KNOWLEDGE AND PERCEPTION OF PATIENTS TOWARDS INFORMED CONSENT IN SURGICAL PROCEDURESAT RWANDA MILITARY HOSPITAL

by

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College of Medicine and Health Sciences

School of Nursing and Midwifery in the

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Declaration

I declare that this dissertation titled “knowledge and perception of patients towards informed consent in surgical procedures at Rwanda military hospital” contains my own work except where specifically acknowledged.

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Supervisor: Doctor Geldine CHIRONDA, RN,PhD,MScN,BScN.

Date and signature…….

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ABSTRACT

Background: Many patients do not fully understand their health diagnosis, treatment and possible risks because of limited knowledge, personal stress and cultural beliefs. Nevertheless, lack of patient's knowledge on surgical informed consent increase the likelihood of a patient safety incident, patient anxiety and generally result in postoperative patient dissatisfaction

Aim: To assess patient's knowledge and perception towards informed consent for surgical procedures in the Rwanda military hospital.

Methodology: It was a descriptive correlation study that was conducted in the Rwanda military hospital. Using Probability Stratified sampling technique; a sample of 147 surgical patients was recruited. Data was collected using closed ended interview schedule. A panel of experts namely research supervisor and surgical professionals was used to evaluate the validity of the modified instrument. Data was analyzed using descriptive and inferential statistics (correlation, regression analysis and chi-square test).

Result: The sample size was 147 and the response rate was 100%. Eighty three per cent (83%) had low knowledge, (12%) had moderate knowledge and (5%) of the patients had high level of knowledge. Twenty three per cent (23%) had low perception ;(50%) had moderate perception and (31%) of the patients had high level of perception towards informed consent for surgical procedures. There is a significant weak positive correlation between patient's knowledge and perception of patients towards informed consent for surgical procedures [($r = .487$), ($-1 \leq r \leq 1$), $p=.00$)].However there is a significant association between the patient level of education, occupation and knowledge or perception towards informed consent for surgical procedures.

Conclusion: This study revealed that the patient's knowledge towards informed consent for surgical procedures is limited and their perception towards informed consent is poor. Moreover the relationship between patient's knowledge and perception towards informed consent was established whereby as the patients with high level of education had a positive perception towards informed consent

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CHAPTER ONE: INTRODUCTION

Introduction

One of the legal, professional and ethical principle of surgical procedures is the informed consent. The patient has the right to obtain enough information regarding surgical procedures options (Aasa et al., 2013, p.1604). However, it was in the twentieth century that informed consent had been recognized as an issue in surgical health care services (Faghanipour, 2014, p.315). Informed consent is built on patient competence to understand information and making a deliberate decision to undergo a specific surgical procedure and is valid until the patient' disease has not been changed, and or no new findings that may change the planned procedure are revealed (Hammami et al., 2014). However the patient may refuse to give the consent and this is an informed refusal (Sulaiman et al., 2015, p.45).

1.1. Background to the study

Informed consent has been recognized as a legal and right for the patient in 1972 and Physicians started to disclose information about diseases and treatment options but potential risks were considered unnecessary and were not told to the patients (Sulaiman et al., 2015, p.50). Informed consent reflects the process of communication between the patient and health care provider by ensuring that the patient has fully understood the procedure, diagnosis, possible risks and its results in patient authorization to undergo specific surgical intervention(Agnew et al. ,2012, p.763).

A well performed informed consent process guaranties that the patient rights are not violated and is taken as independent human being who is treated with respect and beneficence and studies highlight that surgical informed consent reduces postoperative complications (El-nasser et al., 2013, p.7). According to the World Medical Association Declaration of Lisbon (Portugal) ,the essential elements of surgical informed consent are the patient right to self-determination, full disclosure of treatment alternatives, diagnostic and possible risk (Agu et al., 2014, p.77).

A correct informed consent process is built on patient physician interaction and the patient get enough knowledge related to the diagnosis, treatment options and risks so that the patient may make an informed decision (Leclercq et al., 2013, p.1)**.**According to Stu (1997, p.60) ;every patient should be considered as unique in surgical informed consent process because their knowledge and perception towards surgical informed consent is different as some have many

questions and need to understand the details of the procedure and others need to know only the basics.

According to Lorenzen et al (2010, p.25); the patient understanding in the surgical informed consent process can be improved through patient teach back, recognizing differences in their education and health literacy and more emphasis should be putted in patients with less education and low health literacy. A study conducted in the University of Maryland College Park in 2014 on the impact of informed consent regulations on health literate communications showed that most patients regardless their level of knowledge are not capable to understand the information provided to them during an informed consent process and this result in uninformed consent and refusal of treatments (Aldoory et al., 2014).

The study conducted in India revealed that 75% of patients wrongly take an informed consent as legal obligation; 68.8% of patients thought that they have right to any compensation as long as they have signed the consent; 63.6% of patients are not interested on the details of the procedure; 69.2% allowed the physician to determine their treatment and do not need detailed explanation and 11.6% of patients prefer to take the final decision themselves. However the level of understanding was 44,6% for illiterate patients,44.6% to those with primary education and 68.2% for educated people (Singh et al., 2013, p.2011).

The study done in Saudi Arabia revealed that 48% of patients believed that they sign the consent because they thought the surgery would not be performed without signing and 42% thought they would destroy their relationship with their physician (Sulaiman et al., 2015, p.46). A study conducted in Nigeria revealed that educated patients are aware of their rights and are more likely to understand information provided in surgical informed consent process than uneducated patients (Sulaiman et al., 2015, p.50).

However according to Ryckman (2014, p.43); many patients do not fully understand their health diagnosis ,treatment and possible risks because of limited knowledge, personal stress and cultural beliefs. Therefore this study is intended to assess the patient knowledge and perception towards informed consent for surgical procedure in the Rwanda military hospital.

2. Problem statement

In Rwandan hospitals; the researcher has realized a poor perception and limited knowledge regarding surgical informed consent among patients during the clinical practice as the patients sign the informed consent as a medical obligation for surgery and thought that the decision making regarding their treatment is the physician deal. There is no documented evidence regarding this issue. However, in other countries, studies have been done to show the magnitude of the problem. A study conducted in India revealed a great misconception and perception of patients towards surgical informed consent. 88% of patients believed that they are not allowed to withdraw after signing the consent; 63.6% of patients do not believe that detailed explanations are important (Singh et al., 2013, p.2014,).

A survey conducted in Uganda showed that lack of patient's knowledge and poor perception on surgical informed consent compromise shared decision making between the physician and the patient, increase the likelihood of a patient safety incident, patient anxiety and generally result in postoperative patient dissatisfaction (El-nasser et al., 2013, p.9).
A study done in Nigeria highlighted the relationship between the patient knowledge and perceptions towards informed consent whereby patients with no formal education are unable to understand the information provided during informed consent (Agu et al., 2014, p.75). However to the researcher; the relationship between the patient knowledge and perception towards informed consent is not established in Rwandan context.

Although studies show that surgical informed consent leads to positive postoperative outcome. However to the researcher, the patient's knowledge and perception towards the surgical informed consent is not known in Rwanda. Therefore this study will assess patient's knowledge and perception towards informed consent for surgical procedures in the Rwanda military hospital.

1.3. Objectives

1.3.1. Main objective

The main objective of this study is to assess patient's knowledge and perceptions towards informed consent for surgical procedures at the Rwanda military hospital.

1.3.2. Specific Objective

i. To determine the level of knowledge of patients towards informed consent for surgical procedures in the Rwanda military hospital.
ii. To characterize the patient' perception towards informed consent for surgical procedures in the Rwanda military hospital.
iii. To establish the relationship between knowledge and perception of patients regarding informed consent for surgical procedures in the Rwanda military hospital.

1.4. Research questions

1.4.1. Main research question

What is patient's knowledge and perception towards informed consent for surgical procedures in the Rwanda military hospital?

1.4.2. Specific research question

i. What is the level of knowledge of patients towards informed consent for surgical procedures in the Rwanda military hospital?
ii. How do surgical patients perceive informed consent for surgical procedures in the Rwanda military hospital?
iii. What is the relationship between knowledge and perception of patients regarding informed consent for surgical procedures in the Rwanda military hospital?

1.5. Significance of the Study

This study is significant **in practice** because it will improve the surgical informed consent process by highlighting the patient roles and responsibilities in informed consent process. In **education**, this study will help nurse students, clinical nurses and other health care providers to learn evidence based practice in surgical procedures and to recognize surgical informed consent as an autonomous action from the patient. **In research**, the data of this study will be used by other health researchers to conduct their studies therefore the cost of their study will be reduced. This study will help to establish the guideline on informed consent for surgery. This study will be used by **administration** and Ministry of health to establish surgical informed consent policy and adhere to good clinical practice.

1.6. Operational definitions of the concept in the study

Informed consent: Reflects a legal, professional and ethical principle of providing enough information to the patients regarding treatment alternatives so that they actively participate in decision making concerning what is being done on their body (Bowrey & Thompson, 2006). In this study; informed consent relate to the process of communication between a physician and patient on the surgical procedure and result on the patient agreement and authorization to undergo specific surgical procedure.

Surgical procedures: Is any act that is performed by a medical doctor by cutting someone's body by making an incision (Medical dictionary, 2006, p.123).In this study, surgical procedures are related to all invasive procedures that are performed to the patient by the surgeons in the operating room.

Military hospital: Refers to a hospital that takes care of sick soldiers and wounded military people (medical dictionary, 2006, p.103). In this study a military hospital care even sick and wounded civilian and manages other health related issues rather than wounds.

Perception: Is a belief or thought that is possessed by many people that is based by physical sense and appearance (Cambridge dictionary, 2006, p.53). In this study perception refers to patients beliefs the patients have regarding surgical informed consent

Knowledge: Refers to information and understanding that someone acquires from education or experience (Oxford dictionary, 2008, p.103).In the context of this study; knowledge reflects the patient should know and understand during surgical informed consent process.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

A literature review involves body of research which relevant to the research question. It shows what the researchers revealed about the study topic and recommends further studies to respond to questions that are not addressed (Beck, 2009, p.546).This chapter includes theoretical literature, empirical literature and the conceptual framework relating to knowledge and perceptions of surgical patients regarding the informed consent.

2.2. Theoretical literature

Informed consent is an ethical and legal obligation for the physicians to communicate to the patient and results in the patient's agreement to undergo a medical procedure. It is taken as a safety tool for both patient and the surgical team (Agu et al., 2014, p.70). Informed consent originated from legal and ethical principles. The ethical origin of informed consent is explained by the deontological and consequentialism theory. The deontological theory was developed in eighteen century and stated that all physicians who face the same condition should intervene in the same way. However the consequentialism theory believed that the rightness or wrongness of a procedure is dependent upon its complications (Stu, 1997, p.66).

The legal aspect of informed consent began in England in the eighteenth century where the surgeon was accused of performing procedures without a patient's authorization (Stu, 1997, p.67).The informed consent process involves the introduction where the physician look for a calm place for counseling and make clear the consent process to the patient. The second phase is explanation where the physician provides relevant information to the patient using simple language the patient can understand and the third phase is comprehension where the physician check patients understanding by asking questions or using teach back method (Falagas et al. 2009). The last phase is to allow patient to ask questions and the last phase the patient consent where the physician gives a time to patient for reading consent and obtain a signature (Siddiqui et al., 2010, p.209)

According to Leclercq et al. (2013, p.1) ;the process of informed consent is based on assessment of preconditions such as patient competence ; provision of information where the physician gives detailed explanation regarding the procedure to the patient and lastly phase of consent where

the patient give authorization and sign on a form for documentation. The importance of informed consent is a core parameter of safety for patient and surgical team. It makes the patient knowledgeable and accountable for the procedure so that he or she can make deliberate decision regarding their treatment; it proves the patient active participation in his/ her treatment as the care should be patient centered. Informed consent has legal role whereby it can be considered as a proof where the surgical team is being courted (Agnew et al., 2012).

2.3. Empirical literature

2.3.1. Studies on knowledge of patients with regards to informed consent

A study conducted in New Zealand on informed consent process revealed that the patients thought that perioperative nurses are in the best position to guide the consenting procedure because are the one who spent much time with them compared to other surgical team members. Furthermore patients thought that the information provided in informed consent process is not based on their knowledge but on the procedure requirement that must be fulfilled by the physician (Agnew et al., 2012, p.770). A study conducted in India revealed limited knowledge of patients towards informed consent where 75.0% of them wrongly knew that informed consent is legal obligation for the physician and 68.8% of patients thought that informed consent gives them the right to some compensation. Besides ,the level of understanding of patient's to what has been explained in informed consent process was poor in 17% and unsatisfactory in 33% of patients (Singh et al., 2013, p.2013).

The study conducted in India revealed that 75% of patients wrongly take an informed consent as legal obligation; 68.8% of patients thought that they have right to any compensation as long as they have signed the consent; 63.6% of patients are not interested on the details of the procedure; 69.2% allowed the physician to determine their treatment and do not need detailed explanation and 11.6% of patients prefer to take the final decision themselves. However the level of understanding was 44,6% for illiterate patients,44.6% to those with primary education and 68.2% for educated people (Singh et a.l, 2013, p.2011).

The study done in Saudi Arabia revealed that 48% of patients believed that they sign the consent because they thought the surgery would not be performed without signing and 42% thought they would destroy their relationship with their physician (Sulaiman et al. ,2015, p.48). The findings of study conducted in Nigeria on how informed our patients 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 and the majority of participants recognized the role informed consent such as awareness of the risks of the operation, explanation of the procedure. However, there was doubt on the legality of singing the informed consent by next of kin (Olaboyede et al., 2013, p.308).

Siddiqui et al. (2010, p.2009) reported that patient had poor information retention after obtaining informed consent. Furthermore it revealed that current consent 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 the informed consent. According to Ochieng et al. (2015, p.6) study result the majority (98 %) of respondents stated that the surgical procedure should be well explained by the doctors to patients through informed consent, however they were different responses on what should be explained and when explanation should took place with majority saying it should be done before surgery, while others thought it should be done on admission, others proposed immediately after examination.

A study conducted in Nigeria revealed that educated patients are aware of their rights and are more likely to understand information provided in surgical informed consent process than uneducated patients (Sulaiman et al., 2015, p.47). However according to Ryckman (2014, p.51); many patients do not fully understand their health diagnosis ,treatment and possible risks because of limited knowledge, personal stress and cultural beliefs. There are no studies done in Rwanda concerning the knowledge of surgical patients regarding the informed consent process.

2.3.2. Studies on perceptions of patients towards informed consent for surgical procedures

According to Hammami et al.(2014, p.3354) study findings conducted in America, revealed that patient with higher levels of perception towards informed consent was associated with higher degrees of satisfaction with their surgeons. A study conducted in Saudi Arabia on the patients' perception to clinical informed consent showed 65% of patients thought that informed consent helps the patient to decide. The study revealed that female and male perceived informed consent differently as females thought that it is an information disclosure process and males believes that it enables patient self-decision making (Hammami et al., 2014, p.3356).

According to Singh et al.(2013, p.2014) study result conducted in India, 75.0% patients falsely believed that informed consent was a legal requirement. Sixty eight (68.8%) thought that signing the consent meant waving their rights to any compensation and the majority (88.0%) of the patients thought that they had no right to change their minds after signing the informed consent. The study conducted in Nigeria on how the patients are informed during informed consent

process, showed that they had poor perception towards informed consent where 91.5% sign the consent form as a legal obligation before any surgical procedure, 47% thought that signing the consent violates their right to any compensation, 23.9% just signed without knowing exactly the reason behind, 55.6% of patients thought that informed consent serves as a protection for the hospital for being courted (Olaboyede et al., 2013, p.308).

According to Ochieng et al. (2015)patients patients had poor perception towards informed consent because they were not aware of the most fundamental element such as shared decision making and more that 20 % of the participants displayed their lack of satisfaction to doctor's explanations during informed consent process.

2.3.3. Studies on the relationship between perceptions and knowledge regarding informed consent of surgical procedures

The study conducted in Nigeria on knowledge and perception towards informed consent in obstetric patients showed that the patients had a positive attitude and know the informed consent as they are aware of it at 97.5% and stated that the patient understanding during informed consent process is highly related to the patient knowledge, religious beliefs and sociocultural factors as educated one are conscious of their rights and need to know what is being done on their body (Sulaiman et al., 2015, p.45).

However, a study conducted Nigeria on the role of education in the informed consent process revealed that as the patient's level of education increases the requirement of disclosing everything on the surgical process decreases representing 64.7% of patients with no formal education and 56% of patients with university level. The study highlighted the impact of knowledge on patient's perceptions towards informed consent whereby patients with no formal education are unable to understand the information provided during informed consent process and 24% of patients with secondary level knew that they have the right to know the risks ,benefits and are allowed to take the decision regarding their treatment at their own (Agu et al., 2014, p.77).

Previous literatures have shown that there is a relationship between knowledge and perceptions of surgical patients with regards to informed consent procedure. However, this relationship has never been examined in Rwanda context. Hence the need to examine the relationship between knowledge and perceptions of surgical patients concerning the informed consent.

2.4. Conceptual framework

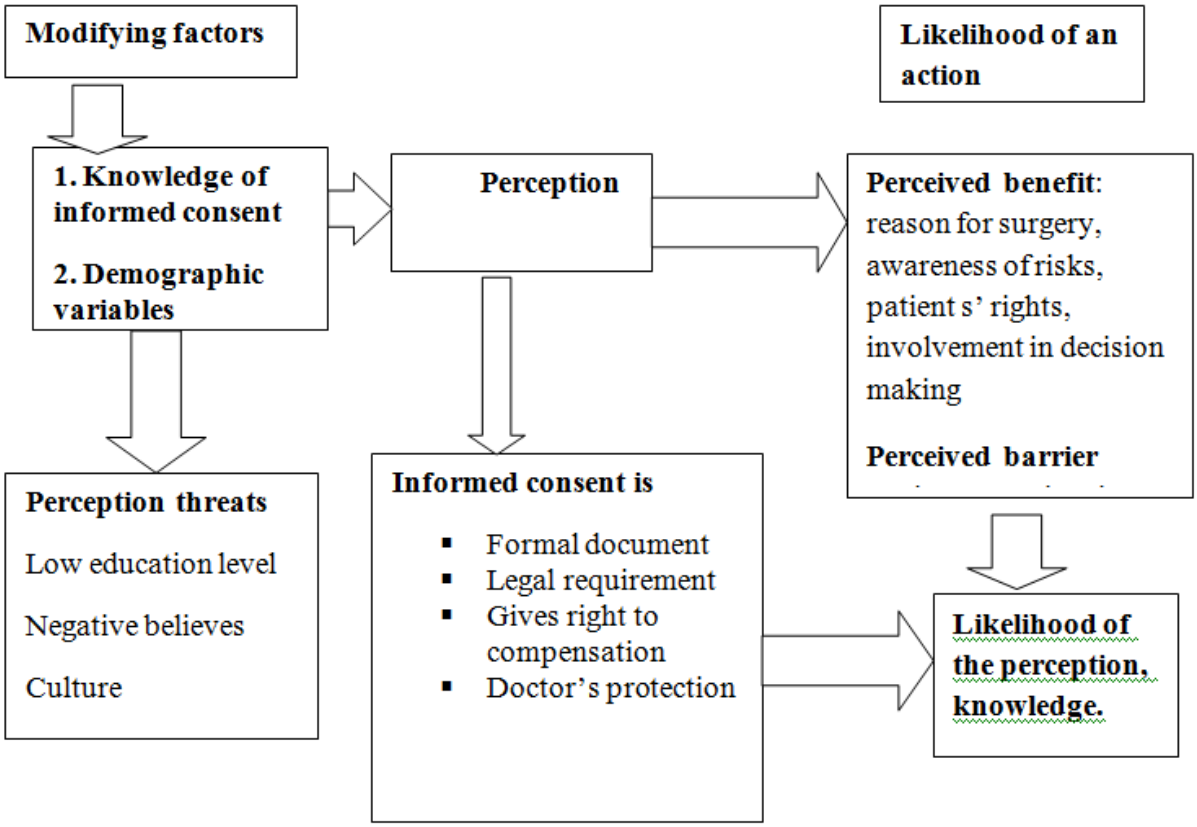

Figure 1: Conceptual framework adopted from (Constructs & Concept ,2003)

This study will be guided by a health belief model. It is an intrapersonal theory between individual, knowledge and belief concepts which is applied in health promotion programs to establish interventions and prevention strategies(Constructs & Concept ,2003).The health belief model has been used by in the study on patient knowledge, attitude and perception towards informed consent in obstetric surgical procedures at Aminu Kano Teaching Hospital (Nigeria).

Therefore the researcher modified the health belief model to better describe the patient knowledge and perception towards informed consent as the modern health care services put much emphasis on patient centered care whereby the patient occupies the central position in decision making and choice of treatment. To attain active participation of the patient, there is a need of positive perceptions and effective knowledge regarding risk and benefit associated with the planned care (Epstein & Street, 2011, p.101). Hence health belief model will be applied to explain how the level of knowledge and believes affect one's perceptions and decision making. Health belief model is explained by its components which are perceived susceptibility, perceived

benefit, perceived barrier and perceived threats(Constructs & Concept, 2003). The study will adopt the following concepts of Health Belief model:

Perceived Susceptibility

Perceived susceptibility assess how the individual's understandings or behavior impacts negatively his or her health outcome(Constructs & Concept ,2003). In this study perceived susceptibility will determine how the patient level of knowledge lead to poor perception to surgical informed consent.

Perceived benefit

Perceived benefit reflects the individual recognition of the usefulness of a new behavior in diminishing the exposure to risks of acquiring the disease(Constructs & Concept 2003).In this study; perceived benefit reflects the patient awareness on the role of surgical informed consent.

Perceived barrier

Perceived barriers are individual's obstacles in the adoption of a new behavior(Bowrey& Thompson, 2006). In this study perceived barriers are anxiety**,** associated risks, limited time and other factors that interferes the likelihood of patient knowledge and perception towards surgical informed consent.

Perceived Threat

Perceived treats examine the likelihood of the occurrence of a negative health outcome (Roberts, 2006, p.42). In the context of this study; perceived treat will be displayed by the elements that lead to the patient limited knowledge and poor perception to surgical informed consent. The following figure depicts the components of the conceptual framework and how they are linked to the concepts under study.

The above literature highlighted that the patient perception towards surgical informed consent is highly related to the patient knowledge. Patient with high education perceived better informed consent and are able to understand information provided during informed consent process.

CHAPTER THREE: METHODOLOGY

Introduction

Methodology involves the methods that the researcher to use in data collection and take into consideration the theories which motivate those methods(William,2004).This chapter has the following: Study design, Research approach, Research setting, Population, Sampling Strategy, Data collection instrument, Data collection procedures, Data analysis, Ethical considerations, data management, data dissemination and study limitation.

3.1. Research approach

Quantitative approach was used. Quantitative approach uses numerical data during investigations (Robert, 2006, p.41).It was used to determine the patient's knowledge and perception towards informed consent for surgical procedures in the Rwanda military hospital. Quantitative approach established the relationship between knowledge and perception of patients regarding informed consent for surgical procedures in the Rwanda military hospital.

3.2. Research design

A research design is a plan that shows the methods and procedures used in a research project to address the main research question (Trochim, 2014).This research has used descriptive correlational as research design. According to The Office of Human Research Protections (OHRP, 2013), in descriptive correlational design, information is collected without manipulating the study subject and reveals the relationships between the concepts under study. In this study, descriptive correlational design determined and described the patient's level of knowledge and perception towards informed consent for surgical procedures in the Rwanda military hospital. Thereafter, a relationship between knowledge and perception of patients regarding informed consent for surgical procedures in the Rwanda military hospital has been established.

3.3. Research setting

The research setting is the place where the data collection is taking place (William, 2008).The study was conducted in Rwanda military hospital. It is a referral hospital located in Kicukiro district, Kigali city. This hospital receives patients from different surgical specialties. In the daily work at Rwanda military hospital the researcher has realized the misconception and discrepancy on patient's knowledge towards surgical informed consent.

This has pushed the researcher to assess the patient's knowledge and perception towards surgical informed consent in the above hospital.

3.4. Study population

The population refers to a group of interest that the researcher need to study (Beck, 2009, p.554).The study population was surgical patients in the Rwanda military hospital

Inclusion criteria

Inclusion criteria are inclusive standards that guide the researcher to select study participants (Waltz, 2005).In this study; patients aged from 18 years old, underwent elective (planned) surgery in the department of general surgery, orthopedic, obstetrics and gynecology, urology, ENT, plastic and maxilla facial surgery and consent for the study are inclusion criteria.

Exclusion criteria

Exclusion criteria refers to the elements that researcher based on to eliminate participants from the study referring to specific study requirements (Beck, 2009, p.543).Patient underwent emergency surgery which may result in patient death or health impairment if delayed surgery; painful patients and patients with postoperative complications

3.5. Sampling Strategy

Probability Stratified sampling was used as sampling strategy. In probability sampling, each one in the population has equal chance of being selected as a study sample. It becomes Probability stratified sampling if the population is divided into subgroups or strata based to some variables which are significant to the study (William, 2005).Surgical patients had equal chance of being selected in the study. The researcher divided surgical patients into different strata according to the surgical specialties (general surgery, orthopedic, obstetrics and gynecology, urology, ENT, maxilla facial and plastic surgery stratum).Simple random sampling technique was used to determine the sample in each stratum. Proportionate stratified sampling technique was used. proportionate stratified sampling refers to the same sampling fraction in each stratum considering the entire population (Roberts, 2006, p.43). In the context of this study, the researcher took the same sampling fraction of patients across strata in order to achieve homogeneity.

3.6. Sample size

The sample size implies the number of units that make the study sample (Robert, 2006**).** In this study, the sample size was calculated by Fisher (1998) formula: $\mathbf{N = z^2pq/d^2}$where

N stands for is the minimum sample size

Z is the standard normal deviate set at 95% and the confidence limit is at 1.96

P is the prevalence of surgical procedures that required informed consent equal to 0,5 (50%)

q = 1-p (complementary probability) =1-0.5=0.5

d is the degree of precision (the margin of error) usually at 5% =0.05

Therefore **N** = $(1.96)^2 \times 0.5 \times 0.5/(0.05)^2$

= 3.8416 × 0.25/0.0025

= 0.9604/0.0025

= 384.16

According to Mugenda (2003), if the population is less than 10 000, the following formula is applied: **Nf =n/1+ (n/N)**

Where; **Nf** is desired sample for population less than 10 000

n desired sample size for population greater than 10 000.

N is estimate of the population size equal to140

Therefore the desired sample size is 384/1 (384/140)

Nf= 384/ (1+2.74)

Nf =384/3.74

Nf =102

The researcher applied a 20% attrition rate to calculated sample size to make it 122. Twenty five more participants were added to improve the power and the validity of the study. Therefore, the sample size for this study became 147 patients.

3.7. Data collection instrument

Data collection instrument reflects the tool used to collect data(Roberts 2006).Data was collected using closed ended interview schedule consisting of bibliographical data, knowledge and perception to surgical informed consent. The researcher adopted the tool from Sulaiman et al., (2015) used to assess the patient's knowledge, attitude and perception towards informed consent in obstetric surgical procedures at AminuKano Teaching Hospital; The research instrument consisted of 3 sections namely:

Section A of the instrument elicited demographic data which will capture the personal descriptive data of participations. The components of the data will include age, sex, and marital status, level of education, religion, occupation and residential area. On item 2, the researcher used observation skills to determine gender of the surgical admitted participants. This data described the characteristics of the sample for the study**.**

Section B assessed the the level of knowledge of patients towards informed consent for surgical procedures in the Rwanda military hospital. The response was rated on a Likert scale whereby the most favorable answer got a higher score and less favorable a lower score and the overall score will be calculated. The minimum possible total score for level of knowledge was 13 and the maximum possible score will be 49. Dividing the attained score on this section by the maximum possible attainable score (49) and multiplying by a hundred came up with a percentage calculated knowledge of informed consent with surgical procedures. Knowledge of informed consent of 80% to 100 % was classified as high, 70% to 79% was classified as moderate and of below 70% was considered as low.

Section C assessed the the level of perceptions of patients towards informed consent for surgical procedures in the Rwanda military hospital. The response was rated on a Likert scale whereby the most favorable answer got a higher score and less favorable a lower score and the overall score was calculated. The minimum possible total score for level of knowledge was 11 and the maximum possible score was 33. Dividing the attained score on this section by the maximum possible attainable score (33) and multiplying by a hundred came up with a percentage calculated level of perceptions towards informed consent with surgical procedures. A perception of informed consent of 80% to 100 % was classified as high, 70% to 99% was classified as moderate and of below 70% was considered as low.

3.8. Validity and reliability of the research tool

Validity is expresses how well the research tool measure the phenomena under study. It refers to the nearness of what the researcher believes is measuring to what he or she planned to measure(Roberts, 2006). **Face validity** measures the construct of the study using facial looking of the tool (Devon et al. ,2016).In this study; the face validity of the questionnaire was determined by asking questions to my classmate to verify whether they are clear. Face validity was achieved by structuring the research tool into three separate sections namely: knowledge regarding informed consent process, perceptions of informed consent and demographic characteristics interview guide.

Content validity assess whether the tool illustrate all the concepts under the study(Devon et al., 2016). Evidence for content-based validity of the instrument will be obtained from the literature, from representatives of the relevant population and from content experts. The research tool was developed based on the literature review of patient knowledge and perception towards surgical informed consent and other research tool used by other researchers for similar studies.
The researcher has adopted the common elements that are used by other researchers to assess the patient knowledge and perception towards surgical informed consent which are awareness, and understanding of consent as a legal document, What do patients need to know about the treatment; patient role in decision making process and patient's ability to understand the explanation of the procedure (Sulaiman et al., 2015, p.49)**.**

Construct validity is the level to which a tool measures the construct it is aimed to measure (Roberts, 2006). The construct validity was determined by assessing whether the knowledge and perception of patients towards surgical informed consent are measured in the conceptual framework and research instrument tool. **Criterion validity** evidenced on the relationship between the concepts under study with other variables (Beck, 2009).In this study; criterion validity was explained by the relationship between knowledge and perception towards informed consent with others variables such as education level, cultural and religion. Table 3.1 reveals the construct validity measure of the instrument

Table 1: 3.1: Construct validity for the research instrument

Objectives of the study	Components of the conceptual framework	Interview schedule	Items in interview schedule
To determine the level of knowledge of patients towards informed consent for surgical procedures in the Rwanda military hospital.	Modifying factors	Section B	Items 1 to 12
To characterize the patient' perception towards informed consent for surgical procedures in the Rwanda military hospital.	Perceptions	Section c	Items 1 to 11
To examine the relationship between knowledge and perception of patients regarding informed consent for surgical procedures in the Rwanda military hospital.	Modifying factors, Perceptions, Perceived benefit, Likelihood an action	Section A, B and C.	All items in the interview schedule from section A to C

According to Roberts (2006, p.41) ;**reliability** describes how far a give tool like questionnaire will lead to similar results in different situations. A pilot study was done to assess the validity of the questionnaire and the feasibility of the study. To achieve the reliability, a closed ended questionnaire with the same words, same structure and same format for each participant, was used to ensure consistency and accuracy of the tool.

The reliability coefficient analysis of the research instrument was 0.72 and this showed that the instrument was a very good measure of the concepts under study.

3.8. Data collection procedures

After obtaining the ethical approval from University of Rwanda and Rwanda military hospital research committees, the researcher presented them to the unit manager of surgical ward in order to get the permission of carrying out a study. The researcher interviewed one patient at once and it was done at the bedside.

An informed consent was obtained from surgical patients before collecting data. The researcher used closed ended interview schedule to collect data from the patients where the researcher asked questions to patients face to face and will record for them. Questionnaires were collected and checked from unit manager office to ensure that all the information had been properly collected and recorded. The study took three months.

3.9. Data analysis

Descriptive statistics was used to analyze data. Descriptive statistics describes and summarizes data in a significant way (William, 2005). Descriptive statistics determined the level of knowledge and perception of patients towards informed consent for surgical procedures in the Rwanda military hospital. Inferential statistics of correlational examined the relationship between knowledge and perceptions of patients regarding informed consent for surgical procedures in the Rwanda military hospital. Regression analysis was used to identify the variance contributed by knowledge towards perceptions of informed consent. Chi-square test was used to find if there is any association between biographical characteristics and knowledge and perceptions of patients regarding the issue of informed consent. Data was presented in tables.

3.10. Ethical Considerations.

This study followed ethical review board rules from university of Rwanda, college of medicine and health sciences and Rwanda military hospital. The research proposal was presented to a panel of research experts and was ethically approved by the panel member.

It covered the concept of informed consent from participant and got authorization from them without coercion. The beneficence principle where patient’s freedom from harm was applied

during data collection. Principle of respect of human dignity such as right to self-determination and to full disclosure was considered in this study. This study adhered to the patient right which are privacy and confidentiality, respect and dignity, patient safety and information. Participants were allowed to refuse or withdraw at any stage of the study. The researcher ensured that there were no risks or harms associated with participating in this study. Privacy was maintained throughout the study through the use of ID numbers and careful attention paid to protection of information.

Confidentiality was kept as no names appeared on the interview scheduled guide at any stage of data collection as was coded. Consent was signed to indicate acceptance.

3.11. Data management

The data management is the set of procedures through which information is processed. It involves the collection, manipulation, storage, and retrieval of information (choenbach, 2000).

Confidentiality was kept by not writing the patient's name on the interview schedule guide. The interview schedule guide was kept in a locked cupboard and they will be destroyed after 5 years. The computer was locked with password to ensure that electronic row data was kept confidentially.

3.12. Data dissemination

The researcher will send a copy of thesis at CMHS library then publication in the national journals and the send the copy of the thesis will be at the Rwanda military hospital research office.

3.13. Limitation to the study

The study was carried out in a single referral university teaching hospital located in town and it may not be generalized to other non referral hospitals therefore the findings of this study may not highlight what happens at the lower none referral hospitals. The reliability of data may also be limited due to the fact that one researcher conducted the data.

CHAPTER FOUR: PRESENTATION OF RESULTS

4.1. Introduction

A descriptive correlational design was used for the study. The purpose of the study was to assess patient's knowledge and perception towards informed consent for surgical procedures in the Rwanda military hospital. The specific objectives were to determine the level of knowledge of patients, characterize the patient' perception towards informed consent for surgical procedures and to examine the relationship between knowledge and perception of patients regarding informed consent for surgical procedures in the Rwanda military hospital. A sample of 147 participants was selected to take part in the study. Face to face method of data collection was employed. Data was entered into SPSS version 21 for analysis.

Descriptive statistics was used to describe the demographic characteristics and level of knowledge and perception of patients towards informed consent for surgical procedures in the Rwanda military hospital. Inferential statistics of pearson correlation coefficient was used to examine the relationship between knowledge and perceptions of patients regarding informed consent for surgical procedures in the Rwanda military hospital. A regression analysis was used to identify the variance contributed by independent variable (knowledge) towards the dependent variable (perceptions) of informed consent. Chi-square test was used to find if there is any association between biographical characteristics and knowledge and perceptions of patients regarding the issue of informed consent. Therefore, the presentation of the results will cover demographic data, knowledge, perception and relationship between knowledge and perception of patients towards informed consent for surgical procedures at the Rwanda military hospital**.**

4.2. Presentation of demographic data of the research subject

Descriptive statistics in the form of graphs and tables was used to analyze demographic data. Table 4.1 reveals the demographic data of research subject. One hundred forty seven patients were recruited for the study. Regarding age, 54(36.7%) of respondents were between 31 and 40 years, 49(33.3%) were between 18 and 30 years, 22(15%) were between 41 and 50 years, 10(6.8%) were between 51 and 60 years and 12(8.2%) were greater than 60 years.

Eighty one (55.1%) of respondents was male and 66(44.9%) were female. One hundred and seven (72.8%) of respondents were married; 31(21.1%) of respondents were single; 7(4.8%) were separated and2 (1.4%) of respondents were divorced.

The majority of the respondents were Christians123 (83.7.4%) while 19(12.9%) were Muslims and 5(3.4%) are from traditional religion.

Fifty two per cent (52.4%) had grade one level to grade 6 level.44 (29.9%) had senior one to senior six, 16(10.6%) had university level and 10(6.8%) were below primary level. Sixty eight (46.3%) were semi-skilled; 57(38.8%) unemployed and 22(15%) were skilled, 84(57.1%) were from rural and 63 (42.9%) were urban. Of 147 patients 38(25.9%) were from general surgery; 29(19.7%) from orthopedics 25(17%) were from obstetrics and gynaecology; 13(10.9%) were from plastic surgery; 13(8.8%) were from maxilla facial; 13(8.8%) ENT; and 13(8.8%) were from urology.

Table 2 : 4.1 Demographic data of the research subject (N=147)

Variable	Frequency	% of frequency
Age in years		
18-30 years	49	33.3
31-40 years	54	36.7
41-50 years	22	15.0
51-60 years	10	6.8
Greater than 60 years	12	8.2
Gender		
Male	81	51.1
Female	66	44.9
Marital status		
Married	107	72.8
Single	31	21.1
Separated	7	4.8
Divorced	2	1.4
Religion		
Christianity	123	83.7
Islam	19	12.9
Traditional	5	3.4
Education		
Below primary level	10	6.8
Primary level	77	52.4
Secondary level	44	29.9
University/college level	16	10.9
Surgery discipline		
Orthopedic	29	19.7
General surgery	38	25.9
Obstetrics and gynaecology	25	17.0
Urology	16	10.9
Plastic	13	8.8
MFS	13	8.8
ENT	13	8.8
Residential area		
Rural	63	42.9
Urban	84	57.1
Occupation		
Skilled	22	15.0
Semi skilled	68	46.3
Unemployed	57	38.8

4.3. Presentation of results on research subject knowledge towards informed consent for surgical procedures

Table 4.2 displays the patient's knowledge towards informed consent for surgical procedures**.** The majority 82 (55.8%)agreed that they want to know the reason for operation; 28(19%) strongly agree;23(15.6%) disagree and only14(6.5%) strongly disagree**.**57(38.8 %) of patients want to know what will be during the operation while 41(27.9%) do not want.73(49.7%) agreed that they want to know the cost for the operation while 42(28.6%) do not want.83(56.5%) of patients agreed that they want to be aware o risks and complications of the procedure,40(27.2%) disagree, 18(12.2%) strongly agree and only 6(4.1%) strongly disagree.83(56.5%) agreed that they need to know postoperative care information, 34(23.1%) disagree, 20(13.6%) strongly agree and10(6.8%) strongly disagree**.**

Forty eight per cent 71(48.3%) of patients do not want to know after how many days they should resume their work, 51(34.7%) agreed that they want to know and 10(6.8%) strongly agreed**.** The majority88 (60%) of patients agreed that the want to be knowledgeable on successful result of the operation while 32(21.8%) do not**.** 75(51%) want to know special precaution to be taken after operation and 51(34.7%) do not**.**

Table 3:4.2. Research subject knowledge towards informed consent for surgical procedure (N=147)

Variable	Frequency	% of frequency
Reason for operation		
Strongly disagree	14	6.5
Disagree	23	15.6
Agree	82	55.8
Strongly agree	28	19.0
What will be during the operation		
Strongly disagree	27	18.4
Disagree	41	27.9
Agree	57	38.8
Strongly agree	22	15.0
Cost for the operation		
Strongly disagree	21	14.3
Disagree	42	28.6
Agree	73	49.7
Strongly agree	11	7.5
Risks and complications		
Strongly disagree	6	4.1
Disagree	40	27.2
Agree	83	56.5
Strongly agree	18	12.2
Postop care information		
Strongly disagree	10	6.8
Disagree	34	23.1
Agree	83	56.5
Strongly agree	20	13.6
After how many days you should resume your work		
Strongly disagree	15	10.2
Disagree	71	48.3
Agree	51	34.7
Strongly agree	10	6.8
Successful result of the operation		
Strongly disagree	3	2.0
Disagree	32	21.8
Agree	88	59.9
Strongly agree	24	16.3
Special precaution to be taken after operation		
Strongly disagree	7	4.8
Disagree	51	34.7
Agree	75	51.0
Strongly agree	14	9.5

Table 4.2b continues to reveal results on knowledge. Forty five percent 66(44.9%) need to be informed on special dietary consideration to be considered after operation while 59(40.1%)

disagreed. Regarding the patient role in the decision making about the procedure, 65(44.2%) of patients disagreed on following the doctor s recommendation while 40.1% agree to follow the doctor's recommendation. agree to follow**.** Forty three point five (43.5%)of patients allow doctors to determine their treatment but they want to know about their treatment while 61(41.5%) agree. Fifty three point seven (53.7%) of patient need to make a final decision regarding their treatment and 46(31.3%) do not want.

Table 4:4.2b. Research subject knowledge towards informed consent for surgical procedure (N=147)

special dietary consideration to be considered after operation **Strongly disagree** **Disagree** **Agree** **Strongly agree**	 **13** **59** **66** **9**	 **8.8** **40.1** **44.9** **6.1**
Following doctor s recommendation **Do not know** **Disagree** **Agree**	 23 65 59	 15.6 44.2 40.1
I want to know about my treatment **Do not know** **Disagree** **Agree**	 22 64 61	 15.0 43.5 41.5
Patient makes a final decision **Do not know** **Disagree** **Agree**	 22 46 79	 15.0 31.3 53.7

Table 4.3 displays the total research subject knowledge score towards informed consent for surgical procedures. The mean was (30.7050), the median (30.0000), and the model score (30.00).The lowest score for knowledge was 24 of 49 and the highest score was 45 out of 49.The lowest knowledge was below 34 out of 49(less or equal to 69%), the moderate score had from35 to 38 out of 49 (70 up to 79%) and the highest score of knowledge was 45 out 49(80 up to 100%).Eighty three per cent(83%) had low knowledge,(12%) had moderate knowledge and (5%) of the patients had high level of knowledge.

Table 5 :4.3. Total research subject knowledge score towards informed consent for surgical procedures (N=147)

Knowledge score out of 49	Percentage knowledge score	Level of knowledge	Frequency	% of frequency
24	49	Low	2	1.4
25	51	Low	5	3.4
26	53	Low	9	6.1
27	55	Low	17	11.6
28	57	Low	15	10.2
29	59	Low	14	9.5
30	61	Low	18	12.2
31	63	Low	18	12.2
32	65	Low	11	7.5
33	67	Low	9	6.1
34	69	Low	5	3.4
35	71	Moderate	3	2.0
36	73	Moderate	4	2.7
37	76	Moderate	4	2.7
38	78	Moderate	6	4.1
39	80	High	5	3.4
40	87	High	1	0.7
45	92	High	1	0.7

4.4. Presentation of research subject perceptions towards informed consent for surgical procedures

Table4.4.displays the research subject perceptions towards informed consent for surgical procedures. Forty eight percent of the patients did not perceive informed consent as formal document. However 52(35.4%) took it as formal and 24(16.3%) did not know neither formal nor not. 57(38.8%) did not believe that signing the consent form is a legal requirement while 46(31.3%)did.65(44.2%) of the patients thought that signing the consent form will not remove their right to compensation.63(42.9%) did not believe that informed consent protect the doctor against

being sued while 55(37.4%) did. Fifty six per cent 83(56.5%) of patients stated that informed consent protect their rights.

The majority 92 (62.6%) of believed that informed consent confirms that operation have been explained while 48(32.7%) thought that informed consent does not necessary mean the operation has been explained.57.1% took the informed consent as a must for undergoing operative procedure while 39.5% believed it is not.

68(46.3%) thought they have no right to change their mind after signing the informed consent and 55(37.4%) believed they have right. 69(46.9%) stated that their relatives can sign the consent form on their behalf and 58(39.5%) did not think so.64(43.5%) of patients believed that the operation cannot take place without informed consent while 62(42.2%)believed that it can.68(46.3%)stated that informed consent are necessary 52(35.4%) mentioned that they are not.

Table 6: 4.4.Presentation of the research subject perceptions towards informed consent for surgical procedures (N=147).

Variable	Frequency	% of frequency
Consent forms are just a formality		
Do not know	24	16.3
No	71	48.3
Yes	52	35.4
Signing the consent form is a legal requirement.		
Do not know	44	29.9
No	57	38.8
Yes	46	31.3
consent form removes your right to compensation		
Do not know	40	27.2
No	65	44.2
Yes	42	28.6
protect the doctor against being sued		
Do not know	29	19.7
No	63	42.9
Yes	55	37.4
Consent form is to protect the patient's rights.		
Do not know	20	13.6
No	44	29.9
Yes	83	56.5
informed consent confirms that operation have been explained		
Do not know	7	4.8
No	48	32.7
Yes	92	62.6
the consent form is a must for undergoing operative procedure		
Do not know	5	3.4
No	39.5	39.5
Yes	57.1	57.1
Right to change your mind after signing the consent form		
Do not know	24	16.3
No	68	46.3
Yes	55	37.4
Your relative can sign the consent form on your behalf		
Do not know	20	13.6
No	58	39.5
Yes	69	46.9
The operation cannot take place without informed consent		
Do not know	21	14.3
No	62	42.2
Yes	64	43.5
Consent forms are necessary		
Do not know	27	18.4
No	52	35.4
Yes	68	46.3

Table 4.5 shows the total patient s perception score towards informed consent for surgical procedures. The mean was (25.0544), the median (25.00), and the model score (26.00).The

lowest score for knowledge was 17 of 33and the highest score was 32 out of 33.The perception was low from 17 up to 22 out of 33(less or equal to 69%), the moderate from 23 to 26 out of 33 (70 up to 79%) and the highest score of perception was 27 up to 32 out 33(80 up to 100%).Twenty three per cent (23%) had low perception ;(50%) had moderate perception and (31%) of the patients had high level of perception towards informed consent for surgical procedures .

Table 7: 4.5.Total research subject perception score towards informed consent for surgical procedures (N=147)

Perception score out of 33	Percentage perception score	Level of perception	Frequency	% of frequency
17	52	Low	1	0.7
18	55	Low	3	2.0
19	58	Low	5	3.4
20	61	Low	6	4.1
21	64	Low	9	6.1
22	67	Low	10	6.8
23	70	Moderate	12	8.2
24	73	Moderate	16	10.9
25	76	Moderate	16	10.9
26	79	Moderate	20	13.6
27	82	High	13	8.8
28	85	High	11	7.5
29	88	High	9	6.1
30	91	High	9	6.1
31	94	High	6	4.1
32	97	High	1	0.7

4.6. Presentation of relationship between research subject knowledge and perception of patients towards informed consent for surgical procedures

Table 4.6 reveals the results for the relationship between the subject knowledge and perception towards informed consent for surgical procedures, There is a significant weak positive correlation between patient's knowledge and perception of patients towards informed consent for surgical procedures($r = .487$), ($-1 \leq r \leq 1$, $p=.00$). This means that as the patient' knowledge increases the perception also increases towards informed consent for surgical procedures. The correlation was significant at 0.01 meaning that 99 percent of the results were correct and there was only one percent chance that the results were incorrect.

Table 8: 4.6: Correlation between subject knowledge and perception towards informed consent for surgical procedures

		Knowledge	perception
Total knowledge	Pearson Correlation	1	.487**
	Sig. (2-tailed)		.000
	N	147	147
Total perception	Pearson Correlation	.487**	1
	Sig. (2-tailed)	.000	
	N	147	147

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.7 reveals the regression analysis of the contribution of the independent variable (Knowledge) to the dependent variable (perceptions) regarding informed consent for surgical procedures. The correlation of knowledge and perception of patients towards informed consent was significant (P value=0.00).Therefore the regression analysis came to explain the variance of the independent variable (knowledge) to the dependent variable (perception).According to the table 4.8 shows that the knowledge is contributing only to 23.7% to increased perception(R Square=0.237) towards informed consent for surgical procedures.The significant F-test (45.145, P=00) indicated a linear relationship and that R Square was significant**.**

Table 9: 4.7 Regression analysis of Knowledge

Model	R	R Square	Adjusted R Square	Change Statistics		
				F Change	Degrees of freedom	Sig. F Change
1	.487[a]	.237	.232	45.145	1	.000

a. Predictors: (Constant), Knowledge

The table 4.8 shows the association between demographic characteristics and patient knowledge towards informed consent for surgical procedures. With regards to age there is no significant association (65.119, p=.577) with patient knowledge towards informed consent. There is no significant association (19.927,p=.278) between the patient gender and the knowledge, marital status and knowledge (46.717,p=.644) ,religion and knowledge (31.539,p=.589) ,surgery discipline and knowledge(97.714,p=.602),residential area and knowledge(15.025,p=.594) towards informed consent for surgical procedures. However there is a significant association between the patient level of education and knowledge (158.538,p=.000), occupation and knowledge(99.613,p=.00) towards informed consent for surgical procedures.

Table 10: 4.8: Association between demographic characteristics and subject knowledge towards informed consent for surgical procedures (N=147)

Demographic	**Chi square**	**Value**	**Degree of freedom (df)**	**p- value**
Age	Pearson Chi-Square	65.119[a]	68	.577
	N of valid cases	147		
Gender	Pearson Chi-Square	19.927[a]	17	.278
	N of valid cases	147		
Marital status	Pearson Chi-Square	46.717[a]	51	.644
	N of Valid Cases	147		
Religion	Pearson Chi-Square	31.539[a]	34	.589
	N of Valid Cases	147		
Education	Pearson Chi-Square	158.538[a]	51	.000
	N of Valid Cases	147		
Surgery discipline	Pearson Chi-Square	97.714[a]	102	.602
	N of Valid Cases	147		
Residential area	Pearson Chi-Square	15.025[a]	17	.594
	N of Valid Cases	147		
Occupation	Pearson Chi-Square	99.613[a]	34	.00
	N of Valid Cases	147		

Table 4.9 displays the association between demographic characteristics and patient perceptions towards informed consent for surgical procedures at the RMH. With regards to age there is no significant association (61.514, p=.422) with patient perceptions towards informed consent. There is no significant association (18.830,p=.222) between gender and the patient perception, marital status and perception (43.727,p=.526) ,religion and perception(33.484,p=.302) ,surgery discipline and perception(93.579,p=.377),residential area and perception(22326,p=.100) towards informed consent for surgical procedures. However there is a significant association between the patient level of education and patient perception (158.538, p=.00), occupation and patient perception (50.626,p=.011) towards informed consent for surgical procedures.

Table 11: 4.9: Association between demographic characteristics and research subject perceptions towards informed consent for surgical procedures at the RMH

Demographics	**Chi square**	**Value**	**Degree of freedom**	**p- value**
Age	Pearson Chi-Square	61.514[a]	60	.422
	N of valid cases	147		
Gender	Pearson Chi-Square	18.830[a]	15	.222
	N of valid cases	147		
Marital status	Pearson Chi-Square	43.727[a]	45	.526
	N of Valid Cases	147		
Religion	Pearson Chi-Square	33.484[a]	30	.302
	N of Valid Cases	147		
Education	Pearson Chi-Square	158.538[a]	51	.00
	N of Valid Cases	141		
Surgery discipline	Pearson Chi-Square	93.579[a]	90	.377
	N of Valid Cases	147		
Residential area	Pearson Chi-Square	22.326[a]	15	.100
	N of Valid Cases	147		
Occupation	Pearson Chi-Square	50.626[a]	30	.011
	N of Valid Cases	147		

4.6. Conclusion of the results

The sample size was 147 and the response rate was 100%. Eighty three per cent (83%) had low knowledge, (12%) had moderate knowledge and (5%) of the research subject had high level of knowledge. Twenty three per cent (23%) had low perception ;(50%) had moderate perception and (31%) of the patients had high level of perception towards informed consent for surgical procedures. There is a significant weak positive correlation between patient's knowledge and perception of patients towards informed consent for surgical procedures [($r = .487$), ($-1 \leq r \leq 1$), $p=.00$)].There is no significant association between the patient age, gender, marital status, religion, surgery discipline, residential area and knowledge towards informed consent for surgical procedures. However there is a significant association between the patient level of education, occupation and knowledge towards informed consent for surgical procedures. There is no significant association between the patient age, gender, marital status, religion, surgery discipline, residential area and perception towards informed consent for surgical procedures.

However there is a significant association between the patient level of education, occupation and perception towards informed consent for surgical procedures

CHAPTER FIVE: DISCUSSION OF THE RESULT

5.1. Introduction

This chapter includes discussion of the result on the sample size, demographic characteristics, patient's knowledge and perception towards informed consent for surgical procedures, the relationship between patient's knowledge and perception towards informed consent for surgical procedures, limitation and recommendation to the study

5.2. Discussion of the sample size

The sample size of 102 patients was calculated using Fisher's (1998) and Mugenda M (2003)'s formula. However the researcher applied a 20% attrition rate and 25 patients was added to improve the power and the validity of the study and the sample size became 147 patients. A study conducted in Nigeria by Sulaiman et al. (2015) to assess the patient's knowledge and perceptions towards informed consent for obstetrics surgical procedure recruited a sample of 384 patients using Fisher's (1998) formula only and the population was less than 10 000, therefore Mugenda (2003)'s formula s would be applied. (Siddiqui et al. 2010) recruited almost the same number (106) of participants in a study on informed consent in surgical patients at a university hospital. Therefore the sample size is enough to reflect the patient's knowledge and perceptions towards informed consent for surgical procedures.

5.3. Discussion of the result on demographic characteristics

The study recruited almost the same number of participants between 31 and 40 years (36.7%) and 18 up to 30 years (33.3%).With regards to age, this result of this study is similar to Agu et al., (2014) result which stated that more than 70% of the study participants were aged 40 years and below in the study on attitude towards informed consent practice in a developing country. Eighty one (55.1%) of respondents was male and 66(44.9%) were female. The findings of this study are almost similar to Ochieng, J. et al., (2015) ones on the study on informed consent in clinical practice in Uganda which recruited 50.7 % female and 49.3% of participants were males. They also similar to a study conducted in Nigeria by Agu et al., (2014) on attitude towards informed consent practice in a developing country which recruited almost 60% male and 50% female.

One hundred and seven (72.8%) of respondents were married ;(21.1%) of respondents were single; (4.8%) were separated and (1.4%) of respondents were divorced which is different from Agu et al., (2014) study that recruited 28.4% of participants married and 66.0% were single.

With regards to religion, the majority of the respondents were Christian (83.7.4%) while (12.9%) were Muslims and (3.4%) are from traditional religion. The findings of this study are different from Sulaiman, A.I. et al., (2015) whereby the majority of the respondents were Muslims (89.4%) while Christians constituted only (10.6%). Fifty seven per cent (52.4%) had grade one level to grade 6 level, (29.9%) had senior one to senior six (10.6%) had university level and (6.8%) were below primary level. These results are different from f Ochieng, J. et al.,(2015) study result which showed that more than 47 % of the participants had at least attained secondary school education, while 37.1 % had primary education.

With regards to occupation, (15%) were skilled (38.8%) unemployed. Therefore there is similarity between of this study and Agu et al., (2014) study that displayed (25.8%) was unemployed and (12%) were employed. The result of this study showed that general surgery has more respondent than other surgical discipline (25.9%) followed by orthopedic surgery (19.7%) and it is similar to Siddiqui et al (2010) study that recruited (34%) from general surgery and (17.9%) of respondent from orthopedics.

5.4. Discussion of the result on patient's knowledge towards informed consent for surgical procedures

With regards to patient's knowledge towards informed consent for surgical procedures, almost a half (55.8%) of the respondents wanted to know the reason for operation which similar to Singh et al. (2013) research result conducted in India which revealed that (55.2%) of the patient needed to know reason for operation.

Thirty eight point eight per cent (38.8 %) of patients were interested on what will be during the operation which is contrary to Singh et al. (2013) findings whereby 63.6% of respondents were not bothered to know what will be done during the operation provided they were made better. The result of this study displayed that the minority (49.7%) wanted to know the cost for the operation. However the study of Singh et al., (2013) stated that the majority (67.4%) of respondents mentioned that information regarding should be an element of informed consent.

In this study, almost a half (56.5%) of respondents wanted to be aware of risks and complications of the surgery which is different from Sulaiman et al., (2015) findings from a study done in Saudi Arabia where(94%) of respondents needed information regarding risks and complications regarding the procedure. Contrary to Siddiqui et al., (2010) study result where seventy percent of respondents were not interested on information about the risks and complications. Other study reported that disclosing the risks and complications to patients before surgery increases the anxiety. Fifty six per cent (56.5%) of respondents needed information regarding postoperative care management which is somehow similar to Singh et al., (2013) study findings where (43%) wanted post operative care information.

The majority (60%) of respondents wanted to be knowledgeable on successful result of the operation which is similar to Olaboyede et al., (2013) result revealed that great number of participants needed to recognize the importance of informed consent like being aware of surgery outcome. Fifty one percent of respondents(51%) wanted to know special precaution to be taken after operation which is a large number comparatively to Singh et al., (2013) result which revealed that only 25.6% needed to be informed on special precautions after surgery.

Regarding the patient role in the decision making about the procedure, forty three (43.5%) of patients allow doctors to determine their treatment but they want to know about their treatment. Fifty three (53.7%) of patient needed to make a final decision regarding their treatment**,** However according to Agu et al., (2014) majority (69.2%) of the respondent were happy to allow doctors to determine their treatment but they wanted to know about their condition, the treatment and the important side effects. Furthermore only a few patients (11.6%) wanted to make final decision themselves. 61.6% trusted their doctor to do the right thing and did not think detailed explanation was important.

Globally the findings of this study displayed that eighty three per cent (83%) had low knowledge (12%) had moderate knowledge and (5%) of the patients had high level of knowledge which are different from Singh et al. (2013) study findings where general the level of knowledge towards informed consent was poor in 17%, unsatisfactory in 33%, moderate in 32% and excellent in 18% of the patients.

5.5. Discussion of the result on patient's perception towards informed consent for surgical procedures

Forty eight percent of the patients did not perceive informed consent as formal document. However 52(35.4%) took it as formal and 24(16.3%) did not know neither formal nor not which is different from Singh et al. (2013) study findings where 55 % of respondents took informed consent as a formal document. Thirty one percent (31%) believed that signing the consent form is a legal requirement and (28.6%) of the patients thought that signing the consent form will remove their right to compensation .However Olaboyede et al(2013) study results revealed that almost all participants (91.5%) agreed that signing of consent form is a legal requirement before surgery while nearly a half 110 (47%)of the patients believed that signing the consent form will prevent them claiming their rights to compensation.

The findings of Sulaiman et al., (2015) study reported that75.0% patients believed that the consent was a legal requirement and almost similar percentage of respondents (68.8%) thought that signing the consent meant waving their rights to any compensation. Thirty seven percent of respondents believed that informed consent protect the doctor against being sued which is different from Agu et al., (2014) findings revealed that about a half of respondent believed that it protects the hospital and doctors against litigation.

Almost of respondent (57.1%) took the informed consent as a must for undergoing operative procedure which is different from Olaboyede et al.,(2013) findings where they were number of doubts about the implications of signing or not signing the consent form and they wondered if surgery can proceed when consent form is not signed.

Forty six percent (46.3%) thought they have no right to change their mind after signing the informed consent and 55(37.4%) believed they have right which similar to (Sulaiman et al., 2015) findings revealed that number of participants (45.3%) and (43.6%)agreed and disagreed respectively, that a patient can change his/her mind after signing the consent form. These findings are different from Singh et al., (2013) one which stated most (88.0%) of the patients under study thought that they had no right to change their minds after signing the consent

Forty six per cent (46.9%) stated that their relatives can sign the consent form on their behalf and (43.5%) of patients believed that the operation cannot take place without informed consent which was different from Hammami, M.M. et al., (2014) findings where nearly all participants (95.7%)

were aware that their next of kin could sign on their behalf, if they were unable to sign for themselves and (68.4%) of the participants believed that the operation could not be done if she refused to sign consent form.

The result of this study revealed that (46.3%) stated that informed consent are necessary which is different from Olaboyede et al.,(2013) study findings displaying that the majority(76.9%) participants strongly agreed that signing consent form is important to them and more than half of them, 124(53.0%) did not agree and that it was just mere papers to sign.

5.6. Discussion of the result on the relationship between patient's knowledge and perception towards informed consent for surgical procedures

The results of this study revealed that there is a significant weak positive correlation between patient's knowledge and perception of patients towards informed consent for surgical procedures($r = .487$), ($-1 \leq r \leq 1$, $p=.00$). This means that as the patient' knowledge increases the perception also increases towards informed consent for surgical procedures. Moreover the patient level of education, occupation influences significantly the knowledge and perception towards informed consent for surgical procedures which is similar to Agu et al., (2014) findings where the greater proportion 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 revealed by Singh et al., (2013) who stated that the level of understanding of informed consent was significantly better in those who had higher education.

However this study revealed no significant association between the patient age, gender, marital status, religion, surgery discipline, residential area and both knowledge and perception towards informed consent for surgical procedures. Contrary Hammami et al., (2014) findings reporting that females took the informed consent process as information disclosure and male perceived it as enabling self decision making. These results could be explained by the social role theory.

5.7. Recommendation to the study

5.7.1. Nursing practice

Nurses should ensure that the informed consent takes place adequately and the patient has enough knowledge to take a deliberate decision. To avoid confusion, consent should be discussed with patients several days before surgery so that patients have opportunity to clear any area of doubt concerning their knowledge and perceptions.

5.7.2. Research

There is need for further local intervention studies on informed consent process hereby highlighting the patient role in the decision making regarding surgical procedure based on his or her knowledge and perception. Different community peculiarities should be taken into consideration while performing informed consent.

5.7.3. Administration

The Rwanda military hospital in collaboration with the ministry of health should draft an informed consent form which include all the detailed information and sensitize to the surgeons to improve the informed consent practice hereby explaining to the patient in details the surgical procedure, risks and potential complications and enable them to take a deliberate decision regarding their treatment. The ministry of health should organize a community based outreach to aiming at teaching the informed consent process.

5.7.4. Nursing education

Informed consent should be thought at nursing schools as legal and ethical requirement to fulfill before undergoing any medical intervention. As patients advocate, nurses should ensure that the patient has understood the procedure and there is no any influence during informed consent process.

5.8. Conclusion

This study revealed that the patient's knowledge towards informed consent for surgical procedures is limited and their perception towards informed consent is poor.

Moreover the relationship between patient's knowledge and perception 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 .Therefore enough time should provided to low educated patients to obtain the informed consent and their comprehension should be assessed.

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APPENDIX 1: QUESTIONNAIRE TO ASSESS THE PATIENT'S KNOWLEDGE AND PERCEPTION TOWARDS INFORMED CONSENT FOR SURGICAL PROCEDURES AT THE RWANDA MILITARY HOSPITAL

A. Bibliographic characteristics of the patient.

Age

18-30 years	
21-40 years	
41-50 years	
51-60 years	
> 60 years	

Gender

Male	
Female	

Marital status

Married	
Single	
Separated	
Divorced	

Religion

Christianity	
Islam	
Traditional	

Education

Below primary level	
Primary level	
Secondary level	
University/college level	

Surgery discipline

Orthopedic	
General surgery	
Obst/gynecology	
Urology	
Plastic	
MFS	
ENT	

Residential area

Rural	
Urban	

Occupation

Skilled	
Semi skilled	
Unemployed	

B. Patient knowledge towards informed consent for surgical procedures.

B.1. what do you want to know about the surgical procedure?

What patients want to know	**Strongly Agree 4**	**Agree 3**	**Disagree 2**	**Strongly disagree 1**
1. Reason for operation				
2. What will be during the operation				
3. For how much the operation				
4. Important risks and complications of the operation				
5. Information about postoperative care				
6. After how many days you should resume your work				
7. Chance of successful result of the operation				
8. Any special precaution to be taken after operation				
9. Any special dietary consideration to be considered after operation				

B.2. what is your role in decision making about the treatment?

Opinion of patients regarding treatment	Agree 3	Disagree 2	Don't know 1
10. I don't want to know anything but I will do what doctor recommends.			
11. I want to know about my treatment but will do what doctor recommends.			-
12. I should make final decision after discussion of pros and cons of the surgery.			

C. Patient' perceptions towards informed consent for surgical procedures

How do you perceive surgical informed consent?

In your opinion	Yes 3	No 2	Don't know 1
1. Consent forms are just a formality.			
2. Consent forms are necessary.			
3. Signing the consent form is a legal requirement.			
4. Signing the consent form removes your right to compensation.			
5. Consent form is to protect the doctor against being sued.			
6. Consent form is to protect the patient's rights.			
7. Signing the consent form conforms that operation and its effect have been explained to me.			
8. I have signed the consent form so that I can undergo operative procedure.			
9. You have the right to change your mind after signing the consent form.			
10. If you can't sign the consent form, can your relative sign on your behalf.			
11. If you are not able to sign the consent form, the operation cannot take place, even if this means you could die.			

THANKS FOR YOUR PARTICIPATION!!

APPENDIX 2: INFORMED CONSENT FORM

My name is MBONERA Felix; I am a student in master's program in perioperative nursing at university of Rwanda, College of medicine and health sciences.

Purpose of the study

I am conducting a research on patient knowledge and perception towards informed consent for surgical procedures. The study will be conducted at Rwanda military hospital. Therefore I request for your participation hereby providing accurate information regarding your knowledge and perception towards surgical informed consent.

Description of the procedures

You are expected to be in the study for 20–40 minutes and will be tape recorded and notes taken as well with your permission. If you are not comfortable with being tape recorded and only be prepared to give answers to the questions, you will also be included in the study. The questions asked in this study will assess your level of knowledge and perceptions towards informed consent in surgical procedures.

Right to refuse or withdraw from the study

Participants are allowed to refuse or withdraw at any stage of the study. Also, you will have the option of not participating in any part or the full interview, without any adverse consequences on your treatment at the study facility.

Risks expected in the study

Minimal risk is expected in this study. The researcher will ensure that there are no risks or harms associated with participating in this study as the human rights will not be violated. Risks will be minimized throughout the study through the use of ID numbers and careful attention paid to protection of information. I realize you might be exhausted after surgical procedures and you are free to reschedule the interview.

Benefits of participating in the study

By participating in the study, you will not receive any direct benefits. There is no any allowance that will be provided to the study participants in this study. However, you will receive the satisfaction of knowing that participation in this research may help patients undergoing surgical procedures in all hospitals of Rwanda. The result of this study will help the nurses practice and their administration to recognize the quality of surgical services the patient receive therefore ,measures to improve patient knowledge and perception towards informed consent can be taken to adhere to good surgical practice.

Confidentiality

Confidentiality will be assured as no names will appear on the interview scheduled guide at any stage of data collection as they will be coded. Signed consent forms will not be attached to instruments to ensure anonymity. If you are willing to participate, a consent form will be signed to indicate acceptance. Data will be stored in a locked cabinet and not be accessible to any other person other than the investigator.

However, absolute confidentiality cannot be guaranteed and personal information may be disclosed if required by the law. The study staff will have access to all the information collected in this study. In addition, there are organizations that may inspect or copy your research records for quality assurance and data analysis and these include the institutional review board (IRB). Furthermore, all documents for the study will be destroyed after 5 years of study completion.

Contact details

For further information or reporting of study related adverse events, contact me or my supervisor on the following address and numbers:

University of Rwanda

College of medicine and Health Sciences

School of Nursing and Midwifery

Kigali, Rwanda

Felix Mbonera : +250 788660899

Dr Chironda – 00250 789924956.

For reporting of complaints or problems relating to the study, contact the IRB Administrator or Chair

Institutional Review Board

Research Office

University of Rwanda

Kigali, Rwanda

Tel……..

Email…….

Consent to participate

- Your signature below indicates that you have decided to volunteer as a research participant for this study, and that you have read and understood the information provided above. You will be given a signed and dated copy of this form to keep, along with any other printed materials deemed necessary by the researcher.

Subject's Name (print):

Subject's Signature: …….. Date:……..

Researcher's Signature: …….. Date:……..

APPENDIX 3 : URUPAPURO RUTANGA UBURENGANZIRA BWO KUJYA MU BUSHAKASHATSI

Amazina y'umushakashatsi ni **MBONERA Felix**; akaba ari umunyeshuri wiga icyiciro cya gatatatu cya kaminuza muri iniverisiti y'u Rwanda mu bijyanye no kuvura abarwayi babagwa (perioperative nursing).Ni murugo rwego arigukora ubushakashatsi k'ubumenyi n'imyumvire y'abarwayi kubijyanye n'urupapuro rw'amaseszerano yo kubagwa hagati y'umurwayi n'umuganga mu bitaro bya gisirikare by'u Rwanda. Umushakashatsi akaba rero abasaba gutanga amakuru y'ukuri.

Muzamarana n'umushakashatsi umwanya uri hagati yiminota 20 kugera kuri 40 ; kandi amakuru muzatanga azabikwa hifashishijwe ibyuma bifata amajwi cyangwa huzuzwa urupapuro rwabigenewe.

Mutwemereye mwagira uruhare muri ubu bushakashatsi kandi mufite uburenganzira bwo kutabwitabira nubwo kureka gutanga amakuru kucyiciro icyo ari cyo cyose ubushakashatsi bwaba bugezeho .Ntangaruka iyo ariyose bibagizeho.Ingaruka ntoya cyane zirashoboka muri ubu bushakashatsi ariko umushakashatsi azabarinda ikintu cyose cyakwangiza uburenganzira bwanyu nk'abarwayi muri ubu bushakashatsi.Ntamazina azagaragara k'urupapuro rw'ubushakadshatsi kandi amakuru mzatanga azabikwa ahantu mwibanga rikomeye.Umushakashatsi akekako mushobora kuba munaniwe nyuma yo kubagwa,ariko mugihe nkicyo mushobora kubwitabira undi munsi.

Ntanyungu idasanzwe iri muri ubu bushakashatsi gusa amakakuru azavamo yafasha mu kunoza serivisi zihabwa abarwayi babagwa mu bitaro by u Rwanda.

Umushakashatsi azagira ibanga atandika amazina kurupapuro rw'ubushakasahatsi .Gusinya kuri uru rupapuro bivuga ko mwemera kwinjira mu bushakashatsi.Impapuro ziriho amakuru muzatanga zizabikwa mu kabati gafungwa n'umushakashatsi ariko rimwe na rimwe amakuru ashobora gutangwa mu gihe binyuze munzira zamategeko cyangwa akenewe nurugaga rushinzwe kwiga ubuziranenge bwubushakashatsi.

Impapuro z'ubushakashatsi zizatwikwa hashize imyaka itanu ubushakashatsi burangiye.

Mugihe mwaba mukeneye andi makuru cyangwa mushaka gutanga ibitekerezo mwa hamagara imyirondoro ikurikira:

Umushakashatsi: Felix Mbonera : +250 788660899

Umunyeshuri muri kaminuza y' u Rwanda.

Umuyobozi mukuru w' umushakashatsi: Dr Chironda – 00250 789924956.

University of Rwanda

College of medicine and Health Sciences

School of Nursing and Midwifery

Kigali, Rwanda

Mukeneye gutanga ikibazo cyangwa kuvuga ibitagenda neza, mwahamagara mumbuyobozi bushinzwe ubuziranenge bwubushakashatsi bufite imyirondoro ikurikira:

Institutional Review Board

Telefoni……

Email……..

Research Office

University of Rwanda

Kigali, Rwanda

Amasezerano

Gushyira umukono kumwanya wabigenewe kuri uru rupaouro byemeza ko wemeye kubushake kwinjira mu bushakashatsi kandi ko wasomye ukanasobanukirwa amakuru yatanzwe hejuru.Uzahabwa kopi yuru rupapuro n'inzindi mpapuroumushakashatsi azabona ari ingenzi kuri wowe**.**

Amazina n'umukono by'uwakoreweho ubushakashatsi

……..

Italiki……..

Amazina n'umukono by' yumushakashatsi:

……..

Italiki:……..

Mwakoze kwitabira ubushakashatsi !!!!!

APPENDIX 4: IBIBAZO BYO KWEREKANA IKIGERARANYO CY' UBUMENYI N'IMYUMVIRE YABARWAYI KUBIJYANYE N'AMASEZERANO YO KUBAGWA MU BITARO BYA GISIRIKARE BY' U RWANDA.

A. Ibiranga umurwayi

Imyaka

Imyaka18-30	
Imyaka21-40	
Imyaka41-50	
Imyaka51-60	
Hejuru ya 60	

Igitsina

Gabo	
Gore	

Irangamimerere

Washatse byemewe n'amategeko	
Ingaragu	
Watadukanye bitemewe n'amategeko	
Watandukanye byemewe n'amategeko	

Idini

Umukirisitu	
Umusiramu	
Gakondo	

Amashuri

Sinize	
Abanza	
Ayisumbuye	
Kaminuza	

Uburwayi buguteye kubagwa **Aho utuye** **Icyo ukora**

Amagufa	
General surgery	
Obst/gynecology	
Urology	
Plastic	
MFS	
ENT	

Icyaro	
Umujyi	

Akazi gahoraho	
Ibiraka	
Ntakazi	

B. Ubumenyi bwabarwayi kubijyanye n'amasezerano yo kubagwa

B.1.Niki ushaka kumenya kubijyanye nigikorwa cyo kubagwa?

Icyo umurwayi ashaka kumenya	**Arabyemera cyane 4**	**Arabyemera 3**	**Ntabyemera 2**	**Ntabyemera nagato 1**
1 .Impamvu zo kubagwa				
2. Ibizakorwa mugihe cyo kubagwa				
3. Igiciro cyo kubagwa				
4. Ingaruka zo kubagwa				
5. Amakuru ajyanye n'ubuvuzi buba nyuma yo kubagwa				
6. Iminsi nzamara kugira ngo nsubire mu kazi				
7. Amahirwe yo gukira nyuma yo kubagwa				
8. Amabwiriza yihariye yo kubariza nyuma yo kubagwa				
9. Ibyo kurya bidasanzwe nyuma yo kubagwa				

B.2. Ni uruhe ruhare ufite mu gufata umwanzuro wo kubagwa

Ibitekerezo byabarwayi bijyanye no kubagwa	**ndabyemera 3**	**simbyemera 2**	**simbizi 1**
10. Ntacyo nshaka kumenya, nzakurikiza amabwiriza ya muganga			
11. Ndashaka kumenya ariko nzakurikiza amabwiriza ya muganga			-
12. Ngomba kwifatira umwanzuro nyuma yo gusobanurirwa			

C. Uko abarwayi bafata amasezerano yo kubagwa

Amasezerano yo kubagwa muyafata mute?

Ibitekerezo	**yego 3**	**oya 2**	**simbizi 1**
1. Amasezerano yo kubagwa n'umuhango			
2 .Amasezerano yo kubagwa ni ngombwa			
3 Gusinya amasezerano yo kubagwa bisabwa n'amategeko.			
4. Gusinya amasezerano yo kubagwa biguha uburenganzira bwo kwemerwa indishyi			
5.Amasezerano yo kubagwo arinda umuganga kuregwa mu nkiko			
6. Amasezerano yo kubagwa asigasira uburenganzira bw'umurwayi			
7. Gusinya amasezerano yo kubagwa bisobanuye ko nasobanuriwe operasiyo ningaruka zayo			
8. Usinya amasezerano yo kubagwa kugirango nemerererwe kubagwa			
9. Wemerewe kwisubiraho nyuma yo gusinya amasezerano yo kubagwa .			
10. Iyo udashoboye gusinya amasezerano yo kubagwa umuvandimwe yagusinyira			
11. Udasinye amasezerano ntiwabagwa kandi bivuze bakureka kugeza upfuye			

MURAKOZE KWITABIRA UBUSHAKASHATSI!!!

Appendix 5: Budget

N°	Items	Quantity	Unit price (Rwf)	Total (Rwf)
1	Flash disk	2	10000	20000
2	Reams of paper	1	4000	4000
3	Notebook	1	1500	1500
4	Pencils	2	100	200
5	Pens	2	100	200
6	Laptop	1	400000	400000
7	Laptop bag	1	20000	20000
8	Modem	1	15000	15000
9	Monthly internet pack	10	21000	210000
10	Transport	30	2000	60000
11	Lunches	30	2500	75000
12	Printing services	3500	100	350000
13	Binding services	15	2000	30000
14	Airtime	300	1000	300000
15	Biostatistician	1	400000	400000
16	Questionnaire distributions	5	5000	25000
17	Collection of completed questionnaire	5	5000	25000
18	Cross checking & verification of data	5	5000	25000
19	Data entry/coding	5	5000	25000
20	Preparation of the first draft of the report	5	5000	25000
21	Result presentation	3	5000	15000
22	Preparation of final report	5	5000	25000
23	Submission of final report	1	5000	5000
24	Feedback to the hospitals under study	3	50000	150000
25	Report publication	1	500000	500000
26	Unforeseen			270590
Total				**2976490**

Appendix 6: Gantt chart for research activities

Tasks												
Tasks/Month	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Searching researchable topic	√											
Developing proposal		√	√	√	√							
Presentation of Proposal to the Panel Members						√						
Correction of proposal						√	√	√				
Submission to IRB								√				
Data collection									√	√		
Data entry and analysis											√	
Finalize study												√
Presentation and dissemination final report												√

Budget

Items	Quantity/	Unity price in Frw	Price in Frw
Equipment and materials			
handbook	2	1 000	2 000
Blade paper	2	4 000	8 000
pen	100	100	10 000
computer	1	350 000	350 000
Hard disc	1	80 000	80 000
modern	1	10 000	10 000
Travels and communication			
Internet bundles	-	21 000per month	252 000
communication	-	5 000 per month	60 000
Transport estimated fees	-	-	360 000
Study processing			
Statisticians assistant salary			500 000
Language editor			200 000
printing	10	5000	50 000
bending	10	500	5 000
		Total Fees	1 837 000

REPUBLIC OF RWANDA
RWANDA MILITARY HOSPITAL
Website: www.rwandamilitaryhospital.rw
P.O. Box: 3377 Kigali, Tel: (+250)252586420, Hotline: 4060
E-mail: info@rwandamilitaryhospital.rw

March 31st, 2017

Ref.: EC/ RMH/ 127/ 2017

REVIEW APPROVAL NOTICE

Dear **MBONERA Felix**
UNIVERSITY OF RWANDA

Your research project: **"Knowledge and Perceptions of Patients towards Informed Consent for Surgical Procedures at Rwanda Military Hospital".**

With respect to your application for ethical approval to conduct the above stated study at Rwanda Military Hospital, I am pleased to confirm that RMH Ethics Committee has approved your study. This approval lasts for a period of **12 months** from the date of this notice, and after which, you will be required to seek another approval if the study is not yet completed.

You are welcome to seek other support or report any other study related matter to the Research office at Rwanda Military Hospital during the period of approval.

You will be required to submit the progress report and any major changes made in the proposal during the implementation stage. In addition, you are required to present the results of your study to RMH Ethics Committee before publication.

Sincerely,

Dr. Pacifique MUGENZI
Lieutenant Colonel
Co Chair: Rwanda Military Hospital Research Ethics Committee

Email: Info@rwandamilitaryhospital.rw
Tel: 0252586420
P.o Box: 3377RWANDA MILITARY HOSPITAL

UNIVERSITY OF RWANDA

COLLEGE OF MEDICINE AND HEALTH SCIENCES

SCHOOL OF NURSING AND MIDWIFERY

Kigali, on 30 / 01 /2017

Ref. No: ..31./ UR-CMHS/SoNM/17

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

Re: Request to collect data

Referring to the above subject, I am requesting for permission for **MBONERA FELIX**, a final year student in the Masters of Science in Nursing at the University of Rwanda/College of Medicine and Health Science to collect data for his/her research dissertation entitled KNOELEDGE AND PERCEPTIONS OF PATIENTS TOWARDS SURGICAL INFORMED CONSENT FOR SURGICAL PROCEDURES.

This exercise that is going to take a period of 2 months starting from 13th February 2017 to 12th April 2017 will be done at RWANDA MILITARY HOSPITAL.

We are looking forward for your usual cooperation.

Sincerely,

Dr. Donatilla MUKAMANA, RN, PhD
Dean, School of Nursing and Midwifery
College of Medicine and Health Sciences

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UNIVERSITY OF RWANDA

COLLEGE OF MEDICINE AND HEALTH SCIENCES

CMHS INSTITUTIONAL REVIEW BOARD (IRB)

Kigali, 16/01/2017
Ref: CMHS/IRB/106/2017

MBONERA Felix
School of Nursing and Midwifery, CMHS, UR

Dear MBONERA Felix

RE: ETHICAL CLEARANCE

Reference is made to your application for ethical clearance for the study entitled ***"Knowledge And Perception Of Patients Towards Informed Consent For Surgical Procedures At The Rwanda Military Hospital".***

Having reviewed your protocol and found it satisfying the ethical requirements, your study is hereby granted ethical clearance. The ethical clearance is valid for one year starting from the date it is issued and shall be renewed on request. You will be required to submit the progress report and any major changes made in the proposal during the implementation stage. In addition, at the end, the IRB shall need to be given the final report of your study.

We wish you success in this important study.

Professor Kato J. NJUNWA
Chairperson Institutional Review Board,
College of Medicine and Health Sciences, UR

JB Gahutu
IRB Vice-Chair

Cc:
- Principal College of Medicine and Health Sciences, UR
- University Director of Research and Postgraduate studies, UR

REPUBLIC OF RWANDA
RWANDA MILITARY HOSPITAL
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E-mail: info@rwandamilitaryhospital.rw

March 31st, 2017

Ref.: EC/ RMH/ 127/ 2017

REVIEW APPROVAL NOTICE

Dear **MBONERA Felix**
UNIVERSITY OF RWANDA

Your research project: **"Knowledge and Perceptions of Patients towards Informed Consent for Surgical Procedures at Rwanda Military Hospital".**

With respect to your application for ethical approval to conduct the above stated study at Rwanda Military Hospital, I am pleased to confirm that RMH Ethics Committee has approved your study. This approval lasts for a period of **12 months** from the date of this notice, and after which, you will be required to seek another approval if the study is not yet completed.

You are welcome to seek other support or report any other study related matter to the Research office at Rwanda Military Hospital during the period of approval.

You will be required to submit the progress report and any major changes made in the proposal during the implementation stage. In addition, you are required to present the results of your study to RMH Ethics Committee before publication.

Sincerely,

Dr. Pacifique MUGENZI
Lieutenant Colonel
Co Chair: Rwanda Military Hospital Research Ethics Committee

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