants that nurse managers do not tend to their concerns on shortages of staff, do not listen to their demands, change nurses' wards without their input, and do not respond to their requests. The participant added: *Before they sent me back to this ward, I went to matron and said, 'please do not change my ward anymore.*

I got so tired of my circulation. If you change my ward, at least let me stay for a year. Do not circulate me anymore, or promise me not to move me if you employ a new staff.' He did not listen and did the swap again.

6.4.2.3 Teamwork Lapses

Team-based health care is when two or more health practitioners collaborate to deliver health services to patients, families, and/or communities (Babiker, et al., 2014). All participants indicated that healthcare workers comprising nurses, doctors and anaesthetists hardly work as a team. In association with this, Babiker et al. (2014) describe that most teams involving nurses, doctors and anaesthetists fail to be functional in the light of reasons such as nurses working in a self-contained one-on-one interaction with their patients, lack of clear role definitions, explicit coordination and other miscommunication. Additionally, Peruzzo et al. (2018) found that conflict and poor relationship, personality problems, overwork and scarcity of resources were found to hinder teamwork among health workers. It emerged that lack of partnership and clinical conflict were factors of teamwork lapses.

a. Clinical conflict – From the study, there is evidence to suggest that conflict exists between nurses and physicians in the wards (Ameen, 2017). Data from the study generally reveal the existence of clinical conflicts between nurses and doctors. Participants indicated that doctors who are not well oriented to their duties exhibit emotional displeasure when nurses correct their mistakes. This finding is supported by the study of Olajide et al. (2015), who discovered that the majority (77.0 per cent) of participants attest to the tendency of a higher probability of conflict ensuing between nurses and doctors owing to a challenge to doctors' autonomy. In the same vein, nurses feel intimidated when doctors reprimand or make fun of them for failing to perform their designated duties. This was agreed by Cullati et al. (2018), and Crowe et al. (2018), who emphasise that doctors are noted for intimidating nurses, which prevents nurses

from summoning them to attend to patients. Acknowledging the prevalence of conflict between nurses and doctors, Robbins (2015) presented a report of the Institute for Safe Medication Practices survey. According to the report, 87 per cent of nurses had encountered doctors who were 'reluctant or unwilling to answer your questions, or return calls'; 74 per cent had encountered doctors who were made 'demeaning comments or insults'; and 26 per cent had had objects thrown at them by doctors in the previous year. Additionally, 42 per cent of the nurses polled said the doctors had ridiculed, humiliated or circulated nasty stories about them. A critical nurse said that *every single nurse I know has been verbally berated by a doctor. Every single one.*

6.4.2.4 Nurse–Patient Interactive Defects

Interactions between nurses and patients and their family members are often affected by insufficient time (Chan et al., 2013). Time is considered to be a limited item in the midst of the shortage of nurses at the SWs/SSs (Chan et al., 2013). It has been established that poor communication between nurses and other health workers could result in patients receiving wrong perioperative care and incorrect information needs (Edemekong et al., 2022). From the study, participants reported unavailability of time as a result of the shortage of staff as contributing to poor nurse–patient interactions. This finding is supported by that of Chan et al. (2013), which describes the opinion of a nurse on how time constraints and pressures from the ward limit the amount of time available to attempt to know patients and their families: *I recall the time when I had to check 20 patients' blood pressure readings in a surgical ward: I would recheck them only if the readings were below the baseline tasks. Most often, I wouldn't know the patient's condition and I wouldn't think of possible reasons for the blood pressure or wonder about possible internal bleeding*. Subcategories that point to the interactive defects among nurses and patients include: inability to establish rapport, and pride and supremacy of doctors. These are discussed below.

a. Inability to establish rapport – Participants assert that nurses act as receptionists who must accord patients and their family members a warm reception. Failure to receive patients in this manner could lead to distrust of the nurse. In accordance with the finding of the study, Price (2017) indicates that the first meeting between the patient and the nurse is to establish rapport, which continues throughout the therapeutic partnership. The author adds that difficulties may develop during this process. It was established in the study that nurses make up the majority of health professionals and spend longer time with patients in the ward and should be the ones to create a trusting relationship with the patients.

6.4.2.5 Poor Time Management

It emerged from the study that poor management of time in the ward results when nurses lose the feeling of empathy for their patients. Moudatsou et al. (2017) describe empathy as the ability to comprehend and share the sentiments of patients. It is critical for nurses to understand patients' thoughts, ideas and experiences in order to determine their actual preoperative anxiety and to respond appropriately by providing tailored information. Furthermore, nurses are observed to neglect their duties by placing little or no value on time designated for patients' care, and instead strive to seek their own comfort. In this regard, Maryniak (2019) agrees that nurses who are involved in unnecessary activities in the ward are seen to manage time poorly. The contribution of Dean (2017b) to the findings of this study is that nurses are losing their sense of empathy for patients because technology is replacing various empathetic activities. The author cites instances when the act of touch in the checking of a patient's pulse is now being performed by electronic devices. It emerged from the data obtained in this study that misplaced priorities and lack of planning, lack of division of labour and supervision, and no value for time were the factors that deny the chance of patients managing their time properly. These are discussed below.

a. Misplaced priorities and lack of planning – Participants speculated that nurses receive a meagre salary, which pressurises some to venture into other business opportunities that contend with the time when patients are supposed to receive information. This is supported by the findings of Asamani et al. (2018), who states that nurses take up other nursing jobs in other hospitals owing to their meagre salary. Participants further postulated that the wards are not endowed with policies on time management in that there are no supervisory activities to monitor the nurses, who therefore carry out activities that are suitable to their own interests. Similar findings were obtained by Kieft et al. (2014), who agree that there is no policy in place on how to improve patient experiences of care.

Lastly, it was brought to bear that nurses fail to prioritise activities designed to provide information, and rather spend time on patients who do not need urgent attention. In contrast, Sabone et al. (2020) emphasise that nurses find difficulty in meeting patients' needs in that they have to discharge care to critically ill patients. In another instance, Tønnessen et al. (2020) mention that when nurses conserve the care of patients, it could jeopardise patients' right to healthcare and conflict with the nurses' personal and professional values. In the article, 'seven most common nurse time management pitfalls', Nursing News (2019) reports an intriguing comment of a nurse: *Sometimes a patient might really need your time, but in the current healthcare climate, it often just isn't possible to spend time talking with one patient when you have other patients to see. It can be frustrating and mentally tough to get over this and get on with your day*.

6.4.2.6 Knowledge Deficit of Nurses

Nurses may not always provide routine preoperative care to patients in that patients' conditions may require the need for application of knowledge in a specific context of preoperative information (Oyira et al., 2016). Knowledge deficit is an obvious hindrance in sticking to guiding principles in the management of preoperative information needs (Dilie &

Mengistu, 2015). Data obtained from the study indicate that nurses lack the skills required to inform patients. Participants in this study assume that nurses also do not have enough information on conditions and the procedures to inform the patients. In support of these findings, Norouzinia et al. (2015) found communication barriers to be a hindrance to the provision of information to patients. The authors continued to discover that nurse-related and patient-related factors were the main challenges to knowledge deficit on the part of nurses. Emerging from the study, participants concluded that deficient information, incompetence, intimidation, inferiority complex, and reluctance to upgrade knowledge are tfactors that contribute to the knowledge deficit of nurses.

a. Intimidation and inferiority complex – Studies have recorded certain levels of intimidation and assaults directed at nurses at the SWs/SSs. Studies also indicate that intimidative conditions are harmful to the patients as well as to the institutions (Yildirim, 2016). Analysed data in this study show that nurses suffer intimidation from other nurses and doctors alike on account of lack of knowledge and wrongful delivery of information to patients. The findings of Yildirim (2016) support those of the current study that nurses suffer intimidation to their professional status and their personality. In the attack, nurses are belittled in a demanding manner while in the presence of other health workers. As a result of this, the victims develop an inferiority complex. In agreement with this, Yildirim (2016) shows that nurses who experience such attacks gradually develop decreased self-esteem and self-confidence. The findings of Sodeify et al. (2013) were found to conform with these findings by stating that nurses who are humiliated by management felt a detrimental impact on their moral rights leaving them feeling abandoned.

6.4.2.7 Lack of Evaluation

It would be difficult to determine the existence of nursing unless it could be proved that it benefits the care patients receive in specific ways (Samson-Akpan & Edet, 2020). Data from the study reveal that nurses are unable to evaluate patients for the effectiveness of their information needs. Participants profess that there is absence of structures which are relevant to enhance evaluation as well as the will power of the nurses. In agreement with this, Kieft et al. (2014) explain that evaluating patients for information provided not only gives feedback on how preoperative anxiety has been successfully managed, but also reveals the aspects of information that patients cherish most. Zamanzadeh et al. (2017) project that individual elements, such as barriers or facilitators of the nursing process, as well as management system issues, might provide challenges in executing evaluation. Subcategories that emerged that emerged to suggest the lack of evaluation include: laziness, the busy schedule of nurses, and lack of planning contributing to the lack of evaluation.

a. Busy schedule of nurses – The study revealed that nurses are unable to evaluate patients for the effectiveness of their information needs because they claim they are unable to do an initial planning of patients' care owing to their heavy workload especially when the ward is full of patients. Participants continued to disclose that they do not have enough time to provide preoperative information and also to evaluate them. Mishra (2015) supports these findings that nurses are always faced with an overload of patients' care, which results from too few nursing staff on duty in the ward. In accordance with this, Jaeger et al. (2018) reiterate the complaint of nurses that the work schedule in the ward overwhelms other activities. *A single nurse for an entire hospital, who also does the out-patient consultations, is a pharmacist, and midwife all in one. For all to be done, you are alone.* Jaeger et al. (2018) continue that nurses expressed their concern that the quality of care provided in such circumstances is always affected. *You are alone. Sometimes you are obliged to not consider all parameters. You did not want to cause*

harm to the patient; you want to do good work, but you cannot anymore, you are overwhelmed.

6.4.3 Theme Three: Improving Identification of Preoperative Anxiety and Information Needs of Patients

Owing to nurses' reaction, several studies affirm the importance and the need to identify preoperative information needs of patients for appropriate provision of information (Dunn & Milheim, 2017; Nwafor & Nwafor, 2016; Galal et al., 2017). In another study, Wyatt (2019) affirms that preoperative assessment of patients is a crucial step in formulating a strategy for providing accurate information. The author added that a nurse's function and responsibilities include preoperative assessment. All the participants admitted that, to assess patients for preoperative anxiety and information needs, processes involved in this act including identification should be improved. Emerging from this aspect of the study are categories, which include: 1. Precursors of effective patient assessment; 2. Establish guidelines on assessment, and 3. Establish appropriate staffing norms. These are discussed in the texts below.

6.4.3.1 Precursor of Effective Patient Assessment

Data extracted describe general participants' views on the nature of knowledge and skills that nursing education offers at the nursing and midwifery training colleges and universities. Participants professed that nurses who have been trained in the special field of perioperative nursing are few and are often absent from the wards to assess patients. They added that general nurses and midwives are trained in bits about patient assessment and are the majority at the SWs/SSs that are supposed to do the assessments. Consonant with this, Khoran et al. (2021) postulate that nurses who are equipped with strong assessment and training skills, and have the desire to use their knowledge and skills are often successful in identifying preoperative anxiety and information needs of patients. The authors add that nurses stationed at SWs/SSs must therefore have appropriate examination skills to meet the needs of holistic

nursing, which includes patient assessment, physical examination, interviews, and discussion of patient's history. Steps to enhance the effective patient assessment include: obtaining sponsorship for further studies, pursuance of structured studies, pursuance of unstructured trainings and development of a positive attitude towards assessment.

a. Pursuance of structured studies – All participants agreed that nurses need to obtain knowledge and skills through further education. This is supported by the finding of Agyepong (2017) who reveals that all of the participants saw continuing formal education as a way to expand their knowledge and to acquire more information and skills to advance in the nursing practice. Participants in this study professed that knowledge and skills are obtained from specialised education. The thoughts of nurses in the study of Kithuci et al. (2019) were in accordance with the findings of this study as the majority (77.2 per cent) declared their interest in furthering their education with the majority (90 per cent) citing reasons such as more knowledge and skills. Describing an important reason for nurses seeking to further their education, Price and Reichert (2017) stress that several nurses voiced their concern that their formal education in the nursing schools did not always prepare them fully for real-world nursing situations. *When on nurse began her job, she was only taught to care for two to three patients, but she was eventually responsible for up to ten patients. We're coming onto these units where our patient ratios are off the chart, and we're expected to function without having much time to figure out how to organise ourselves properly. We've only ever had two or three patients, no more than that, then all of a sudden you have 10, and we just don't spend enough time on the floor; that on-the-job training, I think, is really lacking for lots of us.*

6.4.3.2 Establish Guidelines on Assessment

Nurses' roles in assessment skills are expanding such that they can be adapted into most nursing assessments. Nurse practitioners or professional nurses most typically do history taking

(Liu et al., 2018). Several studies have described the existence of guidelines established to guide nurses to carry out preoperative assessment of patients. These include the deliberative nursing process theory propounded by Ida Jean Orlando (Gonzalo, 2021) and the nursing process theory (Arora, 2015). Data obtained from the study confirm the existence of the aforementioned theories and guidelines with the addition of the code of ethics governing the practice of nurses. Participants further revealed that said guidelines must be defined and adhered to. Sub-categories that emerged under this aspect include: definition of guidelines, and adherence to assessment principles.

a. Adherence to assessment principles – Participants concluded that, to be able to adhere to the defined assessment principles, nurses ought to be taught how to use them, be delegated and supervised. In support of this finding, Zamanzadeh et al. (2015) express that receiving appropriate education in connection with the guiding principle can increase the quality of the services offered. In addition, participants were of the view that measures must be put in place to reward nurses who are able to implement the principles and and to punish those who deliberately refuse to implement the guiding principles. This finding is consistent with that of Nebiat (2014), who discovered that rewards have a strong influence on the responsibilities of nurses and that payment is the most important commodity that makes an impact on nurses' jobs. In contrast, the author also found that recognition as reinforcement has the weakest motivation on nurses.

6.4.3.3 Establish Appropriate Staffing Norms

In Ghana, the Ministry of Health (MOH) used the WHO population staffing requirements and later the 1992 Facility Staffing Norms to attempt to solve the problem. These have been pushed out of order by implementation issues and the sector's continually shifting dynamics. The distribution problem remains largely unsolved, as does the question of how

many health workers are required to provide good and efficient care across the country. To address this issue, the MOH decided in 2011 to create an evidence-based staffing norm based on the WHO's Workload Indicator for Staffing Needs (MOH, 2014). Participants desired that nurse managers and the nursing leadership at the hospitals should establish appropriate staffing norms. Their views led to the emergence of sub-categories including: enhancing factors such as appropriate posting of nurses, maintaining distinctive nurses, and reducing nurse turnover.

a. Maintaining distinctive nurses – All the participants acknowledged that district hospitals often admit patients who are unable to communicate with the nurses in the local dialect. Patients who belong to this category include those from neighbouring French countries such as Togo and Burkina Faso, those from different regions within the country who do not speak the local dialect, and deaf and dumb patients. Participants were of the view that nurses who possesses the ability to speak different local and international languages like French and are able to communicate in sign language must be maintained to assist with communication. Machado et al. (2013) concurs with these findings that it is more useful for nurses who care for patients who are deaf and dumb to learn sign language. In relation to this, Allen et al. (2007) reveal that nurses at SWs/SSs use a variety of means to improve communication among team members and patients. The findings of the study by Machado et al. (2013) share the opinion of some nurses on the use of sign language: *Communication through gestures; I understand a little. I try to practise only with the patients in need. It is the language used for the communication with the hearing impaired; A type of language used to communicate with people with hearing disability, but I do not understand at all how to use it; sign language.* Reiterating the importance of the use of trained interpreters in patients' care, Kristoffersen (2021) stresses that in many situations, nurses continue to rely on multilingual colleagues or patients' relatives or friends for linguistic support. The author continued to express concern about the use of this

method, citing associated challenges such as inadequate communication and care, and breach of confidentiality.

6.4.4 Theme Four: Improving Provision of Preoperative Information Needs of Patients

Nurses' action in informing patients should be capable of producing reliable and timely information on preoperative determinants and should be capable of evaluating patients for the effectiveness of the information. This enables nurses to identify the progress, problems and needs to make evidence-based decisions on the preoperative experiences of patients (Mutale et al., 2013). According to Gerlitz (2017), improving the provision of preoperative information needs of patients requires the collaborative efforts of nurses and other healthcare workers. Preoperative teaching, according to Ali, Soh, Abdullah, Singh, Ahmad and Sapaun (2021), is a multi-disciplinary strategy that demands harmonisation of knowledge or information among nurses, surgeons, anesthesiologists, dieticians, and physiotherapists in order to coordinate patient care. Participants' views on improving preoperative information needs have been grouped into the following categories: 1. Maintaining skilful nurses in the ward; 2. Stimulating teamwork, and 3. Requirements for effective information provision. These are discussed further below.

6.4.4.1 Maintaining Skilful Nurses in the Ward

Nursing is a science that relies on both knowledge and practice (Borji et al., 2018). The optimal work design is the one that meets organisational criteria for high performance, fits individual abilities and needs, and provides possibilities for job happiness (Maru et al., 2013). The study found that nurses who possess skills in interacting with patients in the process of reducing preoperative anxiety with preoperative information should be retained in the wards. In accordance with this, Drenan et al. (2018) lay emphasis on supporting the finding of this study that there should be enough nurses with the necessary skills to provide patients'

information needs to satisfy their preoperative information demands. In spite of this, it emerged that skilful nurses could be maintained in the ward by enlisting speciality nurses and training nurses in the use of audiovisual devices.

a. Train nurses on use of audiovisual devices – It was found that information technology (IT) and audiovisual devices are useful in the process of informing patients on their conditions and surgical operations. Reiterating this finding, Al Barrack and Al Ghammas (2017) agree that technology plays a pivotal role in enhancing and delivering preoperative information to patients on an individual basis. The study also found that some of the nurses are in possession, on their cell phones and laptop computers, of video clips made about surgical conditions and procedures, which could be used to train and motivate nurses to inform patients. In support of this finding, Darvish et al. (2014) propose that, owing to the rapid growth and development of advanced technology, training programmes are recommended for nurses in the implementation of information technology tools to inform patients about their conditions and surgery. Moreover, Creswell et al. (2013) add that nurses who are trained in the use of information technology or audiovisual devices are more productive than those without training. In the same context, Singh (2016) contributes that nurses believe that IT helps them by reducing their burden and enables them to spend more time on patient care. The author continues to report that the respondents acknowledge that the use of IT devices requires training, experience and expertise. However, Singh (2016) discovered in the same study that the majority (81.94 per cent) of nurses show an interest in participating in IT training, but disclosed that personal financial constraints, lack of sponsorship from the hospitals, and lack of time to participate are factors that impede nurses' participation in training programmes. Lastly, some participants advocated that management of hospitals, stakeholders of health services, non-governmental organisations (NGOs) and private institutions could help to procure the IT materials and devices of interest to enhance patients' information provision. Creswell et al. (2013) agrees

that, after deciding on specific care for patients, it is critical to decide on the benefits patients would enjoy and not only on the larger organisational goasl. In spite of this, McGeary (2019) adds that several factors, such as competent health personnel, influence the acquisition of IT items as hospitals may seek to stay on par with other healthcare providers in order to provide patients with the most up-to-date care alternatives.

6.4.4.2 Stimulate Teamwork

Teamwork is crucial and prominent in the provision of preoperative information to patients (Buljac-Samardzic et al., 2020). Studies show a favourable effect of team interventions on performance outcomes, leading to a strong belief that team interventions can increase the effectiveness of healthcare teams (Buljac-Samardzic et al., 2020). Data obtained from the study submit that there should be teamwork among nurses stationed at the SWs/SSs and among nurses and other health workers such as surgeons, anaesthetists and laboratory technicians. This is supported by Musa and Ali (2018), who state that preoperative teaching is a multidisciplinary strategy that demands harmonisation of knowledge or information among nurses, surgeons, anaesthesiologists, dieticians, and physiotherapists in order to coordinate patient care. In accordance with this, Adugbire and Aziato (2017) add that the nurses, anaesthesiologists, surgeons, clinical psychologists and laboratory technicians are among the health professionals who can form a team to provide preoperative information to patients. Nevertheless, forming partnerships and dissemination of information among health workers emerged as steps in stimulating teamwork.

a. Dissemination of information among health workers – Data extracted in this study suggest that nurses should be knowledgeable and well-grounded in patients' conditions and the surgical procedures to enable them to give good accounts during dissemination of information among other health workers. This is supported by Sabei and Lasater (2016), who state that deep

knowledge of nurses on patients' conditions is crucial in clinical judgments. All participants advised that nurses must practise appropriate documentation of patients' conditions as doctors sometimes make reference to themfor clinical decisions. In accordance with this finding, Khattak et al. (2016) describe that nursing documentation is an integral part of nursing practice as well as inter-professional documentation in patients' records, and it is an important means of communicating among members of the healthcare team. In a previous study, Kelley et al. (2013) add that nurses have a tradition of using paper-based documentation to record information that is shared with other nurses and health workers during shifts or meetings. With respect to reference made by surgeons on nurses' documentation for clinical decision, Khattak et al. (2016) discovered that a few (1.6 per cent) of them use documentation by the nurses for that purpose. In relation to this, Tasew et al. (2019) state that the reason may be due to half (56.5 per cent; 52.2 per cent) of nurses indicating that nursing notes written by their colleagues are incomplete, and poor documentation practice, respectively.

6.4.4.3 Requirements for Effective Information Provision

The study revealed that nurses could do well in providing preoperative information to patients. All participants indicate that nurses would be able to do this when they are exposed to the act of information provision, and constant support and when they are assisted to build much confidence. The Health Foundation (2017) explains that patient education used to be the physician's role, but today's nurses take on the majority of the responsibility in providing patients with preoperative information and assisting them in taking control of their own health. However, the study found requirements for effective information provision to include: building confidence, establishing support systems, delegating and monitoring of duties and evaluating provided information.

a. Establish support systems – All participants mentioned that nurses in charge or charge nurses at the SWs/SSs could help with the provision of information by initiating systems that support in the provision of information needs. Concurring with this, Kluge and Figueras (2018) affirm, with emphasis on nurses in charges or charge nurses establishing supportive measures on alterations in information provision, and modification of innovative programmes and policies for implementation. Conforming with the finding, Isfahani et al. (2022) add that creative ideas at the SWs/SSs, generated and employed by nurses, improve their physical and mental health, as well as their self-confidence and happiness. Moreover, the delight of discovering new creative ideas and working on a larger project had provided nurses with an innate sense of satisfaction and pride. In conformity with this, Isfahani et al. (2015) further reveal that creativity develops the abilities of nurses in information provision.

6.5 Category Four: Discussion of Main Findings Obtained Though Face-to-Face Individual Interview of Patients

Four themes emerged from the findings obtained from qualitative data obtained through face-to-face individual interviews of patients who were admitted at the SWs/SSs and were being prepared to undergo surgical operations. The themes include: preoperative anxiety, effects of preoperative anxiety, assessing patients' preoperative information needs, and managing patients with information needs.

6.5.1 Theme One: Factors related to patient's behaviour

All patients interviewed in this study admitted that they experienced some level of preoperative anxiety. Turksal et al. (2020) indicate that preoperative anxiety is a feeling of disquiet and restlessness caused by a lack of knowledge or expectations about the treatments one is about to undergo, such as hospitalisation, anesthesia, and surgery. Wilson et al. (2015)

referr to preoperative anxiety as a period in which patients develop fear before undergoing a surgical procedure. Participants shared their experiences on the various ways in which patients develop preoperative anxiety. In their accounts, the causes of preoperative anxiety have been categorised into: 1. Fear of unspecific cause, and 2. Alleviating preoperative anxiety. These are further discussed below.

6.5.1.1 Fear of Unspecified Causes

Generally, fears of patients are attributed to the fact that they have never undergone surgical operations. Stanborough (2020) explains fear of the unknown as the likelihood of being afraid of something one has no knowledge about on any level. In support of the findings of this study, Ghimire and Poudel (2019) discovered in their study that patients are often afraid of not being able to wake up from anaesthesia after surgery, the outcome of surgery, and postoperative pain. Orlando's theory of deliberative nursing process emphasised that, when a patient is unable to meet his or her information needs, he or she becomes distressed and requires care (Haapoja, 2014). Participants' responses further led to the emergence of the following subcategories: lack of accurate information, fear of the inability to care for self, first-time experience, and fear of environment, complications and death.

a. Fear of Inability to Care for Self – Interviewed patients described that their fear mostly developed on the premise of being disabled and unable to work or function as previously after undergoing surgery. They expressed so much worry that, by being incapacitated, they would not be able to work to cater for themselves and their family members. These findings are similar to those revealed in a study of Woldegerima et al. (2018), who discovered that caring for family, being dependent on family, complications and disability are factors that make patients afraid to undergo surgery. In a more recent study, Ghimire and Poudel (2019) discovered that

most of the fears of patients are focused on the welfare of their family members and financial crisis owing to hospitalisation.

6.5.1.2 Alleviating Preoperative Anxiety

Data extracted from the study demonstrate that patients are able to deal with preoperative anxiety prior to undergoing surgery through comfort mechanisms offered by nurses. Some of them explained that nurses tell them that surgery is not scary and the surgeons are very experienced to perform the procedures. Morales-Rodriguez and Perez-Marmol (2019) describe coping measures for the relief of preoperative anxiety with the use of information concerning the surgical process in addition to psychological management. Participants demonstrated that factors that enhance the alleviation of preoperative anxiety among patients include: having been operated on before, reassurance, compelling symptoms of the condition, and religious beliefs.

a. Religious beliefs – The study revealed that patients often rely on their religious faith for comfort during the period of fear. Some participants emphasise that most patients express their faith in God to assure themselves that they would have a successful surgical operation without any complications or untoward effects. Aghamohammadi and Karimollahi (2014) emphasise that patients who are distressed by the effects of diseases and conditions turn to their religious faith for comfort. In another study, Ogbuji (2019) emphasises that patients' religious faith has helpful results on patients' fears, surgical conditions, and treatment.

6.5.2 Theme Two: Effects of Preoperative Anxiety

This describes any untoward repercussions of preoperative anxiety that patients often exhibit prior to undergoing surgical operation. Several studies have described these effects to encompass psychological (Du et al., 2017), and physiological (Khalili et al., 2020) effects on the outcome of the surgical procedure (Cimpean & David, 2019). Two categories emerged

from this study, which are: 1. Emotional stress, and 2. Inability to come to terms with the outcome. These are discussed in the following text.

6.5.2.1 Emotional Stress

From the study, all participants showed common manifestations of anxiety and apprehension indicating that patients are emotionally stressed as a result of preoperative anxiety. Bansal and Joon (2016) define anxiety as an emotional state, which is manifested by apprehension, and panic attacks caused by perceived threat. In agreement with this, Pam (2013) describes apprehension as a state of emotional disturbance characterised by worry and fear about a future event. Participants' comments further revealed that emotionally stressed patients often experience an anxious mood, depression, tension, intellectual distraction, and insomnia. They expressed that an anxious mood is characterised by a period of long thought about the success of the surgery while depression denotes negative thoughts by patients towards the procedure. Tension is described as a state of nervousness, dizziness and tremors. Intellectual distraction is marked by an inability to maintain attention span, and insomnia is an inability to sleep.

a. Depression – Participants describe the existence of depression among patients as manifested when most of them develop negative thoughts concerning the surgical operation. Others expressed that they prefer to be left alone at such times. Roxana et al. (2021) affirm that depressive disorders have long been one of the top three global causes of non-fatal illness burden and have been designated as a WHO priority. In this regard, Legg (2018) agrees that patients who are depressed often feel down, sad, and develop sleeping problems. Roxana et al. (2021) agree with the current study that female patients are more likely than males to be moderately or seriously depressed (11% vs 7%, P = 0.036), as well as moderately or severely anxious (9% vs 6%, P = 0.034).

6.5.2.2 Inability to Come to Terms with the Outcome

Data emerging under this category describe that patients are unable to come to terms with the occurrence of the condition and the corresponding surgical treatment which they have to undergo. This is tantamount to being in a state of denial. Participants demonstrate that they initially refuse to accept undergoing a surgical operation when they are informed by the surgeon in the consulting room. Denial is defined as a defence mechanism that patients use to cope with agony associated with surgical situations (Mayo Clinic Staff, 2021). The study further revealed that patients refused to undergo surgery. This is characterised by an initial rescinding of the decision to have surgery after a recommendation by a surgeon. Participants expressed that this compels them to seek alternative treatment. Alternativee treatment was described as going for any form of treatment other than surgery, which is mostly considered as a threat to life by the patients. Lugowska et al. (2020) discovered that fear was the key factor in patients trying to rescind their decision to undergo surgery.

a. Finding alternative treatment – When an individual is faced with threats, he or she tries to find a way to escape. From the study, participants expressed their desire to find alternative treatment, such as seeking 'divine intervention' when they felt undergoing surgery was a threat to their lives or would end their lives. They described the reasons they wanted to embark on this route to the advice their religious leaders gave them that they can be healed through prayers and not through undergoing surgical operations. Alternative treatment refers to non-standard treatment used in place of standard treatment (Simon, 2019). It has been established that patients suffering from the effects of diseases may ask themselves fundamental questions including: Why is this happening to me? What happens next? What have I done to deserve this? (Hertz, 2016). In a survey of 542 patients, Balboni and Balboni (2019) discovered that the majority (65 per cent) of the patients strongly opted for religious alternative treatment rather than the designated treatment for the conditions for which they had been admitted.

6.5.3 Theme Three: Assessing Patients' Preoperative Anxiety and Information Needs

The study examined the patients to elicit their experiences of the practices of the nurses in terms of how they were assessed for preoperative anxiety and information needs. Several studies stated the need for assessment to be carried out to identify the preoperative anxiety and information needs of patients to be managed before undergoing surgery (Ghimire & Poudel, 2019; Navarro-Gastón & Munuera-Martínez, 2020). In Orlando's deliberative nursing process theory, nurses seek to identify and manage the immediate needs of patients for information (Gonzalo, 2021). Orlando emphasised that there is a nurse–patient interaction during assessment, and both parties have their own views, feelings, and opinions concerning the patient's condition and the procedure. Orlando went on to say that both the nurse's and the patient's perceptions must be available in order for the nurse's actions to have a solid foundation. Observations of the patient's behaviour, both verbal and nonverbal, aid the nurse in determining the level of the patient's preoperative anxiety and desire for information (Haapoja, 2014). Two categories emerged from this theme. They include: 1. Nurse–patient interactions, and 2. Inability to assess preoperative information needs. They are discussed in the following section:

6.5.3.1 Nurse–Patient Interactions

The background literature examined nurse–patient interactions as 'therapeutic', that is, formed through a reciprocal respect and understanding between the nurse and the patient (Nursing Essay, 2020). The deliberative nursing process theory also emphasised that patient–nurse interaction is a reciprocal process (Gonzalo, 2021). Participants confessed that nurses interacted with them from the time they entered the ward to be prepared to undergo surgery. The Standard (2020) established that this nurse–patient relationship exists only when the patient requires nursing care. Participants indicated that nurse–patient interactions can be made

possible through establishing rapport with patients, clinical observation, empathy for patients, obtaining clarity on conditions and treatment and then being aware of hindrances to obtaining clarity.

a. Empathy for patients – Empathy is the ability to put oneself in another person's shoes and to see things from their point of view, feelings, behaviours, and reactions (Nurse.com, 2019). Participants in this study reported ill feelings in terms of how the nurses handled them. The study reports nurses too often scolding patients who seemed uncooperative as a result of anxiety. Other participants described ways if which nurses are expected to handle patients when they are under their care. In a study, Sloan (2020) reports a comment that aligns with the finding of this study, *You never really understand another person until you consider things from his point of view – until you climb inside of his skin and walk around in it.* On the other hand, Hannan et al. (2019) report the satisfaction of a patient about empathy, *I recently changed physicians and I can honestly say that this physician surprised me. He truly took the time to listen to my concerns amidst the other patients he had waiting. I did not feel like I was simply another patient, but a unique individual. I believe that this is a rare quality to find in physicians since they tend to be overwhelmed with work.*

6.5.3.2 Inability to Assess Preoperative Anxiety and Information Needs

The inability of nurses to assess preoperative information needs results from various factors. Studies found that nurses' practices in the ward influence the assessment of preoperative information needs negatively (Kwame & Petruckab, 2020). From the study, participants highlighted the inability of nurses to identify the factors causing them to become anxious prior to surgery to be due to the attitude of the nurses. Participants describe the attitude of the nurses to be hostile and unapproachable. It has been established that during assessment, nurses and patients express their particular knowledge, attitudes, experiences and patterns of

behaviour, which tend to affect assessment (Kwame & Petrucka, 2020). The study showed some challenges associated with the assessment of preoperative information needs to include: poor nurses' attitude, and patients' perception on condition and surgery.

a. Poor nurses' attitude – Data obtained in the study indicate that certain attitudes displayed by nurses impede the assessment and identification of the preoperative information needs of patients. Participants revealed that some nurses who seem to be too busy to attend to their needs are really not busy. They are rather often seen sitting at the nurses' table in the ward idling. According to Orlando's deliberative nursing process theory, nurses are responsible for meeting the needs of individual patients who exhibit the sense of helplessness and the need for assistance (Gonzalo, 2021). Other participants stressed that some of the nurses appear unfriendly and unapproachable. This is confirmed by the study of Kwame and Petrucka (2020), who discovered that the majority of nurses' behaviours and attitudes were shown to affect the assessment process. They also disclosed that nurses were accused of engaging in inappropriate activities such as verbal abuse, scolding, rudeness, humiliation, use of harsh language, and authoritarian behaviour.

6.5.4 Theme Four: Managing Patients with Information

The study sought the opinions of patients' experiences on how nurses manage preoperative information that they identify from patients. Management of preoperative information needs entails informing the patient about the nature of the surgery and why it is necessary, the risks and advantages, as well as the preparations for the procedures, expectations before and after the treatment, and tactics for avoiding probable postoperative issues (Engelke et al., 2017). After determining the patients' preoperative anxiety and information needs, steps are instituted to inform them. This results in changes in the patient's verbal and nonverbal behaviour enabling the nurse to conclude that the patient's anxiety and information needs prior

to surgery have been managed (Alligood, 2014). Three categories emerged from this theme. They include: 1. Informing patients and family, 2. Obtaining the needed information, and 3. Challenges in informing patients. These are discussed below:

6.5.4.1 Informing Patients and Family

Data obtained from the study indicate that health professionals provide patients with verbal information before undergoing surgery. They indicate that the information is often provided by nurses and doctors, who commonly focus on the condition and the surgical operation. Kruzik (2017) indicates that the process of informing patients and their family usually takes the form of providing pamphlets, whereas doctors give verbal directions to nurses on the day of surgery. The author continued that the verbal provision of information begins at the surgeon's office and ends on admission of the patient (Kruzik, 2017). Face-to-face oral explanation was reported as the most common way of information delivery (Nousiainen & Montin, 2021). In order to be well informed, participants revealed that they need to know the benefits of information. They continued that they need information on their condition and information on the preoperative processes.

a. Information on condition – Participants described that the information they commonly receive from nurses and doctors centres on the condition that they report with at the hospital to be treated. Their description not only pertains to the condition for which they needed surgery, but it also included the conditions and anticipated complications that would occur if they reject surgery. Contrary to the finding of this study, Mitchell (2017) discovered that the information nurses deemed worth sharing with patients were fasting time, information about the surgical procedure, and medical records. However, a recent study by Lithner and Zilling (2020) discovered similar findings that patients who were scheduled for a cholecystectomy needed more information on their admission and discharge process, as well as pain and post-operative

effects after surgery.

a. Information on preoperative process – Additionally, participants indicated that nurses provided information on preoperative teachings including the kind of diet to take in the day preceding the day of surgery, breathing and coughing exercises, and the removal of surgery contraindicated items. The study of Ünver et al. (2018) aligns with the findings of this study indicating that half of the patients in their study were given information about deep breathing exercises. On the other hand, a study by Chi-Kong et al. (2013) reveals that nurses could not provide preoperative teaching owing to time availability, language barriers and tight operation schedules.

6.5.4.2 Obtaining the Needed Information

In this category, participants described that they obtained information on the conditions and the surgical operation from two main sources. They described these sources to be family members and friends, and from health professionals. Various studies (Liebner, 2016; Kennedy et al., 2017; Burgess et al., 2019) found that patients mostly depend on their relatives and friends for information. It emerged in the study that certain factors enhance the process of patients being informed, which include: information patients expect and receive from nurses, health workers involved in information provision, sources of information to patients, and patients' views on the process of information provision.

a. Sources of information to patients – Literature gives evidence of sources of information available to patients (Clarke et al., 2016). Nevertheless, participants described that the sources through which they obtain information about surgical conditions and procedures to be doctors, relatives and friends who are located in their community. The study of Burgess et al. (2019) supports the findings of the current study with similar findings that patients often obtain information from health providers, family members and friends. However, the studies of Zare-

Farashbandi et al. (2014) and Hurst (2016) found other sources to be television, radio and newspapers, which can be accessed by patients.

a. Patients' views on process of information provision – Participants describe their views on the processes by which nurses inform them as being through reassurance and attempting to convince them to make the decision to undergo the operation. They explained that the processes comprise interactions between themselves and the nurses, where the latter try to convince them to consent to undergoing surgery. They added that nurses usually inform them that the surgical procedures do not last long and that they are safe. Describing similar findings, Lee et al. (2021) support that preoperative interactions involve reassuring patients. In addition, Nunez (2019) describes that informed consent is a process that is needed for patients to decide on surgical treatments and that enables them to participate in the procedures.

6.5.4.3 Challenges in Informing Patients

Responses from participants give a clear indication concerning the challenges patients encounter when they are managed with their preoperative information need. In this view, Malley et al. (2016) agree that there are challenges that exist in the process of communication between nurses and patients during preoperative information needs management. Participants describe these challenges to pertain to attitudinal issues harboured by nurses and misconceptions that patients develop towards surgical treatment. As a result of this, it emerged that the poor attitude of nurses, patients' perceptions about surgery, and improving measures to inform patients are some challenges associated with informing patients.

a. Patients' perception about surgery – It has been discovered in this study that one of the factors which deter patients from paying heed to information provided by nurses is the wrong perceptions they develop about surgery. Participants describe that such negative perceptions emanate from the kind of information they obtain from non-health professionals, which include

friends, family members and from the media. In support of this, Swire-Thompson and Lazer (2020) establish that the internet has become a popular resource for learning about health and researching one's own health. People quickly become deceived owing to the enormous amount of false information available online. Participants continue to stress that the information they are provided with describe surgery as being the most dangerous of all treatment options, which could cause them to lose their lives. Associated with these findings, Lazar and Deneuve (2013) agree that patients who are misinformed about surgery develop negative perceptions about practitioners of anaesthesia. In contrast, Dixon et al. (2015) show that the information patients received from health professionals improved their trust and safety perceptions.

6.6 Section Two: Triangulation of Results from Quantitative and Qualitative Studies

This section presents triangulation of the methodologies adopted and the results obtained through both the quantitative and qualitative approaches. The various forms of data collected to achieve the objectives of this study were combined in this section. Triangulation is the practice of examining the validity and credibility of data obtained for a research study from various angles and employing a variety of research techniques (Bans-Akutey & Tiimub, 2021). In this study, the researcher used different methods of data collection to ensure that fundamental biases arising from the use of single method or a single observer is overcome (Noble & Heale, 2019).

6.6.1 Methodology Triangulation

The study used explanatory sequential mixed method design to achieve the objectives of the study. Initial quantitative data were collected using self-administered questionnaire and participant observation with a checklist to *determine the extent to which patients become anxious before undergoing surgery, to identify the factors that make patients become anxious*

before surgical operations and *to explore and describe the practices of nurses in terms of how patient preoperative information needs are managed*. Qualitative data collection followed the initial quantitative data collection and analysis. Qualitative data collection used a face-to-face individual interview sessions of nurses and patients to *explore and describe how preoperative information needs of patients are explored and managed, to explore and describe the type of preoperative information that patients need before they undergo surgery* and *to explore and describe the type of preoperative information that patients need before they undergo surgery and the type of information they receive from the nurses*. Additionally, data were collected using participant observation with field notes to *explore and describe the practices of nurses in terms of how patient preoperative information needs are manage*.

6.6.1.1 Triangulation of findings

Results of these data collected indicated the prevalence of preoperative anxiety, factors making patients to become anxious and few nurses involved with the practices of how preoperative information needs are managed. These findings informed the collection of qualitative data using face-to-face individual interview sessions of nurses and patients. The findings of the qualitative approach supported and revealed the rational of the initial quantitative results. The triangulation of the findings from quantitative and qualitative studies are done in the metrics table form Table 6.1.

Table 6.1: Triangulation of Results from Quantitative and Qualitative studies

Objectives	Patient's group (quantitative-survey)	Patients' group (qualitative)	Nurses' group (quantitative)	Nurses' group (qualitative)	Conclusion Statement based on Themes
Quantitative results, themes and categories					
Preoperative anxiety	Seventy-three (73) per cent of respondents were severely anxious before undergoing surgery	Patients are anxious when undergoing surgery		Patients become anxious before undergoing surgery	Results from the qualitative approaches confirm that of quantitative results that patients become anxious before undergoing surgical operation
Factors making patients anxious	Surgical procedure ($p < 0.0242$) and complications ($p < 0.0163$)	Flight of unspecific cause		Fear of the unknown	Themes emerged from the qualitative study relate to results from the quantitative study that fear concerning the unknown outcome of surgical operation, complications and death is the main cause of preoperative anxiety
Manifestations of preoperative anxiety	Anxious mood on observation (2.14, ±1.4) Tension (2.00, ±1.4) Fear (1.75, ±1,4)	Psychological strain		Emotional stress	Themes emerged from the qualitative data confirm the results of quantitative study that patients exhibit anxiety and depression when they develop preoperative anxiety
Assessing preoperative anxiety and information needs		Interactivity between nurse and patient	Analysis of observation data found that minority of nurses are involved in assessing preoperative anxiety and information needs	1.Nurse-patient interactions 2. Validation of information needs 3. Process to inform patients and family	Data obtained from the observation of nurses informed the collection of qualitative data from nurses and patients as the findings indicated few nurses involved in assessing preoperative anxiety and information needs. Similarities in themes emerged from patients and nurses interview relate to interactions between nurses and patients as the main process in assessing

					preoperative anxiety and information needs. On the contrary, themes from patients and nurses confirmed challenges in assessing preoperative anxiety and information needs.
Management of preoperative information needs		Obtaining preoperative information needed	Observation data revealed that few nurses provide patients with information	Process to inform patients	Results from data obtained through observation study informed the collection of data using qualitative approach There were differences in themes emerged from data obtained from nurses and patients as patients indicated the kind of information they receive from nurses while nurses described the processes of informing patients
Factors inhibiting exploration of information nees		Challenges in informing patients		Setbacks in the management of preoperative anxiety and information needs	There were similarities in themes emerged from data obtained from patients and nurses relating to inadequate time, staff and the poor attitude of nurses deny patients of receiving needed information

6.7 Conclusion

This chapter presented the discussions of data obtained from the qualitative approach of the study and the triangulation of results from quantitative and qualitative studies. This chapter was grouped into Section One and Two. Section One presented the discussions of findings obtained from individual interview sessions involving nurses and patients and participant observation of patients. Section Two illustrated triangulation of the methodology used, data collected and results obtained to achieve the objectives of the study. Techniques used to recruit participants and the mode of data collection and analysis were highlighted. The next chapter describes the process of developing a training programme for nurses on the exploration and management of preoperative anxiety and information needs of patients.

CHAPTER SEVEN

PROCESS OF DEVELOPING A TRAINING PROGRAMME FOR NURSES ON THE EXPLORATION AND MANAGEMENT OF PREOPERATIVE ANXIETY AND INFORMATION NEEDS OF PATIENTS

7.1 Introduction

Chapters Four, Five and Six presented the quantitative and qualitative findings and discussions. The last objective of the study is to develop a training programme for nurses on how to explore and manage preoperative anxiety and information needs of patients at district hospitals in the Ashanti Region of Ghana.the Delphi method was used to guide the process of developing the training program. Chapter Seven presents the process through which the training programme was developed for nurses in the Surgical Wards (SWs)/Surgical Suites (SSs) preparing patients to undergo surgical operations at district hospitals in the Ashanti Region of Ghana.

The training programme is based on the findings of the study, as presented in Chapters Four, Five and Six (See Table 7.2). This chapter describes the Delphi method used, delineating the steps involved, the method of inquiry using both qualitative and quantitative approaches and the findings on experts' responses in the process of developing the training programme. This chapter concludes with the presentation of findings obtained with the Delphi method. Table 7.1 provides a general illustration of the beginning of the development process of the training programme.

Table 7.1: Application of Theoretical Framework in the Phases to Achieve the objectives of the Study

Phase	Objective	Deliberative Nursing Process T
One	**Objective 1:** To determine the extent to which patients become anxious before undergoing Surgery	Nurse reacts to patient's behaviour (anxiety/information need)
	Objective 2: To identify the factors that make patients become anxious before surgical operations	Nurse interacts (explore) with patient to validate causes of his/her behaviour (anxiety/information need)
Two	**Objective 3:** To explore and describe how preoperative information needs of patients are explored and managed by nurses	Nurse's reaction and nurse's actions on information provision
	Objective 4: To explore and describe the practices of nurses on how preoperative information needs are explored and managed	Nurse's reaction and nurse's actions on information provision
	Objective 5: To explore and describe the type of information that patients need before they undergo surgery and the type of information they receive from nurses	Nurse interacts (explore) with patient to explore the causes of his/her behaviours (anxiety/information need)
Three	**Objective 6:** To develop a training programme for nurses on how to explore and manage the preoperative information needs of patients	Findings from objectives 1, 2, 3, 4 and 5 were used to draft training programme

7.2 Aim of the Training Programme

The training programme aims to improve the knowledge and skills for nurses working at SWs/SSs in the assessment of patients to identify preoperative anxiety and information needs in order to provide appropriate information to eliminate or reduce preoperative anxiety for a successful surgical procedure and outcome.

7.3 The Process of Developing the Training Programme

In this section, the aim of the researcher was to achieve Objective Six of the study by developing a training programme for nurses placed at SWs/SSs to help them in the preoperative nursing care of patientsa about to undergo surgery. The training programme is based on the vision, mission, and principles developed for the training programme. The process of developing the training programme uses: 1) situational analysis on the extent to which patients become anxious before undergoing surgery; 2) information from literature on the management of anxiety and the information needs of patients; and 3) the Delphi method for the management of patient information needs (Figure 7.1). Figure 7.1 illustrates the orientation of the phases and objectives making up the study.

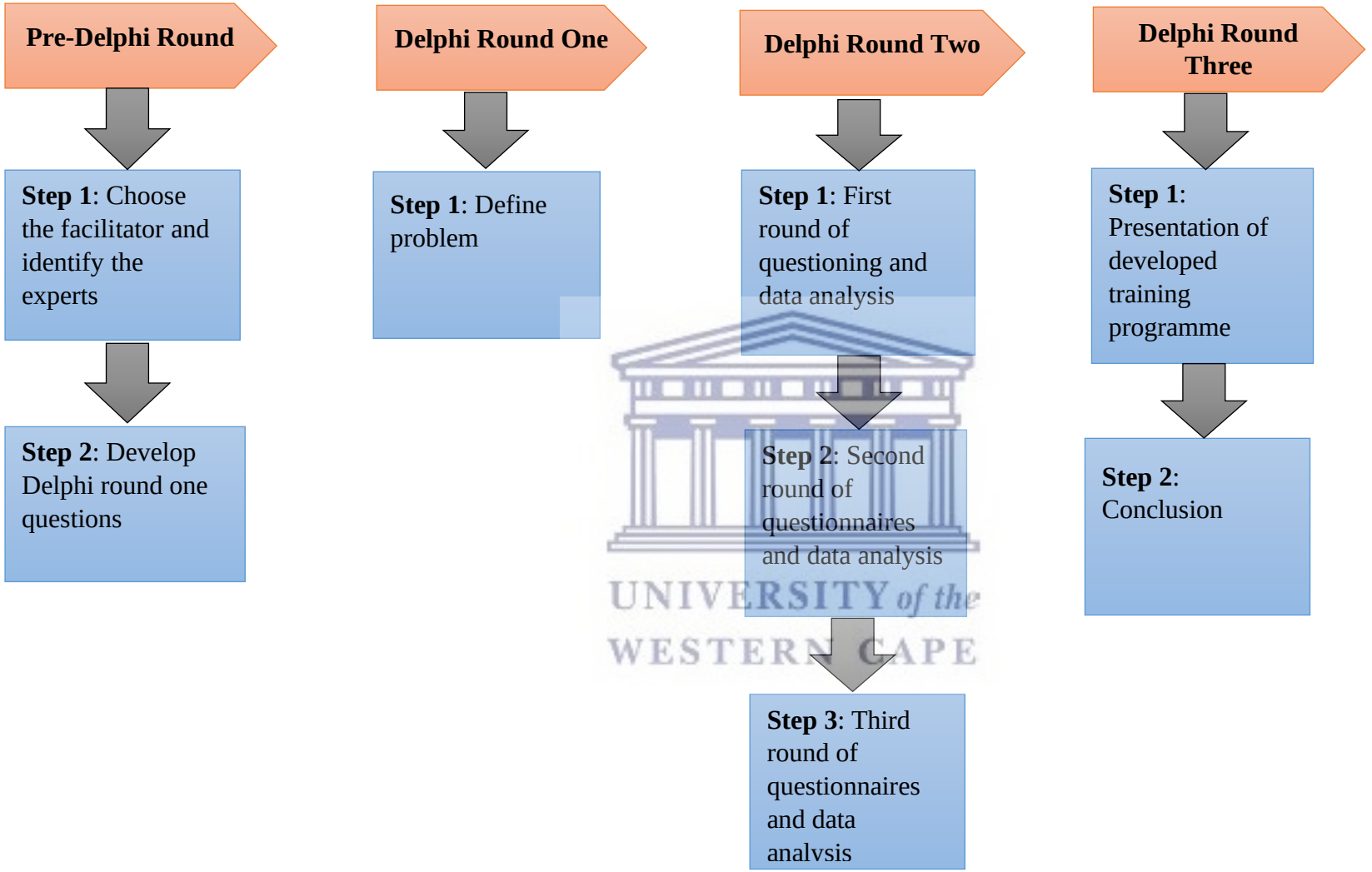

Figure 7.1: Summary of Steps in Developing the Training Programme

7.4 Situation Analysis

Situation analysis began with the formulation of the aim and objectives of the study. Data were collected based on the objectives set for the study using the two approaches, that is, quantitative and qualitative. Quantitative data were first collected and analysed, followed by qualitative data collection and analysis. Quantitative data were analysed using descriptive and inferential statistics, while qualitative data were analysed using thematic analysis. Findings obtained from the mixed methods were used to develop a draft of the training programme (Table 7.2).

Table 7.2: Summary of Key Findings of the Study

No.	Objectives	Findings
	Study One: Survey on key findings for anxiety and information needs	
1.	To determine the extent to which patients are anxious before undergoing surgery at district hospitals in the Ashanti Region of Ghana	• The majority (70 per cent) of patients undergoing surgery are severely anxious.
		• The prevalence of preoperative anxiety among patients in the Ashanti Region of Ghana is 56 per cent.
		• Fewer than 17 patients experienced mild to severe anxiety, 18–24 had mild to moderate anxiety, and 2–30 had moderate to severe anxiety.
		• Patients' ethnic ($p < 0.0024$) group and religion ($p < 0.0014$) had an influence on their preoperative anxiety.
2.	To identify the factors that make patients become anxious before surgical operations at district hospitals in the Ashanti Region of Ghana	• Anaesthesia, surgical procedure and postoperative pain are among the factors that cause preoperative anxiety.
		• The fear patients have for the occurrence of complications ($p < 0.0233$) during and after surgery influenced their anxiety level significantly.
	Study Two: Interviews- Key findings for anxiety and information needs	
3.	To explore and describe how the preoperative information needs of patients are explored and managed by nurses at district hospitals in the Ashanti Region of Ghana	• The study indicated that patients often experience preoperative anxiety before undergoing surgery.
		• Fear is a major manifestation of preoperative anxiety caused by several factors.
		• Lack of accurate information on surgical procedures mostly causes anxiety among patients prior to undergoing surgery.
		• Data obtained found that nurses explore the preoperative anxiety and information needs of patients through interactions and the ability to encourage them to express their views.
		• It was described that nurses validate the information needs of patients through the kind of feedback they receive from patients and the importance patients attach to the information to be provided.

Table 7.2: Summary of Key Findings of the Study

No.	Objectives	Findings
		• It was disclosed that nurses manage the information needs of patients by reinforcing information already provided by surgeons, the introduction of patients to other patients, who are recovering, for interaction, and by using the preferred language of the patients.
	Study Two: Participant Observation	
4.	To explore and describe the practices of nurses in terms of how patients' preoperative information needs are managed at district hospitals in the Ashanti Region of Ghana.	• It was observed that nurses do not explore and manage preoperative anxiety and information needs of patients, as described in the previous findings.
	a. Setbacks in assessing patients' preoperative anxiety and information needs.	• Role confusion, communication lapses, poor nursing etiquette and knowledge lapses of nurses are the main factors that challenge nurses in exploring the preoperative anxiety and information needs of patients.
	b. Setbacks in the management of preoperative anxiety and the information needs of patients.	• Lack of guiding principles, inappropriate staffing norms, nurse–patient interactive defects, and knowledge deficits of nurses are the main factors that inhibit nurses' abilities to manage the preoperative anxiety and information needs of patients.
	c. To improve identification of the preoperative information needs of patients	• It was projected that precursors of effective patient assessment, establishing guidelines in terms of assessment, and establishing appropriate staffing norms would aid in the identification of the preoperative information needs of patients.
	d. To improve management of the preoperative information needs of patients	• It was revealed that, to improve management of the preoperative information needs of patients, skillful nurses should be maintained in the wards, nurses need to stimulate teamwork, and nurses need to develop the requirements for effective information provision.
5.	To explore and describe the type of preoperative information that patients need before they undergo	• The study revealed that fear of unspecified causes is the greatest cause of preoperative anxiety among patients.

Table 7.2: Summary of Key Findings of the Study

No.	Objectives	Findings
	surgery and the type of information they receive from nurses at district hospitals in the Ashanti Region of Ghana	• Additionally, it was discovered that some patients experience preoperative anxiety owing to the fear of the inability to care for themselves.
		• It was revealed that emotional stress, such as depression and the inability to come to terms with surgery as the only treatment are the major effects of preoperative anxiety on patients.
		• The study revealed that patients are often provided with information on their condition and the preoperative process, which is often in a verbal form.
		• The study found that patients receive information from their relatives, surgeons, and nurses.

7.5 Rounds of Delphi Method

As illustrated in Figure 7.1, Delphi method used in the development of the training programme was categorised into four rounds. Each round is subdivided into steps. The rounds and steps have been described in the following text.

7.5.1 Pre-Delphi Round

During this period, the researcher planned on the strategy to conduct the Delphi study including the selection of a facilitator and identification of experts, and the administration of instruments to obtain their opinion.

7.5.1.1 Step 1: Choose the Facilitator and Identify Experts

A facilitator was needed to coordinate the development of the training programme. Haughey (2021) noted that choosing a facilitator is the first step in carrying out the development of a training programme. The author stated that the researcher may decide to act as the facilitator or to employ a neutral person who possesses the skill in data collection to be the facilitator. The researcher decided to facilitate the process in the development of the training programme in that he had been involved in data collection and analysis in all the phases of the study and is well grounded in data collection through qualitative and quantitative techniques.

In the field of perioperative nursing, 15 experts at nursing administration and nursing education were selected to be part of the development process. The selection was done under the guidance of the researcher supervisor. Green (2014) suggests that key experts in a subject area must be selected to elicit rich and expert contributions in the development of the training programme. Grime and Wright (2016) also add that panels selected for the developmental process must comprise heterogeneous experts with appropriate knowledge and must number between 5 and 20. In view of this the participants were selected from the following fields of the nursing profession: Nurse administration from the Nursing and Midwifery Council (NMC) of Ghana,,

Nursing education (Perioperative nursing), Perioperative nursing (clinical), Registered general nursing (clincal nursing and education), and Registered midwifery (clinical). The participants were taken through the study on the day of the first round of the meeting, including its purpose, objectives and findings, in terms of what was expected of them. Grime and Wright (2016) state that it is required that the researcher provides explanations concerning the number of meetings and the time to be spent at each meeting, their responsibilities during the meetings, the purpose of the study, and the purpose of the information they would provide. Of the 20 experts who were sent an invitation 15 from 10 hospitals and other health institutions responded (75 per cent response rate).

7.5.1.2 Step 2: Develop Delphi First Round Questions

Initial Delphi probing questions were developed from the draft of the training programme after it had been reviewed by the researcher's supervisors. One broad question was constructed by the researcher, which was intended to seek participants' opinions on the draft. According to Skinner et al. (2015), clear and feasible probing questions must be used to guide the development of the training programme. Depending on the experts' responses, several follow-up questions were asked.

7.5.2 Delphi Round One: Define Problem

This round involves recognising challenges with respect to the phenomenon under study, that is, the nurses' practice on the exploration and management of preoperative anxiety and information needs. Haughey (2021) stresses that the problem is the issue for which the researcher is seeking to provide answers, and the selected panelists need to be made aware of the problem for which they would be providing responses or answers. Skinner, et al. (2015) state that the researcher can gather the panel of experts in the Delphi methods in a conference room. Hence, in this study, the experts gathered at a convenient place place for the participants

and were presented with detailed information on the nature of the study and the results identified. This was to ensure that they provided precise, comprehensive, and appropriate responses during the rounds of the Delphi method.

7.5.3 Delphi Round Two: Rounds of Questioning and Questionnaires

This is the introduction of a panel of experts to the nature of the study as well as a series of rounds of Delphi questioning to obtain experts' opinion on the draft training programme.

7.5.3.1 Step 1: First Round of Questioning and Analysis

The findings of the study and the draft training programme were presented to the panel of experts. The components of the draft training programme, its purpose and scope were explained to the experts. The experts were also taken through the Delphi rounds of questioning and the activities they would be required to perform. Their rights as participants were explained and they were made aware that the information they provided would be audio recorded. After they had agreed, they were offered consent forms to fill in before the commencement of the data collection. The researcher gave them codes for easy identification. The participants were asked a broad question to express their views on the drafted training programme. This was followed by several follow-up questions. Additionally, all of the participants provided their inputs on the copies of the draft they hads been given. Massaroli et al. (2017) emphasise that the first round of questions should be composed of open-ended questions to allow participants to express their opinions on the subject, with data analysed using a qualitative approach. The researcher collected the comments on the draft training programme after all of them had expressed their views. Data obtained were analysed using content analysis technique. Massaroli et al. (2017) indicate that the obtained data should be analysed through content analysis. Based on these results and the changes, the researcher constructed a questionnaire comprising 'agree' and 'disagree' options to commence the second round of the Delphi questionnaire.

7.5.3.2 Step 2: Second Round of Questionnaires and Data Analysis

The second round of questionnaires commenced when the researcher sent to the participants' feedback on their inputs during the first round and a questionnaire that was developed after the recommendations had been made. Green (2014) states that the researcher gives the panelists feedback from the first round during the second round, and administers the questionnaire to commence the second round of questions. The questionnaire comprised items and responses in the 'agree' and 'disagree' format to delve deeper into the items in the draft. The questionnaires and a document on the feedback were delivered by dispatch riders to the experts at their various workplaces. The questionnaires were collected by the researcher after they had been answered. The researcher read through the questionnaires to check whether there were errors, but none was identified. A simple descriptive statistical analysis was performed in which the data obtained were presented with frequency tables and percentages. The responses were grouped into three options, that is, agree, disagree, and remarks. A 75 per cent or above criteria was set to achieve consensus. Barrett and Heale (2020) indicate that the accepted level of consensus ranges from 51 per cent to 100 per cent. Additionally, Vogel et al. (2018) state that consensus is reached when more than 70 per cent of participants agree or disagree with the questionnaire's items.

7.5.3.3 Step 3: Third Round of the Questionnaire and Analysis

This is the final round of the questionnaire in this study. It was aimed at making decisions on the draft of the training programme to which the panel of experts have contributed. The researcher analysed the data gathered during the second round of the questionnaire to determine consensus on the items to which the panelists responded. Grime and Wright (2016) indicate that results of the quantitative survey obtained in this round are analysed and feedback is provided to the panelists using tables and percentages.

The questionnaire for the third round was based on the results and comments that the experts provided in the second round. Questions which reached a consensus of 75 per cent and above were not included in the third round of questions. For the items which scored below 75 per cent consensus, the experts suggested changes that should be made. After effecting the changes, thequestionnaire for the third round was constructed for administration. The experts were located and provided with the questionnaires together with feedback on the findings from the second round as well as the updated draft training programme. The questionnaires were delivered by dispatch riders and were collected by the researcher.

7.6 Presentation of Findings Obtained from Delphi Second Round Questionnaire

This part presented findings of data obtained from the panel of experts on the draft training programme through the administration of questionnaire.

7.6.1 Demographic Characteristics of Experts

Table 7.3 presents the demographic characteristics of experts selected for this phase of the study. Of the 15 experts selected for this aspect of the study, the majority (8; 53.3 per cent) were males. A little under half (7; 46.7 per cent) fell within the age range between 35 and 39. All (15; 100.0 per cent) of the experts belonged to the Christian religious group, while almost all (14, 93.3 per cent) were belonged to the Akans ethnic group. More than half (9; 60.0 per cent) were married, and the majority (12; 80.0 per cent) of them had obtained a bachelor's degree in nursing. Of the 15 experts, 6 (40.0 per cent) were perioperative nurses, while more than half (53.3 per cent) were ranked as senior nursing/midwifery/health tutors and the same number (53.3 per cent) were charge nurses in their wards. In terms of work experience, nine (60.0 per cent) had worked at the SWs/SSs for 10 to 14 years.

Table 7.3: Demographic Information of Experts

Item	Frequency	Percentage
Gender		
Male	8	53.3
Female	7	46.7
Age		
Under 30 years	1	6.7
31–34	5	33.3
35–39	7	46.7
40 years and above	2	13.3
Religious affiliation		
Christian	15	100.0
Ethnic group		
Akan	14	93.3
Dagao	1	6.7
Marital status		
Married	9	60.0
Not married	6	40.0
Level of education		
Bachelor's degree	12	80.0
Master's degree	3	20.0
Category of nurse		
Perioperative nurse (Education)	1	6.7
Perioperative nurse (Clinical)	6	40.0
Nurse administrator (NMC)	4	26.7
Registered general nurse (Education)	1	6.7
Registered general nurse (Clinical)	2	13.3
Registered midwife (Clinical)	1	6.7
Rank		
Staff nurse/midwife	1	6.7
Nursing/midwifery officer/tutor	3	20.0
Senior nursing/midwifery/health officer/tutor	8	53.3
Principal nursing/midwifery/health officer/tutor	3	20.0
Position at the ward		
Staff	4	26.7
Ward in charge	8	53.3
Nurse manager	2	13.3
Nurse administrator	1	6.7
Working experience		
5 years or less	1	6.7
6–9 years	3	20
10–14 years	9	60
15 years or more	2	13.3

7.6.2 Assessment of Preoperative Anxiety and Information Needs of Patients

This section intends to determine experts' consensual responses on the assessment section of the draft training programme, which comprised objectives under listed steps to achieve the objectives. From Table 7.4, under the objective, acquisition of knowledge, all (15; 100.0 per cent) of the experts indicated Agree to the item, 'pre- and postoperative expected outcomes', while (14; 93.3 per cent) each responded to 'therapeutic communication skills.' With respect to the objective, to develop a training programme for nurses on how to explore and manage preoperative information needs of patients at district hospitals in the Ashanti Region of Ghana, 'data collection skills', the majority (14; 93.3 per cent) and (13; 86.7 per cent) responded with Agree, to the items, 'assure patient and family of confidentiality' and 'validation of findings' respectively. Regarding the aforementioned objective, to develop a positive attitude towards patient assessment, 12 (80.0 per cent) of the experts responded Agree to the item, 'stick to the mission and vision of the hospital' while all (15; 100.0 per cent) responded Agree to the items, 'adhere to the ethics of the profession' and 'be innovative'. Additionally, the majority (13; 86.7 per cent) and (14, 93.3 per cent) Agree to 'follow ward protocols' and 'have good relationships with other staff.'

Table 7.4: Assessment of Preoperative Anxiety and Information Needs of Patients

Item	Agree	Disagree
Objective: Acquisition of knowledge		
Pre- and postoperative expected outcomes	15 (100.0)	0 (0.0)
Surgical ward protocols on surgical interventions	10 (66.7)	5(33.3)
Therapeutic communication skills	14 (93.3)	1 (6.7)
Objective: Data collection skills		
Communicative skills	9 (60.0)	6 (40.0)
Assure patient and family of confidentiality	14 (93.3)	1 (6.7)
Rapport – introduction of self, reassurance, etc.	9 (60.0)	6 (40.0)
History taking – past, present surgical information	9 (60.0)	6 (40.0)
Nursing assessment (vital signs, physical, psychological, spiritual, pain	8 (53.3)	7 (46.7)
Validation of findings	13 (86.7)	2 (13.3)
Objective: Develop positive attitude towards patient assessment		
Develop nursing qualities (empathy, caring, etc.)	9 (60.0)	6 (40.0)
Stick to mission and vision of the hospital	12 (80.0)	3 (20.0)
Adhere to the ethics of the profession	15 (100.0)	0 (0.0)
Develop personal goals	10 (66.7)	5 (33.3)
Follow ward protocol	13 (86.7)	2 (13.3)
Have good relationships with other staff	14 (93.3)	1 (6.7)
Assume responsibilities as assigned	9 (60.0)	6 (40.0)
Be innovative	15 (100.0)	0 (0.0)
Always be ready to learn	10 (66.7)	5 (33.3)

7.6.3 Management of Preoperative Information Needs

This part of the study intended to identify consensual opinions of the panel of experts on the management of preoperative information needs aspect of the training programme. With respect to the objective, 'manage and evaluate information provided', Table 7.5 presents that all (15, 100.0%) the experts Agree to, 'findings on history taken', while the majority (14, 93.3%) responded Agree to the items, 'findings on other assessments' and 'provide holistic care to patient and family' respectively. Concerning the objective, 'conditions of effective management of information', it is demonstrated in Table 7.5 that all (15, 100.0%) the experts Agree to the item, 'take initiative' whereas 14 (93.3%) responded Agree to the item, 'develop confidence'.

Table 7.5: Management of Preoperative Information Needs

Item	Agree	Disagree
Objective: Manage and evaluate information provided		
Findings on history taken	15 (100.0)	0 (0.0)
Findings on other assessments	14 (93.3)	1 (6.7)
Provide holistic care to patient and family	14 (93.3)	1 (6.7)
Evaluate information on patient	9 (60.0)	6 (40.0)
Objective: Conditions of effective management of information		
Develop confidence	14 (93.3)	1 (6.7)
Take initiative	15 (100.0)	0 (0.0)
Be innovative	10 (66.7)	5 (33.3)
Multidisciplinary approach	8 (53.3)	7 (46.7)

7.6.4 Presentation of Findings Obtained in the Delphi Third Round Questionnaire

This section presents results of data obtained during the third round of the Delphi questionnaire. The questionnaires were collected after the experts had finished answering them. They were scanned by going through them one after the other to identify wrongly answered ones for rejection. All of the items were appropriately answered and so none of them was rejected. Data was analysed using Microsoft excel. Descriptive statistical analysis was done using table and percentages to present the results.

7.6.5 Assessment of Preoperative Anxiety and Information Needs of Patients

This section sought to ascertain the experts' consensual responses on the items on the assessment of the preoperative information needs of patients. From Table 7.6, experts' responses on the objective, assessment of knowledge, indicate that 12 (80.0 per cent) Agree to the item, 'standard preoperative interventions'. On the objective, data collection skills, participants responded Agree to the items 'communicative skills' (13; 86.7 per cent), 'establish rapport' (14; 93.3 per cent),' comprehensive history' (13; 86.7 per cent) and 'nursing assessment' (12; 80.0 per cent). To the objective, 'develop a positive attitude towards patient assessment', participants responded Agree to 'develop strengths based on qualities' (13; 86.7 per cent), 'develop patient-centred goals' (12; 89.0 per cent), 'assume responsibilities as

assured and clarify where necessary' (14; 93.3 per cent), and 'always seek new information' (14; 93.3 per cent).

Table 7.6: Assessment of Preoperative Anxiety and Information Needs of Patients

Item	Agree	Disagree
Objective: Assessment of knowledge		
Standard preoperative interventions	12 (80.0)	3 (20.0)
Objective: Data collection skills		
Communicative skills	13 (86.7)	2 (13.3)
Establish rapport – introduction of self, reassurance, etc.	14 (93.3)	1 (6.7)
Comprehensive history (medical and surgical)	13 (86.7)	2 (13.3)
Nursing assessment (vital signs, physical, psychological, spiritual)	12 (80.0)	3 (20.0)
Objective: Develop a positive attitude towards patient assessment		
Develop strengths based on qualities (empathy, caring, etc.)	13 (86.7)	2 (13.3)
Develop patient-centred goals	12 (80.0)	3 (20.0)
Assume responsibilities as assured and clarify where necessary	14 (93.3)	1 (6.7)
Seek new information always	14 (93.3)	1 (6.7)

7.6.6 Management of Preoperative Information Needs

Findings on the experts' responses on the management of preoperative information needs of patients are presented in Table 7.7. From Table 8.6, all (15; 100 per cent) Agree to the item 'evaluate information on patient and family' under the objective, 'manage and evaluate information provided'. Under the objective 'conditions of effective management of information', the majority (12; 80 per cent) responded Agree to the items 'be innovative' and 'multidisciplinary approach', respectively.

Table 7.7: Management of Preoperative Information Needs

Item	Agree	Disagree
Objective: Manage and evaluate information provided		
Evaluate information on patient and family	15 (100.0)	0 (0.0)
Objective: Conditions of effective management of information		
Be innovative	12 (80.0)	3 (20.0)
Multidisciplinary approach	12 (80.0)	3 (20.)

7.6.7 Delphi Round Three: Conclusion on Developed Training Programme

The training programme, which is intended to be used to train nurses who are working at SWs/SSs on how preoperative anxiety and information needs of patients are explored and managed, was developed using the Delphi technique. Three rounds of Delphi questions and questionnaires were used. The first round consisted of a focus group discussion in which experts made known their opinions on the draft, i.e., components that needed to be changed, reworded and added. During the second round, most of the items on the questionnaire attained the 75 per cent consensus, whereas those that could not achieve that criterion appeared in the third-round questionnaire. In the third round, all items achieved the 75 per cent consensus. After data were collected through the Delphi rounds and analysed, it was evident that all the components of the training programmes had attained the 75 per cent consensus criterion. It can therefore be concluded that the training programme could be used to train nurses at the SWs/SSs.

7.7 Conclusion

This chapter provided a description of the process through which the training programme was developed for nurses at SWs/SSs to achieve the objective, to develop a training programme for nurses on how to explore and manage the preoperative information needs of patients at district hospitals in the Ashanti Region. This chapter also described the Delphi method, including the steps involved and the method of inquiry, i.e., qualitative and quantitative approaches. Findings were presented in this chapter obtained from experts recruited for this part of the study using these approaches. The next chapter provides the developed programme on the exploration and management of patients' information needs.

CHAPTER EIGHT

TRAINING PROGRAMME ON EXPLORATION AND MANAGEMENT OF PREOPERATIVE ANXIETY AND INFORMATION NEEDS OF PATIENTS (PEMPAINP)

8.1 Introduction

Chapter Seven described the Delphi technique employed in the development of the training programme. This chapter presensts the draft programme developed (PEMPAINP). It discusses the purpose for which it was developed and the knowledge and skills it would give SW/SS nurses to be able to examine and manage patients who are being prepared to undergo surgery. This chapter concludes with a description of the components and a conclusion on the developed training programme, and presents the final product of the training programme.

8.1.1 Preface

This document focuses on the training of Surgical Ward/Surgical Suite (SW/SS) nurses on how to assess patients who have been booked and admitted into the SWs/SSs for the identification of preoperative anxiety and the management of information needs. This document will serve as a manual for the periodic training of nurses who have been placed at the SWs/SSs to prepare patients to undergo various surgical operations. It will equip them with the necessary knowledge and skills in the exploration of patients for preoperative anxiety and the management of information needs at district hospitals in the Ashanti Region of Ghana.

8.2 Background

The PEMPAIN is a training manual, generally designed to enhance the preoperative preparation of patients in order that they will undergo successful surgical procedures. It is supported by the premise that exploration of preoperative anxiety and management of patients' needs with appropriate information will enhance the elimination or reduction of anxiety leading

to successful surgical operations devoid of postoperative complications such as severe postoperative pain, wound infection and prolonged hospitalisation.

8.2.1 Rationale for the PEMPAIN

The PEMPAIN will equip SW/SS nurses with knowledge and skills and will also empower them to be able to identify patients who are anxious and manage them with the appropriate information they need. Informing patient is beneficial in minimising preoperative anxiety (Gröndahl et al., 2018). In addition, the PEMPAIN will enable nurses to involve patients and their families fully in their care by guiding them in terms of decisions about the availability of obtaining information services, and about health personnel designated to provide preoperative information. Furthermore, it will enable nurses to liaise with other healthcare teams and personnel regarding the appropriate and preferred manner in which patients must be informed. The World Health Organization (WHO) and the European Patients' Forum (EPF) validate patients' involvement in their care (Harris et al., 2020).

8.2.2 Scope of the PEMPAIN

The PEMPAIN is designed specifically to train nurses stationed at the SWs/SSs to provide preoperative preparation for patients scheduled to undergo surgeries. The focus of this guide is to train nurses to develop knowledge and skills in the exploration of preoperative anxiety and the management of patients with identified problems. The scope of the PEMPAIN is intended to be infused into the general and routine preoperative preparation of patients for surgical operations.

The document covers competencies, objectives, activities, and resource persons. The competency section describes the knowledge and skills that SW/SS nurses must possess to enable them to explore preoperative anxiety and to manage the information needs of patients.

The objectives describe specific knowledge and skills that SW/SS nurses need to acquire, specific positive attitude traits, and specific conditions for data collection and effective management of the information needs of patients. However, the general aim for the production of the PEMPAIN is to train SW/SS nurses regarding the practices of nurses for the exploration preoperative anxiety and the management of the information needs of patients.

8.2.3 Aim of the PEMPAIN

The aim of the PEMPAIN is to train nurses placed at SWs/SSs regarding the practices of nurses for the exploration of preoperative anxiety and the management of the information needs of patients at district hospitals in the Ashanti Region of Ghana.

8.2.4 Objectives of the PEMPAIN

At the end of the training, SW/SS nurses will be able to:

1. Acquire and apply their knowledge of preoperative nursing assessment and management of anxiety and the information needs of patients.
2. Acquire and apply skills of preoperative nursing assessment and management of anxiety and the information needs of patient.
3. Develop a positive attitude towards patients' preoperative assessment.
4. Develop conditions to manage and evaluate information provided to patients effectively.
5. Exhibit a high level of acquired knowledge and skills in the assessment, management and evaluation of the preoperative information needs of patients.

8.2.5 Vision of PEMPAIN

The vision of PEMPAIN was motivated by the vision statement of the Ministry of Health (MOH) of Ghana (Ministry of Health, 2022). It states: All nurses at the SWs/SSs will be trained to be able to examine all kinds of patients for preoperative anxiety and information needs and manage them with appropriate information before they undergo all kinds of surgery.

8.2.6 Mission of PEMPAIN

The mission statement of PEMPAIN is aligned with the mission of the MOH of Ghana (Ministry of Health, 2022). It states: To advocate for frequent training of nurses working at SWs/SSs in the Ashanti Region and beyond with knowledge and skills for the exploration and management of preoperative anxiety and the information needs of patients prior to undergoing surgery.

8.2.7 The Principles Underpinning PEMPAIN

The following principles will enable the PEMPAIN to be used in the training of SW/SS nurses at district hospitals in the Ashanti Region of Ghana:

1. The PEMPAIN should guide the training of nurses at the SWs/SSs to acquire knowledge and skills to explore and manage the preoperative anxiety and information needs of patients.
2. PEMPAIN should be used to train nurses at the SWs/SSs to implement various steps to explore the anxiety and information needs of patients before they undergo surgery.
3. The PEMPAIN should be used to aid nurses at the SWs/SSs in gaining skills in applying appropriate steps, using methods and devices to provide the information that patients need before undergoing surgery.

Table 8.1: Components of the Assessment of Preoperative Anxiety and Information Needs of Patients

Duration	Objectives	Activities		Contents	Expected training outcomes
		Nurse trainers' activities	Nurse trainees' activities		
	Assessment of preoperative anxiety and information needs	Nurse specialist trains SW/SS nurses to achieve the objective using the following teaching methods: • Lectures • Slides show • Discussions • Demonstrations • Group work • Role-playing	SW/SS nurse trainees listen and observe illustrations and demonstrations. They ask questions and contribute to discussions.	The following are the contents in which SW/SS nurses would be trained: • Pre- and postoperative care upon patients' admission • Standard preoperative interventions • Therapeutic communication skills	At the end of this session, SW/SS nurses will be able to illustrate knowledge to: • identify pre- and post-operative care upon patients admission • determine and apply standard preoperative interventions • demonstrate therapeutic communication skills
	Skills required to facilitate nursing assessment	Nurse specialist trains nurses to achieve the objective using: • Lectures • Slides show • Discussions • Demonstrations • Group works • Role-playing	SW/SS nurses listen and observe illustrations, demonstrations and role plays. They ask questions and contribute to discussions.	The following are the contents in which SW/SS nurses would be trained: • Assurance of patient/family confidentiality • Establishing rapport • Comprehensive history of patient/family • Nursing assessment (vital signs, physical,	At the end of this section, SW/SS nurses should acquire knowledge and skills to: • assure patient/family of confidentiality for information needs • establish rapport with patient and family • take comprehensive history of patient/family • perform nursing

Table 8.1: Components of the Assessment of Preoperative Anxiety and Information Needs of Patients

Duration	Objectives	Activities		Contents	Expected training outcomes
		Nurse trainers' activities	Nurse trainees' activities		
				psychosocial, spiritual, pain) • Validation of findings from patient/family	assessment (vital signs, physical, psychosocial, spiritual, pain) • validate findings with patient/family
	Positive attitude towards patient	Nurse specialist trains nurses to achieve the objective using: • Lectures • Slides show • Discussions • Demonstrations • Group work • Role-playing	Nurse trainees listen to lecture and observe illustrations, demonstrations, role-playing and take part in discussions and role-playing. They ask questions and answer questions.	The following are the contents in which SW/SS nurses would be trained: • Nursing qualities (empathy, caring, etc.) • Mission and vision of the hospital • Ethics of the profession • Patient centred goals • Ward protocol • Good relationship with other staff • Assumption of assigned responsibilities • Innovativeness • Consistent learning	At the end of this section, SW/SS nurses are expected to: • develop nursing qualities (empathy, caring, etc.) • stick to mission and vision of the hospital • adhere to ethics of the profession • develop patient centred goals • follow ward protocol • have a good relationship with other staff • assume assigned responsibilities • be innovative • be ready to learn always

Table 8.1: Components of the Assessment of Preoperative Anxiety and Information Needs of Patients

Duration	Objectives	Activities		Contents	Expected training outcomes
		Nurse trainers' activities	Nurse trainees' activities		
	Manage and evaluate information provided to patients	Nurse specialist trains nurses to achieve the objective using: • Lectures • Slides show • Discussions • Demonstrations • Group work • Role-playing	SW/SS listen to lecture, observe illustrations and demonstrations and take part in group work. They ask questions and answer questions.	The following are the contents in which SW/SS nurses would be trained: • Informing patient/family of findings on history and other assessments • Provision of holistic care to patient/family • Evaluation of information provided to patient/family	At the end of this section, SW/SS nurses are expected to be able to: • inform patient/family of findings on history and other assessments • provide holistic care to patient/family • evaluate information provided to patient/family
	Conditions facilitating management of information needs	Nurse specialist instructs nurses on topics to achieve sessional objective using: • Lectures • Slides show • Discussions • Demonstrations • Group work • Role-playing	Nurse trainees listen to lecture, observe illustrations and demonstrations and participate in group work and role-playing. They ask and answer questions.	The following are the contents in which SW/SS nurses would be trained: • Development of confidence • Taking initiative • Being innovative	At the end of this section, SW/SS nurses are expected to be able to: • develop confidence • take initiative • be innovative • use multidisciplinary approach (teamwork

Table 8.1: Components of the Assessment of Preoperative Anxiety and Information Needs of Patients

Duration	Objectives	Activities		Contents	Expected training outcomes
		Nurse trainers' activities	Nurse trainees' activities		
				• Using multidisciplinary approach (teamwork among nurses and other health professionals) to provide information	among nurses and other health professionals) to inform patients
	Evaluate nurses after training	Nurse specialist evaluates SW/SS nurses on various instructional sessions using: • Group assessments • Group presentations • Role-playing	Nurse trainees work in their respective groups in response to questions and assignments in preparations for: • group presentations • group demonstrations • role-playing	The following are the contents in which SW/SS nurses would be trained: • Assessment of participants' knowledge and skills on contents throughout the training through presentations, demonstrations and role-playing • Award certificates	At the end of this section, SW/SS nurses are expected to be able to: • perform tasks assigned successfully through presentations, demonstrations and role-playing • receive certificates

8.3 Components of the PEMPAIN

Components of the PEMPAIN are classified under the assessment of preoperative anxiety and the information needs of patients, and management of the information needs of patients. Components of the assessment of preoperative anxiety and ithe nformation needs of patients include: objectives, activities – nurse trainee's activities and nurse trainer's activities, expected outcomes, contents, and resource persons. Additionally, components of the management of information needs of patients are also classified under sub-headings, such as objectives, activities – nurse trainee's activities and nurse trainer's activities, expected outcomes, contents and resource persons. Figure 13 displays the components of the assessment of preoperative anxiety and the information needs of patients and components of the management of information needs of patients.

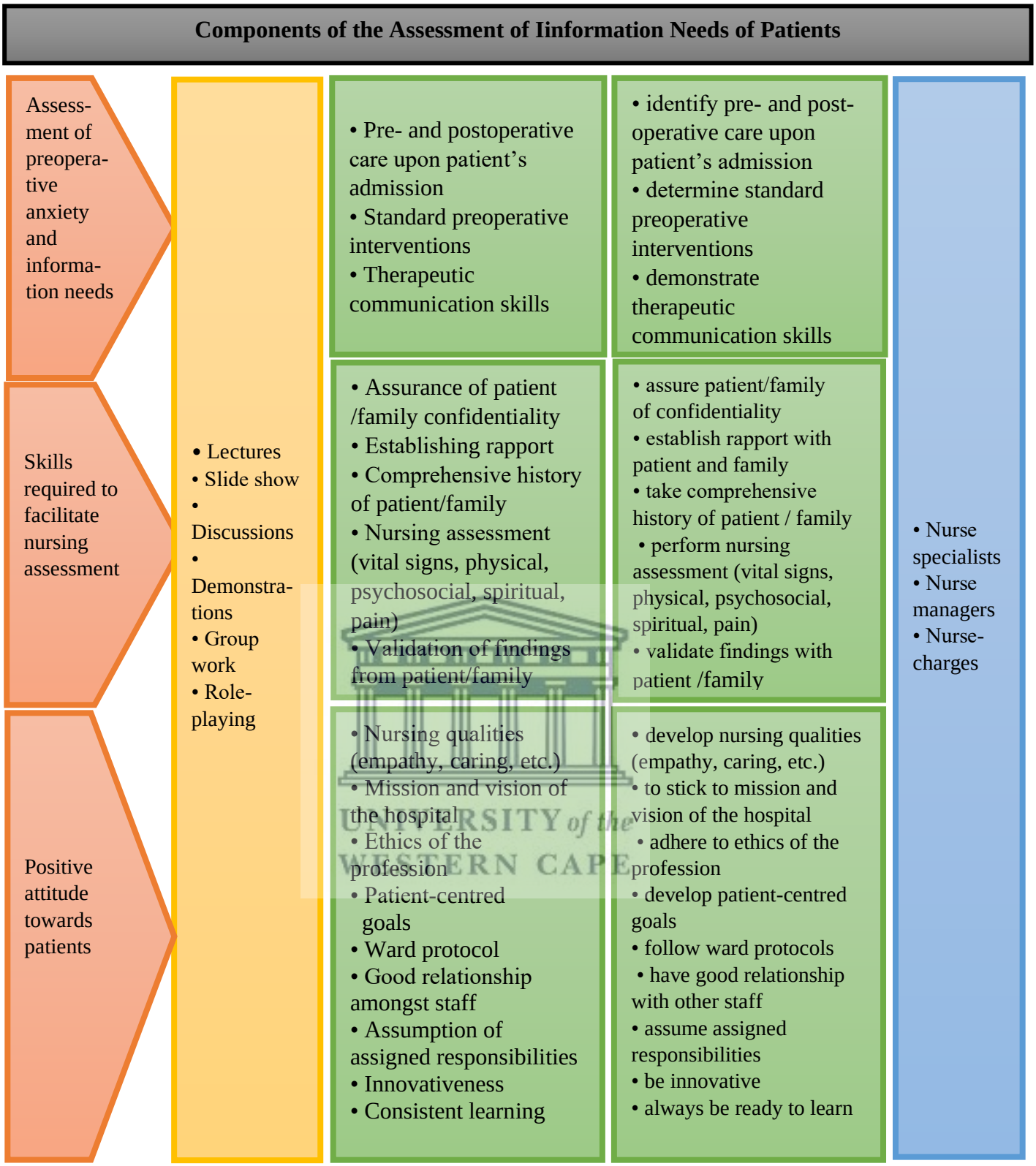

Figure 8.1: Components of the Assessment of Preoperative Anxiety and the Information Needs of Patients

8.4 Assessment of Preoperative Anxiety and Information Needs of Patients

This session will enable SW/SS nurses to utilise the knowledge and skills obtained from training to assess and identify preoperative anxiety and the information needs of patients in planning to provide appropriate information to patients undergoing surgery. Courses of training will be held with objectives and activities and the outcomes that nurses are expected to demonstrate after going through the training.

8.4.1 Objective One

By the end of this session of the training, nurses at SW/SS able to conduct an assessment of preoperative anxiety and the information needs of patient

8.4.2 Training of SW/SS nurses on PEMPAIN

The nurse specialist (trainer) will implement PEMPAIN to facilitate instruction on specific topics in the process of guiding SW/SS nurses to acquire knowledge on the assessment of patients for preoperative information needs. The nurse specialist discharges his/her actions through lectures, showing of slides, and discussions. The SW/SS nurses participate at this level by listening, observing and taking down notes as the nurse specialist leads them to acquire knowledge on the assessment of patients for preoperative information needs. They also contribute in the discussions by sharing their ideas, asking and answer ingquestions.

8.4.3 Contents

The following contents will be taught in the training of SW/SS nurses:

a. Pre- and postoperative care upon patient's admission

- Define pre- and postoperative care of patients in the assessment of preoperative anxiety and information needs.

- Describe activities constituting both pre- and postoperative care of patients.
- Delineate and explain nurses' duties in the pre- and postoperative phases.
- Demonstrate/illustrate/undertake role-playing on pre- and postoperative processes in the assessment of preoperative anxiety and information needs.

b. Standard preoperative interventions

- Define standard preoperative interventions in the assessment of preoperative anxiety and the information needs of patients.
- Describe the components and the roles of SW/SS nurses on standard preoperative interventions in the assessment of preoperative anxiety and ithe nformation needs of patients.
- Demonstrate skills in implementing standard preoperative interventions in assessing preoperative anxiety and the information needs of patients.

c. Therapeutic communication skills

- Define therapeutic communication in the assessment of preoperative anxiety and the information needs of patients.
- Describe the steps through which therapeutic communication skills are implemented to assess preoperative anxiety and information needs.
- Explain and demonstrate skills in implementing therapeutic communication in the assessment of preoperative anxiety and the information needs of patients.

8.4.4 Expected Training Outcomes

At the end of this session, the SW/SS nurses are expected to illustrate knowledge to:

a. Identify pre- and postoperative care upon patient's admission – SW/SS nurses will be able to describe pre- and postoperative nursing care standards rendered to patients before and after undergoing surgery. In addition, nurses will be able to describe positive and

negative effects of both good and poor pre- and postoperative nursing care (Gonçalves et al., 2017).

b. **Determine standard preoperative interventions** – SW/SS nurses will be able to exhibit knowledge in standard preoperative interventions. Additionally, they will be able to illustrate the specific interventions given to patients prior to surgery in order to reduce surgery-related morbidity, shorten hospital stays, speed up the restoration of organ function and make patients' return to a normal life more easily (Iqbal et al., 2019). Moreover, they will be able to list standard preoperative interventions, which include nurse–patient interactions (Vujanić et al., 2020), baseline observations such as blood pressure, pulse, respiration, and temperature (Sapra et al., 2021), and identification of evidence-based information to manage preoperative anxiety (Christalle, 2019).

c. **Demonstrate therapeutic communicative skills** – It is expected that SW/SS nurses will display skills in communicating with patients once they are admitted and that, each time, care would be given. Nurses should know how to communicate with patients in an attempt to assess them by recognising the factors that enhance communication. First, nurses will appreciate that nurse–patient interactions are reciprocal in that both parties are affected by what they say or do. Second, they would exhibit communicative skills which dwell on the traits of listening and speaking. Third, nurses will understand the complex nature of patients' presenting behaviours to perform the assessment successfully. Lastly, nurses will show competence in observation, which is an important component of communication that occurs when an automatic internal response occurs the moment patients' presenting behaviours are observed.

Objective Two

By the end of this section of the training, SW/SS nurses will be able to acquire skills needed to facilitate nursing assessment

8.5.1 Activities of the Nurse Specialist and the SW/SS Nurses

In this section of the training, the nurse specialist guides SW/SS nurses to develop skills in nursing assessment through slide shows, demonstrations, illustrations, and role-playing. The nurses observe and listen attentively and also take part as the nurse specialist explains, demonstrates and illustrates concepts. They are given the opportunity to ask questions, which are answered by the nurse specialist.

8.5.2 Contents

The following contents will be taught in the training of SW/SS nurses:

a. Assurance of patient/family confidentiality

- Describe patient/family confidentiality in the assessment of preoperative anxiety and information needs.
- Explain the importance of keeping confidentiality.
- Explain the common law and statutory regulations, as well as the professional discipline.
- Describe and demonstrate the steps and the skills in keeping confidentiality of patients.

b. Establishing rapport with patient and family

- Define rapport in assessing the preoperative information needs of patients.
- Describe the importance of establishing rapport with patient and family.
- Demonstrate the skills in establishing rapport with patient and family.

c. Comprehensive history of patient/family (past and present surgical information)

- Define history taking (past, present surgical information) in assessing preoperative anxiety and the information needs of patient/family.
- Describe the elements of past and present surgical history of patient/family.
- Perform steps in taking comprehensive past and present surgical history of patient/family.
- Demonstrate critical thinking and clinical judgment abilities in assessing preoperative anxiety and the information needs of patients.

d. Nursing assessment (vital signs, physical, psychosocial, spiritual, pain)

- Explain nursing assessment in the identification of preoperative anxiety and information needs of patients.
- Explain the components and importance of nursing assessment.
- Describe instruments used in performing nursing assessment.
- Demonstrate skills in performing nursing assessment to identify preoperative anxiety and the information needs of patients with appropriate instruments.

e. Validation of findings with patient/family

- Define validation of findings in identifying preoperative anxiety and the information needs of patient/family.
- Describe the process of validating patient/family findings.
- Demonstrate how validation of patient/family findings is done.

8.5.3 Expected Training Outcomes

At the end of this section, SW/SS nurses should acquire knowledge and develop skills to:

a. Assure patient/family of confidentiality – It is expected that SW/SS nurses will be able to keep in confidence personal information that patients will release to them. It is a vital component in the nurse–patient relationship, which is protected in equity, common law and

statutory regulation, as well as through professional discipline (Mendelson & Rees, 2014). Confidentiality is essential in that it is the preservation of information between nurses and /or other health professionals and patients (Blightman et al., 2014). It is based on the rights that arise from relationships and nursing care built on trust (Beltran-Aroca et al., 2016). Patient information is not supposed to be shared with any third party, unless the court orders otherwise or it is in the public domain (Ochonma et al., 2017). Moreover, nurses will be able to keep patients' information confidential by:

- Delivering quality health service in a humane and equitable manner within the resources of the country
- Upholding the dignity and interest of patients/clients at all times, adhering to the provisions of the Patient's Charter
- Exhibiting high levels of professionalism and excellence
- Promoting the corporate image of the Service
- Demonstrating a high sense of efficiency, integrity, transparency, confidentiality, and dedication to duty
- Avoiding discrimination against patients, clients, and employees based on the nature of illness, political affiliation, occupation, disability, culture, ethnicity, language, race, age, religion, gender, etc. in the performance of their duties, and promoting continuous quality improvement in health services.

b. Establish rapport with patient and family –SW/SS nurses will be able to establish a good rapport with patients, which will lead to a tight and pleasant therapeutic relationship that fosters the understanding of patients' emotions for effective interaction (Mills, 2020). Ross (2013) defines rapport as the formation of a therapeutic connection based on mutual understanding (respect, empathy and trust). After the training, SW/SS nurses will exhibit skills in establishing rapport, which require the use of local language and the awareness of patients'

cultural characteristics (Ali & Elzubair, 2016). Additionally, nurses will display skills in establishing rapport by a welcoming stance, maintaining eye contact, showing empathy, open communication, making it personal, practising mirroring, and keeping their word (Ali & Elzubair, 2016).

c. **Take comprehensive history of patient/family (past, present surgical information)** – After this instructional session, SW/SS nurses are expected to exhibit proficiency in taking a comprehensive history including past and present surgical information of patients and families. The nurses are expected to be able to use their abilities in critical thinking and clinical judgment in an active search for patients' concerns regarding anxiety in order to plan and manage and allow patients to become participants in their own care (Ghosh & Karunarantne, 2015; Lowth, 2015). The training requires that trained nurses should show skills in history taking, which include communication skills to build rapport and ensure understanding, consultation skills in the ability to listen and respond to patients, clinical knowledge and experience of common conditions and their manifestations, and the ability to think through clinical algorithms logically (Lowth, 2015; Tidy & Cox, 2019). Additionally, nurses will show competence in interviewing patients, which greatly enhances the identification of patients' problems (Keifenheim, 2015) on past and present medical and surgical information, family medical history, social history, allergies and drugs that the patient is taking or has recently ceased taking (Nichol et al., 2020).

d. **Perform nursing assessment (vital signs, physical, psychosocial, spiritual, pain)** – It is expected that SW/SS nurses will be able to perform nursing assessment on patients. Nursing assessment is a useful tool that allows nurses to obtain descriptions of patients' symptoms, how they evolved, and a method to identify any linked findings that can help to identify preoperative anxiety and information needs (Toney-Butler & Unison-Pace, 2021). Nurses will be able to gather information about the patient's health status, vulnerabilities or risk factors

and perceived difficulties from the patient and their family/care givers (Malley et al., 2015; Stonehouse, 2017). Nurses will develop skills to collect subjective and objective data (Stonehouse, 2017). Nursing assessment categories are performed to assess the state of the major systems of the body, such as the cardiovascular, respiratory, renal, and endocrine systems (Teach Me Surgery, 2021).

e. **Validate findings with patient/family** – SW/SS nurses will be able to perform validation after this section of training. Validation is the process of verifying the causes of preoperative anxiety and confirming the identification of information needs with patients (Bonthagarala et al., 2015). When validation is accurate and done on time, patients are able to receive information tailored to their understanding (Balogh et al., 2015). Validation also makes it easier to choose more effective information that will eliminate or reduce preoperative anxiety of patients (Rivas et al., 2019). Nurses will be able to recognise patients' preoperative behaviours resulting from preoperative anxiety, which would help them to validate the findings by presenting them to the patient for his or her thoughts (Gonzalo, 2021).

Objective Three

At the end of this section, SW/SS nurses will develop a positive attitude towards patient assessment.

8.6.1 Activities of the Nurse Specialist and SW/SS Nurses

The nurse specialist guides SW/SS nurses to develop a positive attitude towards patients' assessment through presentation of slides, illustrations, demonstrations and role-playing. The SW/SS nurses observe and listen attentively and participate in the demonstrations and role-playing. They also ask the nurse specialist questions pertaining to the development of the positive attitude, which are answered accordingly.

8.6.2 Contents

The following contents will be taught in the training of SW/SS nurses:

a. Nursing qualities (empathy, caring, etc.)

- Explain the kind of qualities SW/SS nurses need in assessing preoperative anxiety and the information needs of patients.
- Explain the elements of nursing qualities (empathy, caring, etc.) in assessing preoperative anxiety and the information needs of patients.
- Demonstrate the skills in applying nursing qualities in identifying preoperative anxiety and information needs.

b. Mission and vision of the hospital

- Define the mission and vision affiliated to hospitals.
- Explain the application of the mission and vision of hospitals in the identification of preoperative anxiety and the information needs of patients.

c. Ethics of the profession

- Define the code of ethics in assessing preoperative anxiety and the information needs of patients.
- Explain the concepts associated with the code of ethics, including autonomy, beneficence, justice, and non-maleficence
- Demonstrate the skills in applying the code of ethics with the concepts in the identification of preoperative anxiety and the information needs of patients.

d. Patient-centred goals

- Explain patient-centred goals in the assessment of preoperative anxiety and the information needs of patients.

- Describe steps in developing patient-centred goals in assessing preoperative anxiety and providing information needs.
- Demonstrate skills in applying patient-centred goals in identifying preoperative anxiety and information needs.

e. Ward protocol

- Define protocol in the assessment of preoperative anxiety and the information needs of patients.
- Identify and describe ward protocols pertaining to the assessment of preoperative anxiety and the information needs of patients.
- Demonstrate skills in implementing protocol in assessing preoperative anxiety and the information needs of patients.

f. Good relationships amongst staff

- Explain the nature of good relationships in assessing preoperative anxiety and the information needs of patients.
- Describe the steps in building good relationships with other staff to assess preoperative anxiety and information needs.
- Demonstrate the skills in building good relationships with other staff.

g. Assumption of assigned responsibilities

- Define responsibilities in relation to assessing preoperative anxiety and the information needs of patients.
- Describe the steps in assuming responsibilities as assigned.
- Demonstrate the skills in assuming responsibilities as assigned.

h. Innovativeness

- Define innovation in assessing preoperative anxiety and the information needs of patients.

- Describe ways through which SW/SS nurses can implement innovative measures to assess preoperative anxiety and the information needs of patients.
- Demonstrate how to implement innovative measures in assessing preoperative anxiety and the information needs of patients.

i. Consistent learning

- Describe learning in relation to assessing the preoperative information needs of patients.
- Describe the processes by which SW/SS nurses would access the forms of learning.
- Explain and demonstrate resources which would always aid SW/SS nurses to learn.

8.6.3 Expected Training Outcomes

At the end of this section, SW/SS nurses are expected to:

a. **Develop nursing qualities (empathy, caring, etc.)** – After this instructional session, SW/SS nurses will develop qualities, traits, abilities, talents, strengths, values, beliefs or morals in the aid of assessing patients (Williamson, 2019). These qualities are described as empathy and the sense of caring. With empathy, nurses will be able to understand a patient's feelings and thoughts concerning surgical conditions and procedures in circumstances from the patient's perspective rather than from the nurse's own (Borody, 2020). Caring is a nursing quality that makes all the difference to patients in that nurses who care about how their patients feel have a considerable impact on assessment (Cornell & Vaughn, 2020).

b. **Stick to the mission and vision of the hospital** – After this instructional session, SW/SS nurses will realise and keep in mind the mission and vision of their respective hospitals while assessing patients for surgery. The mission will direct nurses on the values that guide their practice in the assessment of patients for preoperative information needs, while the vision will guide them on the status to which their practice intends to develop the hospital

in future (Rego et al., 2016; Goggin, 2021). In this regard, nurses will possess the potential to assess patients with care, integrity, respect, commitment, loyalty and excellence (MedStar Health, 2021).

c. **Adhere to the ethics of the profession** – It is anticipated that, after this instructional session, SW/SS nurses will demonstrate the competence of adhering to the ethics of the nursing profession. The code of ethics is the backbone of the nursing profession in that its relevance expresses the importance of nurses advocating for patients' rights and fair outcomes of their conditions (Maryville Universtity, 2021). Nurses should realise that nursing ethics thrives on four major concepts, which include autonomy, beneficence, justice, and non-maleficence (Haddad & Geiger, 2020). They will demonstrate the potential of adhering to the nursing ethics by:

- being accountable for their professional practice
- maintaining the individuality of individual patients and relatives, protecting confidentiality, obtaining consent before giving treatment, and maintaining professional knowledge and competence
- Identifying and minimising risks to patients, clients and their relatives, and collaborating with other professionals in the health team.

d. **Develop patient-centred goals** – After this session, nurses should have the capability of developing patient-centred goals in relation to assessment. Nurses should have the ability to develop goals to eliminate or reduce the preoperative anxiety of patients by establishing a partnership with individual patients and their families to provide information with respect to their preferences and the need to participate in their own care (Nkrumah & Abekah-Nkrumah, 2019). By developing their goals, nurses will consider patients' values, preferences and expressed needs with the involvement of patients' family and friends (Kuipers et al., 2019). Development of goals incorporates short- and long-term functional

targets to assist in the elimination or reduction of preoperative anxiety for successful surgery (Bailey, 2017). The goals must be specific, measurable, achievable, relevant and time-bound (SMART) (Thornberry, 2019).

e. **Follow ward protocol** – Nurses will have knowledge on how to follow protocols established in their respective wards. A protocol is a set of rules and practices that are used to convey, interpret and carry out instructions (Jonnalagadda, 2019). They serve as a systematic, evidence-based approach to a specific component of nursing care (Kredo et al., 2016). Nurses will be encouraged and poised to adhere to protocols to ensure that their practices are considered across a category of nurses at the hospital, and to serve as a resource (Irving, 2014).

f. **Have good relationships with other staff** – It is expected that nurses will have a good relationship with other staff. Interpersonal relationships in nursing is defined as the interaction between two or more nurses and other healthcare workers who communicate, and share the same values and energy with respect to their roles at the SW/SS (Borges et al., 2017). Good relationships among nurses and other staff promote decision-making (participation), develop a psychological connection (commitment), make them identify themselves as those who wish to remain members of the hospital (identification) (Yepes-Baldó et al., 2016). Nurses will acquire knowledge on the modalities for establishing good relationships with other staff. This includes accepting the notion that the formation of teams is essential for the preoperative care of patients (Buljac-Samardzic et al., 2020), for collaboration to agree with each other, to share common goals and respect, and frequent communication directed towards informing patients (Tørring et al., 2019).

g. **Assume responsibilities as assigned** –SW/SS nurses will exhibit proficiency in assuming the responsibilities they would be assigned regarding patient assessment. Nurses have a professional duty to perform preoperative assessment consistently and reliably (Barrow &

Sharma, 2021). Nurse managers or leaders mostly lead a team of nurses with skills. One of the first talents each team leader must master is the ability to delegate some responsibilities to other nurses in the team (Ellis, 2015). It is the process of assigning a colleague or subordinate nurse to perform activities or duties in the context of exploring preoperative anxiety and information needs while still maintaining accountability for the outcome (Principles for Practice, 2013). Delegation is not the same as relinquishing control. The nurse who delegates does not absolve him- or herself of the obligation and authority that has been given to him or her, but he or she is responsible for his or her own performance as well as that of the colleague or subordinate (Oviawe, 2015). The charge nurse delegating and the colleague or subordinate nurse being delegated must be conscious of the conditions of delegation, such as the right task, right circumstance, right person, right supervision and the right direction and communication (Barrow & Sharma, 2021).

h. **Be innovative** – SW/SS nurses will show competence in innovative ways to assess patients for preoperative information needs. Innovation is described as the deliberate introduction and implementation of ideas, methods, goods or procedures that are new to the adoption of techniques in the exploration of preoperative anxiety and the information needs of patients (Thomas et al., 2016). Innovative ideas from nurses boost their self-confidence and content (Isfahani et al., 2015). Nurses should exhibit potential in using various ways to implement innovative ideas. This includes continuous education, which broadens knowledge, learning new skills and developing techniques of assessing preoperative anxiety and the information needs of patients (Agyepong, 2017). They will be conscientised to apply acquired knowledge and skills to establish new methods of working to improve preoperative assessment by changing old ways of thinking and practising (Brysiewicz et al., 2015).

i. **Always be ready to learn** – Nurses will show their readiness to learn always and will be motivated to apply new ideas to challenge the status quo (Brysiewicz et al., 2015). With the proliferation of surgical information and the rise of evidence-based practice in the nursing profession, nurses must be able to search, retrieve and select information for decisions on the assessment of preoperative anxiety and information needs (Farokhzadian et al., 2015). SW/SS nurses require information that is current and relevant to the preoperative information need of patients (Ricks & Ham, 2015). Furthermore, nurses will demonstrate information-seeking behaviour described in the model of information-seeking behaviour to enable them always to seek new information. These models include Wilson's model of information behaviour, Dervin's model, Information-seeking behaviour and using process model, Sandtown' optimal foraging theory, and Bloom's task performance model (Kundu, 2017). In addition to these, nurses will demonstrate the ability to explore preoperative anxiety and information needs that is guided by knowledge and evidence from rigorous scholarly methodologies (Curtis et al., 2017). Additionally, it is critical for nurses to translate research evidence into the exploration of preoperative anxiety and information needs (Curtis et al., 2017) because the foundation for a high-quality, evidence-based nursing practice is research (Yates, 2015).

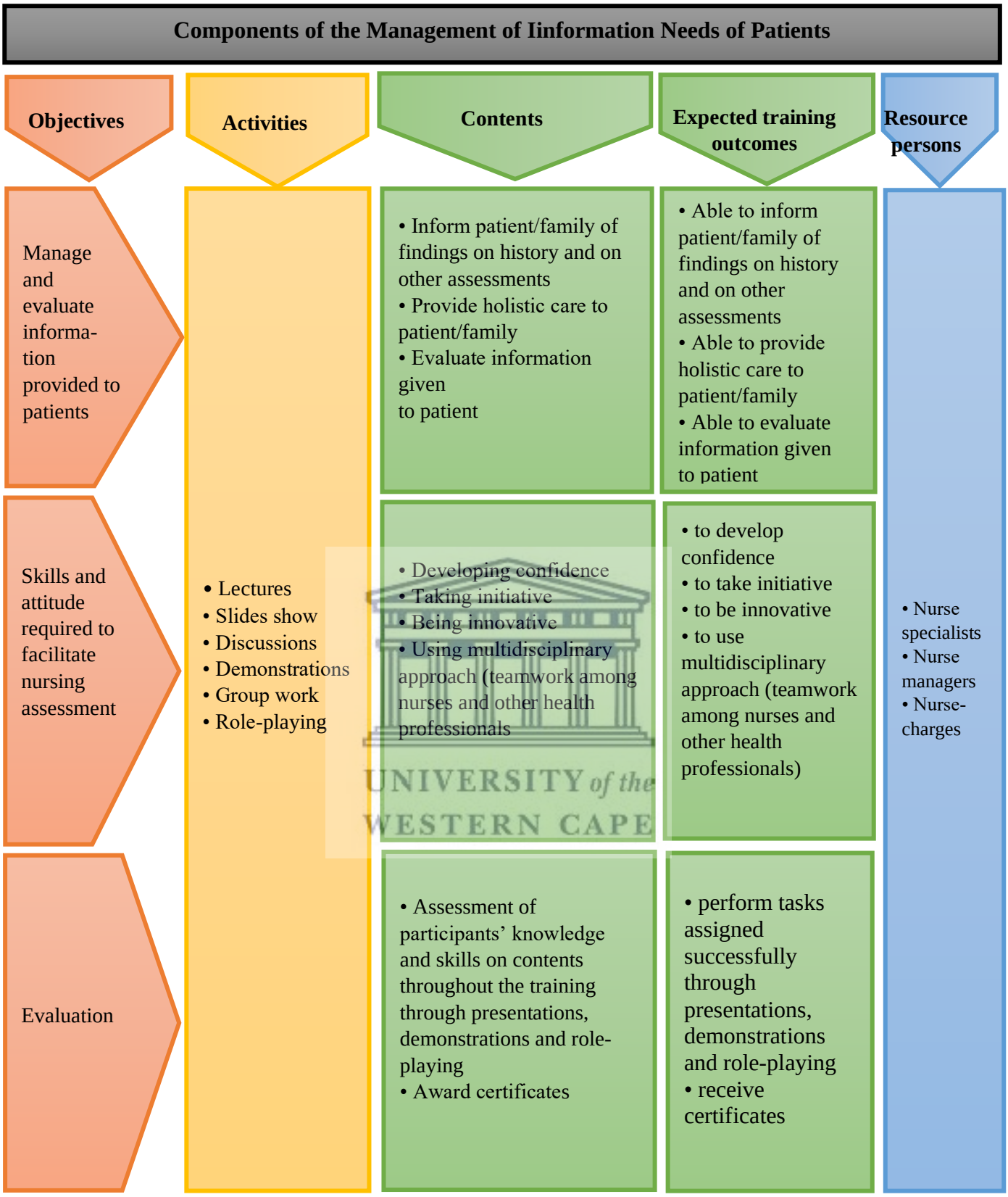

Figure 8.2: Components of the Assessment of Preoperative Anxiety and Information of Patients

8.7 Management and Evaluation of Information Provided to Patients

This section will assist SW/SS nurses to obtain competence in how to integrate knowledge derived from the training to manage and evaluate information provided to patients who are being prepared and are seeking to undergo successful surgical operations. The training contents will be organised based on the objectives and activities to achieve the objectives and outcomes that nurses are expected to demonstrate after undergoing the training.

Objective One

By the end of this session, SW/SS nurses will be able to manage and evaluate information provided to patients.

8.7.1 Activities of Nurse Specialist and SW/SS Nurses

The nurse specialist instructs and facilitates nurses about specific topics to achieve the objectives, manage and evaluate information provided to patients. The nurse specialist uses his or her pedagogical skills through slide shows, lecture, discussions, illustrations, demonstrations and role-playing to achieve this. The SW/SS nurses participate in the training with their attention, observation, asking of questions and taking part of the demonstrations, illustrations, and role-playing.

8.7.2 Contents

The following contents will be taught in the training of SW/SS nurses:

a. **Informing patient/family of findings on history and other nursing assessments**

- Define the process of providing preoperative information needs to patients.
- Describe the various forms (verbal and non-verbal) of providing preoperative information needs to patients.

- Describe the various devices that are used to provide information.
- Demonstrate provision of information using the various forms and devices

b. Provision of holistic care to patient/family

- Define holistic care of patient/family in the provision of preoperative information needs.
- Describe various steps in providing holistic care in the provision of preoperative information needs to patient/family.
- Demonstrate various steps of holistic care in the provision of preoperative information needs of patient/family.

c. Evaluation information provided to patient

- Define evaluation of information needs provided to patients.
- Describe steps in evaluating information needs provided to patients.
- Demonstrate skills of evaluating information needs provided to patients.

8.7.3 Expected Training Outcomes

At the end of the instructional activities under this session, SW/SS nurses are expected to:

d. Inform patient/family of findings on history and other nursing assessments – SW/SS nurses will possess the proficiency to inform patient/family of the findings obtained from history taking and other nursing assessments. Informing patients based on findings obtained from history and assessment conforms to the use of evidence-based practice (EBP) principle. The Nurses and Midwives code of practice advocates that nurses should underpin their practice on the best available evidence (Ford, 2016). EBP merges clinical practice with the foremost available findings (Abu-Baker et al., 2021). It is critical for SW/SS nurses to turn findings into tasks to provide safe, transparent, effective and efficient

information needs to patients (Curtis et al., 2017). It is expected that for SW/SS nurses to inform patients using obtained findings, priorities must be set, goals developed and tasks implemented (Desai et al., 2019). These are done with the participation of the patient.

e. **Provide holistic care to patient/family** – SW/SS nurses will provide holistic care to patient/family. Nurses will be able to provide comprehensive care, taking into cognisance the patient's physical, emotional, social, economic and spiritual requirements, as well as his or her reactions to the condition and the impact of the illness on the ability to meet self-care needs (Khasoha et al., 2020). It is further expected that nurses will implement principles of holistic care, which include the healing power of love, the whole person, prevention and treatment, innate healing power, integration of healing systems, relationship-centred care, individuality, teaching by example, and learning opportunities.

f. **Evaluate information provide to patient** – SW/SS nurses will be able to evaluate information provided to patients. Evaluation of information given to patients and family towards accomplishing goals or intended outcomes, as well as the success of information need provided is a planned, continuing and purposeful action. Nurses will not only evaluate the success of present goals and the reduction of preoperative anxiety, but will also focus on the effectiveness and the impact of the information provided (Gallego, 2017). All nurses and other healthcare members involved in the management of information needs will be involved in the evaluation process. Assessment will lead back to evaluation and the process will be repeated all over again (Gallego, 2017).

Objective Two

By the end of this course, SW/SS nurses will be able to develop conditions facilitating management information needs.

8.8.1 Activities of Nurse Specialist and SW/SS Nurses

The nurse specialist will apply his or her pedagogical skills through the use of lectures, slide show, illustrations, demonstrations and role-playing to train SW/SS nurses on this course. The SW/SS nurses will respond to this instructional session by paying attention, observing slides, illustrations, demonstrations and role-playing. They will ask questions and volunteer to practise what has been taught through the illustrations, demonstrations and role-playing.

8.8.2 Contents

The following contents will be taught in the training of SW/SS nurses:

a. Developing confidence

- Define confidence in the provision of preoperative information needs of patients.
- Describe various processes by which SW/SS nurses would develop confidence in providing preoperative information needs to patients.
- Demonstrate and illustrate skills in providing preoperative information needs with confidence.

b. Taking initiative

- Define initiative in the provision of the preoperative information needs of patients.
- Describe ways in which SW/SS nurses would take initiative to provide preoperative information needs to patients.
- Demonstrate skills in taking initiative to provide the preoperative information needs of patients.

c. Being innovative

- Define innovation in the provision of the preoperative information needs of patients.

- Describe processes by which SW/SS nurses would be innovative in the provision of the preoperative information needs of patients.
- Demonstrate skills in using innovate ways to provide the information needs to patients.

d. Using a multidisciplinary approach (teamwork among nurses and other health professionals

- Define the multidisciplinary approach in the provision of the preoperative information needs of patient.
- Describe the various healthcare professionals constituting the multidisciplinary approach in the provision of preoperative information needs.
- Describe the roles of the various healthcare professionals in the provision of preoperative information needs of patients.
- Demonstrate the role of SW/SS nurses relating to other healthcare professionals in the provision of preoperative information needs of patients.

8.8.3 Expected Training Outcomes

At the end of this session, SW/SS nurses will develop conditions to manage information provided to patients effectively:

a. Develop confidence – SW/SS nurses will develop confidence to provide patients with information. Nurses who are allowed to carry out roles that physicians are too busy to do enhance their confidence level (Health, 2017). It has been established that competence in the performance of tasks develops nurses' capabilities and enhances their confidence level (Owens & Keller, 2018). Nurses with confidence will influence their interactions with patients and other healthcare workers and the surgical team as a whole (Makarem et al., 2019). Nurses will be able to build their confidence through constant learning and broadening of their knowledge (Bettencourt, 2019).

b. **Take initiatives** – SW/SS nurses will be able to take initiative by the end of this course. They will know that taking initiative is an important part of leadership and a valuable asset in many professions (Bruttel & Fischbacher, 2013). They will develop a sense of initiative, which is described as a work-oriented behavioural syndrome that compels a nurse to stick to goals, expect challenges and opportunities, overcome barriers, be consistent with the goals and mission of the hospital, and possess the ability to modify the environment (Lisbona et al., 2021). Furthermore, SW/SS will be able to take initiative by informing other nurses of the reasons to take initiative, to be a role model, to authorise teams to make decisions, to provide a positive and encouraging environment, and to recognise efforts and reward success (Wei et al., 2018).

c. **Be innovative** – SW/SS will be able to innovate in their practices by developing new techniques, technology and ways of managing ithe nformation needs of patients (Kara, 2015). Innovation in nursing will enable nurses to use their knowledge and abilities to establish new methods of working that genuinely improve the management of information needs by changing old ways of thinking and practising (Brysiewicz et al., 2015). Additionally, the nurses will be able to innovate by leveraging connections between technology and the nurses and by increasing knowledge-sharing among nurses (Odero et al., 2016).

d. **Use a multidisciplinary approach (teamwork among nurses and other health professionals) to inform patients** – SW/SS nurses and other health workers will be able to use a multidisciplinary approach in the management of information needs. Nurses will be able to incorporate knowledge or harmonisation of information among nurses, surgeons, anesthetists, dieticians, and physiotherapists to work together in a multidisciplinary approach that incorporates knowledge or information harmonisation (Musa & Ali, 2018). Additionally, it is expected that nurses will know the significance of the use of videos and other teaching

and learning devices to aid in patient information provision (Ruppel & Rains, 2012; Atlas et al., 2019).

Objective Three

At the end of the training sessions, the nurse specialist will be able to evaluate SW/SS nurses after training.

8.9.1 Activities of the Nurse Specialist and SW/SS Nurses

The nurse specialist will implement steps to evaluate SW/SS nurses trained on the competencies to assess, manage and evaluate information needs provided to patients undergoing surgical operations by conducting assessments, using group assignments for presentations, group demonstrations and role-playing. SW/SS nurses will perform assignments in groups, perform demonstrations and do role-playing to indicate acquisition of knowledge and skills to assess and manage the information needs of patients scheduled for surgery.

8.9.2 Content

The following will comprise the contents of evaluating SW/SS nurses:

- Assessment of participants' knowledge and skills on contents throughout the training through presentations, demonstrations and role-playing
- Award certificates

8.9.3 Expected Training Outcomes

At the end of the evaluative session, SW/SS nurses will be able to:

- perform tasks assigned successfully through presentations, demonstrations and role-playing

- receive certificates

8.9.4 Conclusion

The PEMPAIN is a document that will enable nurses who have specialised in the field of perioperative nursing to train SW/SS nurses to assess and manage the preoperative anxiety information needs of patients at the SW/SS. The PEMPAIN has been categorised into components on the assessment of preoperative anxiety and the information needs of patients, and components on management of the information needs of patients. Each of these categories has been subdivided into objectives, activities (nurse trainee's activities and nurse trainer's activities), expected outcomes, contents, and resource persons. The following chapter provides the conclusions, limitations, and recommendations of this study.

CHAPTER NINE

SUMMARY, LIMITATIONS. RECOMMENDATIONS AND CONCLUSIONS

9.1 Introduction

The previous chapter, Chapter Eight, described the developed training programme with respect to its components. This chapter presents conclusions on the various findings obtained, as well as the limitations and recommendations. The aim of this study was to develop a training programme on the exploration and management of preoperative information needs of patients at district hospitals in the Ashanti Region of Ghana. In the study, the focus of the researcher was to give a background to the problem concerning nurses' practice towards the exploration and management of preoperative anxiety and information needs. This chapter reviews the main findings in the form of triangulation and conclusions. It also presents the contributions it will add to the field of preoperative nursing, limitations and recommendations for further studies in the future.

9.2 Summary of main findings

To develop a programme to train surgical ward (SW)/surgical suite (SS) nurses at district hospitals in rhe Ashanti Region of Ghana, valid and appropriate tools were used for this purpose. The study collected quantitative data using self-administered questionnaires and qualitative data using face-to-face individual interviews, and participant observation using a checklist and field notes. In the light of this, the main findings of the study that enhanced the development of the training programme are as follows:

9.2.1 Key Finding One: Extent to Which Patients are Anxious Before Surgical Operation

Findings from the quantitative aspect of the study shows that 73.0 per cent of patients undergoing surgery are severely anxious. From the qualitative aspect of the study, interviewed

nurses confirmed that patients often develop anxiety prior to undergoing surgery, which is commonly manifested as tension and short attention span. Additionally, findings obtained from interviewed patients confirmed the aforementioned findings that patients develop preoperative anxiety before undergoing surgery.

9.2.1.1 Key Finding Two: Manifestations of Anxiety

Quantitative data from the study recorded that patients manifest preoperative anxiety in the form of cardiovascular symptoms, genitourinary symptoms, and autonomic symptoms. It is evident in the qualitative findings that patients manifest anxiety through high values in vital signs such as blood pressure.

9.2.1.2 Key Finding Three: Factors That Make Patients Become Anxious

Findings from the quantitative study discovered that factors such as the type of surgery, postoperative pain and possible complications from the procedure were the concerns that caused anxiety among patients. Qualitative findings revealed that fear of the unknown is the major concern of patients. Patients' fear centres on the surgical procedure, complications, postoperative pain, and it being the first time for an operation.

9.2.1.3 Key Finding Four: Exploring Preoperative Anxiety and Information Needs of Patients

Data obtained in this phase of the study explored the nurses' practice of the assessment of preoperative anxiety and information needs of patients. It was mainly revealed that nurses explore preoperative anxiety and information needs of patients using interactions in the form of interviews and validation. Additionally, nurses rely on vital signs to ascertain whether patients are anxious and need information. Concerning the validation of identified information needs, nurses depend on the importance of probable information to patients and the desire of patients to be informed.

9.2.1.4 Key Finding Five: Management of Information Needs of Patients

Findings obtained from the nurses indicate that nurses provide information to patients specifically on their condition and the procedure by reinforcing information already provided by the surgeon, by introducing patients to other patients recuperating from surgery, and by using the patients' preferred language. On the other hand, data from patients prove that nurses inform patients based on the importance of the information and the surgical conditions.

9.2.1.5 Key Finding Six: Challenges in Exploring and Managing Information Needs

Poor attitude of nurses and poor perception of patients towards nurses prevent the former from identifying information needs. Poor attitude identified among nurses includes hostility and unfriendliness.

9.2.1.6 Key Finding Seven: Improving Exploration and Management of Preoperative Anxiety and Information Needs of Patients

From the nurses, it was discovered that exploration and management of information needs can be improved by improving their attitude and by informing patients using simple terms. It is generally agreed that nurses should recognise that nursing is not solely about making money, or reporting to duty on time; rather, it is a profession that deals in the saving and preservation of life. Other findings reveal that, to improve exploration and management of information needs of patients, nurses must be knowledgeable and need exposure in exploration and management to be confident enough to carry out these tasks. In confirmation of findings from the nurses, it is generally emphasised that nurses should improve their attitude and use simple terms to inform patients about their conditions and surgical procedures. Furthermore, since most of the patients had not had surgery before, nurses should provide them thoroughly with information.

9.3 Unique Contributions of This Study

This describes the distinctive benefits the developed training programme will add on to the practices of SW/SS nurses in Ashanti Region, Ghana and other parts of the world where patients are prepared to undergo surgical operation.

9.3.1 The Contribution of Knowledge on Exploring Preoperative Information Needs of Patients

This research study has contributed new knowledge on the exploration and management of preoperative information needs at district hospitals in the Ashanti Region of Ghana. There had been similar studies in other parts of Ashanti Region, (Dankyi & Adejumo, 2014), Ghana (Aziato & Adejumo, 2013) and the world (Xa et al., 2021; Kifle et al., 2021), but no exact study was found in the aforementioned places, Africa nor in any other parts of the world. New knowledge in the exploration and management of patients at district hospitals in the Ashanti Region emerged in four themes (Chapter Five), which include: setbacks in assessing patients' preoperative anxiety and information needs, setbacks in the management of preoperative anxiety and information needs, improving identification of preoperative anxiety and information needs, and improving provision of preoperative information. These themes contributed massively to the development of the training programme.

9.3.2 The Contribution to the Development of the PEMPAIN

Unique findings of this study contributed to the development of the PEMPAIN. Extensive review of literature was performed in this study, which led to the discovery of several studies on assessment of patients (Musa & Ali, 2018; Mulugeta et al., 2018; Abate et al., 2020) and models on patient assessment before undergoing surgery (Kaufman, 2008; Rock, 2019; Ellis et al., 2020). However, no actual study or model was found on the exploration and management of information

needs of patients undergoing surgery. The unique contribution of this study is that a training programme, PEMPAIN, has been developed to train SW/SS nurses on how to explore and manage the information needs of patients scheduled to undergo surgery. PEMPAIN uniquely comprise of description of knowledge, skill and attitude that would enable SW/SS nurses to explore preoperative anxiety and information needs of patients. In the same vein, it describes the knowledge, skills and attitude required by nurses to manage patients scheduled for surgery with the information identified.

9.4 Implementation Plan for the Training Programme

The training programme needs to be implemented once it has been developed. The plan to implement the training programme will include strategies, processes, and actions (Greany, 2021). This plan will employ two targets, namely the focus on the Nursing and Midwifery Council (NMC) of Ghana and the management bodies at the district hospitals in the Ashanti Region. These categories of authorities are needed to foster the implementation of the training programme.

9.4.1 Approach Targets and Agents of Policy Change

The main target or agent in the implementation of the training programme is the NMC of Ghana, who are the main drivers of the curricula used in the training of RGNs and RMs at the Nursing and Midwifery Training Colleges (NMTCs) in Ghana. The Ministry of Health (MOH) and NMC of Ghana would be approached and presented with the nature of the study, comprising the aim, objectives and the findings, as well as the training programme.

9.4.2 Piloting the Training Programme

This is the process of testing the developed training programme in order to ensure that it is ready to be used by nurses at the SWs/SSs at the district hospitals. It is crucial to ensure that the

training programme would be reliable when used by the nurses (Kopper & Parry, 2020). The following are the steps in testing the training programme:

Set target on testing the training programme

It is important to set clear goals and objectives for testing the training programme. The goal of testing would be to ascertain the ability of the training programme to be used by nurses at the SWs/SSs to identify preoperative anxiety and information needs of patients in order for them to undergo a successful surgical operation. In setting a target, one of the district hospitals would be selected randomly to engage in the trial.

Create timelines

After determining the goal of testing the training programme, the period of time would be established to observe the testing. Resources needed for the testing would be acquired to enhance the process.

Develop a strategy

All nurses at the SW/SS at the selected district hospital would be involved in the process. Workshops and training would be organised to provide the nurses with the purpose, nature, and steps involved in using the training programme to explore and manage preoperative information needs of patients prior to undergoing surgery.

Set up criteria to monitor and obtain feedback

After training on the use of the training programme, it is essential that SW/SS nurses be monitored for their progress and also that feedback is obtained when they begin to prepare patients for surgery according to the dictates of the training programme. Measures would be put in place for the nurses to provide feedback on their progress. This would be achieved by providing them with questionnaires to fill in, or individual interviews would be conducted. It is important to obtain feedback as this would inform the major policymakers in nursing education, i.e., NMC of Ghana,

on adopting and inculcating the training programme into the curricula of the RGN and RM programmes.

9.4.3 Feedback

After the piloting of the training programme, feedback would be given to the MOH, NMC and other cooperate bodies that are involved in the development of curricula for the RGN and RM programmes. The feedback would inform these bodies on whether the training programme would be inculcated into the aforementioned curricula and/ or adapted as a procedure manual. Workshops or seminars would be organised to train health educators at all NMTCs in Ghana on how to give tutorials or to lecture nursing and midwifery students on its use. This is aimed at equipping RGN and RM students with the knowledge and skills for the exploration of preoperative needs of patients. Nurses and midwives who have completed NMCTs before the development of and acceptance of the training programme, would be granted the opportunity to upgrade their knowledge through workshops, seminars and in-service training. On the other hand, if the training programme is adapted by the NMC of Ghana as a procedure manual, workshops, seminars and in-service training programmes would be held to train RGNs and RMs working at the surgical wards (SWs)/surgical suites (SSs) on how to use it.

9.5 Limitations of the Study

The limitations encountered in the study are as follows:

9.5.1 Random Error

There are many reasons that influence a patient's decision to refuse to undergo surgery. These include religion, finances, and fear. The researcher had no power to convince patients who had decided to refuse to undergo surgery and rather to seek alternative treatment. However, the

sample size for the two approaches of the study were deemed to be appropriate because the study needed quality information that participants possessed.

9.5.2 Selection Bias

The study may have been affected by selection bias because it recruited patients who were undergoing surgery and those who had been operated on and were recuperating, within 24 hours after surgery had been performed. It excluded patients who had refused surgery and those who were recuperating more than 24 hours after the operation.

9.5.3 Methods for Data Collection

The majority of the questionnaires administered to obtain quantitative data were administered to the nurses while they were on duty. Even though appointed dates and times were arranged with them, most of them could not administer the questionnaires as planned. They were allowed to take them home and were collected few days after the day of administration. However, a few were rejected after the researcher had scanned through them to identify errors. The tendency of patients interviewed before and after undergoing surgery may have been affected by being anxious and by the effects of anesthesia shortly after the surgery. Despite these factors, patients interviewed during those periods provided quality information needed for the study.

9.6 Recommendations

Recommendations from this study regarding nursing practice, education and further research are made based on the findings of the study:

9.6.1 Nursing Practice

PEMPAIN should be used to train SW/SS nurses to sharpen their knowledge and skills in order to explore and manage the information needs of patients scheduled to undergo surgery. This

would empower the nurses to become independent in their practice to involve patients and their family members to eliminate or reduce the preoperative anxiety of patients. By becoming independent, nurses would not work in isolation, but would rather work in collaboration with other health professionals including surgeons, anesthetists and physiotherapists to meet the information needs of patients effectively. Training nurses with the PEMPAIN requires that relevant policies should be put in place to facilitate the nurses' practice of exploring and managing the information needs of patients.

9.6.2 Nursing Education

Nursing administration, comprising nurse managers and charge nurses, and hospital administration should show interest, sensitise, encourage and release nurses and midwives working at SWs/SSs to be involved in periodic PEMPAIN programmes, such as in-service trainings, workshops, and seminars. This would increase the level of knowledge and skills of the nurses in exploring and managing the information needs of patients undergoing surgery. The Ministry of Health (MOH) and the Nursing and Midwifery Council (NMC) of Ghana, which are the major stakeholders in nursing education, need to establish periodic training of nurses to be organised with PEMPAIN. Literatures suggest that there is a need for nurses to acquire knowledge and skills to enhance their practice (Agyepong, 2017). It is necessary that the aforementioned policymakers in nursing education ensure that this is done in order always to have nurses who are competent enough to prepare patients for surgery.

9.6.3 Nursing Research

It is recommended that the PEMPAIN should be tested in some selected district hospitals using randomised control trials or other necessary study designs. This would be relevant to evaluate its applicability and its impact on the practice of the SW/SS nurses. It would provide vital findings for a probable review and adaption of the PEMPAIN for continuous clinical use or

rejection. Studies should be conducted to assess the costs and benefits of exploring and managing the information needs of patients using the principles of the PEMPAIN in district hospitals. The research should be used to assess cost-based routine utilisation data and suitable economic costing models for preoperative services. Patients' anxiety and information needs should be explored and managed qualitatively before undergoing surgery. Furthermore, cultural and social concerns that may have an impact on the adoption and acceptance of depression screening have not been addressed expressly in this study and should be investigated.

9.7 Conclusion

The study discovered that nurses working at the SWs/SSs encounter challenges during the exploration and management of the preoperative information needs of patients prior to surgery. These include: setbacks in assessing patients' preoperative anxiety and information needs and setbacks in the management of preoperative anxiety and information needs. Additionally, the study found ways in which SW/SS nurses could improve their practice regarding the exploration and management of information needs of patients. These include: improving identification of preoperative anxiety and information needs and improving the provision of preoperative information. These findings provided enough evidence for the development of the PEMPAIN. It constitutes the competencies that SW/SS nurses need to explore and manage the information needs of patients, as well as objectives, activities, and outcomes expected of them after being trained with PEMPAIN.

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APPENDIX I: Questionnaire on Exploration and Management of Preoperative Information Needs of Surgical Patients

Provision of preoperative information relieves patients of anxiety, postoperative pain and helps patients to make decisions about their surgical care. Previous studies show that nurses do little in exploring and managing of the preoperative information needs of patients. This may lead to patients' inability to receive the information that they need before they undergo surgical operation. The purpose of the study is to investigate how preoperative information needs of patients are explored and managed by nurses at district hospitals in Ashanti Region of Ghana.

Section A: Demographic Details of Participants

Instruction: Please respond to each item by marking (√ or x) one box per row.

No.	Item	Response	Code
1.	What is your gender?	1. Male 2. Female	1 2
2.	What is your age?		
3.	What is your ethnic group?	1. Akan 2. Ga 3. Ewe 4. Dagomba 5. Other please specify	1 2 3 4 5
4.	What is your religion?	1. Pentecostal 2. Orthodox 3. Adventist 4. Moslem 5. Traditionalist 6. Other please specify	1 2 3 4 5 6
5.	What is your marital status?	1. Single 2. Married 3. Separated 4. Divorced 5. Widowed	1 2 3 4 5
5.	What is your status in your family?	1. Bread winner 2. Dependent on family 3. Father 5. Mother 6. Student	1 2 3 5 6
6.	What is your level of education?	1. Middle school certificate 2. GCE 'O' Level 3. GCE 'A' Level 4. Diploma 5. Advanced diploma	1 2 3 4 5

		6. Degree 7. Masters 8. PhD	6 7 8
7.	What is your profession?	1. Casual worker 2. Civil servant 3. Minister 4. Trader	1 2 3 4
8	Have you had surgical operations before?	1. Yes 2. No	1 2
9	What surgical operation are going to have?	1. Appendicectomy 2. Herniorrhaphy 3. Haemorrhoidectomy 4. Thyroidectomy 5. Prostatectomy 6. Resection and anastomosis	1 2 3 4 5 6

Section B: The Extent to Which Patients are Anxious Before Surgical Operations

Hamilton Anxiety Rating Scale

The following questions ask about thoughts, feelings and behaviours often tied to concerns about surgery. Please respond to each item by marking (√ or x) one box per row.

No.	Item	Response				
		not present	mild	moderate	Severe	very severe
1	**Anxious mood** Worries, anticipation of the worst, fearful anticipation, irritability	**0**	**1**	**2**	**3**	**4**
2	**Tension** Feelings of tension, fatigue, startle response, moved to tears easily, trembling, feelings of restlessness, inability to relax	0	1	2	3	4
3	**Fear** of being left alone	0	1	2	3	4
4	**Insomnia** Difficulty in falling asleep, broken sleep, unsatisfying sleep and fatigue on waking, dreams, nightmares, night terrors	0	1	2	3	4
5	**Intellectual** Difficulty in concentration, poor memory	0	1	2	3	4
6	**Depressed mood** Loss of interest, lack of pleasure in hobbies, depression, early waking, diurnal swing	0	1	2	3	4

7	**Somatic (muscular)** Pains and aches, twitching, stiffness, myoclonic jerks, grinding of teeth, unsteady voice, increased muscular tone	0	1	2	3	4
8	**Somatic (sensory)** Tinnitus, blurring of vision, hot and cold flushes, feelings of weakness, pricking sensation	0	1	2	3	4
9	**Cardiovascular symptoms** Tachycardia, palpitations, pain in chest, throbbing of vessels, fainting feelings, missing beat	0	1	2	3	4
10	**Respiratory symptoms** Pressure or constriction in chest, choking feelings, sighing, dyspnea	0	1	2	3	4
11	**Gastrointestinal symptoms** Difficulty in swallowing, wind abdominal pain, burning sensations, abdominal fullness, nausea, vomiting, borborygmi, looseness of bowels, loss of weight, constipation	0	1	2	3	4
12	**Genitourinary symptoms** Frequency of micturition, urgency of micturition, development of frigidity	0	1	2	3	4
13	**Autonomic symptoms** Dry mouth, flushing, pallor, tendency to sweat, giddiness, tension headache, raising of hair	0	1	2	3	4
14	**Behaviour interview** Fidgeting, restlessness or pacing, tremor of hands, furrowed brow, strained face, sighing or rapid respiration, facial pallor, swallowing	0	1	2	3	4

Section C: Factors That Make Patients Become Anxious Before Undergoing Surgery

Amsterdam Preoperative Anxiety and Information Scale

Interpretation of scale/items: 1 = patient does not need information on item, 2 = mild information need, 3 = moderate information need, 4 = severe information need, 5 = very severe information need

Instructions: The following questions ask about thoughts, feelings and behaviours, often tied to factors that cause preoperative anxiety. Please respond to each item by marking (√ or x) one box per row.

No.	**Item**	**Scale**				
	Factors that influence preoperative anxiety	1	2	3	4	5
1	Anaesthesia					
2	Surgical procedure					
3	Postoperative pain					
4	Physical disability					

5	Job security					
6	My family					
7	Paying my medical bill					
8	Complications					
9	Results of the operation					
10	Losing my life					
11	Harm from doctor/nurse					
12	Change of environment					
13	Nil per os					
14	Blood transfusion					
15	Unknown					
16	Getting stuck with needle					

APPENDIX II: Forward Translation of Questionnaire from English Language into Twi

GHANA INSTITUTE OF LANGUAGES TRANSBUREAU
TRANSLATION, CONFERENCE INTERPRETING, SECRETARIAL SERVICES.

Nsɛmmisa a ɛfa nkuranhyɛ nsɛm a ɛsɛsɛ wɔdeto ɔyarefoɔ a afei na oduruyɛfoɔ (Dɔkta) bɛ pae ne mu (operation) asa no yareɛ ne kwan a wɔfa so de to n'anim

Sɛ wɔbɛnya nkuranhyɛ asɛm ato ɔyarefoɔ anim ansa na Dɔkta apae ne mu asa no yareɛ bɛtumi ama ehu a ɛwɔ ne mu no so ate, saa nso na ɛbɛtumi ama ɔyea a ɛsɛsɛ ɔte "operation" no akyi no so bɛ te. Sɛ ɛba saa a, ɛboa ma ɔyarefoɔ no si n'adwene pi sɛ ɔbɛpene ama Dɔkta ayɛ "operation" no anaa ɔnpene. Nhwehwemu a atwam di adanseɛ pefee sɛ Dɔktaboafoɔ(nurse) ntaa mmɔ wɔn ho mmɔden papa, sɛ ɛfa nkuranhyɛ asɛm a ɛsɛsɛ wɔdeto ɔyarefoɔ anim ansa na Dɔkta ayɛ ne ho adwuma (operation). Yei mma ɔyarefoɔ nte nkuranhyɛ asɛm a ehia ansa na Dɔkta no ayɛ ne ho adwuma. Saa nhwehwɛmu yi botae ne sɛ ɔbɛyɛ nhwehwɛmu afa ɔkwan a Dɔktaboafoɔ (nurse) fa so ka nkuranhyɛ nsɛm kyerɛ ɔyarefoɔ wɔ ayaresabea ahodoɔ a ɛwɔ yɛn nkuro ketewaa ne akɛseɛ a ɛwɔ Asanteman a ɛwɔ Ghana man mu.

Ɔfa a Ɛdi Kan.

Yei yɛ nnipa no a yɛbɛ toto n'ano no no nsɛm, ne mfeɛ ne ɔsom a ɔwɔ mu ne ade.

Nsɛm a Yɛbɛbisa No.

Mesrɛ sɛ fa saa ahyɛnso yi na yi asɛmmisa biara ano.

#	Nsɛmmisa	Anoyie	N'ahyɛnso
1	Woyɛ ɔbaa anaa ɔbarima?	1. ɔbarima 2. ɔbaa	1 2
2	Woadi mfeɛ sɛn?		
3	Woka kasa bɛn	1. Akan kasa 2. Nkran kasa 3. Ewe kasa 4. Dagomba kasa 5. Deɛ ɛka ho	1 2 3 4 5
4	Asɔre anaa ɔsom bɛn na wodɔm?	1. Pentecost 2. Roman 3. Adventist 4. Kramosom 5. Abosomsom 6. Deɛ ɛka ho	1 2 3 4 5 6
5	Woaware / wowɔ yere? Wo wɔ kunu?	1. Daabi	1

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		2. Aane 3. Me ne me yere / me kunu ntam atete 4. Awareɛ no agu 5. Meyɛ kunafoɔ anaa me yere afirim	2 3 4 5
6	Wo diberɛ wɔ abusua mu ne sɛn?	1. Me na mehwɛ abusua no 2. Abusua no na hwɛ me 3. Me ne agya wɔ abusua no mu 4. Me ne ɛna 5. Me yɛ sukuuni	1 2 3 4 5
7	Woakɔ sukuu aduru mpɛnpɛnsoɔ bɛn?	1. Middle school 2. G.C.E "O" Level 3. G.C.E "A" Level 4. Diploma 5. Advanced Diploma 6. Degree 7. Masters 8. HND	1 2 3 4 5 6 7 8
8	Wosuaa adwuma bɛn?	1. Meyɛ adwuma nso ɛnyɛ dabiara 2. Meyɛ aban adwuma 3. Meyɛ aban Suafoɔ 4. Meyɛ dwadini	1 2 3
9	Dɔkta apae wo mu da?	1. Aane 2. Daabi	1 2
10	"Operation" bɛn na Dɔkta yɛɛ wo?	1. Kɔkɔbo "Operation" 2. Nkwee "Operation" 3. Kookoo "Operation" 4. Me mene mu 5. Me bɛmma mu / Me baa mu 6. Me ntini mu baabi anaa sɛ M'awodeɛ "Operation"	1 2 3 4 5 6

ɔfa a ɛtɔ so mmienu

Ehu a "operation" no nti ɛbɛtumi abɔ ɔyarefoɔ no.
Sɛ yɛde yɛn ani bɛ susu ehu a, adokoro no
Edin a ɛda saa nhwehwɛmu yi a ɛdidisoɔ yi yɛ" Hamilton Anxiety Rating Scale"

Emu nkyerɛkyerɛmu;
Sɛ ehu biara ndokoro no a, fa mmuaeɛ no hyɛ ha.....0
Sɛ ehu no yɛ ketewa bi a, fa mmueɛ no hyɛ ha 1
Sɛ ehu no yɛ hɔ ne hɔ a, fa mmueɛ no hyɛ ha.....2
Sɛ ehu no wɔ soro a, fa mmueɛ no hyɛ ha.....3
Sɛ ehu no wɔ soro paa, fa mmueɛ no hyɛ ha.....4

"Operation" no ho adwenedwene, ne ɔyarefoɔ no ahomeka anaasɛ ne nneyɛe no, mepawokyɛw yi nsɛmmisa yi ano. Fa ahyɛnso yi(✓anaa✗)

#	ɔhaw no	Anoyie				
		0	1	2	3	4
1	ɔwɔ ɔhaw mu, ɔrebɔhu sɛ asɛmbɔne bɛsi. ɔwɔ ehu nsusuieɛ, ɔretetee, ɔnnya abotare					
2	Ɔrehaahaa, ɔte nka sɛ wabrɛ, ɔbɔ birim, Anisuo retaataa no, ne ho rewoso, ɔnhunu deɛ ɔnyɛ ne ho, ɔntumi nsi abotare					
3	Ɔbɔ hu sɛ wɔn ayi ne baako ama no					
4	Ɔntumi nna, ne nna nso nsisi so, afei nso ɔnyane a ɔntumi nnante, dayɛson, ɔso dayɛbɔne, ehu ahyɛ ne so					
5	Ɔntumi nsua adeɛ, Ɔntumi nkaekae adeɛ					
6	N'anigyeɛ asa, N'ani nnye agorɔ biara ho Ɔtaa nyanenyane wɔ nnam dwonso, ɔyane ntɛntɛm, ɔhaahaa					
7	Ɔte ɔyaw wɔ ne mu, Ne ho tumi woso prɛko pɛ, ne ho yɛ titiritii, Ne ho woso brɛ ne brɛ ɔka nese si so, ne nne nnyina so, ne ntini ntumi ntene					
8	ɔte dede anaa ɛnne by wɔ n'asom, ɔnhunu adeɛ papa, ne ho betumi ayɛ nwu anaa hye brɛbiara, ɔwɔ atenka sɛ wɔayɛ mmerɛ ɔte nka sɛ ne ho woso no					
9	N'akoma bɔ ntɛntɛm, N'akoma bɔ paripari, ɔte ɔyea wɔ n'akoma mu, Ne ntini mu popo, ɔwɔ atenka sɛ ɔbɛtwahwe fam					
10	Ɔnya atenka sɛ ne mene mu asi, Ne home nsisi so yie, ɔhome tenten baako baako, ɔberɛ paa'ansa wɔahome					
11	Ɔntumi mmene aduane, ɔte ɔyea wɔ ne yam, Ne mu hyehye no, Berɛ biara ɔte'sɛ nafuruu ahyɛ, ɔte nka sɛ ɔbɛfe, ɔte pampan a na ɔreyɛ afe, wɔafɔn/ ne so ate N'agyanan mu ayɛ den					
12	Ɔtaa dwonso ntɛntɛm, ɔtaa nya atenka sɛ ɔbɛdwonso, ne mu ayɛ nwunu enti ɔnni atenka					
13	N'anom awo, Ne ho ayɛ nwunu anaa hye, N'anim dua asesa, Ne ho firi fifire, N'ani so biri no, ɔhaahaa, Ne tiri pae no, Ne tiri nwim gyinagyina so					
14	ɔntumi nnyina faako, wayɛ basaa, Ne nsa wosowoso, N'anim ayɛ duru, ɔhome ntɛntɛm, N'anim ayɛ basaa					

Ɔfa a ɛtɔ so mmiɛnsa

Deɛ ɛma ayarefoɔ bɔ ansa na ɔduruyɛfoɔ (Doctor) de sikan apae ne mu (operation)

Edin a ɛda saa Nhwehwɛmu yi a ɛdidisoɔ yi yɛ **"Amsterdam preoperative Anxeity and information scale**

Emu nkyerɛkyer mu/Deɛ yɛbɛka ɛho asɛm

Sɛ Ɔyarefoɔ no nhia amanebɔ a yi ano wɔ ha..... 0

Sɛ ɔhia amanebɔ kakra a yi ano wɔ ha..... 1

Sɛ amanebɔ no yɛ ɛhɔ ne hɔ a yi ano wɔ ha..... 2

Sɛ amanebɔ no wɔ soro a, yi ano wɔ ha.....3

Sɛ amanebɔ no wɔ soro paa a yi ano wɔ ha..... 4

Hyɛ no nso: Saa nsɛmmisa yi a ɛdidisoɔ yi ɛfa adwene, atenka ne yɛbea bi a ɛma ayerefoɔ di kan bɔ hu ansa na oduruyɛfoɔ (Dɔkta) ayɛ ne ho adwuma

Fa saa ahyenso yei yi ano (✓ anaa×)

#.	Ɔhaw No					
	Deɛ ɛma ayarefoɔ bɔ hu ansa na Doɔkta ayɛ "Operation"	0	1	2	3	4
1.	Berɛ a ɛsɛsɛ yɛdwodwo nnipa dua no te sɛ deɛ wɔafiri ne nkwa mu no - "Anaesthesia"					
2.	ɔkwan aɔfa so yɛ "Operation" no					
3.	Ɔyea a ɔyarefoɔ no bɛte "Operation" no akyi					
4.	Sɛ ebi a na wɔanhyɛda anyɛ nnipa bio, operation no akyi					
5.	Ebia na wɔahwere n'adwuma					
6.	N'abusua anaa ne yerɛ ne nɛ mma nti					
7.	Sika a ɔde bɛsa ne ho yareɛ bɛtumi ayɛ ɔhaw					
8.	Ebi koraa a, na asan akɔfa ɔhaw foforoɔ aba nɛ honam					
9.	"Operation" no nsonsoansoɔ					
10.	Ebia a na wɔahwere ne nkwa					
11.	Ebia a na oduruyɛfoɔ no (Doctor) anaa sɛ ne boafoɔ no adi no dɛm					
12.	Sɛ ɔbɛsesa bea a ɔteɛ na wakɔtena ayaresabea					
13	Sɛ Dɔkta bɛhyɛ ɔyarefoɔ no sɛ mma ɔnni aduane					
14	Mogya a yɛbɛtwe ama no					
15	Yɛntumi nkyerɛ					
16	Paneɛ a yɛdebɛwɔ no nti					

FORWARD TRANSLATION BY: ABU MENSAH
E-MAIL: mensabu@yahoo.com
TEL: 0244757879 / 0268815914
DATE: 2ND AUGUST, 2016

APPENDIX III: Backward Translation of Questionnaire from Twi Language into English

GHANA INSTITUTE OF LANGUAGES TRANSBUREAU
TRANSLATION, CONFERENCE INTERPRETING, SECRETARIAL SERVICES.

QUESTIONNAIRE ON DISCOVERING AND HANDLING OF INFORMATION THAT SURGICAL PATIENTS REQUIRE BEFORE OPERATION

Providing information that relates to an operation to a patient reduces their fear before the event just as it soothes their pain after it. Earlier research conducted indicates that nurses do not do enough in the discovery and handling of information which patients require before undergoing an operation; a situation which may prevent them from getting the relevant information before the surgery. The aim of this study is to find out how nurses in the District and Municipal Hospitals discover and manage information required by patients before surgery in the Ahanti Region of Ghana.

SECTION 1: information on gender, age, ethnic group, religion etc of participants.

Instruction: kindly respond to each question by marking (√ or **X**) once in each box.

No	Question	Answer	Code
1	What is your sex?	1. Male 2. Female	1 2
2	How old are you?		
3	Which ethnic group do you belong to?	1. Akan 2. Ga 3. Ewe 4. Dagomba 5. Any other	1 2 3 4 5
4	What is your Religion?	1. Pentecostal 2. Orthodox 3. Adventist 4. Muslim 5. Traditionalist 6. others	1 2 3 4 5 6
5	What is your marital status?	1. Single 2. Married 3. Separated 4. Divorced 5. Widowed	1 2 3 4 5
		1. Middle school leaving certificate	1

THE DIRECTOR
GHANA INSTITUTE OF LANGUAGES
P.O. BOX M67, ACCRA
TEL: 021-221052 / 221092 FAX: 021-222880
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BRANCHES: THE HEAD OF SCHOOL
GHANA INSTITUTE OF LANGUAGES
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THE HEAD OF SCHOOL
GHANA INSTITUTE OF LANGUAGES
P.O. BOX 358, TAMALE, N/R
TEL/FAX: 071 - 24147
E-mail: gil@yahoo.com

6	What is your educational level?	2. G.C.E "O" Level 3. G.C.E. "A" Level 4. Diploma 5. Advanced Diploma] 6. Degree 7. Masters 8. PHD	2 3 4 5 6 7 8
7	What is your profession?	1. Temporal workers 2. Government employee 3. Minister of state 4. Trader	1 2 3 4
8	Have you been operated on before?	1. Yes 2. No	1 2
9	What is the type of operation?	1. Appendicitis 2. Hernia 3. Piles 4. Throat 5. Prostate surgery 6. Surgical operation to create connection between two blood vessels	1 2 3 4 5 6

SECTION 2: The nature of the sick person's restlessness before surgery
Explanation of the rating which is entitled Hamilton anxiety rating scale

Indicate for zero if the patient's restlessness is absent – 0
Indicate for 1 of the patient's restlessness is mild – 1
Indicate for 2 of the patient's restlessness is moderate – 2
Indicate for 3 of the patient's restlessness is severe – 3
Indicate for 4 of the patient's restlessness is very severe – 4

The following question relate to a patient's thinking, feelings or how they behave because of surgery.

Indicate √ or **X** to respond to the following questions.

No	Question	Respond				
1	A feeling of anxiety, thinking that the worst will happen, fear, impatient	0	1	2	3	4
2	Tension, feeling of tiredness, shaky when responding, shed tears easily, cannot stay at one place, cannot relax					
3	Patient fears that they will be abandoned					
4	Finds it difficult to sleep, sleep is cut from time to time, not having sufficient sleep and gets tired when walking, dreams, bad dreams, feels afraid in the night					
5	Patient cannot concentrate in learning, patient finds it difficult to recollect events.					
6	Has no interest in anything, Does not have interest in games, feels sad and bored, wakes up early, urinate very often					
7	Feels pains all over the body, has spasm, look rigid, make a sudden movement uncontrollably, grinds the teeth, the voice is not steady, passive contraction of the muscles; they don't stretch					
8	Perception of noise, vision is not clear, very sensitive to coldness and warmth, always feeling weak, feeling of being pricked.					
9	Heart beats at very fast rate, heart beats strongly, chest pain, the vessel beat violently, feeling of fainting, heart beat not at regular intervals					
10	Pressure on narrowing in chest, unable to breathe well, deep respiration, shortness of breath					
11	Difficulty in swallowing, Abdominal pain due to wind, burning sensation, and abdomen feels full, feeling of vomiting, bowel is loose, patient loses weight, constipation.					
12	Frequent urination, often feels like urinating, feeling too cold and lacking warmth					
13	Dry mouth, paleness, sweating, dizziness, stress, headache, hair straightens ups					
14	Moving around nervously, not at peace or comfortable, the handshakes, a wrinkle around the eyebrow. Face looking strained, deep respiration or fast paleness in the face, swallowing difficulty.					

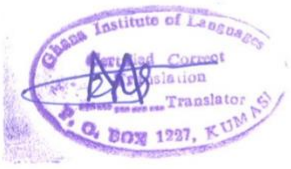
SECTION 3: Why patients become uneasy before surgical operation
Explaining of information which is entitled Amsterdam preoperative Anxiety and Information Scale

- If patient does not require information indicate in – 0
- If patient require mild information indicate in – 1
- If patient require moderate information indicate in – 2
- If patient requires severe information indicate in – 3
- If patient requires very severe information indicate in – 4

Instruction: the following questions are about patient's thinking, feeling and behavoiur that cause restlessness before surgery.

Mark either √ or **X** in the by once.

No	Question	Scale				
	Factors that cause restlessness before surgery	0	1	2	3	4
1	Anesthesia					
2	Operation procedure					
3	Pain after surgery					
4	Fear of becoming disabled					
5	Fear of losing one's job					
6	My family					
7	The payment of medical bill					
8	Complications or working of condition					
9	Results of the surgery					
10	The fear of dying					
11	Fear of harm from doctor or nurse					
12	Having to relocate to another place					
13	Nil per so - The order of doctor to patient not eat before the surgery					
14	Receiving of blood					
15	None					
16	The fear of getting stuck with needle					



Backward translated by Mr. N.B. Keelson
Email: ksigil@yahoo.com
Tel: +233265499552,+233277849494

APPENDIX IV: Interviewing Guide for Nurses as Participants

Section A: General Information

1. Date of interview: _____
2. Time of interview: _____ end: _____
3. Place of interview: _____
4. Sex of participant: _____
5. Age of participant: _____
6. How long have you worked in this ward? _____

Section B: Exploration and management of preoperative anxiety and information needs of patients

1. Please tell me, how do you examine patients to know the information they need before surgery?
   i. Please clarify this/please elaborate on this.
2. Please tell me, how do you provide patients with information they need before surgery?
   i. Please clarify this/please elaborate on this.

APPENDIX V: Checklist on the Practices of Nurses in Terms of Exploring and Management of Preoperative Information Needs

Title of the research: A Training programme for nurses on the management of preoperative anxiety and information needs of patients in Ashanti Region, Ghana.

Principal Investigator:

Section A: Demographic Characteristics of Respondents

No.	Items	Response	Code
1	What is your gender?	0 Male 1 Female	0 1
2	How old are you?		
3	How many years have you worked in this ward?		
4	What category of nurse are you?	1 Registered general nurse 2 Registered midwife 3 Nurse assistant clinical/enrolled nurse	1 2 3
5	What is the level of your education	1 Certificate 2 Diploma 3 Degree 4 Masters	1 2 3 4

Section B: Steps in Exploring and Management of Preoperative Information Needs of Patients

No.	Items	Agree	Disagree
1	Admission of patient into the ward		
2	Interaction with patient during admission and performance of other procedures		
3	Observation of patient exhibiting signs and symptoms of preoperative anxiety		
4	Probe patient for the causes of patient's manifestations of preoperative anxiety		
5	Ask patient if his/her manifestations observed are as a result of lack of information on the surgical experience		
6	Mention probable areas of surgical experience that patient is likely to need information		
7	Patient responds to confirm what the nurse has asked		
8	Patient tells nurse areas that he/she need the nurse to provide him/her with information		
9	Take steps to provide patient with information		
10	Evaluate patient by finding out if he is satisfied with information provided		

APPENDIX VI: Interviewing Guide for Nurses as Participants

Section A: General Information

1. Date of interview:_____
2. Time of interview:_____ end:_____
3. Place of interview:_____
4. Sex of participant:_____
5. Age participant:_____
6. Ethnicity of participant: _____
7. Religious denomination of participant: _____
8. Marital status of participant: _____
9. Status of participant in his/her family:_____
10. Profession of participant: _____
11. Number of times participant has had surgery: _____
12. Reason for surgery:_____

Section B: Setbacks in the Exploration of Preoperative Anxiety and Information Needs of Patients Before Undergoiong Surgery

1. Please, what are the challenges you encounter in assessing patients who are anxious?
2. Please, what are the challenges you encounter in identifying information needs of patients?

Section C: Setbacks in the Management Of Information Needs Of Patients Before Undergoing Surgery

3. Please, what are the challenges involved in the management of the information needs of patients before undergoing surgery?
   i. Please elaborate on this

Section D: Improving the Exploration of Preoperative Anxiety and Information Needs of Patients Before Undergoing Surgery.

1. Please, in what ways do you think nurses could assess for preoperative anxiety and information needs of patients?
   i. Please, I would like you to tell me more.
2. Please, in what ways do you think nurses could manage information needs of patients?
   i. Please, can you explain further?

APPENDIX VII: Interviewing Guide for Patients as Participants

Section A: General information

13. Date of interview:_____
14. Time of interview:_____ end:_____
15. Place of interview:_____
16. Sex of participant:_____
17. Age participant:_____
18. Ethnicity of participant: _____
19. Religious denomination of participant: _____
20. Marital status of participant: _____
21. Status of participant in his/her family:_____
22. Profession of participant: _____
23. Number of times participant has had surgery: _____
24. Reason for surgery:_____

Section B: Exploration and Management of Preoperative Anxiety and Information Patients Need Before Surgery

4. Please, how did the nurses explore you to know the information you needed?
5. Please, how did the nurses provide you the information you needed?

Section C: Preoperative Information Patients Need Before Surgery and the Trend on the Preoperative Information Given by Nurses to Patients Before Surgery

6. Please, what information do you need from nurses which make you less anxious?
7. Please, what information did the nurses give you before you had surgery?
   ii. Please elaborate on this

APPENDIX VIII: INFORMATION SHEET FOR BOTH NURSES AND PATIENTS

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 9346

E-mail: 3211793**@myuwc.ac.za**

INFORMATION SHEET

Project Title: A training programme for nurses on the management of preoperative anxiety and information needs of patients in Ashanti Region, Ghana

What is this study about?

This is a research project being conducted by Sawan Dankyi at the University of the Western Cape. You are being invited to participate because your contribution is best suited for this study. The purpose of this research project is to develop a training programme for nurses on the management of preoperative anxiety and information needs by investigating how preoperative anxiety and information needs of patients are explored and managed by nurses at district hospitals in Ashanti Region of Ghana. Results of this study will be used to develop a training programme on the management of preoperative anxiety and information needs of patients.

What will I be asked to do if I agree to participate?

You will be asked to: (1) complete a questionnaire at the surgical ward which will take about 30 minutes to complete. Questions you will be responding to involve the extent to which you become anxious before surgery and the factors that make you become anxious. (2) answer questions through an interview session at the nurses' station/office which would last between 45 to 60 minutes; answer questions on how preoperative anxiety and information needs are managed, the kind of information you need before you undergo surgery and the kind of information nurses give you before you undergo surgery. You will be asked to give your permission for the use of an audiotape recorder to record the interview.

(3) You will be observed during the period you are attending to a patient at the surgical ward which would last about 60 minutes.

Would my participation in this study be kept confidential?

The researcher undertakes to protect your identity and the nature of your contribution. To ensure your anonymity, "the surveys are anonymous and will not contain information that may personally identify you; you will not be required to provide your name during the interview session; and your name will not be written in the field notes during observation". The information you will give will

be coded (1) your name will not be included on the surveys, interviews and observations; (2) a code will be placed on the survey and other collected data; (3) through the use of an identification key, the researcher will be able to link your survey to your identity; and (4) only the researcher will have access to the identification key.

To ensure your confidentiality, you will not provide your name on the questionnaire, during the interview session and in the field notes during the observation and only identification codes will be used. Your permission will be sought for the use of audiotape recorder to record the interview to help in reporting the exact information you will give. The questionnaire, audio tape recordings and field notes will be kept locked in cabinets and the key kept by the researcher. Identification codes only will be used on data forms and field notes and password-protected computer files will be used to store audio sound recordings. If we write a report or article about this research project, your identity will be protected.

What are the risks of this research?

All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about the management of preoperative anxiety and information needs. We hope that, in the future, other people might benefit from this study through improved understanding of.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by Sawan Dankyi from the School of Nursing at the UWC.If you have any questions about the research study itself, please contact Sawan Dankyi at: SDA NMTC, P. O. Box PC 96, Kwadaso-Kumasi, Ghana. Tel. +233208587862 or email: 3211793@myuwc.ac.za

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Dr Sathasivan Arunachallam

Acting Director: School of Nursing

University of the Western Cape

Private Bag X17

Bellville 7535

sarunachallam@uwc.ac.za

Prof José Frantz

Dean of the Faculty of Community and Health Sciences

University of the Western Cape

Private Bag X17

Bellville 7535

chs-deansoffice@uwc.ac.za

This research has been approved by the University of the Western Cape's Biomedical Research Ethics Committee.

APPENDIX IX: CONSENT FORM FOR BOTH NURSES AND PATIENTS

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +2332085879862

E-mail: 3211793**@myuwc.ac.za**

CONSENT FORM

Title of Research Project: **A Training programme for nurses on the management of preoperative anxiety and information needs of patients in Ashanti Region, Ghana**

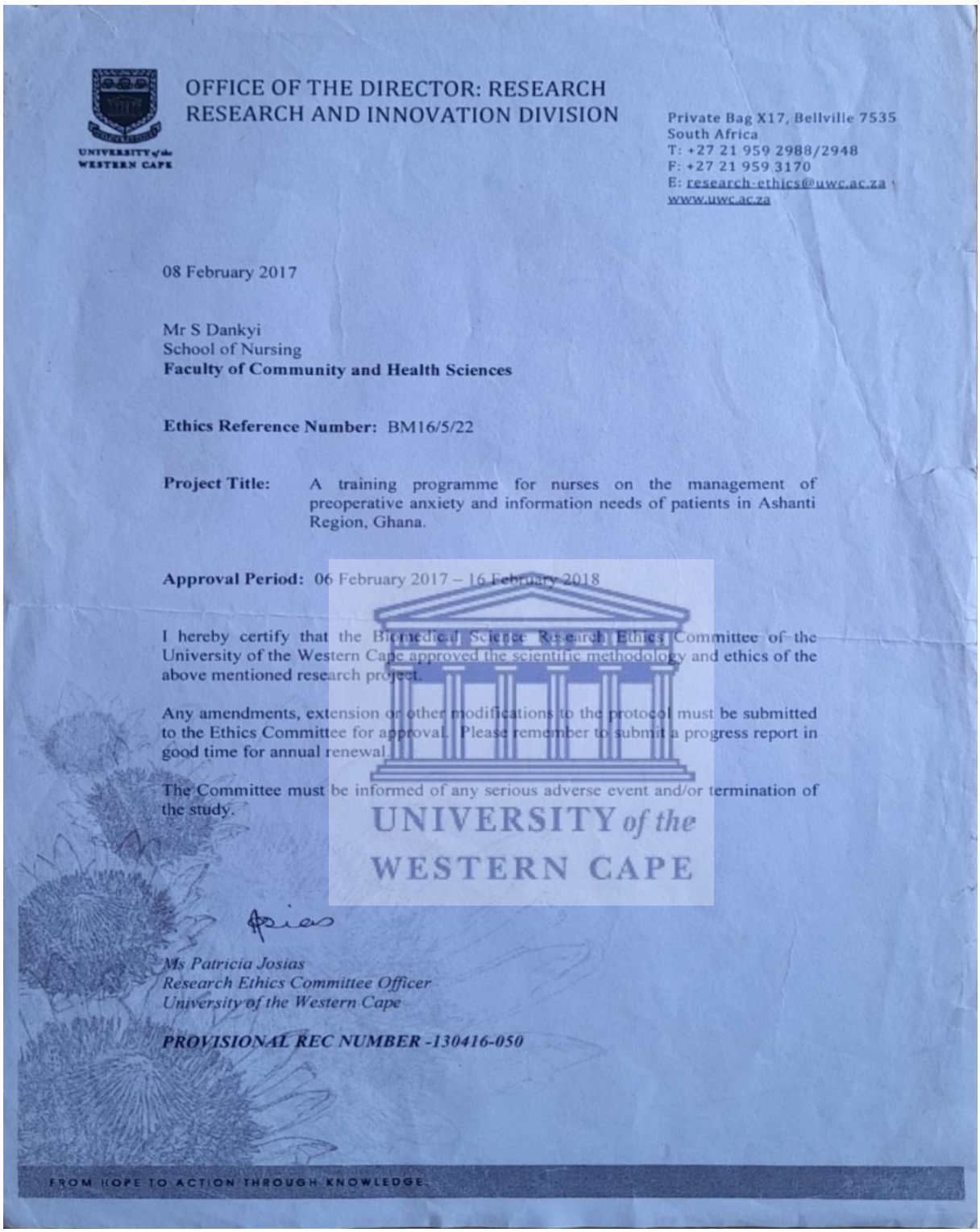
The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant's name……

Participant's signature……

Date……

APPENDIX X: PERMISSION LETTER FROM ETHICS COMMITTEE, UNIVERSITY OF THE WESTERN CAPE



UNIVERSITY of the WESTERN CAPE

OFFICE OF THE DIRECTOR: RESEARCH
RESEARCH AND INNOVATION DIVISION

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South Africa
T: +27 21 959 2988/2948
F: +27 21 959 3170
E: research-ethics@uwc.ac.za
www.uwc.ac.za

08 February 2017

Mr S Dankyi
School of Nursing
Faculty of Community and Health Sciences

Ethics Reference Number: BM16/5/22

Project Title: A training programme for nurses on the management of preoperative anxiety and information needs of patients in Ashanti Region, Ghana.

Approval Period: 06 February 2017 – 16 February 2018

I hereby certify that the Biomedical Science Research Ethics Committee of the University of the Western Cape approved the scientific methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval. Please remember to submit a progress report in good time for annual renewal.

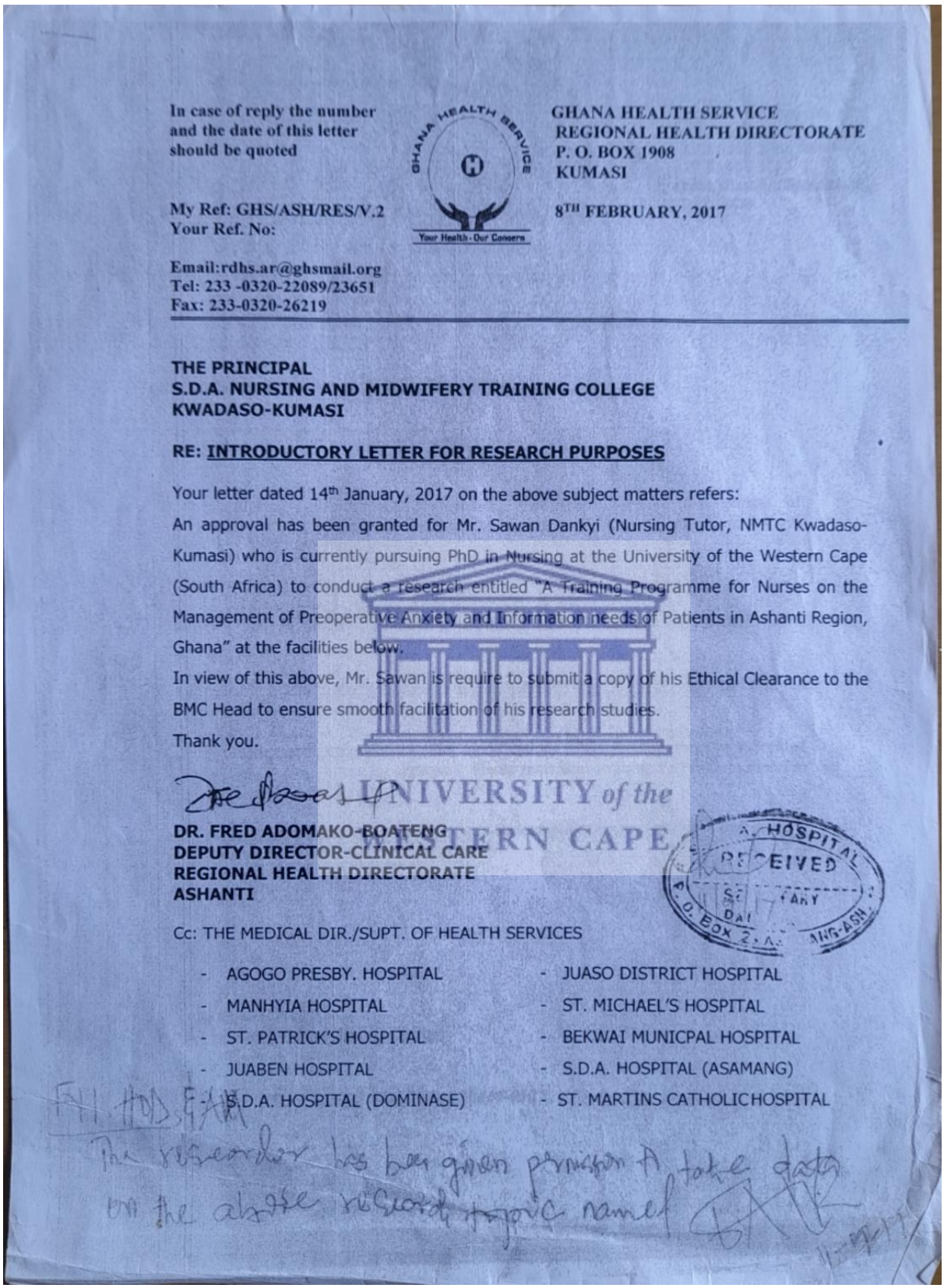
The Committee must be informed of any serious adverse event and/or termination of the study.

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

PROVISIONAL REC NUMBER -130416-050

FROM HOPE TO ACTION THROUGH KNOWLEDGE

APPENDIX XI: PERMISSION LETTER FROM THE REGIONAL GHANA HEALTH SERVICE AND DISTRICT HOSPITALS



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

GHANA HEALTH SERVICE
REGIONAL HEALTH DIRECTORATE
P. O. BOX 1908
KUMASI

My Ref: GHS/ASH/RES/V.2
Your Ref. No:

8TH FEBRUARY, 2017

Email:rdhs.ar@ghsmail.org
Tel: 233 -0320-22089/23651
Fax: 233-0320-26219

THE PRINCIPAL
S.D.A. NURSING AND MIDWIFERY TRAINING COLLEGE
KWADASO-KUMASI

RE: INTRODUCTORY LETTER FOR RESEARCH PURPOSES

Your letter dated 14th January, 2017 on the above subject matters refers:

An approval has been granted for Mr. Sawan Dankyi (Nursing Tutor, NMTC Kwadaso-Kumasi) who is currently pursuing PhD in Nursing at the University of the Western Cape (South Africa) to conduct a research entitled "A Training Programme for Nurses on the Management of Preoperative Anxiety and Information needs of Patients in Ashanti Region, Ghana" at the facilities below.

In view of this above, Mr. Sawan is require to submit a copy of his Ethical Clearance to the BMC Head to ensure smooth facilitation of his research studies.

Thank you.

DR. FRED ADOMAKO-BOATENG
DEPUTY DIRECTOR-CLINICAL CARE
REGIONAL HEALTH DIRECTORATE
ASHANTI

Cc: THE MEDICAL DIR./SUPT. OF HEALTH SERVICES

- AGOGO PRESBY. HOSPITAL
- MANHYIA HOSPITAL
- ST. PATRICK'S HOSPITAL
- JUABEN HOSPITAL
- S.D.A. HOSPITAL (DOMINASE)
- JUASO DISTRICT HOSPITAL
- ST. MICHAEL'S HOSPITAL
- BEKWAI MUNICPAL HOSPITAL
- S.D.A. HOSPITAL (ASAMANG)
- ST. MARTINS CATHOLICHOSPITAL

The researcher has been given permission to take data on the above research topic named

PRESBYTERIAN HEALTH SERVICES

AGOGO HOSPITAL

BANKERS:
Ghana Commercial Bank
Agogo, Ashanti-Akim
Barclays Bank
Prempeh II Street, Adum Kumasi

Our Ref: APH/ADM/RES-135/17

Your Ref:

P. O. Box 27
Agogo, Ashanti - Akim
Ghana-W/Africa
E-mail:info@agogopresbyhospital.org
Website:www.agogopresbyhospital.org

September 07, 2017

MS. PATRICIA JOSIAS
RESEARCH ETHICS COMMITTEE OFFICER
UNIVERSITY OF THE WESTERN CAPE
PRIVATE BAG X17, BELLVILLE 7535
SOUTH AFRICA

Dear Madam,

RE: INTRODUCTORY LETTER FOR RESEARCH PURPOSE
MR. SAWAN DANKYI

This is in reference to your letter dated February 08, 2017, with the aforementioned subject.

I am pleased to inform you that your request for Mr. Sawan Dankyi, a student currently pursuing PhD in Nursing at your University, to use our facility for his research/project on the topic, **"A training programme for nurses on the management of preoperative anxiety and information needs of patients in Ashanti Region, Ghana"** has been approved.

He is assured of our support and cooperation and he is therefore entreated to be of good behavior as any misconduct will eventually lead to the termination of the research work using our facility.

By a copy of this letter, it is expected of the student to provide the hospital with the findings of the final copy of his study.

Yours sincerely,

ALEX KESSE NYAMESA
GENERAL MANAGER

cc: - Medical Administrator, Presbyterian Hospital, Agogo
- Mr. Sawan Dankyi, University of Western Cape, South Africa

A MEMBER OF CHAG

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

My Ref: GHS/ASH/RES/V.2
Your Ref. No:

Email: rdhs.ar@ghsmail.org
Tel: 233 -0320-22089/23651
Fax: 233-0320-26219

GHANA HEALTH SERVICE — Your Health - Our Concern

GHANA HEALTH SERVICE
REGIONAL HEALTH DIRECTORATE
P. O. BOX 1908
KUMASI

8TH FEBRUARY, 2017

THE PRINCIPAL
S.D.A. NURSING AND MIDWIFERY TRAINING COLLEGE
KWADASO-KUMASI

RE: INTRODUCTORY LETTER FOR RESEARCH PURPOSES

Your letter dated 14th January, 2017 on the above subject matters refers:

An approval has been granted for Mr. Sawan Dankyi (Nursing Tutor, NMTC Kwadaso-Kumasi) who is currently pursuing PhD in Nursing at the University of the Western Cape (South Africa) to conduct a research entitled "A Training Programme for Nurses on the Management of Preoperative Anxiety and Information needs of Patients in Ashanti Region, Ghana" at the facilities below.

In view of this above, Mr. Sawan is require to submit a copy of his Ethical Clearance to the BMC Head to ensure smooth facilitation of his research studies.

Thank you.

DR. FRED ADOMAKO-BOATENG
DEPUTY DIRECTOR-CLINICAL CARE
REGIONAL HEALTH DIRECTORATE
ASHANTI

HOSPITAL RECEIVED ... P.O. BOX 2, ... ANG-ASH

Cc: THE MEDICAL DIR./SUPT. OF HEALTH SERVICES

- AGOGO PRESBY. HOSPITAL
- MANHYIA HOSPITAL
- ST. PATRICK'S HOSPITAL
- JUABEN HOSPITAL
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- S.D.A. HOSPITAL (ASAMANG)
- ST. MARTINS CATHOLIC HOSPITAL

FH, HOD, FAH
The researcher has been given permission to take data on the above research topic named

In case of reply, the number and date of this letter should be quoted.

My Ref No.: GHS/JMH/MM/18

Your Ref.:

E-mail: *juasohospital@gmail.com*

Tel: 0500482761/0244381730

GHANA HEALTH SERVICE

JUASO MUNICIPAL HOSPITAL

POST OFFICE BOX 34

JUASO

SEPTEMBER 8, 2017

MS PATRICIA JOSIAS
RESEARCH ETHICS COMMITTEE OFFICER
UNIVERSITY OF THE WESTERN CAPE
PRIVATE BAG X17, BELLVILLE 7535
SOUTH AFRICA

Dear Madam,

RE: INTRODUCTORY LETTER FOR RESEARCH PURPOSE

The management of Juaso Government Hospital wishes to acknowledge the receipt of your letter with reference number BM16/5/22 dated 8th February, 2017. It mentioned Mr. Sawan Dankyi, a student currently pursuing PhD in nursing who intends to conduct a research entitled" A Training Programme for Nurses on the Management of Preoperative Anxiety and Information needs of Patients in the Ashanti Region, Ghana".

You are kindly notified that his request has been approved and we promise to give him the necessary assistance and cooperation needed.

Thank you.

Yours faithfully,

DR. BENEDICTUS K. AKPI
MEDICAL SUPERINTENDENT.
(JUASO MUNICIPAL HOSPITAL)

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

My Ref: GHS/ASH/RES/V.2
Your Ref. No:

Email: rdhs.ar@ghsmail.org
Tel: 233 -0320-22089/23651
Fax: 233-0320-26219

GHANA HEALTH SERVICE
REGIONAL HEALTH DIRECTORATE
P. O. BOX 1908
KUMASI

8TH FEBRUARY, 2017

JUABEN HOSPITAL ADMIN
RECEIVED
DATE: 5/9/17
JUABEN-ASHANTI

THE PRINCIPAL
S.D.A. NURSING AND MIDWIFERY TRAINING COLLEGE
KWADASO-KUMASI

RE: INTRODUCTORY LETTER FOR RESEARCH PURPOSES

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In view of this above, Mr. Sawan is require to submit a copy of his Ethical Clearance to the BMC Head to ensure smooth facilitation of his research studies.

Thank you.

DR. FRED ADOMAKO-BOATENG
DEPUTY DIRECTOR-CLINICAL CARE
REGIONAL HEALTH DIRECTORATE
ASHANTI

Cc: THE MEDICAL DIR./SUPT. OF HEALTH SERVICES

- AGOGO PRESBY. HOSPITAL
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GHANA HEALTH SERVICE
REGIONAL HEALTH DIRECTORATE
P. O. BOX 1908
KUMASI

8TH FEBRUARY, 2017

THE PRINCIPAL
S.D.A. NURSING AND MIDWIFERY TRAINING COLLEGE
KWADASO-KUMASI

RE: INTRODUCTORY LETTER FOR RESEARCH PURPOSES

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Thank you.

DR. FRED ADOMAKO-BOATENG
DEPUTY DIRECTOR-CLINICAL CARE
REGIONAL HEALTH DIRECTORATE
ASHANTI

Cc: THE MEDICAL DIR./SUPT. OF HEALTH SERVICES

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- BEKWAI MUNICPAL HOSPITAL
- S.D.A. HOSPITAL (ASAMANG)
- ST. MARTINS CATHOLIC HOSPITAL

12/07/17

Copy to Mr. Eugene Kpmee
- Female Ward
- Male Ward
- Postnatal Ward

APPENDIX XII: LETTER FOR LANGUAGE EDITION

Editing Certificate

To whom it may concern,

Editing of a Doctoral Thesis

I, Marietjie Alfreda Woods, hereby certify that I have completed the editing and correction of the doctoral thesis: **A Training Programme for Nurses on the Management of Preoperative Anxiety and Information Needs of Patients in the Ashanti Region, Ghana** by **Sawan Danyki** submitted in fulfilment of the requirements of the degree **Philosophiae Doctor in Nursing in the School of Nursing, University of the Western Cape.**

It is believed that the thesis meets with the grammatical and linguistic requirements for a document of this nature.

Name of Editor: Marietjie Alfreda Woods

Qualifications: BA (Hons) (Wits)

Copy-editing and Proofreading (UCT)

Accredited Text Editor (English) (Professional Editors' Guild)

Signature:

Contact Number: 083 312 6310

Email address: rickywoods604@gmail.com

Date Issued: 12 May 2022