

THE ASSESSMENT OF THE KNOWLEDGE OF SURGICAL PATIENTS AND THEIR
UNDERSTANDING OF INFORMED CONSENT FOR ELECTIVE SURGICAL
INTERVENTIONS IN OPERATING-ROOMS AT PUBLIC TRAINING HOSPITALS,
WINDHOEK, KHOMAS REGION, NAMIBIA

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DECLARATION

I, Colleen Ngaujake-Kavari, Student number 9416099, hereby declare that the thesis “Assessment of surgical patient’s knowledge and their understanding to informed consent for elective surgical interventions in operating rooms at public hospitals, Windhoek, Khomas” is my own work. All sources that I have used or quoted have been indicated and acknowledged by means of references. This is an original work and has not been submitted in full or in part for any degree or purpose at any other university or institution. This thesis may not be reproduced, stored in any retrieval system, transmitted in any form or by any means (e.g. electronic, mechanical, photocopying, recording or otherwise) without prior permission of either the author or University of Namibia.

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ABSTRACT

A majority of patients do not fully understand their health, diagnosis, proposed treatment/procedure and possible risks because of limited knowledge on the importance of informed consent according to previous studies. It has been noted at Windhoek Central Hospital operating rooms that patients may sign informed consent form without knowledge and understanding of what they have signed for. The aim of this study was therefore to assess surgical patients' knowledge and understanding of the informed consent process for elective surgical interventions in operating rooms at public training hospitals in Windhoek. A quantitative, descriptive and analytical study was conducted among surgical patients using structured questionnaires and data was analysed numerically through statistical procedures. A total of 80 participants were recruited using systematic random sampling method at Windhoek Central Hospital and Intermediate Hospital Katutura operating rooms.

Regarding surgical patients' knowledge and understanding of informed consent process for surgical interventions, findings revealed that the majority of surgical patient (45%) indicated they did not understand the information written on the informed consent form. Most of the patients just signed the informed consent form without understanding its function. Furthermore, regarding ethical concept, the study revealed that a majority of surgical patient (87.5%) did not receive appropriate information on the nature, risk, alternatives and benefits of the operation to be performed. The level of education of the participants was shown to significantly affect the knowledge and understanding of the informed consent process.

The study concluded that the surgical patient knowledge is limited which seems to contribute to poor understanding regarding the informed consent process. The level of knowledge and understanding was not different between the two state hospitals. The study also revealed incorrect and incomplete recordings on the informed consent form which is regarded as illegal, unethical and an act of misconduct because the form is regarded as a legal document.

The study recommends drafting of a policy to guide the informed consent process which will improve patients' knowledge and understanding of the process. The study also recommends improvements and standardisation of the informed process in the two hospitals to improve patient knowledge and understanding. Regular refresher courses on informed consent process including how to complete the form are also recommended for all healthcare workers.

DEDICATION

I dedicate this thesis to my husband Jezee Ace Kavari, and my children: Rihupisee,
Kavenotjari, Komboro and Kavari -Kavari.

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I wish to extend my profound thanks and appreciation to various people who contributed immensely to the successful completion of the research document.

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LIST OF ABBREVIATIONS

CMS	Centre for Medicare and Medicaid Services
COHSASA	Council for Health Service Accreditation of Southern Africa
HIV	Human Immunodeficiency virus
HPCNA	Health Professional Council of Namibia
HPCSA	Health Professional Council of South Africa
MoHSS	Ministry of Health and Social Services
NQA	Namibia Qualifications Authority
UK	United Kingdom
USA	United States of America
IHK	Intermediate Hospital Katutura
WCH	Windhoek Central Hospital

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CHAPTER 1

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 INTRODUCTION

Informed consent remains a critical issue in healthcare and has remained on the health care agenda for so long as it is constantly not being done properly (Bryant & Sagin, 2007). It is widely accepted as a legal, professional and ethical principle of medical- surgical intervention in health care,(Aasa, Hovback & Bertero, 2013; Hammami 2014) reported that informed consent is considered as one of the vital requirement for medical-surgical treatment in health care , which can apply to decision-making regarding patient's treatment. It builds on the rights of the individual to be autonomous in decision-making and patient-centered care, whereby patients autonomy must be respected and he /she is allowed to have a say in his/her health care. Informed consent's importance is built on patient's competence to understand information and making deliberate decision to undergo a specific surgical procedure and is valid for as long as the patient disease has not been changed, and or no new findings that may change the planned procedure has been revealed (Hammami, 2014). Furthermore it proves the patient active participation in his /her treatment as the care should be patient centred, it has a legal role whereby, it can be considered as a proof of agreement when the surgical team is under litigation. Furthermore, it protects patients against assault and battery of unwanted medical intervention as well as to safeguard patients' rights to autonomy, self-determination and inviolability (Agnew, 2012).

Legally, signing of informed consent is regarded as the most important aspect in health care practice Worldwide. It is a stipulated standard that no surgical procedure should be performed on the patient without his/her legal signature on the informed consent form with date, time and

witnesses signatures, except in life threatening emergency situations, where consent can be obtain from the Medical hospital superintendent as described by Sowney & Bar, (2011).

Ministry of Health and Social Services (MoHSS) (2014), stipulates clearly on requirements of persons allowed to sign an informed consent form, including person who have reached the legal age of eighteen and older, mentally alert patients as well as competent patients. In case of a minor a legal guardian or biological parent can sign for her/him. Individuals who are not allowed to sign an informed consent form are, minors younger than eighteen; mentally ill or incompetent and unconscious or intoxicated/drunk person. In case of deaf and dumb patients, where there is a communication problem, it is better to get hold of someone who can communicate with the patients and staff members to provide interpretation.

The patient role regarding informed consent is to be able to voluntarily make a free – decision about his/her treatment, receive and understand the appropriate information about the nature alternative risks and benefits of proposed treatment given by the physician, before giving permission by signing on the informed consent form. The informed consent process is regarded as an opportunity to guide the patient to the right decision and also dispel any unrealistic expectations concerning the surgical procedure. Ultimately it is an opportunity to create a good a relationship of openness and trust between physicians and patients (Siegler & Winslande, 2010).

According to Bryant (2007) the role of physicians are to address the procedures and treatment which might require informed consent and they are responsible and accountable for explaining the required treatment or procedure to the patient, whereas, the nurses role is to facilitate and witness the informed consent signing process as well as to advocate for the patient This was supported by Dzaher (2017) who reported that the nurses role are to facilitate the signing process of the informed consent form, with date and time as witnesses, to justify that the patient

was competent voluntarily when gave their consent and understood the information related to the treatment as explained by the physician. After witnessing and getting the patients to sign on the informed consent form, it must be kept in the patient medical records that accompany the patient to the operating room and goes to the operating room with the patient. Nurses' role during informed consent process is to protect, preserve and support the patients (American Nurses' Associations, 2001). Namibian Nursing Act, (2004) stipulates the scope of practice of registered nurses as a nursing regime and sub regulation (1) of 2 (n and p), to prepare a patient for operative , pre –operative,intra-operative and post –operative interventions and to provide effective patient advocacy to enable the patient to obtain the health care needed inclusion facilitation of informed consent process for treatment or any surgical interventions..

Informed consent process involves the introduction phase whereby, the physician look for a conducive quiet place for counselling and make clear the consent process to the patient. The second phase is the explanations where the physician provides relevant information to the patient using simple language the patient understand by asking questions or using teach back method (Falagas, 2009). The last phase on the process of informed consent is to allow the patient to ask questions. Patient informed consent is regarded as valid only when the physician gives time to the patient to read the consent form and obtained a signature (Siddiqui, Shaik & Memmon, 2010). A patient can consent to treatment orally or in writing or tacitly by conduct (Dada & McQuoid-Mason, 2001). However, patients may refuse to give consent and this is defined as an informed refusal (Sulaiman, 2015).

A complete informed consent process consist of seven elements; discussing the patients role in the decision–making process, describing the clinical issue and suggested treatment, discussing alternatives to proposed treatment, discussing related uncertainties, assessing the patients understanding of the information provided and eliciting the patient preference. The process of informed consent may occur within encounter, or across multiple encounters and all these

elements must be met, before the patient signs the informed consent form (MoHSS, 2014). As defined by (Stacey , 2006) knowledge is a reflection /recall of the information that the patient had gathered before the consent process for the proposed treatment for health care.

According to White (2000) for the nurses to imply understanding, they should ask whether conditions for informed consent been met, with their role of being advocates to patients, while ensuring that no surgical procedure is to be done unless the patient had fully comprehends the details on the informed consent. Furthermore, nurses are ethically bound to ensure that patients has understood the information thoroughly , to make an autonomous decision , whereby the nurses must provide a solution in case they identified any knowledge deficits from the patient during the informed consent process. Understanding of informed consent as presented by Falagas (2010) involves the interaction of psychological and intellectual characteristics of an individual and depends on the educational status, level of general knowledge, personal attitudes which are affected by moral and customs society.

According to Lourenzen (2010) patient's poor understanding in the surgical informed consent process can be improved through teach back, recognising differences in the patient s education and health literacy and placing more emphasis on the patient with low education and low health literacy. There are ways to improve patient understanding of informed consent, which have been evaluated (Kinnersley et al., 2013), patients will understand better the risks when physicians are taught communication strategies and use decision making –tools. According to Stu (1997) every patient should be considered as unique in informed consent process, because their knowledge and understanding of informed consent for surgical interventions are different, as some have many questions and need to understand the details of the procedure while others need only to know the basics.

The chapter highlights the background, the problem, aim and objectives as well as the significance of the study.

1.2 BACKGROUND OF THE STUDY

This study was conducted in operating rooms of two public training hospitals in Windhoek Khomas Region namely, Intermediate Hospital Katutura and Windhoek Central Hospital. The operating room is where surgical interventions are taking place. These public training hospitals are fully owned by the Namibian government. The Intermediate Hospital Katutura is a referral hospital where district hospitals refer their patients, while Windhoek Central Hospital is the country national hospital, where patients for special surgery intervention or procedures are referred to from Intermediate hospital Katutura.

Informed consent is an old practice in most areas of medicine and it has been, in the last century, accepted as a legal and ethical concept vital to medical practice. It has been accepted as an authorization of an action by understanding based on the proposed activity without control by others in U.S.A. and in many other countries (Appelbaum & Thomas, 2013). Informed consent has been recognized world-wide as a legal right for patients since 1972 whereby physicians started to disclose information about diseases and treatment options that was previously considered unnecessary and were not revealed to patients (Sulaiman, 2015).

The essential elements of surgical informed consent include a full explanation of the procedure to be undertaken followed by, a full disclosure of treatment alternatives, benefits and possible risks (Agu, 2014). Informed consent is regarded as a cornerstone of modern health care practice, which is a vital communication between the physician and the patient. It serve to protect patient autonomy as one of the four important principle of biomedical ethics (Beauchamp & Childress, 2009). According to Leclercq, (2013) a correct informed consent process is built on patient physician interaction and the patient got enough knowledge related to the diagnosis, treatment options, benefits and risk involves for the patient to make an informed consent.

In the African context physicians has a moral duty to respect patients human dignity which is in line with the Bill of Rights of the South African Constitution that affirms in section 12 (2b): “Everyone has the right to bodily and psychological integrity, which includes the right to the security in and control over their body” (South African Parliament ,1997). The National Health Act also stipulates in its section 7(1) that “A health service may not be provided to a user without the user’s informed consent”, (South African National Health Act, 2003). Studies on quality of informed consent have been conducted in Southern Africa and Worldwide. Obtaining good quality consent are beneficial to both the patient, physician and the researcher and allows patient participation in the decision-making process (Lupton, 2015). A study done on quality of informed consent in Western African countries revealed, majority of cases, that physicians were not meeting the requirements for an adequate informed consent, (Upadhyay, Beck, Rishi, Amoateng-Adjepong & Manthous, 2008).

Several patients’ factors have been reported to affect the knowledge and understanding of the informed consent process. A study by Suleiman (2015) showed, that the majority of educated patients were aware of their rights and could thoroughly understood the information provided in the surgical informed consent process. Clegg-Lemptey & Hodasi (2005) revealed the majority of patients did not know about possible complications of the proposed surgery while half of them also did not know the diagnosis, which is a justification by the researcher that physicians does not explain the intervention to be performed to the patients, that’s why there’s low knowledge and poor understanding to informed consent for surgery. Siddiqui, Shaikh, and Memon (2010) reported that patients had poor information retention after obtaining informed consent. The author’s, revealed that the current process in Nigeria seems inadequate as a means for the expression of independent choice as the patient had limited knowledge on the importance of signing or to reject the signing of informed consent. The same mentioned results are the same as Aldoory & Ryan (2014) who revealed that the majority of patients regardless

their knowledge were not capable to understand the information provided to them during informed consent process which results in uninformed consent and refusal of treatment. Singh, (2013) revealed that the majority of patients wrongly took an informed consent as legal obligation. However, the level of understanding was limited for illiterate patients, those with primary education and high for educated people. The study further revealed limited knowledge of patients towards informed consent, the majority showed that they, wrongly knew that informed consent legal obligation for the physician. Besides the level of understanding of patients to what has been explained in informed consent process was poor and unsatisfied.

In Namibia, as presented by the Health Professional Council of Namibia (2010), health professionals, should give the patients information they ask for or need about their conditions, treatment and prognosis. The information must be given in a way or understandable language best to be understood by the patient. The statement further indicated the health workers should refrain from withholding from patients information on, investigations, treatment or procedure that is in the patients' best interest. Health care workers must apply the principle of informed consent as an on-going-process and should allow patient to access their medical records. It is an obligation of the healthcare professionals to help the patient and to ensure these rights, which are in conjunction with the Namibia patient- charter.

Although there is concern over the issue of informed consent and understanding of such, little has been done in Namibia, especially at the two state hospitals in Windhoek, regarding assessment of knowledge and understanding of the patients. It has been noted that physicians do not have enough time to explain the process of informed consent to the patients and sometimes underestimate or alternatively overestimate the amount of information to provide to the patients. The assessment of surgical patients' knowledge and understanding to informed consent for elective surgical intervention has not been conducted before at the two state

hospitals in Windhoek, that's why the researcher found it interesting to conduct this study, in order to determine the level of knowledge and understanding thereof.

1.3 PROBLEM STATEMENT

The researcher worked in the operating rooms for more than 10 years and noted that surgical patients seem to have limited knowledge and understanding of informed consent for surgical interventions. This was supported by a previous incident reported by Johnson (2014) where the Supreme Court of Namibia ruled that medical personnel at public hospitals violated the rights of HIV- positive women, by sterilizing them without their consent. The women argued that their signature was coerced, forced and adequate information was not provided by the physicians. Patient safety and legality of informed consent were thus compromised. The process of obtaining informed consent may appear to be a formality and easy, but it is more than getting a signature for a surgical procedure. Singh (2013) revealed, the majority of patients wrongly take an informed consent as legal obligation. According to Singh's report, the majority of the patients allowed the physician to determine their treatment and do not need detailed explanation and few patients prefer to take the final decision themselves. However, the level of understanding for illiterate patients showed minority, while for educated people showed high. Besides the level of understanding of patients of what is explained, the process of informed consent was poor and patients were unsatisfied.

1.4 AIM OF THE STUDY

The aim of this study was to assess surgical patient's knowledge and their understanding of informed consent for elective surgical interventions in operating rooms at public training Hospitals, Khomas Region, Namibia.

1.5 OBJECTIVES OF THE STUDY

The objectives for this study were to:

- Assess surgical patient's level of knowledge and their understanding of informed consent for elective surgical interventions in operating rooms at public training hospitals, Khomas region, Namibia.
- Analyze the association between participant's responses and the public training hospital of admission, Khomas region, Namibia.
- Analyze the association of Knowledge and their understanding with patient demographic characteristics at public training hospitals, Khomas region, Namibia.
- Analyze the association of knowledge and their understanding with hospital related characteristics at public training hospitals, Khomas region, Namibia.

1.6 SIGNIFICANCE OF THE STUDY

The assessment of surgical patient's knowledge and their understanding to informed consent for surgical interventions in the operating room results will be of considerable significance with regard to future planning; of clinical nursing education, and will furthermore compliment the identified shortcomings, that can be used for in-service-training to the nursing staff. The Ministry of Health and Social Service as well as training institutions will be informed on possible areas that need attention and strengthening for assessment of patient's knowledge and understanding of informed consent for elective surgical interventions. The results may serve as baseline information for future studies and may also highlight areas for policy formulation and improvements. The patients will be equipped with information about the importance of informed consent before signing the document for surgical interventions.

1.7 LIMITATIONS

There was no funding available during the study and the researcher had to fund for the study on her own. As a consequence, questionnaire could not be translated into the different languages, however the translation was done during data collection by the researcher.

1.8 DELIMITATIONS

Delimitations are those characteristics that limit the scope and define the boundaries of the study, which are in control of the researchers Simon, (2011). In this study only two public training hospitals in Khomas Region were used for the study. The researcher did a pilot study at the W.C.H. operating room only and conducted the study at W.C.H and IHK operating rooms.

1.9 PARADIGMATIC PERSPECTIVES

Henning, Van Rensburg & Smith, (2004) define a paradigm as a theory or hypothesis. The former is a framework within which theories are built, that essentially influences how one sees the world, determines one's perspective, and shapes one's understanding of how things are connected. A research paradigm is a set of beliefs, under which a research is based. Paradigm perspectives influence the way a research is designed, how data are to be collected and analysed, and how the research results are presented and disseminated. Since paradigms represent belief systems that guide a researcher to assess surgical patient's level of knowledge and understanding of informed consent for elective surgical interventions in operating rooms at public training hospitals, Khomas. Considered in this study were meta-theoretical assumptions, theoretical assumptions as a basis for the study.

1.9.1 Meta- theoretical assumptions

The meta-theoretical assumptions for this study were ontological, epistemological, axiological, methodological, and rhetorical. Each is described below.

1.9.1.1 Ontological assumption

This philosophy relates to different perspectives from which the nature of the world can be seen by an individual, which in normative emphasises that social phenomenon is different from other factors (Bryman as cited in Rahmawati, 2008). Ontology define as a patterned set of assumptions (Brink, Van der Walt & Van Rensburg, 2016). In this study the researcher used quantitative method in order to be able to bring positivism and the researcher used a structured closed –ended questionnaire to obtain quantitative data.

1.9.1.2 Epistemology assumption

Epistemology relates to how knowledge can be recognized, developed or acknowledged (Mkansi & Acheampong, 2012). Epistemology may be objective or subjective. The former recognises the outside world, which is hypothetical and impartial, while the latter being subjective suggests that the outside world is in the realm of clarifications from reflection (Eriksson & Kovalainen, 2008). Through the use of epistemology the researcher was able to verify concepts quantitatively by measuring a large sample. This allowed for generation of valid findings to approximate reality as closely as possible. The researcher tried to obtain the truth by relying on the accounts of the respondents, and respected the views of the respondents as valid data (Tshilongamulenzhe, 2012). In this study through the generalisation of findings from the questionnaire, it revealed the quatitative approaches that the knowledge and understanding regarding informed consent process was average to good for the majority of patients going for surgical procedures, hence the majority of patients reported that they did not receive enough

information on risks, benefit and alternative to the surgical procedure to the proposed surgical treatment and were only asked to sign the informed consent form without explanation.

1.9.1.3 Axiology assumption

Axiology has to do with values. For the pragmatic worldview, values play a significant role in the interpretation of the results according to Wagner, Wright, Ganesh, Zhou, Mobahi & Ma (2012). It primarily refers to the aims of a research and tries to clarify if one is trying to explain or predict the world, or seeking to understand it. Since this study used a quantitative approach, axiology was employed as to how values play a crucial role in interpreting results. In this study as the researcher tried to assess surgical patient's level of knowledge and understanding of informed consent for elective surgical interventions in operating rooms at public training hospitals, Khomas region, this was undertaken in through the use of quantitative research .

1.9.1.4 Methodological assumption

Methodological assumption focuses on analysis of the methods used for gaining the data (Cohen, Manion & Morrison, 2012). In normative paradigms, a quantitative scientific method is used to observe objects. It uses a mathematical calculation to generalise findings and to test theory. In contrast, an interpretive paradigm uses observation and fieldwork notes to investigate an object. It uses a quantitative approach to control the social setting when doing actions.

In this study the researcher relied on the surgical patients for analysis. A quantitative analysis was used as describe in the methodological assumption, whereby closed- ended questions was used on the questionnaires.

1.9.1.5 Rhetorical assumption

Rhetorical assumption refers to the persuasive language of research (Gone, 2009). According to Peterson (2014), in quantitative research the language is formal. In the study this meant using

rhetorical assumption that increased the reliability and validity of results. In this study the researcher applied rhetorical approaches to assess surgical patient's level of knowledge and understanding of informed consent for elective surgical interventions in operating rooms at public training hospitals, Khomas region, Namibia.

1.9.2 Theoretical research as a basis for the study

In this study, the researcher used one theory: shared-decision making model described below.

1.9.2.1 Shared-decision making model-apply to informed consent

The researcher had chosen this Model because it apply the best to informed consent process, whereby the physician need to explain physician must share and educate the nature of treatment, benefit, alternatives and risk of the proposed treatment in order for the patient make own/free decision on the proposed treatment before he patient sign the informed consent form

This model identifies different analytical steps in the treatment decision making process, it provides a dynamic view of treatment decision making by recognizing that the approach adopted at the outset of a medical encounter many change as the interaction involves, it also stipulates decision –making approach which lies between the three main models namely,(paternalistic, shared information and education) which have a practical application for clinical practice, research and medical education, whereby the physician are expected to respect the difference in decision- making of patients (Charles,1999).

Paternalistic in this study applied whereby the physician regard themselves as knowing and not allowing the patients to practice the right of autonomy, whereby the surgical patients need to make own/free decision, after all options was shared and educated the by the physician about, risks and benefit on the proposed treatment had been explained in order for patient to make /free decision or to give an informed consent.

According to the researcher this model apply best to the informed consent process, whereby , the physician must share and educate the nature of treatment, benefit, alternatives and risk of

the proposed treatment in order for the patient make own/free decision on the proposed treatment before the patient sign the informed consent form. This model was used to assess surgical patient’s level of knowledge and understanding of informed consent for elective surgical interventions in operating rooms at public training hospitals, Khomas region, Namibia. This shared decision making Model by Elwyn, Edwards & Thompson, (2009) is guiding the physicians to further develop their understanding of available Model that can be used to guide the provision of decision support aids as intervention to facilitate this Model.

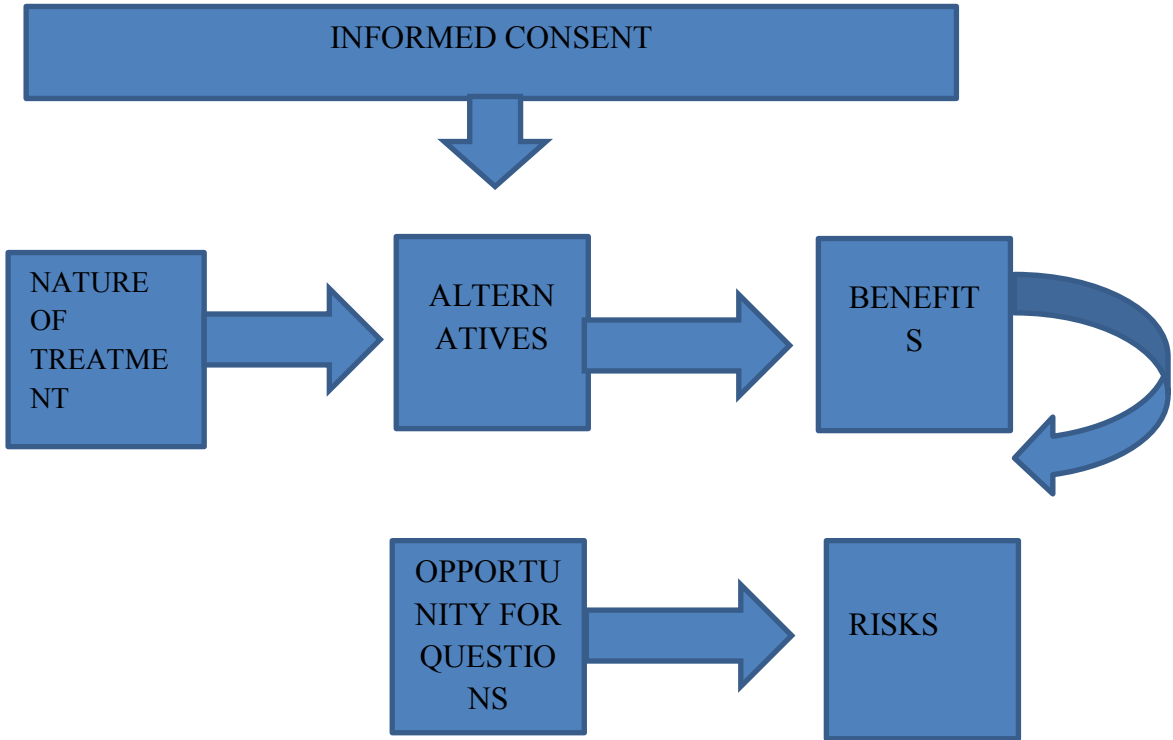


Figure 1.1 Shared decision making Model apply to informed consent

1.10 DEFINITIONS OF CONCEPTS

A concept is a general idea or understanding of something Polit & Beck (2012). Concepts defined in this study are derived from the title. However, some concepts are also described due to their close link with the main concept, informed consent. The concepts are:

1.10.1 Assessment

Assessment refers to the act of examining or inspecting some work done to determine the level of quality, value, size and produce the detail report/feedback on what are the findings Oxford dictionary, (2016). In this study assessment of surgical patient's knowledge and understanding of informed consent was done through a structured questionnaire.

1.10.2 Operating room

Operating room refers to a place in a hospital set-up used for performing medical procedure or operation on patients in need of it MoHSS, (2014). In this study operating room of training hospitals was the place where the study took place and is where medical surgical procedure are been done by the physicians.

1.10.3 Elective Surgical intervention

Elective Surgical intervention is any acts that is performed by a medical doctor by cutting someone's body by making an incision Medical dictionary (2016). In this study, elective surgical intervention are scheduled, invasive procedures that are performed the patient by the surgeons in the operating room, excluded emergencies.

1.10.4 Surgical Patient

Patient is an ill or sick person who needs medical/surgical treatment at a hospital Brunner and Suddarth's (2010). In this study a surgical patient was a person for elective surgical procedure in the operating room of the public training hospitals, Windhoek, Khomas Region whose knowledge and understanding were assessed, regarding informed consent.

1.10.5 Consent

Consent refers to an act of reason and deliberation, a person who possess and exercises sufficient mental capacity to make an intelligent decision demonstrates consent by an act

recommended by another. It is a physical power to act and reflective, determine and unencumbered exertion of these powers. Consent is implied in every agreement (West's Encyclopaedia of Law, 2008). In this study consent refers to the permission or agreement given by the surgical patient to allow the health care professionals to perform medical –surgical interventions or procedures.

1.10.6 Informed consent

Informed consent, reflects a legal, professional and ethical principle of providing adequate and proper information to the patients regarding treatment alternatives so that they actively participate in decision making, concerning what will be done on their body (Bowrey & Thompson, 2006). In this study, informed consent relate to the process of communication between a physician and patient about the surgical procedure and depends on the patient agreement and authorization to undergo a specific surgical procedure and this is only, legal after the patient signed on the informed consent form. According to the literature in this chapter it is the protection of the rights and welfare of the surgical patient.

1.10.7 Informed consent process

Informed consent process is the elements of informed consent that need to be satisfied are and the thresholds elements, information elements and consent elements to achieve the goal of a legal informed consent from the patient. Competence to understand and to decide voluntarily, without coercion are the thresholds elements. Information elements are made up of disclosure (information) recommendations of a plan and understanding of the information. Consent elements are decision in favour or against the plan and the authorization of the chosen plan (Bowrey, 2006). In this study it is the series of action, how the physician explained to the patient the proposed procedure to be performed, with benefits, risks, complications and alternatives of the treatment and the understanding of the patient before the patient signed the informed consent form.

1.10.8 Understanding

Understanding is knowing about something why something happen, when someone has told you about, it is deeper because it comes from empathy or identification Oxford South African dictionary (2016). In this study, patient understanding was assessed by completing a questionnaire and it entails the following aspects: understanding in terms of asking questions directly if the information had been understood and whether the patient can recall what was explained to him/her in order to make an informed decision or agreement by signing on the informed consent form.

1.10.9 Knowledge

Knowledge has been conventionally defined as a beliefs that are true and are justified. It is reasonable to think of a true belief as one that is in accord with the way in which objects, people, process and event exist and behave in real world. Knowledge itself, cannot be directly observed, it must be inferred from observing performance on a test, and for example questions design to determine the belief of a person about something (Hunt, 2003). In this study the patients were assessed whether they have the knowledge about informed consent for surgical intervention by completing a questionnaire in this regard.

1.10.10 Training Hospitals

Training hospital is a hospital that trains nurses, doctors and other health professionals. In this study, training hospitals were the, Intermediate hospital Katutura and Windhoek Central Hospital. Training hospitals in Namibia is accredited by the Namibia qualification authority (NQA, MoHSS, 2014). However, in South Africa, training hospitals must be accredited by the Council for Health Services Accreditation in Southern Africa (COHSASA).

1.10.11 Shared decision-making model

Shared decision making model is define as an approach where physician and patients share the best available evidence when faced with the task of making decisions, and where patients are supported to consider options, to achieve informed preferences.(Elwyn, Coulter, Walker, Watson & Thompson,2010)

1.11 OUTLINE OF CHAPTERS

The study report are composed of five chapters, as outlined below:

Chapter 1: This chapter focused on the introduction and background to the study which introduced the topic under study. It provides the background and research problem statement that justified the study as well as the defined key concepts, highlighted the significance and indicated delimitations of the study.

Chapter 2: This chapter reviewed the literature and theoretical framework, which linked to the research problem and research instrument. The purpose of this chapter was to gain more information of previous research in the about same subject to analyse its conclusion, identify research gaps and recommendations

Chapter 3: This chapter represents the research methodology used in the study. It included definition of the target group, sample design, data collection validity and reliability and ethical consideration.

Chapter 4: This chapter describes the discussion of data collection, data analysis and the research findings.

Chapter 5: This chapter presents the discussion of findings, conclusions, limitations, recommendations and contribution to the body of knowledge of the study. It summarised the

research findings and linked to different literature that answered the research objectives. Recommendations were made, based on the research findings.

1.12 SUMMARY

This chapter focused on the introduction and background of the study and highlighted the importance of informed consent of the patient before any surgical intervention could be performed by the physician. However, concerns of knowledge and understanding of the surgical patients to informed consent were confirmed in the literature displayed in this chapter. The research problem statement, aim of the study and objectives guided the researcher throughout the study. Key concepts regarding informed consent were clarified and regarded as the most relevant for this study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter gave an overview of the introduction and background of the study, includes the problem statement, the research purpose, significance of the study, and delimitations of the study and defined concepts. In this chapter the researcher presents a review of the literature, in relation to the study in terms of types, source, theme and content. Literature review is a compilation of resources that lay the foundation of the study, and directs the argument about the need for a new study and the research method and also directs the planning and execution of the study (Fulton & Krainovich-Miller, 2010). The literature was in various formats, including journals, books, guidelines, dissertations and findings from previous investigations on the research topic, developing the study design and methods of the study. The researcher elaborates on general information regarding surgical patients' knowledge and understanding to informed consent for surgical interventions and review of relevant literature done in Africa and other parts of the world. A review of relevant literature is an essential feature of any academic project. An effective review creates a firm foundation for advancing knowledge. It facilitates theory development, closes areas where a plethora of research exists, and uncovers areas where research are needed (Webster & Watson, 2002).

2.1.1. Informed consent

The doctrine of medical informed consent is rooted firmly in American juris prudence, which forms an acknowledgement basis for physicians' accountability in the 50 States. Informed consent is a legal recognition on patients' rights and evolution of the informed consent doctrine, which consist of a rebuilt of ethics for medical practice. Doctrine of informed consent has four

goals, ethical goal which promotes patient autonomy; decision making goal to promote patient ability to make an autonomous decision; regulatory goal which attempts to control physicians disclosure practices and lastly compensatory goal, mechanism that provide monetary compensation for injuries (Jon & Merz, 2009).

Significant literature which confirmed an important gap between the practices of informed consent and its theoretical construct, whereby it indicated many unresolved theoretical and practical questions. Empirical evidence, revealed a difference in the level and type of detailed information disclosed in patient understandings of the information and how their decisions are influenced. Furthermore, physicians receive insufficient training regarding practice of informed consent, and are forced by time and high demand whereby, they often misinterpret the requirements and its legal standards. Patients have inadequate comprehension of the risks and alternatives of proposed surgical treatments whereby, their decisions are driven mostly by the trust they have in their physicians rather than by the information provided (Falagas & Mathew, 2011).

Informed consent is regarded as an ethical and legal obligation for the physicians to communicate with the patients 'to get permission from the patient to perform a surgical procedure. The ethical origin of informed consent was explained by the consequentialism theory. The consequentialism theory believed that the rightness and wrongness of a procedure dependent upon its complication (Stu, 1997). According to O'Leary (2008) informed consent concept is elaborated as the fundamental ethical principle of right of self-determination. This principle recognizes that patients are autonomous, independent with the right to make own decisions regarding their own wellbeing without coercion from others. During obtaining informed consent there are certain elements to be met by the physician to the patients for informed consent to be valid, capacity and discussion, with the patient disclosure of

information, treatment and alternatives, risks, autonomous authorization and finally, documentations thereof which is vital

Legally, there is a minimal difference between the way in which the law on informed consent for patients approach its analysis and the way in which the physicians indicate how it is carried out in practice. The focus of the legal inquiry in the cases has centred on the reasonableness between the physicians obtaining the signature of the patient. The law of informed consent has never engaged in a broader examination of whether or not the patient was kept informed at numerous stages of the treatment, by different levels of health professionals. The law of informed consent assessment concentrates on the isolated incident of when it was obtained and if disclosure was reasonable at that point. Whether or not patients' were given the maximum opportunity to make a considered choice was overlooked (Barrett, 2015).

Hall, Prochaska & Fink, (2012) revealed that informed consent it has become a primary paradigm, which can be used for 3 different purposes, ethically, safeguarding patient autonomy during decision- making process and supporting patient defined goal while, legally it protects patient from unwanted procedures to be performed on him/her without a signed informed consent form and administratively, it serve as a document where parties are involve to witness by signing on the informed consent form which provides efficient safeguards to ensure nominal fulfilment of ethical and legal requirements to the informed consent.

According to Carsten's & Piermain, (2007) informed consent is important in relation to contracts as it is part of the consensus to be reached before the contract to be made and it is also part of the terms of the contract itself. The contract to be met all parties must have the understanding to sign the contract. Intentions to sign should be a free will from the parties in order for the contract to be to be concluded or signed. Therefore, is important for all the parties to be aware of all specifications to decide to be part of the contract. Any misinterpretations that

are made can lead to violation and an invalid contract. Meaning the physician and the patient have two different knowledge that's why is it is important for the physician to inform the patient in order to have required knowledge and appreciation to effectively consent and to have a contract with the physician. Any compromise can lead to a compromise in the contract which is not desired. Doyal, Tobias & Warnock (2011) argues the importance of informed consent must share a belief in the moral imperative of respecting human being autonomy in almost all circumstances to adopt a fairly rigid, absolutist and universal perspective on the need for informed consent.

Informed consent is a process of communication which requires a dialogue between a patient and a physician that results in patient authorization or agreement to undergo a prosed treatment/procedure is process for medical intervention (American Medical Association, 2009). Informed consent is a process of an agreement whereby, the patient gives permission, which must be in writing, with date and patient signature, to permit for surgical intervention /procedure to be performed freely after being duly informed of its nature, significance, implications and risks and appropriately documented in the patient medical record by the nurse, which is their main responsibility (MoHSS, 2014). The information must be explained to the patient by a physician, after ensuring that the potential patient has understood the information. The physician must then seek the potential patients' freely-given informed consent form. The nurses must make sure that the patient is competent, has understood the explained informed consent form and freely signed an informed consent without coercion. They further facilitate the informed consent process by documenting it in the patient records and with witnesses' signatures, date and time.

According to Brazell (2006) every patient should be considered as unique in surgical informed consent as a continuing process, because their knowledge and understanding regarding surgical informed consent are different as many have questions and need to understand the detail of the

procedure while others need to know only the basics. Agnew (2012) recognized informed consent for surgical patients as a completed process and legal requirements, which stated that authorization is made through a completed and signed informed consent form. The author further suggested that it would be more sensible to describe the patient, who has been taken through the consenting process as an informed patient giving consent, rather than a fully informed patient. The author further emphasized that, by signing an informed consent form there is no guarantee that the patient unequivocally understood the provided information.

According to Appelbaum & Thomas (2007) informed consent has elements to be followed by the physician namely, nature of the proposed treatment, reasonable alternatives to the proposed intervention alternative risks benefits and uncertainties related to each alternative, assessment of the patient understanding and the acceptance of the intervention by the patient. According to the Health Professional Council of South Africa (HPCSA), (2012) health professionals should adhere to the general guidelines regarding informed consent. They should give their patients the information they ask for or need about their condition, its treatment and prognosis. Health professionals should provide information to their patients in a way they can best understand, in a language that the patient understood and taking the patients literacy level into account, by understanding their values and belief system. The health professionals should also refrain from withholding from the patient any information, investigation, treatment of procedure which is for the best interest to apply the process of informed consent as an ongoing process.

A patient from the age of eighteen years and older and who is conscious and able to understand when the physician explains the relevant information regarding the proposed treatment or intervention to be performed can sign the informed consent form (MoHSS 2014). In case of someone below the legal age of signing, a legal guardian is allowed to sign or either one of the biological parents. In case of any language communication problem encountered, translators

must be used. Ultimately, no surgical procedure should be performed on a patient without a legal informed consent, except in a life-threatening emergency situation, whereby the hospital medical superintendent can give informed consent for an operation to be performed.

According to Bryant & Sagin (2007) in May 2004, (CMS) (Centre for Medical Care and Medicaid Services) issued new guideline, which significantly expanded the scope of informed consent that must be obtained by hospitals prior surgery procedures. CMS new guidelines for patient to have the right to make informed decisions regarding care or his/legal representative to decide for him/her. Hospitals must establish a process to assure that each patient or his/her representative is given information on the patients' health status, diagnoses and prognosis. Hospitals must utilize an informed consent process to assures that patient are given the information and disclosures needed in order to make an informed decision about whether to consent to a procedure, intervention, or type of care that requires consent. Hospitals must also establish policies and procedures that assure a patients' rights to request or to refuse treatment, and how this right will be exercised.

Closet, (2009) advocates that physician's role' is to obtain the patients signature on the informed consent form and be responsible to provide clarification on the surgery and requesting patients' signatures. Obtaining consent proves that practitioners respect patients' autonomy and their human dignity. The moral duty is fundamental to medical practice whereby the, medical practitioner does not act against a patients reasonable wishes. Health practitioners must protect patients and promote good ethical practice. Patient should understand the purpose of the procedure, its process, risks, benefit and alternatives prior to giving consent and in order to make a free and voluntary decision about the intervention. Informed consent should be viewed as a process not a signature of a piece of paper. While the nurses role is to witness the informed consent process and to sign as a witness after the physician had explained to the patients about the proposed treatment or procedure.

Melendo, Viegas, Noqueira de Sousa & Caregnato (2016) found that the majority of surgical patients received informed consent information from non-physician professionals' such as a secretary, nurse and other unidentified professional's, which is regarded as wrong. According to the (MoHSS, 2014) it is a physician role to explain informed consent regarding the proposed treatment and the nurses role is to witness and to facilitate the informed consent process of signing. Furthermore, the study demonstrated that many patients who considered the informed consent form to be important did not know its purpose, and were not provided with the a signed copy.

In the U.S.A the evaluation revealed that the six elements of informed decision-making were hardly met. In major cases, decisions were made on only one or two of the six elements namely: clinical problem, alternatives, benefits and risks associated to the recommended plan, uncertainties about the procedure, patients understanding and expression of patients' preference. This clearly demonstrates a global trend on poor informed consent in clinical practice (Upadhyay et al., 2010).

Whitney, McGuire and McCullough (2014) concluded that the majority of doctors met many of the legal requirements for informed consent. Clegg-Lampsey & Hadossi (2013) also emphasised that "doctors have sometimes been accused of arrogance, because they dictate treatment or surgery even when there was other available options". Even though lack of formal education was to blame for poor understanding, and the consenting medical staff had less communication skills and did not make time to speak properly to patients, health care workers did not explain informed consent to patients too. They did not provide the necessary information or talk about alternatives that was available. Ideally physicians should talk to patients some time (at least two or three days) before the intervention or procedure. This allows the patients some time to reflect on discussion and deliberate on their options. However, the signing of the informed consent form delayed until the patient was admitted for the procedure.

Consenting became a hurried ritual that does not allow the patient enough time to fully consider their decision (Elwyn, 2008).

Clegg-Lamprey et al. (2013) describe challenges of informed consent as follows, workload in the public hospital must be considered as one of the contributing factors to the lack of interaction between surgeons and patients, which leads to poor adherence to the principle of informed consent on the part of the physicians. Some health professionals has less communication skills and does not make time to speak properly to patients and by not explaining informed consent to the patient too. Furthermore lack of formal education is to be blame for poor patient written in English understanding, worsen by the fact that the informed consent form is only at the public hospital. Furthermore informed consent is ethically required of healthcare practitioners in their relationship with all patients and should not viewed as a luxury.

Judson, (2011) elaborated on patients challenges of informed consent for surgical interventions or procedure were told about operation to be performed and gave their signature's, without further explanations done, patients became afraid and pretend to have understood what was told to them, while in reality have not understood .Lack of time from the health professionals leads to patient unable to ask questions and they fear to ask questions as the operation won't be performed when they ask questions. (Tobias, 2011) revealed, that less educated patients were less informed due to limited knowledge and understanding regarding informed consent. Hammami, (2014) revealed that patients with higher levels of understanding towards informed consent for surgical procedures, were associated with higher degrees of satisfaction with their surgeons. However, the same study revealed that female and male perceived informed consent differently as females thought that was an information disclosure process and males believe that it enables patient self-decision making.

Lavelle-Jones, Byrne & Rice (2003) revealed ,patients admitted that they did not read the consent form before signing it majority of them were unhappy with the information they received while others stating that most of the information they obtained about their treatment was obtained outside the hospital . However, the author indicated that the main challenge which remain are the patient who cannot read, were at risk for medical errors that might occur. Picano, (2004) describe, the use of a standardised consent form as a challenge which, may add to ritualised nature of consent discussion by making the process seem repetitive and ritualistic to the physician. According to the author this could lead to the clinician becoming desensitised to the patients' fears and concerns, as the physician may view the treatment as being a routine and common place.

2.1.2 Knowledge and understanding for informed consent for surgical intervention

Knowledge has been conventionally defined as beliefs that are true and justified. It is reasonable to think of a true belief as one that is in accord with the way in which objects, people, process and event exist and behave in real world. Knowledge itself, cannot directly observed, it must be inferred from observing performance on a test, for example questions design to determine the belief of a person about something (Hunt, 2003). In this study the patients were assessed whether they possess knowledge and understanding to informed consent for surgical intervention.

There are specific criteria/requirements, which allow for informed consent to justify that it has been provided. Patients required to have knowledge of proposed treatment, aware of the procedure, any risks, and benefits alternatives and have understood the information provided. Thus, it is clear that both knowledge and understanding are needed when dealing with informed consent for surgical intervention. It is only then when a patient can give informed consent (National Health Act, 2003).

A study conducted in India revealed limited knowledge of patients towards informed consent where the majority of them wrongly knew that informed consent was a legal obligation of the physician. The level of understanding of patients to what had been explained about informed consent process was also poor and unsatisfactory. However, results of the level of understanding showed low for illiterate patients and high for educated people (Singh, 2013). Understanding is defined as knowing about something why something happen, when someone has told you about, it is deeper because it comes from empathy or identification (Oxford School dictionary, 2016).

Silverman, (2005) often patients do not fully understand the information provided during the informed consent process. However, a clear set of skills for physician can be identified which, if used, increases likelihood that patient will understand and be able to recall complex clinical information. Furthermore, these include specific skills for shared decision making, risk communication and the use of decision aids. Physicians can be trained in these skills in order to improve patients understanding about informed consent. Shacter, (2006) reports that patients do not receive sufficient information, that the information is not fully understandable or that the information patients received is not tailored to their particular needs. Failure to achieve informed consent is the basis of many formal complaints and a costly litigation. Adequate information provision has additional wider benefits for patients, including increased satisfaction, more rapid symptoms resolution, reduced emotional distress, reduced use of analgesia and possibly shorter hospital admissions (Roter, 2002).

Patient understanding of informed consent entail the following aspects: understanding in terms of asking the patient directly if the information had been understood, understanding in terms of evidence of comprehension of information provided, and the patients' situation beyond simple factual recall and understanding in terms of the way the patient used the information provided. If the information have been understood, subsequent decisions by the patient should be

consistent with their personal values. Evidence of this process was considered to be present for the outcomes of deliberation and decisional conflicts (Mazur, 2009). Patients understanding to informed consent can improve through synthesising and simplifying information and using practical strategies, furthermore, suggestions on the need to revise the medial concept on the informed consent form cause, some notions are outdated (Schenker & Meisel, 2011).

Olaboyede, Musliudin & Oladeni (2013) showed that most of the patients recognized informed consent as a legal requirement before any surgery and did not recognize it as primarily served their interest. The majority of participants recognised the role of informed consent, such as awareness of the risks of the operation and explanation of the procedure. Siddiqui, Shaikh, and Memon (2010) reported that patients had poor information retention after obtaining informed consent. Furthermore, the authors revealed that current the process in Nigeria seems inadequate as a means for the expression of independent choice as the patient had limited knowledge of legal importance of signing or reject the signing of the informed consent.

Ochieng, (2015) highlighted that the majority of respondents stated that the surgical procedure should be well explained by the doctors to patients through informed consent. However, there were different responses on what should be explained and when explanation should took place, with the majority saying it should be done before surgery, while others thought it should be done on admission, others proposed immediately after examination. The author further revealed, that patients has poor understanding toward informed consent because they were not aware of the most fundamental element such as shared decision making and more than 20% of participants displayed their lack of satisfaction to doctor's explanations during informed consent process. Furthermore it revealed that educated patients are aware of their rights and are more likely to understand information provided in the surgical informed consent process than uneducated patients. However, many patients did not fully understood their health diagnosis, treatment and possible risks because of limited knowledge, personal stress, and cultural beliefs

Judson & Harrison, (2010) indicated that in the United States the judicial system had begun to apply the principle of informed consent to resolve individual cases relating to medical, surgical care and treatment, thus endorsing it juridical. Patients were given details of every possible risks however small, whereas, in the United Kingdom only major significant were given and there was no legal obligation to disclose every possible complications. Benefits must be weighed against risks for the patient and how risky the treatment is under consideration. In addition information should be available over time, so that the patient is not overwhelm with information at once.

Patients are told about the operation to be performed. However, they become afraid and pretend to have understood what was explained to them, while in reality they do not understood. That is why it is of vital importance to make sure that the patient has understood what he/she is consenting for, and by even using an interpreter to avoid any barriers in communication. Lack of time from the health professionals also lead to patient not to ask further questions, in case they do not understand what was explained. It is one of the functions of all health professionals to show responsibility and accountability to clear communication between the health professional and the patient (Judson & Harrison, 2011).

Kalpi, Valimaki, Arnand, Dassen, & Gasull, (2010) highlighted that a nursing informed consent is a critical process that occurs through the course of the nurse – patient relationship and assumes the ethical imperative of giving patients comprehensive information allowing them to make independent choices. According to the authors informed consent promotes self-determination and rational decision making in an area that is of vital concern to the patient. Ideally, the doctrine contemplates mutual participation between the patient and the doctor in a process shared decision-making.

Kinnersley, Phillips & Savage, (2013) revealed the High court found unanimously against a surgeon who was considered to have provided inadequate information, which was part of the doctor's duty to disclose procedure risk and benefits to every patient. Furthermore in the United Kingdom, the department of health emphasise if patient has not being given adequate information, not understanding the information neither had sufficient opportunity to ask questions the consent regards to be invalid, even when patient has signed a consent form.

Rothrock, (2015) elaborated that courts continue to affirm the patients' rights to inform consent. It can also involves a physical injury due to other lapse in the safety system, both aspects of such cases are equally important in respectful treatment of patients. Except in emergencies, surgical procedure should not be performed without documentation of patients' informed consent in the charts. The surgeon performing the procedure is legally accountable to inform consent in case of emergency.

Jones and Harrison, (2011) shown improved patient outcome with effective physician-patient communication and increased patient empowerment. The author revealed a link of informed consent with health outcomes and few studies on the impact of the procedure use to obtain informed consent on quality of consent obtained, whereas the informed consent process have been learned and the effectiveness of intervention implemented for improvement.(Sulaiman ,2015) the majority of patients believed that, signing of consent form, they thought, that the surgery wouldn't been performed without signing and minority thought they will destroy their relationship with their physician.

The Joint Commission, Division of Health Care Improvement, (2016) showed there are barriers which contributes to lack of understanding on the patients parts which include: lack of basic information on the informed consent, ineffective provider patient communication and lack of shared decision-making between patient and provider, lack of consideration of health

literacy of patients when developing informed consent communication forms and other materials and lack of consideration of cultural issues of patients when developing informed consent forms and other materials.

Most of the studies done on surgical patients knowledge and understanding for informed consent revealed limited knowledge and poor understanding, while in contrary, Mark & Spiro, (2000) indicated the majority of patients understood everything what the physician described concerning informed consent, while only a few requested more time to speak to their physicians.

2.2 SUMMARY

Informed consent implies that the person understands what is about to happen to him or her and consents to those actions. From the literature review, it became evident that the majority of the surgical patients' knowledge and understanding to informed consent for elective surgical intervention was insufficient or poor. Literature in this study displayed both negative and positive results nationally and internationally regarding the surgical patients' knowledge and understanding of informed consent. It also highlighted the importance of obtaining an informed consent for any procedure. The following chapter will cover the research methodology, the procedure and methods used for data collection and analysis.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In the previous chapter the literature review was presented. This chapter focuses on the research process and presents an overview of the methods used in the study namely, the research design, study population, sampling, research instrument, data collection process, data processing and data analysis. The purpose of this chapter to provide information on how this study was carried out. According to Brink, Van der Walt & Van Rensburg, (2012), the research methodology section informs the reader of what the researcher did to solve the research problem. The chapter concluded measures to ensure ethical standards that have been adhered to throughout the study to ensure scientific value.

3.2 RESEARCH DESIGN

According to Brink et al., (2012) research design refers to a set of logical steps taken by the researcher to answer a research question. It is a plan that shows the methods and procedures, used in a research project to which data was collected and utilised for desired information to be obtained. Furthermore it is an overall structure of a study to determine how a study population was sampled, measurements recollected and data analysed. A quantitative, descriptive, analytical study design was used in this study.

3.2.1 Quantitative design

De Vos, (2011) defined quantitative study as an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers and analysed with statistical procedures in order to determine whether the predictive generalisations of the theory holds

truth. In this study a quantitative design was used to determine the existing knowledge and understanding of surgical patients to informed consent for surgical interventions at the public training (W.C.H and I.K.H) hospitals operating rooms, because it focused on a moderately a small number of participant and numeric information which were analysed through statistical procedure.

3.2.2 Descriptive design

According to Brink et al., (2012) a quantitative descriptive study refers to a systematic, logical and empirical investigation of an observable phenomenon. The research study was descriptive as it described the surgical patients' knowledge and understanding to informed consent for surgical intervention in the two public training hospitals, (W.C.H and I.K.H) operating rooms. The researcher remain detached from the study by not influencing the study with own view.

3.2.3 Analytical design

An analytical study is well suited in understanding the cause-effect relationship and correlations that occur between variables (Austin, Baldwin, Li, & Waskett, 1999). The study was analytical as it sought to further analyse the association between the demographic variables, hospital factors and different hospital of admission on knowledge and understanding of the participants regarding informed consent process.

3.3 RESEARCH SETTING

This study was conducted in the operating rooms at Intermediate Katutura hospital and Windhoek Central Hospital. These are public training hospitals fully owned by the Namibian government. Intermediate hospital Katutura is a referral hospital, where the districts hospitals referred their patients, while Windhoek Central Hospital is the country's national hospital,

whereby the country's Intermediate and regional hospitals refer their patients for specialised surgical procedure and treatment.

3.4 STUDY POPULATION

The population is the entire group of persons or objects that is of interest to the researcher which met the criteria onto which the researcher wishes to investigate. The group should have a set of characteristic about which the researcher wishes to draw a conclusion (Brink et al., 2012). In this study, the population were the surgical patients for elective surgical interventions admitted at the public training hospitals operating room (W.C.H and IHK) in Windhoek. The study population consisted of all patients within the ages of 18 years and above, which were on the elective operation list for surgery. On average, there were 100 and 100 surgical patient's booked weekly at Intermediate Hospital Katutura and Windhoek Central Hospital respectively, from February 2018-March 2018. The interviews was done every Monday and Tuesday at Windhoek Central Hospital operating room and every Thursday and Friday at Intermediate Hospital Katutura operating room respectively.

3.5 SAMPLE AND SAMPLING METHOD

A sample is a part or fraction of a whole, or a subsequent of a larger set, selected by the researcher to participate in a research study. It consists of a selected group of elements or units of analysis from a defined population, provided it has the same characteristics as the population (Brink et al., 2012). The sample consisted of surgical patients from public training hospital operating room, (W.C.H and I.H.K). A sample size of 40 out of 100 population of surgical patients from the Intermediate hospital Katutura operating room and 40 out of 100 population of surgical patients from Windhoek Central hospital operating room who were on the elective operation list for surgery, were selected. Therefore the total sample size was 80, every third

surgical patient was included in the sample size (systematic sampling) with their informed consent form, whereby it was assessed through a structured questionnaire.

Brink et al., (2012) defines sampling as a process of selecting a sample from a population in order to obtain information regarding a phenomenon in a way that represents the population interest. A systematic random sampling was used. The researcher used a systematic random sampling because it was believe to be economical and practical for the study. Every third surgical patients on the elective surgery list were selected to respond to the questionnaires and was completed by the researcher during the study .The study was conducted at each hospital for two months to ensure the sample size was reached.

3.5.1 Inclusion Criteria

Timothy (2006) defined inclusion criteria as an evaluation for eligibility on the basis of relevance and acceptability and gave the researcher a set of inclusive standard to screen potential participants. Inclusion were crucial requirements for consideration which allowed the researcher to embrace the participants' responses. The inclusion criteria in this study: were patients from 18 years and above who were scheduled for elective surgery list.

3.5.2 Exclusion Criteria

Welman, Kruger, & Mitchell, (2008) exclusion criteria help the researcher eliminate candidates based on a specific set of requirements and ability. Exclusion criteria are basic features for consideration which allow the researcher to exclude the participants who did not have characteristics that the researcher was interested in, despite the fact that their inclusion would not have met the purpose of the study. Patients excluded in this study were patients for emergencies, all children schedule for elective surgery and all patients 18 years and above scheduled for ophthalmology surgery.

3.6 DATA COLLECTION

Data collection refers to the process of selecting subjects and gathering data from these subjects Grove et al., (2012).The actual steps collecting data are specific to each study and depend on the research design. In this study data was collected verbally through interview with structured questionnaire that was completed by the researcher.

3.6.1 Procedure for data collection

Data was collected by the researcher from the 80 patients who gave consent .The questionnaire that was developed in English was tested in a pilot study with 10 patients, at operating rooms of WCH and data was collected for 2 days. Data was collected over a period of 8weeks at the above mentioned hospitals during the actual data collection process. The researcher was collecting the data from every third patient, through a structured questionnaire in a quiet and safe environment. The researcher sought permission from the ward manager every morning and patient were recruited as they come from the ward into the operation rooms. The researcher introduced herself and the research to the patients and sought consent before data collection. Data was collected in the recovery room for privacy.

3.6.3 Research instrument for data collection

The data for this study was collected by using a structured questionnaire to assess patient's knowledge and understanding of informed consent for treatment. The questionnaires were in English, it was translated those who could not understand English. Data was collected during February 2018 to March 2018. The questionnaires had the following sections: Section A: demographic data, Section B: assessing knowledge and understanding to informed consent, Section C: ethical concept, Section D: legal concept, Section E: administrative concept. All questions were close ended and section B was on Likert scale.

3.6.4 Validity of data collection instrument

De Vos, (2011) explained that the validity is the degree to which an instrument measures what it intends to measure, given the context in which it was applied. Content validity refers to the degree to which instruments covers the scope and arrange of information that it sought, whereby it assessed all concepts under the study.

3.6.4.1 Content validity

Content validity refers to how well an instrument represents all the components of the variables to be measured (Brink, Van der Walt & Van Rensburg, 2016). Evidence for contend based validity of the instrument was obtained from the literature, and from content experts. The research tool was developed based on literature review of surgical patients' knowledge and understanding to informed consent for surgical intervention.

3.6.4.2 Face validity

Face validity refers to how well a research design offers a process that will facilitate data acquisition within a research agenda (Healy & Perry, 2000). In other words, it measures what it is supposed to measure. In this study the face validity of questionnaire was determined by doing a pilot study to verify whether the questions was clear. Face validity was achieved by structuring the research tool into separate sections namely: demographic data, knowledge and understanding, ethical concept and administrative concept (Devon, 2016). Researcher submitted the questionnaire to her supervisors, who evaluated the questions in relation to the objectives of the study. This study used face validity to ensure readability and clarity of content as suggested by Brink et al. (2016).

3.6.4.3 Construct validity

According to Polit & Beck (2008), construct validity measures the relationship between an instrument and related theory. A measure has construct validity if the set of items constituting it faithfully represents the set of aspects of a theoretical construct measured, and does not contain items which represent aspects not included in a theoretical construct. (Emory & Cooper, 1991). In this study, questions were well formatted to measure knowledge and understanding of the participants.

3.6.5 Reliability of the research instrument

Reliability according to Brink et al., (2012) refers to the accuracy, consistency and dependability of a research instrument as regarding measuring a variable, it also describes how far a utilised -tool, like questionnaire will lead to similar results in different situations . In order to ensure reliability of the data collection instrument the researcher pre-tested the questionnaires during a pilot study. Cronbach alpha test was conducted and a score of 0.63 was obtained and accepted as it was above the normal 0.6 cut-off point.

3.6.6 Data management

The researcher employed replicable data management principles to verify accuracy of data sources. Data management included construction of research questions, the research set-up, and the choice of method to be used and to ensure reference to sources studied was accurately documented. The quality of data collection, data input, data storage and data processing were guarded closely. All steps taken were properly reported and the execution was properly monitored. Raw research data were archived in such a way that they can be retrieved at a minimum expense in terms of time and effort.

3.6.6.1 Data entry, editing and handling

It is prerequisite for any researcher to make data entry and editing before data analysis. In this study, the researcher checked if every data file actually contained the necessary information before making them ready for coding and transfer to computer. The researcher edited the information by checking and adjusting the allocated information for consistency, omissions and legibility. Whenever errors were detected on the information, the researcher diagnosed, but did not change them and edited to make the information more complete, consistent, and readable. For missing data elements which were very small in number, values were assigned for that purpose. Afterwards, the researcher made a coding procedure and recorded in the database all the respondents' responses for each question to facilitate computerized data analysis. The researcher then made sure that the SPSS, that was used to clean the data was compatible with the reading languages from the data base. The data was then stored and shared with the statistician for assistance in the analysis.

3.6.6.2 Data storage and disposition

For safety and security reason, the study data were stored in the researcher computer and in hard- drive both of which were password protected. The researcher opted to have a separate memory stick from which she was working on to minimise the chances of losing the data. The researcher kept on adjusting the information on the computer and the hard-drive. Password protected due to proprietary, ethical, or privacy consideration. The researcher kept the data files in such a way they could be properly tracked the information whether the researcher needed them. The paper filled questionnaires were safely stored in a lockable file cabinet in the researcher office. The researcher will retain the data at least for five years before they may be deleted

3.7 DATA ANALYSIS

Data was analysed quantitatively using SPSS version 24. Quantitative data analysis is a mathematical and statistical methods, which quantifies objectives of the study (Brink et al., 2012). The researcher carefully checked the completed questionnaires on a daily basis for consistency, accuracy, and completeness of data collected. The questionnaires were coded before entry. Brink et al., (2012) defined coding as an analytical process in which data, in both quantitative and qualitative form are categorised to facilitate analysis. Codes was used to maintained confidentiality, anonymity, to transform the data into a form suitable for computer-aided analysis and preparing data for computer processing with statistical software. After data entry was completed, researcher checked all records with the original data. The data entry included checking and editing the collected data and eventually cleaning, coding systematically re-organised raw data into a computer readable format. Frequency distribution tables, descriptive statistics and measures of association between variables were computed.

3.8 PILOT STUDY

A pilot study refers to a preliminary small scale study that was conducted by the researcher prior to the main study Brink et al., (2012). A pilot study was conducted in order to identify unforeseen problems and to assess the feasibility of the study. The pilot study was conducted in the same public training hospital to determine whether the recommended study was feasible, refined research instrument and diagnose problem with the design of the study. A small group of 10 patients were selected to participate in the pilot study, however patients who participated in the pilot study did not participate in the main study. Data was collected for 2 days for pilot study, at W.C.H. No challenges, gaps, and flaws in completing the questionnaire thus no adjustments were made to the research tool after the pilot study. The main study did not include data collected during the pilot study.

3.9 ETHICAL CONSIDERATIONS

Research ethics are principles, rules, and regulations that all researchers should follow and abide by while conducting research. Ethical considerations refers to codes of conduct that should direct the researchers' actions and ensure that all actions are in the best interest of the study participants (Parahoo, 2006). Four Ethical principles, namely, principle of respect, beneficence, justice and autonomy were considered in this study (Parahoo 2006).

3.9.1 Principle of respect

Health Professions Councils of Namibia (HPCN) (2010) defined respect as to respect patients as, and acknowledge their intrinsic equal worth, dignity and sense of value. The ethical principle of respect were adhere to during the study. Respect is based on the human rights that needs to be protected in research, namely, maintaining confidentiality no names was written on the questionnaire, privacy were assured by completing the questionnaire individually at a time, respecting self-determining of the respondents by voluntarily to participate and respondents were informed to refuse or to withdraw from the study any time, to be protected from harm and discomfort and scientific integrity and respecting patient voluntary participation in the study (Brink et al., 2012). In this research all subjects were reassured that the information gave would be regarded as confidential, whereby the researcher treated personal or private information as confidential.

3.9.2 Principle of beneficence

Brink et al, (2012) explained the principle of beneficence entails a means of securing the well-being of respondent who has the write to be protected from discomfort and harm while, the HPCN, (2010) defined it as to act in the best interest of patients even when there are conflicts with the health professionals own interest. The researcher have an obligation to protect the

respondents against any harm that can result from their participation in a study. An option was provided, namely to give an indication if they did not feel comfortable to answer certain questions in an effort to alleviate feelings of discomfort. The researcher took an active role in promoting good and preventing harm throughout the research study. The researcher protected the respondent from discomfort and harm by ensuring that the benefits of the study outweigh the risks (Brink et al., 2012). The benefit of the study was explained to the respondents and outlined to them.

3.9.3 Principle of justice

The fundamental principle of justice entails, treatment of all respondents fair and impartial (Grove et al., 2012). The researcher maintained this principle of justice at all times by fairly treated all respondents equally without discrimination by giving all respondents equal chance to participate in the study. Thus, all those patients who met the inclusion criteria and who indicated their willingness to partake in the study were granted the chance to participate in the study.

3.9.4. Anonymity

Health Professions Councils of Namibia (2010) defined the principle of anonymity as to honour patient rights to self-determination or to make, living their lives by their own beliefs, values and preferences own informed choice. Anonymity was protected by making it impossible to link the specific data to a specific person. No patient names were collected during data collection, patients were assigned codes and these were used during data analysis.

3.9.5 Permission to conduct research:

Approval to conduct the study were obtained from the UNAM (University of Namibia) Postgraduate Studies Committee, the Ministry of Health and Social Services Research Ethical

Committee and Medical Superintendents and operating room Nurse Managers of both public hospitals. Further the written informed consent were given to the respondents prior to interview.

3.10 SUMMARY

This chapter discussed the research methodology and design in the study. It focused on the research design, research methods, data collection method, reliability and validity of data collection instrument, data management and analysis, study population and sampling. Quantitative designs used and a systematic random sampling was used. A pilot study was done, to determine the effectiveness of an intervention, as a result sudden changes and the necessary modifications were done, before the actual study took place. Data was collected through a face to face interview and a structured questionnaire. The study was conducted by adhering to ethical principles in the entire data collection, analysis and report writing process. Data analysis was carried out by using SPSS and statistically presented in graphs and tables.

Chapter 4 will present and discuss the research findings.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS OF THE RESULT

4.1 INTRODUCTION

This chapter focused on the presentation of the research results of data analysed, discussed meanings and implications thereof. The results are based on data collected by means of a structured questionnaire, to assess the surgical patients' knowledge and understanding to informed consent for elective surgical intervention in operating rooms at the public hospitals in Windhoek. Descriptive statistics were applied in frequency and percentage used. Results analysed and reflected in tables and figures.

4.2 OVERVIEW OF COLLECTED DATA AND DATA ANALYSIS PROCESS

The results of the study are based on data collected by means of a structured questionnaire. Data were analysed using SPSS (Statistical Package for Social Science) with the help of a statistician questionnaire items were on a three point Likert scale and were mainly analysed using frequencies and percentages for descriptive studies.

4.3 RESPONSE RATE

The response rate in this study was 100% (n=80 received) whereby 80 questionnaire were distributed, all 80 were completed. A total of 40 (50 %) were from the Intermediate Hospital Katutura while 40 (50 %) were from Windhoek Central Hospital.

4.4 RESULTS OF EACH OBJECTIVE

4.4.1 Objective 1

4.4.1.1 Demographic Data

The data presented are demographic which included: Gender, age, employment status, educational level and type of elective surgery which the participants had consented for.

Gender of participants

During the process of data analysing it has been noted the total participants, 40 (50 %) were male and 40 (50 %) were females.

Age of participants

The results indicated that the majority of the participants 23 (28.7%) were between the age of 18 - 30 years and 31 - 45 years respectively. Table 4. 1 illustrate the age of the participants in more detail.

Table 4.1 Age distribution of participants

Participant's age	Frequency	Percent %
18-30	23	28.7
31-45	23	28.7
46-55	19	23.8
>55	15	18.8
Total	80	100.0

Employment status of participants

The results of employment status, indicated 39 (48.2%) of the participants were employed and 41 (51.8%) were unemployment.

Educational Level of participants

A difference in the educational level of the participants can be noted in figure 4.1 below. The majority had secondary level of education.

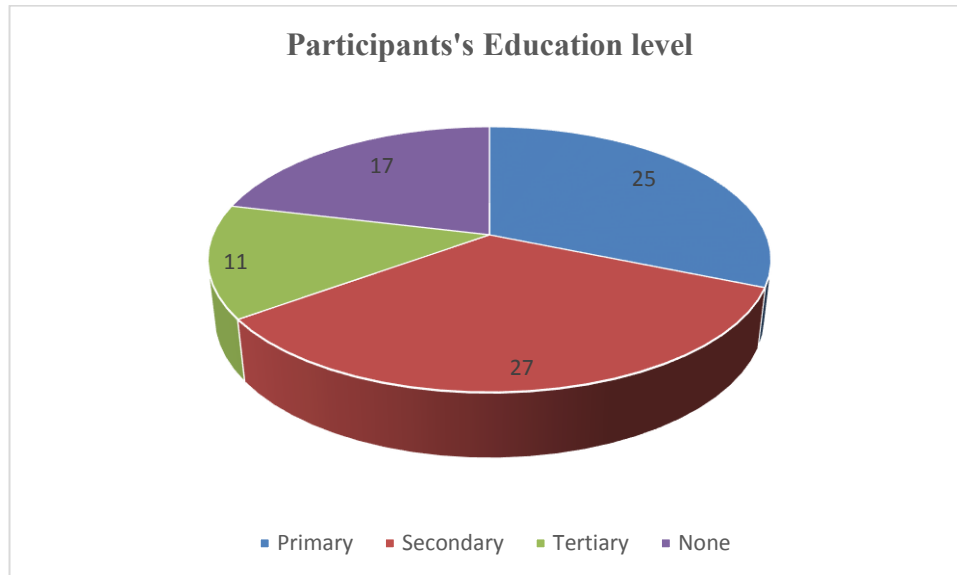


Figure 4.1: Education level

The results of this study illustrates most of the participants in this study had different educational levels, with the majority 27 (33.8%) having secondary level education, followed by 25 (31.3%) with primary education. The rest of the results are shown in Figure 4. 1.

Informed consent on type of elective surgical intervention

Data shown that most of the participants in the study were given informed consent for general surgery with 31.3% followed by orthopaedic surgery with 30%. The rest were referred for other surgical procedures as shown below in Figure 4. 2.

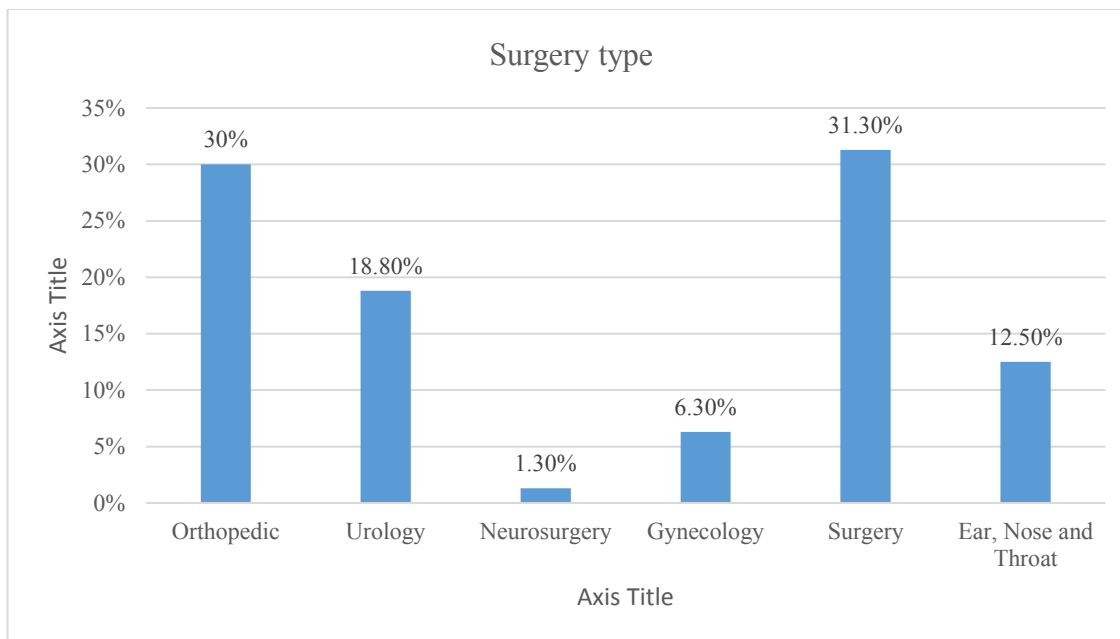


Figure 4.2: Overview of informed consent to different type of elective surgical intervention

A total of 56 (70%) of the participants gave their consent to surgery for the first time while 24 (30%) had some surgery before. The result of the study indicated all the participants indicated that they had signed the informed consent form in advance before the elective surgical intervention was performed. Participants indicated that they were admitted for 1-2 days (30%), 3-4 days (45%) and over 5 days (25%) in the surgical ward which includes the days of pre operation and post operation. It was evident by the data analysed that the informed consent was explained by the various staff members as follow, 46 (57.5%) indicated the doctor, 32 (40%) indicated the registered nurse and only 2 (2.5%) indicated the enrolled nurse.

4.4.1.2 Knowledge and understanding of informed consent

For general aspects the respondents were given opportunity to rate eight (8) statements on general aspects of informed consent using a three point Likert scale as illustrated in Table 4.2 below. The majority of the participants reported as follows , questions were not clarified during

the consent process was 77.5%, they did not know the function of the informed consent was 71.3% and information was not clear and simple during the process was 68.8%.

Table 4.2: Response on general aspects regarding informed consent

Statement	Agree	Did not answer	Disagree
Item 1: I understand the information written on the informed consent form	43 (53.8%)	1(1.3%)	36(45.0%)
Item 2: The information was in Clear and simple language	25(31.3%)	0 (0.0%)	55(68.8%)
Item 3 : Questions were clarified	15(18.8%)	3(3.8%)	62(77.5%)
Item 4 : I felt ashamed to ask questions	25(31.3%)	31(38.8%)	24(30.0%)
Item 5: I gave consent voluntarily/freely without no external duress	54(67.5%)	1(1.3%)	25(31.3%)
Item 6: I felt afraid of the health professionals	25(31.3%)	32(40%)	23(28.7%)
Item 7: Only a signature was requested without explanation of the informed consent form	49(61.3%)	2(2.5%)	29(36.3%)
Item 8: I knew the function of the informed consent form	23(28.8%)	0(0.0%)	57(71.3%)

Item 1: Of the respondents, 43(53.8%) of them agree that they understood the information written on the form, while 36(45, 0%) disagreed and only 1(1.3%) did not answer.

Item 2: Of respondents 25(31.3%) agreed that the information was clear and in simple language while, 55(68.8%) disagreed.

Item 3: Of respondents 15 (18.8%) agreed that questions were clarified, 3(3.8%) did not answer, while 62(77.5%) disagreed.

Item 4: Of the respondents 25(31.3%) agreed that they felt ashamed to ask questions, 1(1.3%) did not answer and 25(31.3%) disagreed.

Item 5: Of the respondents 54(67.5%) agreed that they gave consent voluntarily/freely without no external duress, 1 (1.3%) did not answer, and 25 (31.3%) disagreed.

Item 6: Of the respondents 25(31.3%) agreed that they felt ashamed for health professionals,, 32(40%) did not answer and 23(28.7%) disagreed.

Item 7: Of the respondents 49(61.3%) agreed that only signature was requested without explanation of the informed consent form, 2 (2.5%) did not answer and 29(36.3%) disagreed.

Item 8: Of the respondents 23(28.8%) agreed that they knew the function of the informed consent form and while 57(71.3%) disagreed.

4.4.1.2.1 Ethical aspects

Participants were asked to respond to two questions regarding ethical aspect of the informed consent process. The responds are summarized in Table 4.3. It was noted with interest, the majority of participants (87.5%), reported that they did not receive the appropriate information regarding the nature, alternatives, risks and benefits of the proposed treatment.

Table 4.3: Participants response on ethical aspect

Question	Yes	Unsure	No
Item 1: Did you voluntarily \freely make own decision regarding treatment?	60 (75.0%)	15 (18.8%)	5 (6.3%)
Item 2: Have you received appropriate information about the nature, alternatives risks and benefit of the proposed treatment?	6 (7.5%)	4 (5.0%)	70 (87.5%)

Item 1: The majority of the respondents 60 (75.0%) answered yes on whether they voluntarily /freely make their own decision regarding treatment, 15 (18.8%) were unsure and 5(6.3%) indicated no, meaning they did not make a voluntary/free decision.

Item 2: Of the respondents 6 (7.5%) answered yes on whether they have received appropriate information about the nature, alternatives risks, and benefits of the proposed treatment, 4(5.0%) were unsure and 70(87.5%) answered no.

4.4.1.2.2 Legal aspects

Participants were asked whether they know that no procedure can be done on them without a signed informed consent, except in case of emergency and 21 (26.2%) indicated that they know, 42 (52.5%) did not know while 17 (21.3%) were not sure.

4.4.1.2.3 Administrative aspects

On administrative aspects, the researcher used three questions on a questionnaire regarding the completeness and recording of information on the informed consent form and the results are indicated in Table 4.4. A significant 29 (36.3%) of the informed consent forms were not recorded and completed correctly.

Table 4.4: Participants response to administrative aspects of the informed consent

Question	Yes	No
Item 1: Informed consent form recorded correctly and completely?	51 (63.7%)	29(36.3%)
Item 2: Informed consent signed by patient?	78(97.5%)	2(2.5%)
Item 3: Is there witness’s signature s on the informed consent form?	75 (93.8%)	5(6.3%)

Item 1: The majority of respondents 51(63.7%) answered yes on whether the informed consent form was recorded correctly and completely and only 29(36. %3) indicated no.

Item 2: Regarding whether the informed consent form was signed by patients, 78(97.5%) indicated yes while 2 (2.5%) indicated no.

Item 3: Of the respondents 75 (93.8%) answered yes on whether there was witnesses signature on the informed consent form while 5(6.3%) answered no.

**4.4.2 Association between hospitals related variables and the participant’s responses.
(Objective 2)**

Participants Reponses on questions and statement related to hospital function and responsibilities during the informed consent process (Objective 2) were analysed for the two hospitals and results are in Table 4.5. Analysis was done to determine if there was association between the patients’ responses and the hospital where they were admitted for surgical operation.

Table 4.5: Association between participant’s responses and hospitals of admissions

Statement/question	Hospital				p-value
	IHK		WCH		
	Agree	Disagree	Agree	Disagree	
Item 1: I understand the information written on the informed consent form	16 (40.0%)	24 (60.0%)	27 (67.5%)	12 (32.5%)	0.020
Item 2.: The information was in clear and simple language	8 (20.0%)	32 (80.0%)	17 (42.5%)	23 (57.5%)	0.530
Item 3: Questions were clarified	4 (10.0%)	36 (90.0%)	11 (27.5)	26 (72.5%)	0.019
Item 4: I gave consent voluntarily /freely without no external duress	22 (55.0%)	17 (45.0%)	32 (80.0%)	8 (20.0%)	0.048
Item 5: Only a signature was requested without explanation of the informed consent form	30 (75.0%)	9 (25.0%)	19 (48.0%)	20 (52.0%)	0.036

Item 1: Of respondents, 16 (40.0%) agreed on whether they have understood the information written on the informed consent form and 24(60.0%) disagreed from IHK, while from WCH 27(67.5%) agreed and 12 (32.5) disagreed.

Item 2: On whether the information was in a clear and in simple language 8 (20%) agreed and 32 (80%) disagreed from IHK while 17(42.5%) agreed and 23(57.5%) disagreed. from WCH

Item 3: Regarding whether the questions were clarified 8 (20%) agreed and 32 (80 %). disagreed from IHK whilst 11 (27.5%) agreed and 23 (57.5%) disagreed from WCH.

Item 4: On whether they gave consent voluntarily/freely without no external duress 22 (55.0%) agreed and 17(45.0%) disagreed from IHK, while from WCH 32(80.0%) agreed and 8 (20.0%) disagreed.

Item 5: Of the respondents from IHK whether only signature were requested without explanation on informed consent form 30 (75.0%) agreed and 9(25.0%), disagreed while from WCH 19 (48.0%) agreed and 20 (52.0%) disagreed.

Significant differences in association were noted between Intermediate Hospital Katutura and Windhoek Central Hospital regarding how participants understand the information (p=0.020), whether questions were clarified (p=0.019), whether consent was voluntary (p=0.048) and where signature was asked for without explanation (p=0.036).

4.4.2.1 Overall scores for knowledge and understanding

All question under general aspects of informed consent were scored using a scale of 1=correct, 2=not sure and 3=incorrect. The individual scores were summed up to give a total score of the knowledge and understanding of general aspects of each participant regarding the informed consent process. Total scores were rate using the following scale; 8 – 11 Good, 12 – 17 Average, 18 – 24 Poor. The results are given in Table 4. 6. The majority of participates, (58.8%) showed a poor level of knowledge on the general aspects of the informed consent process.

Table 4.6: Level of understanding of general aspects of consent

Level	Frequency	Percent	Cumulative Percent
Good level of Understanding	19	23.8	23.8
Average level of Understanding	14	17.5	41.3
Poor level of Understanding	47	58.8	100.0
Total	80	100.0	

All question in section B of the questionnaire were scored using a scale of 1=correct, 2=not sure and 3=incorrect. The individual scores were summed up to give a total score of the knowledge and understanding of each participant regarding the informed consent process. Total scores were rate using the following scale; 14 – 22 Good, 23 – 32 Average, 33 – 42 Poor. The

results are given in Table 4.7. The majority (82.5%) revealed average to good level of knowledge and understanding of the informed consent.

Table 4.7: Overall level of knowledge and understanding of informed consent

Level	Frequency	Percent	Cumulative Percent
Good level of Knowledge and Understanding	20	25.0	25.0
Average level of Knowledge and Understanding	46	57.5	82.5
Poor level of Knowledge and Understanding	14	17.5	100.0
Total	80	100.0	

The overall level of knowledge and understanding of participants was analysed for association with demographic and other characteristics of the sample. These association were tested for significance using Chi squared test at 0.05 significance level. Results are separate for patient related and hospital related characteristic and presented, together with the p-values, in Table 4.8 and Table 4.9 respectively.

4.4.3 Association of Knowledge and understanding with patient demographic characteristics (Objective 3)

Participants’ demographic characteristics were analysed for association with the overall level of knowledge and understanding regarding informed consent process at the two training hospitals in Khomas region Namibia. The demographic characteristics include gender, age, education level, employment status and history of previous surgery. The results are shown in Table 4.8

Table 4.8: Association of Knowledge and understanding with patient demographic characteristics

Patient characteristics		Overall level of Knowledge and understanding on informed consent			p value
		GOOD	AVERAGE	POOR	
Gender	Male	10 (50.0%)	23 (50.0%)	08 (57.1%)	0.889
	Female	10 (50.0%)	23 (50.0%)	06 (42.9%)	
Age	18-30	08 (40.0%)	13 (28.3%)	02 (14.3%)	0.201
	31-45	04 (20.0%)	17 (37.0%)	02 (14.3%)	
	46-55	04 (20.0%)	10 (21.7%)	05 (35.7%)	
	>55	04 (20.0%)	06 (13.0%)	05 (35.7%)	
Education level	None	03 (15.0%)	10 (21.7%)	04 (28.6%)	0.000
	Primary	03 (15.0%)	15 (32.6%)	07 (50.0%)	
	Secondary	05 (25.0%)	19 (41.3%)	03 (21.4%)	
	Tertiary	09 (45.0%)	02 (4.3%)	00 (0.0%)	
Employment status	Yes	14 (70.0%)	19 (41.3%)	06 (42.9%)	0.089
	No	06 (30.0%)	27 (58.7%)	08 (57.1%)	
Previous surgery	Yes	04 (20.0%)	18 (39.1%)	22 (64.7%)	0.109
	No	16 (80.0%)	28 (60.9%)	12 (35.3%)	

Gender: Regarding gender, respondents' overall level of knowledge and understanding was equal for good (50%) and average (50%) while for poor 57.1% were males and 42.9% were females. No significant association was seen between gender and overall level knowledge and understanding on informed consent (p=0.889).

Age: Respondents age showed variation with overall level of knowledge and understanding as follows; 18-30, 40% were good, 28.3% were average while only 14.3% respondents were poor; 31-45, 20% were good, 37% were average while 14.3% respondents were poor; 46-55, 20% were good, 21.7% were average while 35.7% respondents were poor; 55 and above, 20% were good, 13% were average while majority 35.7% respondents were poor. No significant

association was seen between age and overall level knowledge and understanding on informed consent ($p=0.201$).

Education level: On the association between respondents' education level and overall level of knowledge there was a significant association noted with a p value of 0.000. For those with no education; 15% were good, 21.7% were average while majority 28.6% were poor. For those with primary education, 15% were good, 32.6% were average while majority 50% were poor. Those with secondary education, 25% were good, 41.2% were average and the rest 21.4% were poor. For those with tertiary education, the majority 45% were good, 4.3% were average and none were poor.

Regarding employment status, 70% of those employed indicated good, 41.3% showed average while 42.9% indicated poor overall level of knowledge and understanding. For unemployed respondents 30% were good, with the majority 58.7% average and 57.1% indicated poor overall level of knowledge and understanding. No significant association was seen between employment status and overall level of knowledge and understanding ($p=0.089$).

Previous surgery: Of those respondents with previous surgery, 20% were good, 39.1% were average while the majority 64.7% were poor in overall level of knowledge and understanding. Respondents with no previous surgery, the majority 80% were good, 60.9% indicated average while 35, 3% were poor on overall level of knowledge and understanding. No significant association was seen between previous surgery and overall level of knowledge and understanding ($p=0.109$).

4.4.4 Association of knowledge and understanding with hospital related characteristics

(Objective 4)

Participants' knowledge and understanding was analysed for association with hospital related characteristics such as duration of admission, staff who obtained the informed consent and type of surgery to be conducted. Analysis was done comparing the outcomes between the two hospitals as shown below.

4.4.4.1 Association between duration in hospital and knowledge and understanding of informed consent.

Participant's duration in hospital before the surgical operation was analysed to determine its association with the knowledge and understanding regarding informed consent between the two hospitals. Participants were admitted for 1-2days, 3-4days and 5 and above days. The results are shown in table 4.9

Table 4.9: Association between duration in hospital and knowledge and understanding of informed consent.

		Overall level of Knowledge and understanding on informed consent			p value
		GOOD	AVERAGE	POOR	
Duration in hospital					
IHK	1-2 days	3 (75.0%)	02 (7.4%)	01 (11.1%)	0.010
	3-4 days	01 (25.0%)	10 (37.05%)	04 (44.4%)	
	> 5 days	00 (0.0%)	15 (55.6%)	04 (44.4%)	
WCH	1-2 days	08 (57.1%)	10 (45.5%)	00 (0.0%)	0.280
	3-4 days	06 (42.9%)	11 (50.0%)	04 (44.4%)	
	> 5 days	00 (0.0%)	01 (4.5%)	00 (0.0%)	
Total		18	49	13	0.004

Duration of hospital: Of respondents at IHK admitted for day 1-2, the majority of 75% were good, 7.5% were average while 11.1% respondents were poor; those admitted for 3-4 days, 25% were good, 37.5% were average and the majority 44.4% were poor; those admitted for 5 and more days, none was good, the majority 55.6% were average and 44.4% respondents were poorly regarding overall level of knowledge and understanding on informed consent. Of respondents at WCH admitted for 1-2 days, 57.1% were good and 45.55% were average and none were poor, those admitted for 3-4 days, 42.9% were good, 50% were average and 44.4% were poor, while those admitted for 5 and more days none were either good or poor and only 4.5% were average regarding overall level of knowledge and understanding on informed consent. The number of days of admission in the hospital was significantly associated with the level of knowledge and understanding on informed consent ($p=0.034$).

4.4.4.2 Association between staff who gave the explanation and knowledge and understanding of informed consent

The healthcare workers who explained the informed consent were analysed to determine the association with the knowledge and understanding regarding informed consent between the two hospitals. Healthcare workers who explained the consent were doctors, registered nurses and enrolled nurses. The results are shown in table 4.10

Table 4.10: Association between staff who gave the explanation and knowledge and understanding of informed consent.

		Overall level of Knowledge and understanding on informed consent			p value
		GOOD	AVERAGE	POOR	
Staff who gave explanation					
IHK	Doctor	4 (100%)	16 (59.3%)	05 (55.6%)	0.190
	R. Nurse	00 (0.0%)	11 (40.7%)	03 (33.3%)	
	E. Nurse	00 (0.0%)	00 (0.0%)	01 (11.1%)	
WCH	Doctor	11 (78.6%)	10 (45.5%)	00 (0.0%)	0.017
	R. Nurse	02 (14.3%)	12 (54.5%)	04 (100%)	
	E. Nurse	01 (7.1%)	00 (0.0%)	00 (0.0%)	
Total		18	49	13	0.023

Staff who gave explanation at IHK; for those who were good, 100% were doctors and none were nurses, for those who were average, 59.3% were doctors, 40.7% were registered nurses and none were enrolled nurses. For those who were poor, 55.6% were doctors, 33.3% were registered nurses and 11.1% were enrolled nurses. No significant association between staff who explained informed consent and overall level of knowledge and understanding was seen at IHK.

For staff who gave explanation at WCH; for those who were good, 78.6% were doctors 14.3% were registered nurses and 7.1% were enrolled nurses, for those who were average, 45.5% were doctors, 54.5% were registered nurses and none were enrolled nurses. For those who were poor, none were doctors or enrolled nurses and all 100% were registered nurses. There was significant association between staff who explained informed consent and overall level of knowledge and understanding at WCH (p=0.017).

4.4.4.3 Association between type of surgery to be done and knowledge and understanding of informed consent

The type of surgical procedure to be done was analysed to determine its association with the knowledge and understanding regarding informed consent between the two hospitals. Participants were referred for orthopaedic, urology, neurosurgery, gynaecology, general surgery and ENT procedures. The results are shown in Table 11.

Table 4.11: Association between type of surgery to be done and knowledge and understanding of informed consent.

Type of surgery		Overall level of Knowledge and understanding on informed consent			p value
		GOOD	AVERAGE	POOR	
IHK	Orthopaedic	00 (0.0%)	13 (48.1%)	05 (55.6%)	0.000
	Urology	01 (25%)	00 (0.0%)	00 (0.0%)	
	Neurosurgery	00 (0.0%)	00 (0.0%)	00 (0.0%)	
	Gynaecology	00 (0.0%)	01 (3.7%)	00 (0.0%)	
	Surgery	00 (0.0%)	12 (44.4%)	04 (44.4%)	
	ENT	03 (75%)	01 (3.7%)	00 (0.0%)	
WCH	Orthopaedic	03 (21.4%)	02 (9.1%)	01 (25%)	0.649
	Urology	03 (21.4%)	09 (40.9%)	02 (50%)	
	Neurosurgery	00 (0.0%)	01 (4.5%)	00 (0.0%)	
	Gynaecology	02 (14.3%)	02 (9.1%)	00 (0.0%)	
	Surgery	05 (35.7%)	03 (13.6%)	01 (25%)	
	ENT	01 (7.1%)	05 (22.7%)	00 (0.0%)	
Total		18	49	13	0.647

Type of surgery: Of respondents from IHK for orthopaedic, 0.0% were good, 48.1% were average while majority of (55.6%) respondents were poor; for urology 25% were good, 0.0% were average and poor; for neurosurgery no patients were referred at IHK, for gynaecology

0.0% were good and poor while 3.7% were average; for general surgery 0.0% were good, 44.4% were average and 44.4% were poor; lastly for ENT 75% were good, 3.7% were average and 0.0% were poor regarding overall level of knowledge understanding on informed consent. There was significant association between type of surgery and overall level of knowledge and understanding at IHK ($p=0.000$).

Type of surgery: Of respondents from WCH for orthopaedic, 21.4% were good, 9.1% were average while majority of (25%) respondents were poor; for urology 21.4% were good, 40.9% were average and 50% were poor; for neurosurgery 0.0% were good, 4.55 were average and 0.0% were poor; for gynaecology 14.3% were good, 9.1% were average and 0.0% were poor; for general surgery 35.7% were good, 13.6% were average and 25% were poor; lastly for ENT 7.1% were good, 22.7% were average and 0.0% were poor regarding overall level of knowledge understanding on informed consent. There was no significant association between type of surgery and overall level of knowledge and their understanding at WCH ($p=0.649$).

4.5 SUMMARY

The results of the study revealed positive and negative responses related to the assessment of surgical patient knowledge and their understanding to informed consent for elective surgical intervention in operating rooms was conducted among 80 respondents at Windhoek Central Hospital and Intermediate Hospital Katutura, Khomas Region, Namibia. The results were analysed for each objective and the response rate was 100%. The results showed that surgical patients knowledge and their understanding of informed consent for elective surgical interventions in operating room between (W.C.H and I.H.K), that W.C.H patient's knowledge and understanding was better than of I.H.K comparing the results.

The demographic data analysed were based on that was discussed were gender, age, hospital, surgery type, informed consent signed, duration of admission, staff members who explained

the inform consent process to the patient, education level, employment and previous surgery. It was noted with interest the findings shown the age of the majority of respondents was between 18-30 years.

The next chapter deals with the discussions, conclusions, limitations and recommendations of the study

CHAPTER 5

DISCUSSION, CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

5.1 INTRODUCTION

The previous chapter outlined the results of this research. This chapter discusses the quantitative research findings and the results presented in chapter 4. It was expected that the analysis of the results displayed in the previous chapter would allow the researcher to gain a deeper understanding on the assessment of knowledge and their understanding to informed consent for surgical interventions at public training hospital Khomas region in Namibia. This chapter was in order to meet the three objectives listed in chapter 1. Discussions, conclusions, recommendations and limitations based on the analysis are also presented.

5.2 DISCUSSION

The discussions are largely based on the study objectives since the aim was to assess surgical patient's knowledge and their understanding to informed consent for elective surgical interventions in operating rooms at public training hospitals, Khomas Region. Eighty questionnaire were completed by the researcher and 100% response rate. Mbonero (2017) used an almost similar sample (102) in a similar study in Rwanda.

5.2.1 Discussion based on demographic characteristics

There was a slightly higher number of males in this study compared with females. This was also similar studies in Rwanda and Nigeria where the majority of participants were male (Mbonero 2017; Agu 2014). A study conducted by (Hammami, 2014) revealed, that females understand informed consent differently as information disclosure while males believe it enables patient self-decision making this results can be explained by the social role theory. The

majority of participants in the current study were aged below 45 years (57.4%). This is also similar to studies by Agu (2014) and Kalala (2011) where the majority of respondents were below 45 years.

Educational level is important as it goes hand in hand with understanding of informed consent. Only a few participants had tertiary education in this study with that majority having up to secondary level of education (86.4%). Similar findings were reported in a study conducted by Ochieng, (2015) where a few had tertiary education and the majority of participants had primary education. Tobias (2011) revealed that less educated patients are less well informed due to limited knowledge and low understanding regarding informed consent. Study done by Kalala, (2011) in contrast showed, that patient with proper education did not prove to have adequate understanding of the informed consent process.

Employment status tend to affect a person ability to find alternatives, if they are not comfortable with the recommended procedure. In this study a significant high proportion, (48.8%) were unemployed which is in contrast to a study by Agu (2014) and Mbonero (2017) where a relatively lower percentage of the participants were unemployed. Most patients in the current study were going for general surgery followed by orthopaedic surgery. A similar trend was also reported by Siddique (2010) where 34% and 17.9% of patients were referred for general surgery and orthopaedic surgery respectively. Mbonero (2017) also reported the same in Rwanda where 25.9% were for general surgery and 19.7% were orthopaedic surgery patients.

Most of the participants, (70%) were having surgery for the first time, while the rest had surgery before. Study done by Kalala, (2011) showed 48% had previous surgery which is in contrary with the current study. Those with previous surgery were expected to show a high level of understanding of the informed consent process, however results of this study were contrary to

this. Those with previous surgery generally showed a lower level of knowledge and understanding than those having surgery for the first time.

All the participants in the current study indicated that they signed the informed consent before surgery was done. Similar studies also reported a majority signing the informed consent before surgery was performed. However, signing of the consent form does not necessarily indicate understanding of the informed consent process. In South Africa, Kalala (2011) reported that only 27% of patients were able to say that the signing of the consent form for operation meant that they understood what will happen to them, while 24%, after signing the informed consent form, indicated that they did not know the importance and saw it as access to theatre. Another study by Olaboyede (2014) reported that the informed consent was signed by patient to enable compensation of the costs of the procedure. In agreement, another study by Sulaiman (2015) reported that the majority of patients believed that the surgery will not be performed if they did not sign the informed consent form and a few thought it will destroy their relationship with their physicians. In contrast study done by (Jafarey & Farooqui, 2005) in Pakistan regarding signing of informed consent, the duty is sometimes left for the family to decide or even leaving it up to the doctors to make the decision on what they think could be the right thing for the patient.

Duration of admission showed an inverse relation with knowledge of informed consent in this study. The study done by Kalala (2011) showed the a hospital stay of more than 12 hours for 91% of patients showed no particular advantage, instead it constitute a considerable missed opportunity not exploited by health care workers to educate patients awaiting surgery on informed consent process. While more admission days were expected to increase interaction between patients and health care professionals, enabling a better understanding of the informed consent process, results of this study were contrary to this. Those who had been admitted for

more days show lack of knowledge and understanding of the informed consent process compared with those admitted for 1 to 2 days a trend similar to Kalala's findings.

According to the scope of practice of nurses as stipulated by the Nurses Council, Namibia, nurses are supposed to play a facilitative role during the informed consent process and not the main role. In this study however, a significant 40% of the patients reported that nurses were responsible for the informed consent process. Doctors are well positioned to obtain informed consent for surgical procedures as they can be able to answer clearly patients concerns regarding the surgical procedures. In contrast to this is a study by Melendo et al, (2016) which reported that the majority of surgical patients received informed consent information from non-physician professionals such as nurses, secretaries and other unidentified professionals. Another study also revealed that, the majority of the patients got their explanations on the informed consent from the nursing sisters (Kalala, 2011).

5.2.2 Knowledge and their understanding to informed consent (Objective 1)

The majority of the participants (77.5%) reported that questions were not clarified during the consent process, findings similar to a study by Clegg-Lamprey et al., (2013). Some physicians have poor communication skills and, have little time, to speak to the patients or to allow patients to ask questions. A similar study by Judson, (2011) revealed that due to lack of time of the physicians', patient are unable to ask questions, and they didn't know the function of the informed consent.

In this study a majority reported not knowing the function of informed consent which contributed to their poor knowledge and understanding on the function of the informed consent process. Furthermore, a study done by Melando et al., (2014) showed similar results were the majority of patients considered the informed consent form to be important but did not know its function and were not provided with copy. A study done by Kalala (2011) showed that the

majority of patients declared that they do not know the importance and the function of informed consent even though they signed it, while others still understand the signing of it, as just a mere administrative practice, to allow the access to theatre, because information was not clear and simple during the process.

A similar study done by (Hammami, 2014) revealed, that females understand informed consent differently as information disclosure while males believe it enables patient self-decision making this results can be explained by the social role theory. Similar study done by Sign, (2013) showed the same trend of low understanding and poor knowledge on informed consent. The use of English on the informed consent, especially in public hospitals, has been reported to contribute to poor patient understanding thereof (Clegg –Lampsey et al., 2013). It was further reported that use of English presents a communication barrier which contribute to poor knowledge and understanding. Poor literacy levels have been reported as placing patients at risk for medical errors as reported by (Lavelle-Jones, 2003). Incidentally the researcher observed that communication was predominantly in English during the informed consent process and patients felt ashamed to ask questions as they were not fluent in English.

Regarding ethical concept interestingly, the majority of the respondents 70 (87.5%), reported that they did not receive the appropriate information regarding, alternatives, risks and benefits of the proposed treatment. This can contribute to poor knowledge and understanding of informed consent because the health professionals just command patients to give their signature without explaining the nature, risks, benefits and alternative on the operation they signed for. A study done by Siddiqui, et al.,(2013) revealed that the majority of patients did not know and were not interested in knowing the risk, nature, benefits or alternatives on operation to be performed. Another study however reported that, disclosing the risks and complications before surgery increases anxiety to the patients (Hammami, 2014).(Judson, 2011) revealed that patients are told to sign the informed consent form without any further explanation, which is

regarded as wrong and unethical when considering the three core elements of informed consent. While a study done by (Kalala, 2011) showed 61, 6% trusted their doctor to do the right thing and did not think detailed explanation was important.

According to Schenker, (2007) informed consent is ethical requirement of health care practitioners in their relationship with all patients and should not be viewed as a luxury. While Straus et al., (2007) in S.A. elaborated that informed consent is a process requiring a dialogue through communication, whereby physician have responsibility to ensure and educate their patients by knowing the regulations related to informed consent process. Ethical co values and standard for good practice according to HPCNA, 2011 must be considered and adhere to by all health professionals during informed consent process.

On legal aspects participants were asked whether they know that no procedure can be done on them without a signed informed consent, except in case of emergency. The results indicated a significant majority of 42 (52.5%) did not know this. Knowledge of one rights are important and enables then to fully exercise their autonomous right during the informed consent process. When patients are not aware of their rights and obligations, it opens room for abuse by health care professionals who at times became overly paternalistic in their interaction with the patients. The findings of Sulaiman et al ., (2015) showed majority of patients (75%) believed that consent form is a legal requirement, while 68.8% thought signing of consent meant waving their rights to any compensation. Study done by Akkad, Jackson, Woods, Kenyon, & Dickson, (2004) revealed that patients had limited understanding of legal implication of written informed consent and their views on the function and remit of the informed consent form.

Concerning administrative aspects, the results, revealed a significant 29 (36.3%) of the informed consent forms were not recorded and completed correctly, because abbreviations have been used on the consent forms and some information was missing. Surgical operation to be

performed were abbreviated such as D & C, which is supposed to be written correctly and completely as dilatation and curettage. The type of anaesthetic to be given to the patient was also abbreviated to, L.A or G.A to be given, which supposed to be written correctly and completely as Local anaesthetic or General anaesthetic to be given respectively. This results showed poor recording on the informed consent form, which is supposed to be avoided by health professionals, because these abbreviations may be misinterpreted and the informed consent form is a legal document where, no abbreviations can be used according to MoHSS (2011). Correct and complete recording of all health related documents is legally and ethically required. Correct documentation is one of the vital ethical principle in health care. According to the current study a majority of forms were incomplete with missing information such as age and ward of referral. Guidelines on the importance of recordkeeping according to HPCNA (2011) must be adhere to at all times to prevent any legal suits against the health professionals. According to NMC, (2005) good practice in recordkeeping can help to protect welfare of patients and ensuring high standards of patient care and enhance communication between the health care professionals. Taylor (2003) also reported that, poor record keeping can negatively affect patient care and result in clinical negligence claim.

5.2.3 Overall level of knowledge and their understanding and their differences between hospitals (Objective 2)

In the current study, the majority of participants showed a poor level of knowledge regarding general aspects of the informed consent process. Only 41.3% showed average to good level of knowledge on these aspects. The general aspects are elements that are expected to be known by a majority of patients as they are regarded as non-complex issues relating to the informed consent process. When all the questions were summed up, the level of knowledge and understanding of the participant showed a significant increase and improvement. A majority, 82.5% showed average to good level of knowledge and understanding of the informed consent

process. However, 17.5% still showed a poor level of understanding on informed consent aspects and this can be worrisome as the process is supposed to be explained and clarified on all the elements thereof.

Similar study conducted by Clegg-Lampsey et al., (2005) observed that possible explanation for poor understanding could be that consenting medical staff had less communication skills, did not have proper knowledge or experience or did not make time to speak properly to patients. It is important to realise that for informed consent to be valid, the three critical elements, (information, voluntariness and competence) should be satisfied fully. The results generally showed poor compliancy with these elements by healthcare professionals which might lead to litigation cases by patients. It is important and crucial that healthcare professionals carryout their duties in accordance with the stipulations of the scope of practice as well as expectations professionally, as stated by Clegg-Lampsey et al., (2005).

The study done by Kalala, (2011) generally come to the conclusion that it is very difficult to evaluate patients understanding of the informed consent process and this is worsening by the lack or poor understanding of English language as informed consent were only in English in a hospital where 75 % of patients got their procedure further explained in their mother tongue.

Over all, the study done by (Kalala, et al., 2011) revealed poor general understanding of informed consent. This study also found similar results on the meaning attached to signing of consent form for operation. Similarly a study by Minnie's, (2008) acknowledged that there were difficulties in measuring understanding of informed consent process. These difficulties were encountered also in this study when trying to determine ways of assessing appropriate understanding. The notion of understanding is not easy to evaluate according to Minnie's, (2008).

Significant differences were noted between Intermediate Hospital Katutura and Windhoek Central Hospital regarding how participants understand the information ($p=0.020$), whether questions were clarified ($p=0.019$), whether consent was voluntary ($p=0.048$) and where signature was asked for without explanation ($p=0.036$). The process of informed consent should be standardised between the two state hospitals to ensure maximum benefits to the patients.

5.2.4 Association of demographic and hospital characteristics and knowledge and their understanding of informed consent (objective 3 and 4)

No difference was seen in levels of knowledge and understanding between males and females in this study. Differences were noted between participants aged 18-30 years and the rest of the ages, those employed and those not, as well as those who had previous surgery and those who did not. However, these differences were not significant. Only the educational level of the participants was significantly associated with knowledge and understanding of informed consent process ($p=0.000$). This reveals that the more educated an individual is, the more they are likely to understand the whole informed consent process. This is also true as the whole process is conducted in English most of the times and sometimes it is difficult to translate some of the medical terminologies into local languages. A study conducted by Verastigui, (2006) also made same observation of lower level of understanding on informed consent among older persons and those with fewer years of education, but this was in contrast with a study by Kalala (2011) which did not find correlation between understanding of informed consent process and age ($P=0.289$).

The current study findings were consistent with results by Mbonera, (2017) which revealed no significant association between knowledge and age, gender and surgery type, furthermore concluded the relationship between patients knowledge and understanding towards informed consent was established whereby as the patients with high level of education had a positive perception towards informed consent and understood quickly information provided during

informed consent process. According to (Mbonero, 2017), enough time should be provided to lowly educated patients when obtaining the informed consent and their comprehension should be assessed. He further concluded that there were significant weak positive correlation between patients knowledge and perception towards informed consent for surgical procedures ($r=.487$), ($p=.00$) meaning that as patients level of knowledge increases their perception also increases towards informed consent for surgical procedures.

A similar study by Agu, (2014) also reported that a greater portion of the more educated respondents understood that it is their right to know all risks, benefits, hazards and alternatives of a procedure to enable them to take a decision than the less educated respondents. Similar findings were also reported by Sigh et al. (2013) who stated that level of understanding of informed consent was significantly better in those who had higher education. Another study done by Falagas et al., (2011), noted that although the majority of patients felt that the amount of information received was adequate, the actual understanding was low with only 28, 6% of patient's responding correctly to all nine questionnaire items.

5.3 CONCLUSION

The study revealed that knowledge and their understanding regarding informed consent process was average to good for the majority of the patients going for elective surgical procedures. The majority of patients reported that they did not receive enough information on risks, benefits and alternatives to the surgical procedure and that they were only asked to sign the informed consent form without explanation.

The level of education of the participants was shown to significantly affect the knowledge and their understanding of the informed consent process. Other demographic characteristics revealed differences but these were not significant.

Significant differences were noted in the understanding of the process, clarity of the information as well as regarding practice of seeking the signature only between the two state hospitals. However overall, the level of knowledge and understanding was not significantly different between the two state hospitals. Patient duration in the hospital was also found to affect patients' level of knowledge and their understanding regarding the informed consent process.

Communication and language used during the informed consent process was not assessed in this study but incidentally the researcher witnessed interactions that showed barriers in communication due to language may exist and can be affecting the process.

The study also revealed incorrect and incomplete recordings on the informed consent form which is regarded as illegal, unethical and an act of misconduct because the form is regarded as a legal document.

5.4 RECOMMENDATIONS

The recommendations are based on functions of nursing: Clinical practice, Research, Administration and education.

5.4.1. Clinical Practice

Health professionals should ensure that informed consent process take place adequately and patient has enough knowledge and understanding to make a decision regarding the operation to be performed before they sign the informed consent.

Health care professionals must improve on explanation on risks, benefits, complications and alternatives of operation to be performed and must allow patients to ask questions, before they let patients to signs. This will enhance and improve the patients knowledge and understanding

on the informed consent form function, process and the signing thereof. Better communication mechanisms should be put in place improve the effectiveness of the process.

5.4.2 Research

There is a need for further local intervention studies on informed consent process to highlight the patient role in decision making regarding surgical procedure based on his or her knowledge and understanding.

Further research to be done on to explore communication between patient and Physicians during informed consent process and its possible effects.

Further research in the field of informed consent for medical intervention and especially the role of physicians and of the nurses.

Therefore, this kind of studies need to be undertaken in all regions in Namibia to find out the extent to which the knowledge and their understanding of surgical patients varies from one region to another.

5.4.3 Administration

MoHSS to reinforce CPD (continuous professional development) for all health care professionals to improve compliance with informed consent process.

MoHSS to draft and implement a directive that indicates that no abbreviations to be used in order to strengthen the importance of recordkeeping., on any health related documents example, informed consent form, failure to comply to it to be regarded as an offence, which can lead to legal suits.

5.4.4 Education

Strengthening the importance and function of informed consent to be taught as a module at the Medical and Nursing school and to be regarded as a legal and ethical requirement to be fulfilled before undergoing any medical or surgical intervention to patients.

As nurses advocates nurses should ensure that the patients has understood the procedure, risks benefits, potential complications and other alternatives are well explained by the doctor to the patient before signing of the informed consent form and to make sure that there is no other influences during informed consent process.

5.5 LIMITATIONS

This researcher will not generalise the findings to other hospitals as the study was conducted at public training hospitals operating rooms in Khomas Region. Communication problem was observed as a barrier during the study but was not adequately measure to see its effects.

Language proficiency was also not measured in this study but could have an effect on the level of knowledge and understanding of informed consent by patients.

The questionnaire was only in English whereby some patients could not read or understand without interpreting in their vernaculars.

5.6 CONTRIBUTION OF THE STUDY

Based on the findings of the study it is suggested that this study contributed to the body of Knowledge and services providers.

5.6.1 Body of knowledge

According to the study literature it would serve as a basis for further studies in the field of informed consent and especially the role of physicians. The patient will be equipped with information about the importance and the function of informed consent before signing the document for surgical intervention.

5.6.2 Service providers

The study should inform and assist MoHSS regard to future planning; for policy formulation and improvements identified shortcomings, that can be used for in-service–training to the nursing staff. The MoHSS as well as training institutions will be informed on possible areas that need attention and strengthening for assessment of patient’s knowledge and their understanding of informed consent for elective surgical interventions.

5.6.3 Nursing profession

The study provides a useful information on promotion of surgical patients understanding and the importance of informed consent before signing for intervention. In addition it also promotes good relationship between patient and the entire professional staff.

5.7 SUMMARY

This was the final chapter of this study and focused on discussing the research findings and the results presented in chapter 4. Subsequently, conclusions were drawn and recommendations were made. The overall purpose of the study was to assess surgical patients’ knowledge and their understandings to informed consent for surgical interventions at public training hospital Khomas region. This was in order to meet the three objectives listed in chapter 1. Discussions, conclusions, limitations and recommendations based on the analysis were presented. Discussion based on demographic, knowledge and understanding of surgical patient to

informed consent for surgical interventions, recommendations and conclusions were presented. The conclusions are the researcher evaluation of the outcomes or the results achieved from the study. Ultimately, the researcher states the way forward for the study in terms of recommendations, which were based on the implications of the study findings.

Accordingly, it is concluded that the research aim was achieved to a large extent and supported by the findings of this study. To justify this conclusion, the findings were appraised against the research intention and the main objective for the study.

REFERENCES

- Agnew, J. (2012). *Informed consent: A study of the OR Consenting process in New Zealand* 95(6), 763-770. <https://doi.org/10.1016/j.aom.2010.11039>
- Agu, K., A. (2014). *Attitude towards informed consent practice in developing County. A community based assessment of the role of educational status. BMC, ethics.* 15-77. <https://doi.org/10.1186/1472-6939>
- Aldoory, L., & Ryan, B. (2014). *Best Practices and New Models of Health Literacy for informed Consent.* Review of impact of informed Consent Regulations on Health Literate Communication. University of Maryland. U.S.A:
- Akkad A., Jackson .,C, Woods., M,Kenyon., N,Nick.,T, & Habib, M.(2004). *Informed consent for elective and emergency surgery in obstetrics and gynaecology: a questionnaire study. BJOG*111:11338-8
- American Medical Association. *Informed consent* (2009).<http://www.ama-assn.org/ama/pub/physician-resources/legal-topics/patient-physician-relationship-topics/informed-consent.shtml>.
- American Nurses Association, (2001). *Code of Ethics for nurses with interpretive statements.* Washington, DC: Nurses books.org.
- Appelbaum, P, S., & Thomas, G. (2013). *Assessment of competence to treatment.* Legal theory and Clinical practice. New York: Oxford University Press.
- Aroori, S. & Spencer, R., A., J. (2007). *Chronic pain after hernia surgery –An informed consent issue.* *Ulster Med J.*76 (3) (pp.136-140).
- Aassa, A., Hovback, M. & Bertero, C. (2013). *The importance of perioperative information for patient participation in colorectal surgery care.* *Journal of clinical Nursing*, 22:1604-1612, June.
- Austin, S. Baldwin, A. Li, B., & Waskett, P. (1999). *Analytical design planning technique: a model of the detailed building design process.* *Design studies*, 20 (3), 279-296.

- Barret, R. (2005). *Quality of informed consent: measuring understanding among participants in oncology clinical trials*. *Oncol Nurs-Forum*.32 (4):751-5.10.1188/.ONF.751-755
- Beck, C., T. (2009). *Critique Qualitative Research*. *AORN.Journal*, 90(4), 543-544.
<http://dx.doi.org/10.1016/j.aorn.2008.12.023>.
- Beauchamp T, L., & Childress, J.F. (1994). *Principles of biomedical Ethics*. New York: Oxford University Press.
- Brezell, R.N. (1997). *Significance and application of informed consent*, 65(2)
[https://doi.org/10.1016/50001-2092\)06\)63341-3](https://doi.org/10.1016/50001-2092)06)63341-3)
- Bryant, S. & Sagin, T. (2007). *CMS and informed consent: Is your institution getting right?* Marblehead, MA: HCPro.
- Brink, H., Van der Wald, C., & Van Rensburg, G. (2012). *Fundamentals of research for healthcare professionals'*. (3rd ed.)Cape Town: Juta.
- Bowrey, S., & Thompson, J.P. (2006). *Nursing Research: Ethics, consent and good practice*. *Nursing Times*, 110(1-3) 20 available at:<http://www.ncbi.nih.gov/pubmed/24597204>.
- Brunner, L, S. (2010). Brunner & Suddarth's textbook of medical-surgical nursing (Vol).Lippincott Williams& Wilkins.
- Carsten's, P. & Piermain, D. (2007). *Foundational Principles of South African Medical Law*. LexisNexis: Durban.
- Charles, A. C. (1999). *Decision-Making in physician-patient encounter: Revisiting the shared treatment decision-making-model*. *Social Science & Medicine*.49 (5) pp651-661.Elsevier.
- Clegg-Lamprey, J.N.A., & Hodasi, W.M. (2013). *An audit of aspects of informed consent and pain relief in general surgical units of Korle Bu Teaching Hospital*. *Ghana medical journal*, 39(2), (pp.63-67).
- Closet J.O. (2009). *Consent information in practice and Medical*. *Rev Biomet*: 3(1):51-9.

- Cocanour, C. (2017). *Informed consent –it’s more than a signature on a piece of paper.* Sacramento .U.S.A .<https://doi.org/10.1016/j.amjsurg.2017.09.015>.
- Cohen, L., Manion, L., & Morrison, K. (2012). *Research methods in education.* 5th ed. London and New York: Routledge.
- Dada, M, A., & McQuoid-Mason, D.J. (2011). *Introduction to medico-legal practice.* Durban: Butterworth’s.
- De Vos, A. S. (2006). *Research at grass Roots for professions* (4th ed.).Pretoria: Van Schaick Publishers.
- Doyal, L., and Tobias, J.S., & Warnock, M. (2011). *Informed consent in medical research.* *Empirical Ethics.* (2nd ed.)London.
- Dzاهر, A. (2017). *The nurses role in obtaining informed consent from patients.* <https://today.mims.com/the-nurse-s-role-in-obtaining-consent-from-the-patient>
- El-Nasser, G.A.B.D. (2013). *Patient satisfaction with Preoperative care and its relationship with patient characteristics.*81 (2), 1-10.www.medicaljournalofcairouniversity.com
- Elwyn, G. Edwards, A. & Thompson, R. (2009). *Shared Decision Making health Care.* Achieving evidence –based patient choice (3rd d.).Oxford University Press.
- Emory, C. W., & Cooper, D. R. (1991). *Business Research Methods.* Homewood IL: Richard D. Irwin.
- Erickson, F. & Kovalainen, A. (2008). *Qualitative Methods in Research in Research on Teaching.* East for Native North America. *Healing traditions: The mental health of Aboriginal peoples.* Vancouver: University of British Columbia.
- Faghanipour, S. (2014). *Surgical informed consent in Iran-how much is it informed?* 21(3), 314-322.<https://doi.org/10.1177/0969733013498525>.
- Falagas, M., S. & Mathew, E. (2009). Informed consent: how much and what do patients understand? *The American Journal surgery.*195 (3)42435. <https://doi.org/10.1016/j.amjsurg>.

- Fulton, S. & Krainovich-Miller, B. (2010). *Gathering and appraising the literature*. "Nursing Research: Methods, critical appraisal and utilization.56-80
- LoBiondo G, & Haber J. (Eds). *Nursing research: Methods and Critical appraisal for Evidence based practice*, (7th ed.) Mosby Elsevier, Missouri, (pp.56-84).
- Gone, J. P. (2009). *Encountering professional psychology: Re-envisioning mental health services government*. *Review of public personnel administration*, 20(2), 63-74.
- Grove, S., Burns, N., & Gray, J.R. (2012). *The Practice of Nursing research appraisal , Synthesis, and Generation of Evidence*. (7th ed.) Saunders Elsevier: China.
- Hall, D, E., Prochaska, A, V., & A, S., Fink, A, S. (2012). *Informed consent for clinical treatment*.*CMAJ*.184 (5):533-540.doi:10.1503/cmaj.
- Hammami, M.M. (2014). *Patients perceived purpose of clinical informed consent: Mill's individual-autonomy-model-is-preferred*.
3354(Mbc03).15(2).https://doi.org/10.1186/1472- 6939-15-2
- Health Professionals Council of Namibia (2010). *Ethical Guidelines for Health Professionals*.
- Healy, M. & Perry, C. (2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *International Journal on Qualitative Market Research*. 3(3), 118-126.
- Henning, E., Van Rensburg, W., & Smit, B. (2004). *Finding your way in qualitative research*.
- Holloway, I., & Wheeler, S. (2010). *Qualitative Research in Nursing and Health care*. Wiley-Blackwell: London
- Hunt, D.P. (2003). *The concept of knowledge and how to measure it. Human performance enhancement*. *JIC*, 4(1).doi:10.1108/146919303104554414.
- Jafarey, A.M., & Faroorqui, A. (2005). *Informed consent in the Pakistani milieu: the physician's perspective*. *J Med Ethics*.31, 93-96 .
https://dx.doi.org/10.1136/jme.2002112220.

- Johnson, C. (2014, Nov 10). *Namibia: Supreme Court Ruling against Forced Sterilization of HIV Positive Women*. The Namibian Newspaper.
- Jon, F., & Merz, J.D. (2009). *On decision –Making Paradigm of medical Informed consent* *Journal of Legal Med.*14 (2), 231-264.<https://doi.org/10.1080/1947649309510913>.
- Jones M. (2011). *Informed consent and other fairy stories*. New York: Oxford University Press.
- Judson, K., & Harrison, C. (2010). *Law and ethical, medical careers*. (5 th ed.) New York: McGraw-Hill.
- Kalala, T.W. (2011). *Patient perception and understanding of informed consent for surgical procedures*. S.A. <https://hdl.handle.net/10539/0425>
- Kalpi, H., Valimaki, V., Arnand, M., Dassen, T., & Gasull, M. (2010). *Privacy and informed consent. Biomedical and health research*. Netherlands, U.S.A: *Patient anatomy*,
- Kinnersley,P., Phillips,K., & Savage K (2013). *Interventions to promote informed consent for patients undergoing surgical and other invasive health care procedures*. (1sted.)Cardiff University: U.K.
- Lavelle-Jones, Byrne, D, J. & Rice .P. (2003). *Factors affecting quality of informed consent*. *BMJ*, 300(6882)885-890
- Leclercq, W.K.G. (2013). *A survey of the current practice of the informed consent process in general surgery in the Netherlands*. *Patient safety in surgery*, 7(1). <https://doi.org/10.1186/754-9493-7-4>
- Lourenzen, B. (2010). *Using principles of Health Literacy to enhance the informed Consent Process*. 88 (1), 3-29.<https://doi.org/10.1016/j.aorn.2008.03.001>
- Lupton, M. (2015). *Informed consent: can a patient ever be fully informed?* (3rd ed.)London: U.K.:17(6)601-604doi:10.097/01.gco.000019190061697.74
- Mark, J., S. & Spiro, H. (2000). Informed consent for colonoscopy. A prospective study. *Arch Intern Med*.7990; 150(4):777-780.do.101001/archinte.1990.00390160049011

Mbonera, F. (2011). *Knowledge and perception of patients towards informed consent in surgical-procedure-at-Rwanda-Military-Hospital.*

<http://dr.ur.ac.rw/bitstream/handle/123456789/295>

Medical dictionary. (2016). (10th ed).St. Louis, MO: Mosby Elsevier.

Melendo M.P., Viegas, K., Noqueira de Sousa, E., & Caregnato, R.C.A. (2016). *Surgical patients understanding of the free and informed consent form. Brasil.*29 (3)

<http://dx.doi.org/10.1590/1982-0194201600041>

Ministry of Health and Social Services (2011). *Operation theatre manual.*

Mkansi, M. & Acheampong, E. A. (2012). *Research Philosophy Debates and Classifications: Students' Dilemma.* The Electronic Journal of Business Research Methods, 10, 132-140.

Minnies, D. (2008). *Evaluation of the quality of informed consent in a vaccine field trial in a developing country setting. BMC Med Ethics.*9 (15).

Namibian Nursing Act (2004). Regulations relating the scope of persons registered and enrolled. Government Notice 206 of 2014.1 (2) n and p.

Nursing and Midwifery Council (NMC) (2005). *Guidelines for records and records keeping.* NMC, London.

National Health Act (2003). *Government Gazette of Namibia.*

Ochieng, J. (2015). *Informed consent in clinical practice: patients' experiences and perspectives following surgery. BMC Research notes,* (pp.4-9).Available at:

<http://dx.doi.org/10.1186/s13104-015-1754-z> .

Olaboyede, O., (2014). *Pre-operative written consent in Nigeria: How informed are our patients, JMMS* 4(8), pp.307-310. <http://www.intersjournals.org/JMMS>

O'Leary, C, E. (2006). *Informed consent requires active communication: standardized consent process may be useful.* APSF Newsletter 2008, 23:pp4-5

Oxford South African School Dictionary (2016). *Oxford Dictionary.* (3rd ed.) Oxford University Press.

- Parahoo, K. (2006). *Nursing Research: Principle, Process and Issues*. (6th ed.)New York: Palgrave McMillan.
- Picano, E. (2004). *Informed consent and communication of risk from radiological and nuclear medicine examinations: How to escape from a communication infemo*. BMJ 2004; 329:849. doi:<https://doi.org/10.1136/bmj.329.7470.849>.
- Peterson, J. (2014). *Philosophical paradigms, data collection, and analysis design of a green technology education mixed methods research*. Retrieved from <https://www.linkedin.com/pulse/20140714153011-31971126-philosophical-paradigms-data-collection-and-analysis-design-of-a-green-technology-education-mixed-methods-research>
- Polit, C, T. & Beck, D, F. (2012). *Essential of nursing research: Appraising evidence for nursing practice*. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.
- Rahmawati, Y. (2008). Epistemological, Ontological, and Methodological. Viewed at <https://pendidikansains.wordpress.com/2008/04/12/epistemological-ontological-and-methodological/> Date accessed: 16 October 2017.
- Roter, D.L. (2002). *The patient –physician-relationship communication patterns of primary care physicians*. *Journal of American Associans*.U.S.A.
- Rothrock, J, C. (2015). *Alexander Care of the patient in surgery*. (15th ed.).Elsevier .Canada.
- Schenker, Y. & Meisel, A. (2011). *Informed consent in clinical care: practical consideration in the effort to achieve ethical goals*.305 (11)1130-1 DOI:10.1001/jama.2011.333
- Schattner, A. (2006). *Information and shared decision making are top patient priorities*. *BMC health Research*. <https://doi.org/10.1186/1472-6963-6-21>.Licnse Bio Med Central Ltd.
- Siddiqui, F., Shaikh, JM., & Memon, M.M. (2010). *An Audit of informed consent in surgical patients* .22(1) pp.2008-2010. *Journal of Ayub Medical College abbatabat*:J AMC.

- Simon, M.K. (2011). *Dissertation and scholarly research: Recipes for success* .College Grove. OR: Dissertation Success, LLC.
- Siegler, M., & Winslade, W.J. (2010). *A practical approach to ethical dimension in clinical medicine*. (7 th ed.) U.S.A. McGraw-Hill.
- Silverman, H.D. (2005). *Recommendations for informed consent for critical care clinical. Medicine and Lippincott Williams &Wilkinson's*. 3(4), pp 867-82.
- Singh, A. (2013). *Origin Research Paper's Awareness, Attitude, Understanding and Perspective towards Legal Nature of Informed Consent Introduction: Methods Application of informed consent: Discussion: 35(1), pp. 2011-2014.*
- Smeltzer, S, C., Bare, B, G. & Cheever K, H. (2010). Brunner and Suddarth's *Textbook of Medical- Surgical Nursing*. China. Lippincott and Wilkins.
- South Africa National Health Act (2004). *Government Gazette of South Africa*.
- South African Parliament (1997). *Constitution of South Africa. Bill of Rights. Government Gazette of South Africa* .Cape Town:
- Sowney, M., & Bar, O. (2011). *The challenges for nurse communicating with gaining valid consent from adults*. Clinical Nursing. Black Well, Publishing.
- Stacey, K. (2006). *The place of problem solving in contemporary mathematics curriculum documents*. Journal of Mathematical Behaviour 24, pp 341-350.
- Stu-, J. (1997). *The significance and Application of informed Consent*.65 (2).
- Sulaiman, A.I. (2015). *Knowledge, attitude, perception of patients towards informed consent in obstetric surgical procedures at, Aminu Kano Teaching Hospital*.12 (1), pp .45-50.
- Tobias, S. (2011). *Informed consent in deep brain stimulation-Ethical considerations in a stress field of pride and prejudice*. Research Unit Ethics, Institute for the History of Medicine and Medical Ethics, University of Cologne, Germany. (5) 7.
- Timothy. M. (2006). *Selecting studies for systematic Review: Inclusion and exclusion Criteria*. The University of Texas –Pan American, Edinburg. (33) 21-27.

- The Joint Commission, Division of Health Care Improvement, (2016). *Informed consent: more than getting a signature*. 21. Joint Venture accredited organisation.
- Taylor, H. (2003). *An exploration of the factors that affect nurses records keeping*. *British Journal of Nursing*. 12.12, 751-758
- Tshilongamulenzhe, M.C. (2012). *Integrated learning programme management and evaluation model for the South African skills development context*. (Unpublished doctoral dissertation). University of South Africa. Turnover in Mission Hospitals in Kenya: A Case for Pcea Chogoria Hospital. *International*
- Verastegui, E.I. (2006). *Consenting of the vulnerable: The informed consent procedure in advanced cancer patients in Mexico*. *BMC. Med Ethics*. 7 (3)
- Wagner, A., Wright, J., Ganesh, A., Zhou, Z., Mobahi, H., & Ma, Y. (2012). *Toward apractical face recognition system: Robust alignment and illumination by sparse representation*. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 34(2), 372-386.
- Welman, C., Kruger, F., & Mitchell, B. (2005). *Research Methodology*, Inc. ISBN-19321590509, Cape Town, South Africa: Ross.
- Webster, J., & Watson, R.T. (2002). *Analysing the past to prepare for the future: Writing a Literature Review*, *MIS Quarterly*: 26(2), xiii-xxiii/June 2002 xiii.
- West's Encyclopaedia of American Law* (2008). The Gale Group, (2nd ed.). Inc.
- White, G. (2000). *Workplace rights. Informed consent*. *American Journal of Nursing*.
- Whitney, S.N., McGuire, A.L., & McCullough, L.B. (2014). *A typology of shared decision making, informed consent, and simple consent*. *Annals of Internal Medicine*, 140(1), pp.54-59.
- Upadhyay, S., Beck, A., Rishi, A., Amoateng-Adjepong, Y., & Manthous, C.A. (2010). *Patients' predictions regarding informed consent for hospital treatments*. *Journal of hospital medicine*, 3(1), pp.6-11.

BOOKS CONSULTED BUT NOT IN TEXT

- Babbie, E (2005). *The basic of social research* (3rd ed.) Canada.
- Cocanour, C. (2017). *Informed consent –it’s more than a signature on a piece of paper.* Sacramento .U.S.A .<https://doi.org/10.1016/j.amjsurg.2017.09.015>.
- Jeffords, M., & Moore, R. (2010). *Improvement of informed consent and the quality of informed consent documents. The lancet oncology*, 9(5), 485-493. [https://doi.org/10.1016/S1470-2045\(08\)70128-1](https://doi.org/10.1016/S1470-2045(08)70128-1)
- Mazur, D.G. (2009). *Informed consent in adult patient can we achieve a gold standard?* British Journal of Oral Maxillofacial Surgery.4 (3), <http://doi.org.10.1016/j.bjoms.2008.06.016>
- Mohammed, A. (2013). *Informed consent in elective surgical procedure: What do the patients think?”* .J Pak Med Assoc. (59):pp.662-680.
- Rajesh, D.R., & Chopra, M. (2013). *Patient awareness, attitude, understanding and perception towards legal nature of informed consent. Indian Accad forensic Med.*35 (1) pp.42.
- Roberts, P. (2006). *Reliability and validity in research.* 20 (44), pp.41-45. DOI:10.7748/ns2006.07.20.44.41.c6560.
- Straus,S.,& Stelfox,T. (2007).*Whose life is it anyway? Capacity and consent in Cananda.CMA: Canadian Medical Association Journal.*177 (11) 1329. <http://doi.org/10.1503cmaj.071536>
- Streubert Speziale, H.J., & Carpenter, D.R. (2007). *Qualitative research in Nursing: Advancing the humanistic imperative* (4th ed.).Philadelphia: Lippincott Williams & Wilkins.
- Worthington, R. (2012). *Clinical issues on consent: some philosophical concerns.* Journal of Medical ethics, 28(6), pp.377-380.
- Woolf, S, H., Chan.E, C., & Harris, R. (2005). *Promoting informed choice: transforming healthcare to dispense knowledge for decision making.* Ann Intern Med.19 (143), pp293-300

APPENDIX: A CONSENT FORM

TITLE: KNOWLEDGE, ASSESSMENT OF SURGICAL PATIENTS UNDERSTANDING AND KNOWLEDGE TO INFORMED CONSENT REGARDING SURGICAL INTERVENTION AT PUBLIC HOSPITALS, OPERATING ROOM IN WINDHOEK, KHOMAS REGION, NAMIBIA

Researcher: Colleen Kavari

Dear participant

I am Colleen Kavari registered with University of Namibia, doing a Master degree in Nursing Science I wish to conduct a research project entitled: Assessment of surgical patient's understanding and knowledge to informed consent regarding surgical intervention at public hospitals operating room, in Windhoek, Khomas region, Namibia. The study will be conducted under the supervision and guidance of Mrs E. Bampton and Dr. H. Amukugo and School of Nursing and Public Health, University of Namibia.

The objectives of this study is to assess surgical patients' understanding and knowledge to informed consent regarding surgical intervention at public hospitals operating room, in Windhoek, Khomas region, .Your participation will provide information that might enable decision makers to assist in this regard. Participation in this study will take approximately 25-30 minutes. The procedure includes responding to questions on demographic, assessment on of surgical patient's understanding and knowledge to informed consent regarding surgical intervention at public hospitals. Meanwhile a check list will be used by the researcher and this will assist her to gain more insight and understanding by assessing surgical patient understanding and knowledge to informed consent regarding surgical intervention at public hospitals operating room to informed consent regarding surgical intervention.

Your participation in this study is voluntary and you have the right to withdraw at any time should you feel so. You should feel free to ask the researcher to clarify the question where you don't understand and you will be expected to answer all questions. The questionnaire will be completed by the researcher. The study data will be coded so they will not be linked to your name. Your identity will not be revealed during the study or when the study is being reported or published with the permission granted by the Ministry of Health and Social Services for the benefit of improving surgical patients' understanding and knowledge to informed consent regarding surgical intervention at public hospitals operating room. The researcher and the supervisors are the only people that will have access to the data collected.

You are among the study population of the patients in the operating room. These wards are selected on the ground that is where surgical patients are admitted for surgical intervention.

If you have any questions or concerns about the research, please feel free to contact Mrs. Colleen Kavari at(061-2064575), cell 0812201845 or E-mail ckavari@unam.na.The main supervisor Dr.H.Amukugo 061-2064617:E-mail: hamukugo@unam.na and Co-Supervisor:Mrs Bampton at: E-mail:ebampton@unam.na, Faculty of Health Science, School of Nursing and Public Health, at the University of Namibia.

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims or rights because of your participation in this research study.

Should you agree to participate, please sign the consent provided. If you have any question that need clarification you are welcome to contact me.

I.....	
Agree to participate in this research project on my own will.	
Signed at	
.....
Participant signature	Date

APPENDIX: B QUESTIONARE

ASSESSMENT OF SURGICAL PATIENTS KNOWLEDGE AND UNDERSTANDING TO INFORMED CONSENT FOR ELECTIVE SURGICAL INTERVENTIONS IN OPERATING-ROOMS AT PUBLIC TRAINING HOSPITALS, WINDHOEK, KHOMAS REGION, NAMIBIA.

A RESEARCH QUESTIONNAIRE IN FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER IN NURSING SCIENCE

OF

THE UNIVERSITY OF NAMIBIA

BY

COLLEEN-NGAUJAKE-KAVARI

9416099

APRIL 2017

MAIN SUPERVISOR:DR. H.J AMUKUGO

CO-SUPERVISOR: MRS. E. BAMPTON

SECTION A

Questionnaire on patient:

1. Demographic Data

(Tick appropriate box)

1.1 Gender

Male	
Female	

1.2 Age

18-30yrs		31-45yrs		46-55yrs		55yrs+	
----------	--	----------	--	----------	--	--------	--

1.3 Hospital

Katutura intermediate hospital	
Windhoek Central hospital	

1.4 Surgery type

Orthopaedic		Urology		Neurosurgery	
Gynaecology		Surgery		Ear, Nose and Throat	

1.5 Is the informed consent form signed? \ Finger printed?

Yes	
No	

1.6 Duration of admission

1-2 days	
3-4 days	
5+ days	

1.7 Staff members who explained the informed consent process to the patient

Medical doctor	
Registered nurse	
Enrolled nurse	
Student nurse	

1.8 Educational Level

Primary	
Secondary	
Tertiary	
None	

1.9 Employment

Yes	
No	

1.10 Previous surgery

YES	
NO	

2 SECTION B

ASSESSMENT OF KNOWLEDGE AND UNDERSTANDING FOR THE INFORMED CONSENT

2.1 GENERAL ASPECTS REGARDING THE INFORMED CONSENT

- Strongly agree=1
- Agree=2
- Disagree=3
- Did not answer=4

(Please circle a number to best indicate your rating of the following statements)

2.1.1 I understand the information written on the informed consent form

1 2 3 4

2.1.2 The information was in clear and simple language

1 2 3 4

2.1.3 Questions were clarified

1 2 3 4

2.1.4 I felt ashamed to ask questions

1 2 3 4

2.1.5 I gave consent voluntarily /freely without no external duress?

1 2 3 4

2.1.6 I felt afraid of the health professionals'

1 2 3 4

2.1.7 .Only a signature was requested without explanation of the informed consent form

1 2 3 4

2.1.8 I knew the function of the inform consent form

1 2 3 4

2.2 ETHICAL ASPECTS

(Choose the appropriate answer)

3.1.1 Did you voluntarily \freely make own decision regarding treatment?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Unsure	<input type="checkbox"/>

3.1.2 Have you received appropriate information about the nature, alternatives risks and benefit of the proposed treatment?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Unsure	<input type="checkbox"/>

2.3 LEGAL ASPECTS

2.3.1 Do you know that no procedure can be done to you without a signed informed consent? Except in case of emergency.

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Unsure	<input type="checkbox"/>

2.4 ADMINISTRATIVE ASPECTS

2.4.1 Informed consent form recorded correctly and completely?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Unsure	<input type="checkbox"/>

2.4.2 Informed consent signed by patient?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Unsure	<input type="checkbox"/>

2.4.3 Is there witness's signature s on the informed consent form?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Unsure	<input type="checkbox"/>

APPENDIX: C RESEARCH PERMISSION LETTER FROM THE POSTGRADUATE STUDY

CENTRE FOR POSTGRADUATE STUDIES

University of Namibia, Private Bag 13301, Windhoek, Namibia
340 Mandume Ndemufayo Avenue, Pioneers Park
☎ +264 61 206 3275/4662; Fax +264 61 206 3290; URL: <http://www.unam.edu.na>



RESEARCH PERMISSION LETTER

Student Name: C N Kavari

Student number: 9416099

Programme: Masters in Nursing Science

Approved research title: Assessment of surgical patient knowledge and understanding to informed consent for elective surgical intervention in operating room at public hospital in Khomas region Namibia

TO WHOM IT MAY CONCERN

I hereby confirm that the above mentioned student is registered at the University of Namibia for the programme indicated. The proposed study met all the requirements as stipulated in the University guidelines and has been approved by the relevant committees.

The proposal adheres to ethical principles as per attached Ethical Clearance Certificate. Permission is hereby granted to carry out the research as described in the approved proposal.

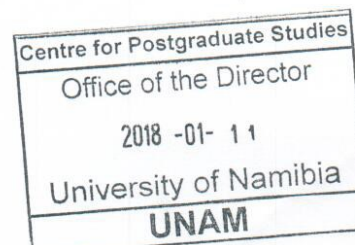
Best Regards

A handwritten signature in black ink, appearing to read 'Marius Hedimbi', is written over a dashed horizontal line.

Name: Dr Marius Hedimbi
Director: Centre for Postgraduate Studies
Tel: +264 61 2063275
E-mail: directorpgs@unam.na

11/01/17

Date



APPENDIX: D WINDHOEK CENTRAL HOSPITAL PERMISSION LETTER

9 - 0/0001



REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13215 Windhoek Namibia	Harvey Street Windhoek Central Hospital Ref.	Tel. No: (061) 203 3024 Fax No: (061) 222886 Date: 13 February 2018
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**OFFICE OF THE MEDICAL SUPERINTENDENT
WINDHOEK CENTRAL HOSPITAL**

**Ms. Coleen Ngauyake Kavari
University of Namibia
Windhoek
0812818212**

Dear Ms. Kavari

SUBJECT: PERMISSION TO RESEARCH ON THE ASSESSMENT PATIENT'S KNOWLEDGE AND UNDERSTANDING TO INFORMED CONSENT FOR ELECTIVE SURGICAL INTERVENTIONS IN OPERATING-ROOM AT PUBLIC HOSPITAL.

This letter serves to inform you that permission has been granted for you to conduct a study at Windhoek Central Hospital on the above mentioned subject as you have requested and does not include any remuneration.

Patients/Clients information should be kept confidential at all times.

Thank you for your kind gesture.

Yours sincerely,



**DR. D. UIRAB
CHIEF MEDICAL SUPERINTENDENT**



"Health for All"

APPENDIX: E INTERMEDIATE HOSPITAL KATUTURA PERMISSION LETTER



Republic of Namibia

Ministry of Health and Social Services

Private Bag 13215
WINDHOEK
Namibia

Intermediate Hospital Katutura
Independence Avenue
WINDHOEK

Telephone (061) 203 4004/5
Telefax (061) 222706

Enquiries: Dr. F. M. Shiweda

Date: 16 February 2018

OFFICE OF THE MEDICAL SUPERINTENDENT

Ms. Coleen Ngauyake Kavari
UNAM
Windhoek

Dear Ms. Kavari

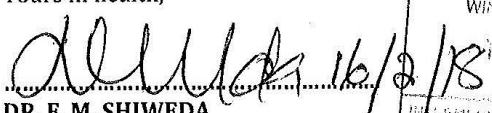
RE: ASSESSMENT OF SURGICAL PATIENTS' KNOWLEDGE AND UNDERSTANDING TO INFORMED CONSENT FOR ELECTIVE SURGICAL INTERVENTIONS IN OPERATING - ROOM AT PUBLIC HOSPITAL, WINDHOEK, KHOMAS REGION, NAMIBIA

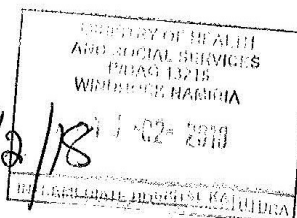
The above mentioned subject refers:

This office hereby grants you permission to do an assessment of surgical patients' knowledge and understanding to informed consent for elective surgical interventions in operating room at Katutura State Hospital, Khomas Region, MoHSS.

Thank you

Yours in health,


DR. F. M. SHIWEDA
CHIEF MEDICAL OFFICER



APPENDIX: F MINISTRY OF HEALTH AND SOCIAL SERVICES PERMISSION LETTER



REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13198 Windhoek Namibia	Ministerial Building Harvey Street Windhoek	Tel: 061 – 2032537 Fax: 061 – 222558 Email: shimenghipangelwa71@gmail.com
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OFFICE OF THE PERMANENT SECRETARY

Ref: 18/3/3 CK
Enquiries: Mr. J. Nghipangelwa

Date 06 February 2018

Ms. Coleen Ngauyake Kavari
UNAM
Windhoek

Dear Ms. Kavari

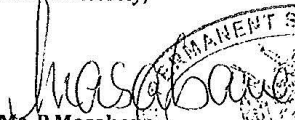
RE: Assessment of surgical patients' knowledge and understanding to informed consent for elective surgical interventions in operating –room at Public Hospital, Windhoek, Khomas Region Namibia

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit.
3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**
 - 3.1 The data to be collected must only be used for academic purposes;
 - 3.2 No other data should be collected other than the data stated in the proposal;
 - 3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects' should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;
 - 3.4 A quarterly report to be submitted to the Ministry's Research Unit;
 - 3.5 Preliminary findings to be submitted upon completion of the study;

3.6 Final report to be submitted upon completion of the study;

3.7 Separate permission should be sought from the Ministry of Health and Social Services for the publication of the findings.

Yours sincerely,


Ms. P Masabane
Acting Permanent Secretary



