

**FACTORS INFLUENCING NURSING CARE OF PATIENTS ADMITTED WITH
INDWELLING URINARY CATHETER AT SURGICAL WARD ST. FRANCIS
HOSPITAL MUTOLERE, KISORO DISTRICT.**

**A RESEARCH REPORT SUBMITTED TO UGANDA NURSES AND MIDWIVES
EXAMINATIONS BOARD**

**IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A
DIPLOMA IN NURSING.**

KAMPIRE HATEGEKA JULIET

JAN22/U024/DNE/003

MAY, 2023

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ABSTRACT

Nursing care of patients admitted with indwelling urinary catheter contributes a lot in acquiring catheter associated urinary tract infections and other related complications such as prostatitis, urethritis.

The study aimed at identifying the factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere, Kisoro District.

A descriptive cross sectional study design was used and 20 patients admitted with indwelling urinary catheter with 10 health workers were chosen to participate in the study using purposive sampling method. Data was collected using pre-tested semi structured questionnaires for health workers, interview guide for patients and observational checklist for health workers on surgical ward.

Data was then analyzed using statistical package for social science (SPSS) version16.0 and presented in form of tables and figures using Microsoft excel version 2010.

It was established that 85% of the patients admitted with indwelling urinary catheter receive nursing care from health workers only twice daily. This means that catheter care is done once during day time and once during night time. This low nursing care is attributed to health workers related factors influencing nursing care of patients admitted with indwelling urinary catheter such as heavy work load on ward, lack of equipment to use, low level of health worker motivation, poor health workers' attitude on patient care and frequency of health education to patients on catheter care. Whereas patient related factors influencing nursing care of patients admitted with indwelling urinary catheter are the level of health care costs, comfortability of the patient to live with a catheter, patients' beliefs and misconceptions about indwelling urinary catheters and the level of patients' hygiene.

There is a need to recruit more nurses on surgical ward to reduce on the heavy work load and provision of adequate equipment to use during nursing care of patients admitted with indwelling urinary catheter.

The health workers on surgical ward are encouraged to always health educate patients admitted with indwelling urinary catheter to improve on selfcare, do personal hygiene to prevent the risks of acquiring catheter associated urinary tract infections

The nurses encouraged to always be self-motivated and always attend to patients admitted with indwelling urinary catheter as required to improve their overall health.

DECLARATION

I hereby declare that this research report titled "**FACTORS INFLUENCING NURSING CARE OF PATIENTS ADMITTED WITH INDWELLING URINARY CATHETER AT SURGICAL WARD ST. FRANCIS HOSPITAL MUTOLERE, KISORO DISTRICT**" is entirely my own work and has not been presented anywhere for academic or other purposes.

Sign.....

Date.....

KAMPIRE HATEGEKA JULIET

(Researcher)

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AUTHORISATION

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DEDICATION

This study is dedicated to my parents Mr. Hagekimana Feresian and Mrs Ntakarimazi Catherine

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I thank the almighty God for love, guidance and protection. I would like to acknowledge the assistance both material and moral support received from individuals who contributed towards the completion of this study

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OPERATIONAL TERMS.

Catheterization. Is the insertion of a tube through urethra to the bladder to aid urine flow out of the bladder.

Urinary tract infections. These are diseases caused by invasion of microorganisms into the urinary system

Catheter associated urinary tract infections. These are diseases of the urinary system that are caused by inappropriate use of urinary catheters or infections related to poor use of urinary catheter

Urinary catheter. It is a tube used to drain urine out of bladder through urethra

LIST OF ACRONYMS.

CAUTIs: Catheter associated urinary tract infections

UTIs: Urinary tract infections

ISC: Intermittent self-catheterization

UNDHS: Uganda national demographic and health survey

WHO: World Health Organization

CHAPTER ONE: INTRODUCTION

1.0 Introduction

This chapter covers the background of the study, problem statement, purpose of the study, specific objectives, research questions and justification of the study.

1.1 Background of the study.

Nursing care offered to patients with indwelling urinary catheter refers to services given by nurses to all the sick who have urinary catheter in their urethra for the purpose of allowing urine outflow from the bladder (Wilde, McMahon, Crean & Brasch, 2017). Care for patients with indwelling urinary catheter may include cleaning the catheter and genitalia, changing the catheter routinely, draining it and emptying the urine bag (Ghauri, Javaeed, Abbasi, Khan & Mustafa, 2019). Poor nursing care of patients with indwelling urinary catheters result in hospital acquired infection and other related complications (Prasanna & Radhika, 2015). These infections are caused by micro-organisms such as E.coli (21.4%), Enterococcus(14.9%), Pseudomonas Aeruginosa(10%), Klebsiella Pneumonia(7.75%) and Enterobacter (4.15%) (Scott 2016).

Globally it is estimated that more than 70% of urinary tract infections (UTIs) are acquired due to poor use of indwelling urinary catheters (Wilde *et al*,2017). According to Mosbeh, Faheim and Ali (2018), poor nursing care of the patients with indwelling urinary catheters contributes to more than 70% of urinary tract infections.

According to Mukakamanzi (2017), catheterized patients have more than 80% of developing urinary tract infections when compared to non-catheterized patients, with a higher incidence in developing countries compared to developed countries.

In sub-Saharan Africa, about 25% of the hospitalized patients with indwelling urinary catheters get catheter-associated urinary tract infections (CAUTIs) as a result of poor nursing care offered (Methu, Mwenda & Mbugua, 2019). The inappropriate care for patients with indwelling urinary catheters in acute care hospitals stands at 63% and often there is no documentation of a need for the catheter care (Loveday, Wilson, Pratt, Golsorkhi, Tingle *et al*, 2014).

The nursing care offered to patients with indwelling urinary catheters should be of optimal standard to avoid catheter-associated urinary tract infections (Haza'a, Al-Jaradi & Odhah, 2021).

Both short- and long-term use of urinary catheters has been associated with significant morbidity affecting any part of the urinary system including the urethra, bladder, kidneys and ureters (Cutinho, Sheilini & Harish, 2018). In most cases, Catheter associated urinary tract infections are acquired during the insertion of a urinary catheter unnecessarily, the presence of a catheter for a long period in the bladder and poor catheter care (Talaat, El-Shokry, El-Kholy, Ismail, Kotb *et al*, 2016).

In Uganda it is reported that patients with indwelling urinary catheter receive inadequate care and this exposes them to infections (Martin, 2019). Although poor nursing care maybe the sole cause of catheter associated infections, there are risk factors associated with acquiring catheter associated urinary tract infections such as being female, prolonged duration of catheterization, immune-compromised patients, advanced age, and prolonged intensive care unit (ICU) stay (Fink, Gilmartin, Richard, Capezuti, Boltz & Wald, 2019). More so, the care of patients with indwelling urinary catheter have been influenced by health workers work load, socio-economic status of the patient and availability of equipment to use (Mukakamanzi, 2017). However, this is not well known in the context of Kisoro and St. Francis hospital in particular. It is from this

background that the researcher needs to determine the factors influencing care of patients admitted with indwelling urinary catheter on surgical ward St. Francis hospital Mutolere, Kisoro District.

1.2 Problem statement

In Uganda, catheterized patients have continued to develop urinary tract infections compared to non-catheterized patients as a result of poor nursing care (Martin, 2019).

At St. Francis Hospital Mutolere, some patients with indwelling urinary catheter on surgical ward do present with unpleasant smell and others are found with over filled urine bags which are not timely emptied and this indicates poor nursing care. This resulted into complications, for instance in 2021, 15 catheterized patients developed complications including prostatitis, epididymitis, orchitis, cystitis, pyelonephritis. (Annual analytical report 2021/2022).

To improve on nursing care offered to patients admitted with indwelling urinary catheter at St. Francis hospital Mutolere, the hospital management employed qualified health workers(nurses) and provided equipment to use during care. Despite the above interventions, nursing care offered to patients admitted with indwelling urinary catheter is still inadequate. However, little data is documented on the factors influencing care of patients admitted with indwelling urinary catheter on surgical ward St. Francis hospital Mutolere, Kisoro District and thus the need for this study.

1.3 General objective

To determine the factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere, Kisoro District.

1.4 Specific objectives

1.4.1 To find out health worker related factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere, Kisoro District

1.4.2 To identify patient related factors influencing nursing care of patients admitted with indwelling urinary catheter on surgical ward St. Francis hospital Mutolere, Kisoro District.

1.5 Research questions

1.5.1 What are health worker related factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere, Kisoro District?

1.5.2 What are patient related factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere, Kisoro District?

1.6 Justification of the study

Inappropriate or poor nursing care offered to patients with indwelling urinary catheter can result into catheter associated urinary tract infections and other complications such as prostatitis, epididymitis, bladder spasm, orchitis in males and cystitis, pyelonephritis, urosepsis, endocarditis and bloodstream infections. Therefore, the study results may be used by higher authorities and ministry of health in putting up measures that can ensure provision of appropriate and adequate care to patients with indwelling urinary catheter hence improving their health

The study results may provide a basis for the district health officer, hospital administrator and other stake holders to scale up evidence-based measures to improve on the care offered to patients with indwelling urinary catheter.

In addition, the study results may provide literature for future researchers on related study project since few studies have been done on the factors influencing care of patients admitted with indwelling urinary catheter on surgical ward St. Francis hospital Mutolere, Kisoro District

More so the study will be a partial fulfillment of requirements for award of a diploma in nursing.

CHAPTER TWO: LITERATURE REVIEW

2.1: Introduction.

This chapter presents literature from acknowledged studies that included text books, medical journals and research reports. This will be reviewed in relation to specific objectives of the study that include health worker and patient related factors influencing nursing care of patients admitted with indwelling urinary catheter.

2.2: Health worker related factors influencing nursing care of patients admitted with indwelling urinary catheter.

A study done on Assessment of perceptions and practices of the nurses to prevent indwelling catheter-associated infection in Jinnah hospital Lahore, Pakistan revealed that work load on staff greatly affected the nursing care offered to patients with indwelling urinary catheter (Anwar, Nawaz, Afzal, Majeed & Waqas, 2017). In another study done by Gould, Umscheid, Agarwal, Kuntz and Pegues (2019) on the Guidelines for prevention of catheter-associated urinary tract infections, it was found out that a lot of work to do on ward prevents nurses from giving the necessary care to patients with indwelling urinary catheter.

A study by Ndomba, Laisser, Kidney, Kohi, Mwanga et al, (2021) on Prevalence and indications of long-term indwelling urinary catheter among out-patients attending urology clinic at a tertiary hospital in Northwestern Tanzania found out that the level of motivation among the health workers greatly influenced nursing care of patients admitted with indwelling urinary catheter. Furthermore, a study done by Lee, Chao, Wang, Lin (2015) on a nurse-family partnership intervention to increase the self-efficacy of family caregivers and reduce catheter-associated urinary tract infection in catheterized patients, it was highlighted that health workers'

demotivation related to long working hours, work-related stress negatively influenced nursing care of patients admitted with indwelling urinary catheter. On the other hand, a study done by Opina and Oducado (2014) on Infection control in the use of urethral catheters among nurses in a private hospital in Iloilo city, it was found out that team work among health workers greatly motivated the nurses while giving nursing care to patients admitted with indwelling urinary catheter.

In a study about Knowledge and attitude of nurses towards the prevention of catheter-associated urinary tract infection in Public Hospital Lahore, it was highlighted that nurses' knowledge influenced nursing care of patients with indwelling urinary catheter (Shehzadi, Ali & Bhatti, 2018). In addition, there was optimal nursing care of patients in hospitals that had nurses with good knowledge about catheter care and care of the patients compared to hospitals with nurses who were incompetent (Algarni, Sofar & Wazqar, 2019).

Attitude of health workers is also a factor that greatly influences nursing care of patients with indwelling urinary catheter (Scott, 2016). Health workers with good attitude toward patients offer good nursing care compared to health workers who are less committed to their work (Sabir, Ikram, Zaman, Satti, Gardezi et al, 2017).

In a study done by Andrade and Fernandes (2016) about Prevention of catheter associated urinary tract infection implementation strategies, it was discovered that the level of multi-task competency among health workers greatly influenced the nursing care of patients admitted with indwelling urinary catheter. Hao-ATH, Wu, Kumar, Jian, Huang et al, (2013) added that nurses who had the ability to handle with patients of different complaints and attend to them in a shortest possible time improved the nursing care offered to them. in addition, a study done by in

a study done by Shaw and Logan (2013) about psychological coping with intermittent self-catheterization (ISC) in people with spinal injury, it was realized that nurses' flexibility on duty had a great influence during nursing care of patients admitted with indwelling urinary catheter. Very flexible health workers provide the necessary care in the shortest possible time compared to those who take a lot of time working for one patient yet the number of patients on ward maybe high (Mazzo et al 2014).

During assessment done by Mackay, MacIntosh, Kydd, Fleming, O'Kane et al, (2018) on how to live with an indwelling urethral catheter in a community setting, it was reported that health workers who health educate patients with indwelling urinary catheter greatly improved the nursing offered to them. Furthermore, Maeda, Takiuti, Kohno, Nakai, Fukuda et al, (2017) added that the frequency of health education talks to patients with indwelling urinary catheter influences the nursing care since it improves the patients' knowledge on how to care for the indwelling urinary catheter in absence of the health workers.

2.3: Patient related factors influencing nursing care of patients admitted with indwelling urinary catheter.

A study done by Zou and Li (2013) on Diagnosis, prevention, and treatment of catheter-associated urinary tract infection in adults revealed that most of the patients claim to have no money for purchasing catheters and other medical equipment needed for catheter care and this negatively influence nursing care offered to such patients with indwelling urinary catheter. More so patients who expect hospital bills to be high deny some care in fear of having no money to pay for the equipment used and care given (Rashmi & Dhakal, 2021).

A study on Health-care associated infections and infection control practices in intensive care unit of a tertiary care hospitals pointed out that comfortability of the patient to the care given greatly influenced nursing care of patients with indwelling urinary catheter (Anupriya, Priyanka, Snehalaxmi & Uma, 2016). The patients who don't feel pleased with care offered deny being attended to and thus limiting the nursing care to be provided. More so only patients with indwelling urinary catheter who are cooperative to nurses are given optimum nursing care compare to those who are not cooperative (Sarani, Balouchi, Masinaeinezhad & Ebrahimitabs, 2014).

A study done by Labib and Spasojevic, (2013) on Problem of Catheter Associated Urinary Tract Infections in Sub-Saharan Africa revealed that patients' knowledge about catheter care greatly influenced nursing care. Patients who knew how to maintain personal hygiene, motivated nurses to give good nursing care compared to patients who placed urine bags on the floor and even refused to bathe (Zegeye, Kassahun & Temechu, 2021). In addition, a study done by Ashraf, Iram, Rasheed and Shaukat, (2015) on Comparison Between infections of Non-Catheterized and Catheterized patients, it was found out that patients who were knowledgeable on how to handle the catheter in situ without manipulating it eased the work of nurses and thus received good nursing care compared to the patients who continued dismantling the catheter in situ.

According to Faleiros, Käppler, Rosa and Gimenes (2018) in their study about Intermittent Catheterization and Urinary Tract Infections in Germany and Brazil, it was revealed that the comorbidities and other underlying diseases of the patients greatly influenced the nursing care of patients admitted with indwelling urinary catheter. Most of the patients who cannot turn in bed due to severe injuries were not cleaned thoroughly well by nurses due to pain felt on turning in bed (Faleiros, Cordeiro, Favoretto, Käppler, Murray et al, 2017). More so, a study done by

Markiewicz, Goldstine and Nichols (2020) on Emotional attributes, social connectivity and quality of life associated with intermittent catheterization reported that patients who had self-care deficit due to chronic illnesses had a negative influence on the nursing care offered to them as they could even fail to bathe hence risk getting infections.

A study about Urinary tract infections and associated factors among patients with indwelling urinary catheters attending Bugando Medical Centre a Tertiary Hospital in Northwestern Tanzania highlighted that patients' duration of stay in the hospital influences nursing care (Ndomba, Laisser, Silago, Kidenya, Mwanga et al, 2022). Patients who stay for a very short time do not receive adequate care compared to those who are admitted for comprehensive care (Biardeau & Corcos 2016).

Fuminelli, Mazzo, Martins, Henriques and Orlandin (2017) in their study on quality of life among patients using intermittent urinary catheterization revealed that patients' beliefs and perceptions about the use of indwelling urinary catheter greatly influenced nursing care offered to patients with indwelling urinary catheter. Some male patients thought that indwelling urinary catheter could lead to impotence and therefore never allowed for routine changing of the catheter (Biardeau and Corcos, 2016). In addition, a study done by Yilmaz, Akkoç, Alaca, Erhan, Gündüz, et al (2014) about Intermittent catheterization in patients with traumatic spinal cord injury, it was reported that some females think that indwelling urinary catheters result into reduced sexual feelings and thus could not accept any assistance given to them by nurses during care of the indwelling urinary catheter.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter describes the methods and techniques that the researcher used to investigate the problem. It comprises of the study design and rationale, study setting and rationale, study population, sample size determination, sampling procedure, inclusion criteria, definition of variables, research instruments, data collection procedures, data management and analysis, ethical consideration, limitations of the study and dissemination of results

3.2 Study design and rationale

The researcher adopted a descriptive cross sectional research design that employed both qualitative and quantitative methods of data collection to study the factors influencing nursing care of patients with indwelling urinary catheter on surgical ward St. Francis hospital Mutolere, Kisoro District. This type of study design was used because the study was done within a short period of time and there was no follow up of respondents who had participated in the study. Qualitatively, the participants were given opportunity to express their views about the factors influencing nursing care of patients with indwelling urinary catheter and quantitatively some responses were recorded in numerical form.

3.3 Study setting and rationale

The study was conducted on surgical ward at St. Francis hospital Mutolere, a private not for profit hospital located at about 4km from Kisoro municipality and 500km from Kampala capital city of Uganda. The hospital offers a wide range of both outpatient and inpatient services. it has a well-established surgical department with about 72 bed capacity. The setting was chosen because the hospital receives many patients who usually need to have an indwelling urinary catheter

throughout their stay on surgical ward and therefore the researcher will get adequate sample size of respondents during data collection. Additionally, the study area was very convenient and accessible to the researcher.

3.4 Study population

The study involved patients admitted with indwelling urinary catheter and nurses on surgical ward at St. Francis hospital Mutolere.

3.4.1 Sample size determination

The sample size consisted of 20 patients admitted with indwelling urinary catheter and 10 Nurses who work on surgical ward. This sample size was chosen because the researcher anticipated getting adequate information regarding the factors influencing nursing care of patients with indwelling urinary catheter on surgical ward St. Francis hospital Mutolere, Kisoro District.

3.4.2 Sampling procedure

For the patients, the researcher used purposive sampling method to obtain date. The researcher specifically looked for patients who had indwelling urinary catheter and then requested them to participate in the study.

Similarly for the health workers, purposive sampling method was used where by the researcher directly approached health workers on surgical ward during their convenient free time and requested them for consent to participate in the study.

3.4.3 Inclusion criteria

The study included all patients admitted with indwelling urinary catheter and health workers on surgical ward at St. Francis hospital Mutolere so long as they consented to participate in the study.

3.5 Definition of variables

3.5.1 Independent variable

Factors influencing nursing care of patients admitted with indwelling urinary catheter.

These include individual related factors such as socio-economic status, education level, comfortability of the patient, patients' knowledge about catheter care and health worker related factors such as duty work load, health workers' knowledge about catheter care.

3.5.1 Dependent variable

Nursing care of patients admitted with indwelling urinary catheter; refers to services given by nurses to all the sick who have urinary catheter in their urethra for the purpose of allowing urine outflow from the bladder and promote patients' health.

3.6 Research instruments.

3.6.1: A questionnaire

The researcher used a pre-tested semi structured questionnaires to collect data from health workers who work on surgical ward.

3.6.2: Observational checklist.

The researcher used an observational check-list to assess the nursing care given to patients admitted with indwelling urinary catheter.

3.6.3: An interview guide

The researcher used an interview guide to collect data from patients admitted with indwelling urinary catheter on surgical ward.

3.7 Data collection procedure.

After approval of the research proposal by the research committee and permission granted to access surgical ward, informed consent was sought and signed by the respondents.

Pre tested questionnaires were administered to selected respondents to identify the factors influencing nursing care of patients with indwelling urinary catheter on surgical ward St. Francis hospital Mutolere, Kisoro District. The literate respondents were given questionnaires to answer on their own while the illiterate ones were guided by explaining the questionnaires in local language. The filled questionnaires were checked for completeness before leaving the place and the respondents were thanked.

3.7.1 Data management.

The researcher managed data herself to ensure security and confidentiality. Questionnaires were numbered prior to data collection for easy identification. Crosschecking of completed questionnaires was done before respondents left to confirm completeness.

Data editing and coding was also done to correct errors and ease entry into the computer for proper analysis.

3.7.2 Data analysis.

Quantitative data was analyzed using statistical package for social science (SPSS), Excel program and was presented in form of tables, and figures using a computer program of Microsoft excel software version 2010 for easy interpretation.

Qualitative data did not require the use of Excel, Data was sorted and listed. Clustering was done for related information especially the responses to some open-ended questions. This was manually presented by description of the situation.

3.8 Ethical consideration.

The study adhered to the ethical policy of the nursing schools and institutional research committee recommendations. Upon approval of the research proposal by school research committee, letter of introduction from the principal was given introducing the researcher to the medical director of St. Francis hospital Mutolere who in turn introduced her to the in-charge surgical ward. The in-charge authorized her to have access to departments and participants. A written informed consent was sought from the respondents after explanation of the purpose of the study. Respondents were assured of their right to consent or withdraw even when the study had commenced. Complete confidentiality to the respondents' information was ensured.

3.9 Limitations of the study.

The researcher encountered the challenge of inappropriate interpretation of the questionnaires since most of the patients did not know how to read and write. However, the questionnaires were translated in local languages for easy understanding to illiterate patients. Some patients expected motivational rewards for their participation in the study. The researcher tried explaining for them the main purpose of the study and appreciated them after the session for their participation.

3. 10 Dissemination of the results.

The results of the study were disseminated as follows; three copies of dissertation were produced where one copy was submitted to school library, second copy to Uganda nurses and midwives examinations board (UNMEB) and the third copy for the researcher.

CHAPTER FOUR: RESULTS

4.0: Introduction

This chapter shows presentation of data on the factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere, Kisoro District. A designed questionnaire, interview guide and observational checklists were used to collect data from the respondents. The study involved a sample size of 20 patients admitted with indwelling urinary catheter and 10 health workers on surgical ward. All respondents attempted the questions asked appropriately and their responses were presented in form of tables and figures arranged according to the study objectives.

RESULTS FROM HEALTH WORKERS

4.1: *Socio-demographic characteristics of respondents.*

Table 1: Showing socio-demographic data of the respondents.

| S/NO | Variable | Frequency (N=10) | Percentage (%) |
|------|-----------------------------------|------------------|----------------|
| 1 | Gender | | |
| | Male | 6 | 60 |
| | Female | 4 | 40 |
| 2 | Professional cadre | | |
| | Enrolled nurse | 5 | 50 |
| | Registered nurse | 4 | 40 |
| | Nursing officer | 1 | 10 |
| 3 | Number of years in service | | |
| | <1year | 3 | 30 |
| | 1-2years | 3 | 30 |
| | 2-3years | 2 | 20 |
| | 4years and above | 2 | 20 |

Table 1 shows that more than half 6(60%) of the respondents were males while 4(40%) were female. Data shows that half 5(5%) of the respondents were enrolled nurses, 4(40%) were registered nurses while 1(10%) was a nursing officer. More so, 3(30%) of the respondents had worked for less than 1year, 3(30%) had worked for 1-2years, 2(20%) had worked for 2-3years and 2(20%) had worked for more than 4years

4.2: Health worker related factors influencing nursing care of patients admitted with indwelling urinary catheter

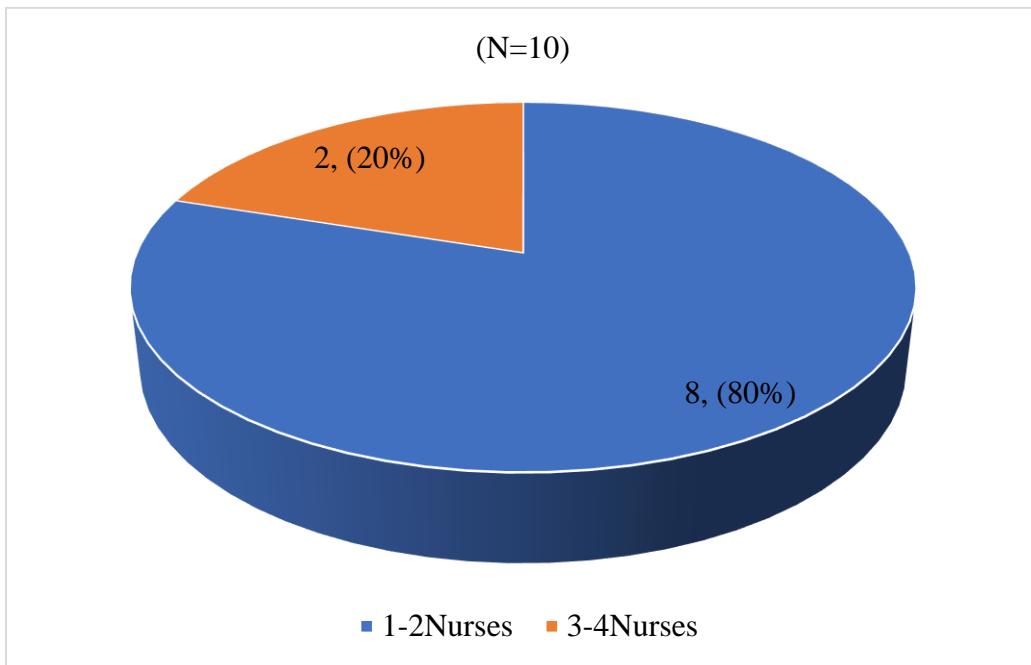


Figure 1: A pie chart showing number of nurses always on duty per shift

Figure 1 above shows that majority 8(80%) of the respondents reported that 1-2nurses are always on duty per shift while 2(20%) of the respondent mentioned that they are usually 3-4nurses on duty per shift.

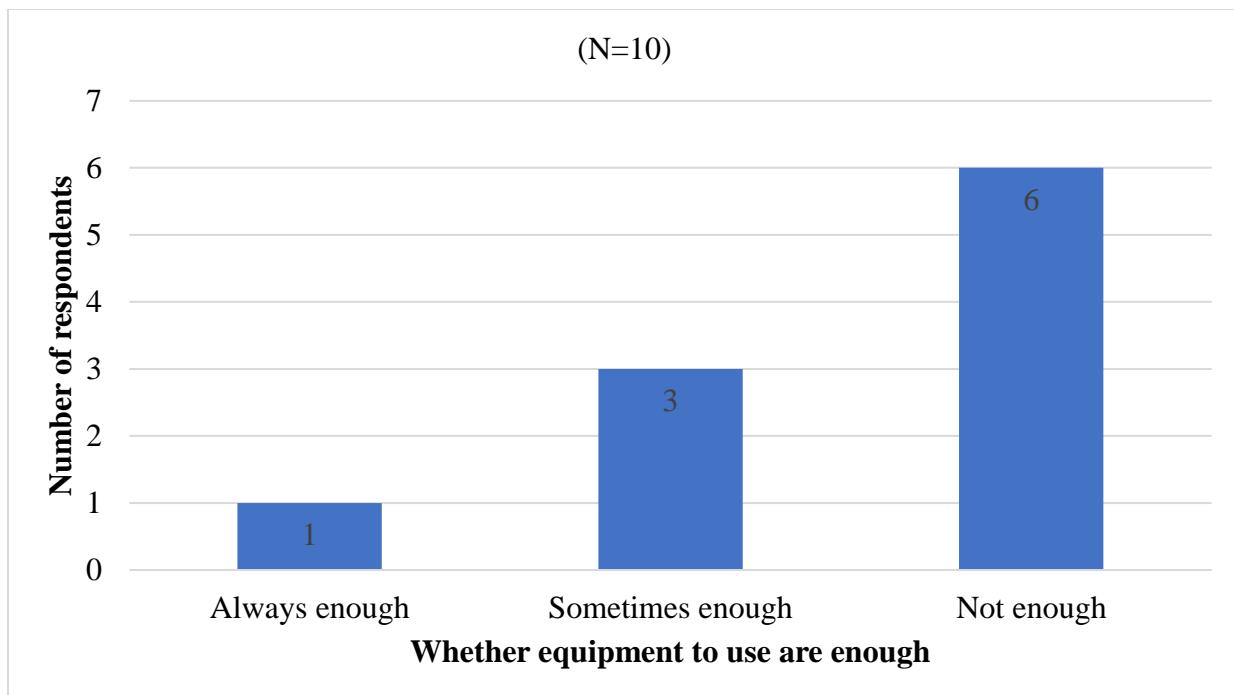


Figure 2: A bar graph showing whether equipment to use in caring for patients with indwelling urinary catheter are enough

When respondents were asked whether there is always enough equipment to use on ward during care of patients with indwelling urinary catheter, more than half 6(60%) of the respondents said that the equipment to use are not enough, 3(30%) mentioned that equipment to use are sometimes enough and 1(10%) mentioned that equipment to use are always enough.

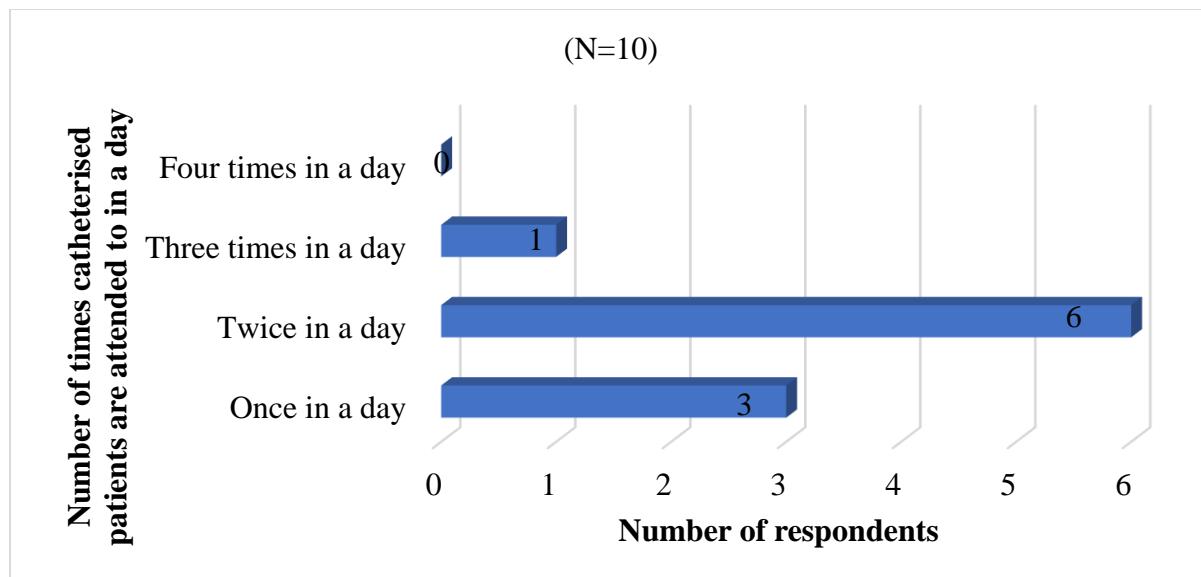


Figure 3: A bar graph showing how many times health workers attend to catheterized patients for care in a day

From figure 3 above, data shows that more than half 6(60%) of the respondents highlighted that catheterized patients are cared for twice daily, 3(60%) mentioned that they are cared for once in a day and 1(10%) mentioned that catheterized patients are attended to 4times daily.

Table 2: Showing if the health workers are overwhelmed by the work on duty and the reasons of being overwhelmed

| S/NO | Variable | Frequency (N=10) | Percentage (%) |
|----------|---|------------------|----------------|
| 1 | Whether health workers are overwhelmed | | |
| | Yes | 9 | 90 |
| | No | 1 | 10 |
| 2 | Reasons of being overwhelmed | | |
| | Work overload | 8 | 80 |
| | Uncooperative patients | 5 | 5 |
| | Work related stress | 7 | 7 |
| | No equipment to use | 7 | 7 |

Note: Respondents gave multiple answers

Table 3 above shows that majority 9(90%) of the respondents mentioned that they are always overwhelmed by duties on ward. Majority 8(80%) of the respondents are overwhelmed by work load, 7(70%) are overwhelmed by work related stress, 7(70%) are overwhelmed by lacking equipment to use and 5(50%) are overwhelmed by uncooperative patients.

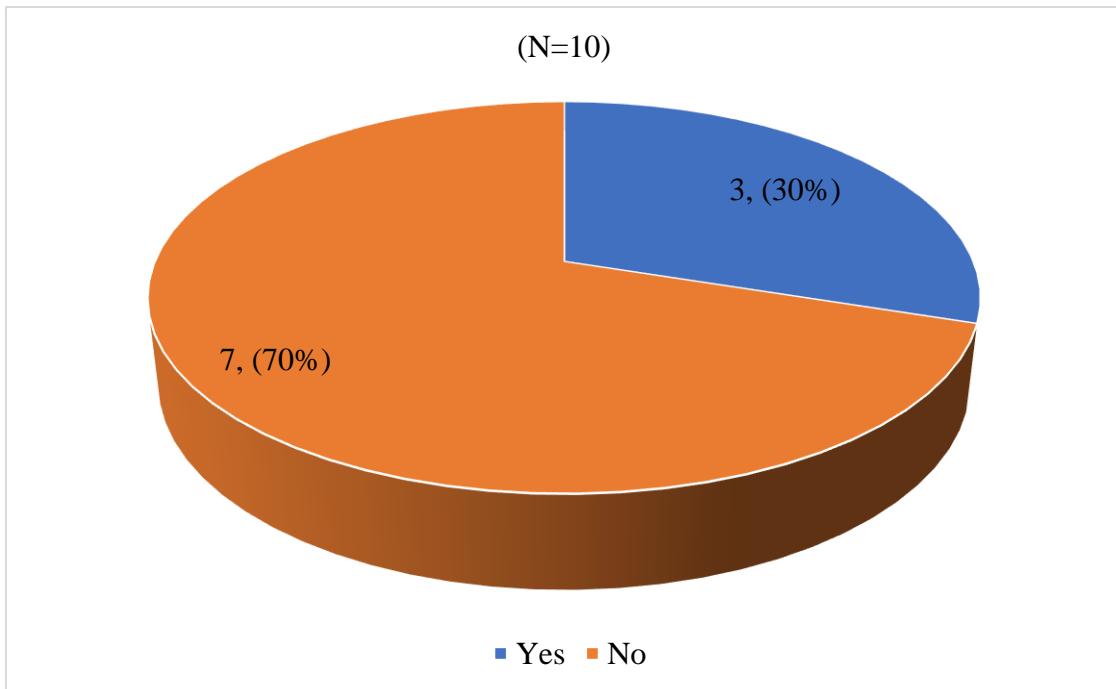


Figure 4: A pie chart showing whether respondents feel that their payment is enough according to work they do.

Data results show that most 7(70%) of the respondents do not feel that their payment is enough according to the work they do while 3(30%) feel that their payment is enough according to the work they do.

Table 3: Showing health worker related factors influencing nursing care of patients admitted with indwelling urinary catheter

| S/NO | Variable | Frequency (N=10) | Percentage (%) |
|----------|---|------------------|----------------|
| 1 | Inadequate knowledge about catheter care | | |
| | Yes | 6 | 60 |
| | No | 4 | 40 |
| 2 | Poor nurses' attitude towards patient care | | |
| | Yes | 5 | 50 |
| | No | 5 | 50 |
| 3 | Work overload | | |
| | Yes | 8 | 80 |
| | No | 2 | 20 |
| 4 | Inadequate equipment to use | | |
| | Yes | 7 | 70 |
| | No | 3 | 30 |

Note: The respondents gave multiple answers

When the respondents were asked the health worker related factors influencing nursing care of patients admitted with indwelling urinary catheter, 8(80%) mentioned work load, 7(70%) mentioned inadequate equipment to use during care, 6(60%) mentioned inadequate knowledge about catheter care and 5(50%) mentioned poor attitude of health workers towards patients care.

4. 3 Patient-related factors influencing nursing care of patients admitted with indwelling urinary catheter

Table 4: Showing patient-related factors influencing nursing care of patients admitted with indwelling urinary catheter

| S/No | Variable | Frequency (N=10) | Percentage (%) |
|----------|--------------------------------------|------------------|----------------|
| 1 | Lack of cooperation | | |
| | Yes | 6 | 60 |
| | No | 4 | 40 |
| 2 | Patients' stigma | | |
| | Yes | 7 | 70 |
| | No | 3 | 30 |
| 3 | Low knowledge on catheter use | | |
| | Yes | 6 | 60 |
| | No | 4 | 40 |

Note: Respondents gave multiple answers

Table above shows more than half 7(70%) of the respondents mentioned patients' stigma as one of the patient-related factors influencing nursing care of patients admitted with indwelling urinary catheter, 6(60%) mentioned low knowledge on catheter use and 6(60%) mentioned lack of cooperation with health workers during care.

RESULTS FROM OBSERVATIONAL CHECKLIST

Table 5: Showing nursing care of patients admitted with indwelling urinary catheter

| S/No | Nursing care of patients admitted with indwelling urinary catheter. | Yes | No |
|------|--|--------|----------|
| 1 | Adequate staff on duty | 0(0%) | 10(100%) |
| 2 | Enough equipment for catheter care on ward | 2(20%) | 8(80%) |
| 3 | Commitment and flexibility of staff on duty | 5(50%) | 5(50%) |
| 4 | Creates thorough rapport and listens to patients' complaints. | 4(40%) | 6(60%) |
| 5 | Observes for any signs of catheter associated urinary tract infections | 3(30%) | 7(70%) |
| 6 | Timely changes the urinary catheter | 6(60%) | 4(40%) |
| 7 | Empties urine bags in time | 2(20%) | 8(80%) |
| 8 | Changes patients' linen and carries out bed bath | 0(00%) | 10(100%) |
| 9 | Health educates the patients about catheter care | 1(10%) | 9(90%) |
| 10 | Follows the schedule for catheter care | 0(00%) | 10(100%) |
| 11 | Maximum number of days spent by one patient with indwelling urinary catheter | 30days | |
| 12 | Minimum number of days spent by one patient with indwelling urinary catheter | I day | |

The table above shows that there are no adequate staff on duty per shift and the equipment to use during care of patients with indwelling urinary catheter are not enough. In addition, there is average (50%) commitment and flexibility of staff on duty.

Data shows that less than half 4(40%) of the staff on ward created thorough rapport and listens to patients' complaints well. More so, more than half 7(70%) of nurses on ward do not observe for any signs of catheter associated urinary tract infection during care. Furthermore, data results shows that nearly half 4(40%) of the nurses do not timely change the catheter in patients.

Results revealed that majority 8(80%) of the health workers do not empty urine bags in time and they overfill while in patients' beds without being emptied. It was also observed that all 10(100%) of the health workers do not promptly change patients' linen and do not carry out bed bath after catheter care.

It was observed that all 10(100%) of the health workers do not follow the schedule of catheter care and 1(10%) gives health gave health education to the patients after catheter care.

RESULTS FROM INTERVIEW GUIDE FOR PATIENTS ADMITTED WITH INDWELLING URINARY CATHETER

Table 6: Showing results from interview guide for patients admitted with indwelling urinary catheter.

| S/No | Variable | Frequency (N=20) | Percentage (%) |
|----------|---|------------------|----------------|
| 1 | Times health workers attend to patients in a day | | |
| | 2 times | 17 | 85 |
| | 3 times | 3 | 15 |
| 2 | Health education message received | | |
| | To avoid pulling the catheter | 8 | 40 |
| | To come for review | 5 | 25 |
| | No information given | 7 | 35 |
| 3 | Whether they purchase catheter care equipment | | |
| | Yes | 20 | 100 |
| | No | 0 | 00 |
| 4 | Whether patients feel comfortable with catheter | | |
| | Yes | 9 | 45 |
| | No | 11 | 55 |
| 5 | Number of times patients bathe in a day | | |
| | Once | 17 | 85 |
| | Twice | 3 | 15 |
| 6 | Whether patients think catheter is related to sexual performance | | |
| | Yes, leads to sexual dysfunction | 13 | 65 |
| | No relationship | 7 | 35 |
| 7 | Patient related factors influencing nursing care | | |
| | Cost of catheter care | | |
| | Level of patient hygiene | | |
| | Duration of hospital stay | | |
| | Patients' beliefs and misconceptions | | |
| | Comfortability or level of patient's pain | | |

The responses from patients admitted with indwelling urinary catheter were recorded in the interview guide, analyzed and then presented in description form since respondents gave verbal answers that were interpreted by the researcher.

Majority 17(85%) of the patients admitted with indwelling urinary catheter mentioned that health workers attend to them 2times every day while 3(15%) mentioned that health workers attend to them 3times in a day.

In addition, about 7(35%) of the patients admitted with indwelling urinary catheter said that there is no information given to them by health workers regarding care of the indwelling urinary catheter, 8(40%) said that they are told to avoid pulling it out while 5(25%) said that they are told to come for review and changing the catheter after one month. They were also taught how to urinate and live with a catheter

More so, all 20(100%) of the patients admitted with indwelling urinary catheter stated that the hospital charges them for catheter insertion and changing. However most 11(55%) of them claimed that they don't feel comfortable having a catheter and living with it.

Furthermore, majority 17(85%) of the patients admitted with indwelling urinary catheter said that they bathe once in a day while 3(15%) said that they bathe twice in a day

A significant number 13(65%) of the patients admitted with indwelling urinary catheter mentioned that indwelling urinary catheter leads to sexual dysfunction while 7(35%) mentioned that there is no relationship between the indwelling urinary catheter with sexual performance.

Data results showed that the patient related factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere include cost of catheter care, patients' hygiene, duration of hospital stay, patients' beliefs and misconceptions and patients' comfortability or degree of pain felt during catheter insertion.

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS.

5.0: Introduction.

This chapter presents discussion in relation to the literature review on the factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere, Kisoro District. The research findings are discussed according to the specific objectives and socio-demographic characteristics. It also concludes and proposes recommendations according to the study.

5.1: DISCUSSION.

5.1.1: Socio-demographic characteristics of the respondents.

The study results showed that more than half 6(60%) of the respondents were males. This may be due to the fact that most of the work on surgical ward such as wound dressing, emergency bleeding and fracture care may need energetic people especially males as the patients are usually many compare to the number of nurses on duty per shift. More so, half 5(50%) of the respondents were enrolled nurses. This may be related to reasons such as labour versus payment. It may be because enrolled nurses are paid less compared to other high cadre health workers and therefore more preferred to care for patients. This is why most of the respondents on ward were enrolled nurses.

5.1.2 Health worker related factors influencing nursing care of patients admitted with indwelling urinary catheter

Data results revealed that majority 8(80%) of the respondents mentioned that there are always 1-2nurses on duty per shift (figure 1). This implies low staffing on ward that results in work overload. Therefore, the overwhelming number of patients on ward are not attended to because of few health workers on duty. The study findings are in line with the findings of Anwar et al, (2017) which revealed that work load on staff greatly affected the nursing care offered to patients with indwelling urinary catheter. Similarly, Gould et al, (2019) also found out that a lot of work to do on ward prevents nurses from giving the necessary care to patients with indwelling urinary catheter. This was evidenced by more than half 6(60%) of respondents who reported that health workers attend to patients admitted with indwelling urinary catheter twice in a day.

Majority 9(90%) of the health workers mentioned that they usually overwhelmed while on duty especially because of work load and having uncooperative patients. This results in poor nursing care as time to attend to every patient with indwelling urinary catheter may not be enough. Moreso, poor cooperation and poor flexibility of health workers on ward leads to poor nursing care offered. The study results are in line with study done by Shaw and Logan (2013) where it was realized that nurses' flexibility on duty had a great influence during nursing care of patients admitted with indwelling urinary catheter. However, when health workers are overwhelmed with a lot of work to do on ward, they cease to be flexible but get more tired resulting in poor nursing care (Mazzo et al, 2014).

More than half 6(60%) of respondents mentioned that equipment to use on ward while caring for patients with indwelling urinary catheter are not enough. Thus, nurses may sometimes not provide the necessary nursing care to patients admitted with indwelling urinary catheter. The

study results are related a study done by Lee et al, (2015) which highlighted that health workers' demotivation related to lack of what to use negatively influenced nursing care of patients admitted with indwelling urinary catheter.

Most 7(70%) of the respondents do not feel that their payment is commensurable with their work. This implies that they are not motivated in terms of better payment which gives them less morale of caring for patients. Similarly, a study done by Ndomba et al, (2021) found out that the level of motivation among the health workers greatly influenced nursing care of patients admitted with indwelling urinary catheter. Furthermore, a study done by Lee, Chao, Wang, Lin (2015) highlighted that health workers' demotivation was related to low payment and this negatively influenced nursing care of patients admitted with indwelling urinary catheter.

More than half 6(60%) of the respondents mentioned that inadequate knowledge on catheter care negatively influences the nursing care offered to patients admitted with indwelling urinary catheter. This is because one should know when to clean the patient and change the indwelling catheter. Similar results were reported in a study done by Shehzadi et al, (2018), which revealed that nurses' knowledge influenced nursing care of patients with indwelling urinary catheter () .

Half 5(50%) of the respondents mentioned that nurse's attitude towards patient care greatly influences the nursing care offered to patients with indwelling urinary catheter. Relatedly, it was reported in another study done by Scott, (2016) who reported that attitude of health workers is also a factor that greatly influences nursing care of patients with indwelling urinary catheter. Health workers with good attitude toward patients offer good nursing care compared to health workers who are less committed to their work (Sabir et al, 2017).

Nearly half 8(40%) of patients admitted with indwelling urinary catheter claimed that they are not taught how to handle and care for their urinary catheters absence of health workers but told to avoid pulling and use it to urinate only. This left the patients with little knowledge about catheter care hence can't help themselves. Similarly, an assessment done by et al, (2018) on how to live with an indwelling urethral catheter in a community setting, it was reported that health workers who health educate patients with indwelling urinary catheter greatly improved the nursing offered to them than those who did not teach their patients. Furthermore, Maeda et al, (2017) added that the frequency of health education talks to patients with indwelling urinary catheter influences the nursing care since it improves the patients' knowledge on how to care for the indwelling urinary catheter in absence of the health workers.

Furthermore, data results showed that only 2(20%) of the respondents on ward had a working experience of more than 4years. This implies that a few health workers on surgical ward have worked there for long time and therefore maybe lacking experiences in some procedures done on surgical ward

5.1.3 Patient related factors influencing nursing care of patients admitted with indwelling urinary catheter

The study findings revealed that all 20(100%) of patients admitted with indwelling urinary catheter pay for changing catheter and using other catheter care equipment yet most of the claimed that they do not have enough money. This implies that patients who feel that they can't afford hospital bill refuse to come for catheter care in time and end up having catheter associated urinary tract infections. The same results were identified in a study done by Zou and Li (2013) which revealed that most of the patients claim to have no money for purchasing catheters and other medical equipment needed for catheter care and this negatively influence nursing care

offered to such patients with indwelling urinary catheter. More so patients who expect hospital bills to be high deny some care in fear of having no money to pay for the equipment used and care given (Rashmi & Dhakal, 2021).

More than half 11(55%) of patients admitted with indwelling urinary catheter claimed that they don't feel comfortable having a catheter and living with it. This is because it irritates them and sometimes imparts stigma in such patients. This creates uncooperativeness of patients when they are told to keep with the catheter for long time. Similarly, a study by Anupriya et al, (2016) pointed out that comfortability of the patient to the care given greatly influenced nursing care of patients with indwelling urinary catheter. More so, the patients who don't feel pleased with care offered deny being attended to and thus limiting the nursing care to be provided. In addition, it was reported that only patients with indwelling urinary catheter who are cooperative to nurses are given optimum nursing care compared to those who are not cooperative (Sarani et al, 2014).

A significant number 13(65%) of the patients admitted mentioned that indwelling urinary catheter leads to sexual dysfunction and such beliefs may prevent patients from accepting care given to them by nurses. The study results are in line with those of Fumincelli et al (2017) who revealed that patients' beliefs and perceptions about the use of indwelling urinary catheter greatly influenced nursing care offered to patients with indwelling urinary catheter. In a related study, some male patients thought that indwelling urinary catheter could lead to impotence and therefore never allowed for routine changing of the catheter (Biardeau and Corcos, 2016).

It was found out that 17(85%) of the patients admitted with indwelling urinary catheter bathe once in a day. This shows that they do not have enough selfcare and this risks them having catheter associated urinary tract infections and related complications. Similar findings were

reported in a study done by Markiewicz et al, (2020) who revealed that patients who had self-care deficit due to chronic illnesses had a negative influence on the nursing care offered to them as they could even fail to bathe hence risk getting infections

5.2 CONCLUSION

The study aimed at identifying the factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere, Kisoro District. It was established that the health workers related factors influencing nursing care of patients admitted with indwelling urinary catheter are work load on ward, availability of equipment to use, level of health worker motivation, knowledge on catheter care, health workers' attitude on patient care and frequency of health education to patients on catheter care. Whereas patient related factors influencing nursing care of patients admitted with indwelling urinary catheter are the level of health care costs, comfortability of the patient to live with a catheter, patients' beliefs and misconceptions about indwelling urinary catheters and the level of patients' hygiene.

5.3 RECOMMENDATIONS

Basing on the findings, the following recommendations were drawn out of the study

There is a need for hospital management to recruit more health workers on ward especially surgical ward to reduce on work load caused by few nurses on duty per shift which denies appropriate patient care

The nurses are encouraged to always be self-motivated and give the necessary care to patients admitted with indwelling urinary catheter in order to prevent catheter associated urinary tract infections and related complications

There is a need for continuous health education by health workers to patients admitted with indwelling urinary catheter so that they care improve on self-care to avoid bad smell and risk for infections.

5.4 IMPLICATION TO NURSING PRACTICE.

Improved Nursing care of patients admitted with indwelling urinary catheter given by skilled health workers on surgical ward using adequate equipment Can prevent catheter associated urinary tract infections and promote the overall health of the patients.

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APPENDICES.

APPENDIX I. CONSENT FORM.

Dear respondent, I am **KAMPIRE HATEGEKA JULIET** a student nurse at Mutolere School of nursing and midwifery offering a diploma in Nursing. I am conducting a study on **“Factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere, Kisoro district”**. By participating in this study, you will have greatly contributed to the success of this study. Information obtained from you during this study will be kept confidential and be accessed by the researcher only. There are no risks anticipated in the study and you are free to participate or voluntarily withdraw from the study at any time. By signing below, it indicates that you have understood the information above concerning the study and you voluntarily agree to participate in the study.

Respondent's signature.....

Date

Name of the researcher **KAMPIRE HATEGEKA JULIET**

Signature

Date

APPENDIX II: QUESTIONNAIRE FOR HEALTH WORKERS.

My name is **KAMPIRE HATEGEKA JULIET**, a student of Mutolere School of Nursing and Midwifery. I am carrying out a study to identify **the factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere, Kisoro district**. This questionnaire is to help the researcher to collect data for the above-mentioned study. All the information collected will be kept confidential and is for academic purpose only.

Instructions.

Circle the correct objective or write in the spaces provided.

Do not write your name on the questionnaire.

SECTION A: Socio-demographic data of the respondent

1. Gender

A. Male

B. Female

2. Professional cadre

A. Enrolled nurse

B. Registered nurse

C. Nursing officer

3. Number of years in service

A. <1year

- B. 1-2 years
- C. 2-3 years
- D. 4 years and above

SECTION B. Health worker related factors influencing nursing care of patients admitted with indwelling urinary catheter

4. How many nurses are always on duty per shift

- A. 1-2 Nurses
- B. 3-4 Nurses
- C. 5-6 Nurses
- D. More than 6 Nurses

5. Do you always have enough equipment to use while caring for patients with indwelling urinary catheter?

- A. Yes always enough
- B. Yes sometimes enough
- C. Not enough

6. How many times do you attend to catheterized patients for care in a day?

- A. Once in a day
- B. Twice in a day
- C. Three times in a day
- D. Four times in a day

7. Have you ever been overwhelmed by the duty

- A. Yes

B. No

8. If yes, How.....

9. Do you think what you are offered in terms of payment (salary) is commensurable with your work?

A. Yes

B. No

10. If No, what is missing.....

11. In your opinion, what are the possible health worker related factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere?

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SECTION C. Patient-related factors influencing nursing care of patients admitted with indwelling urinary catheter

10. Are patients always cooperative during provision of nursing care especially those with indwelling urinary catheter?

A. Yes always cooperative.

B. Yes sometimes cooperative.

C. Never cooperative.

11. In your opinion, what are the possible patient-related factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere?

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Thanks for your participation

**APPENDIX III: OBSERVATIONAL CHECK LIST FOR ASSESSING NURSING
CARE OF PATIENTS ADMITTED WITH INDWELLING URINARY CATHETER.**

| S/NO | Nursing care of patients admitted with indwelling urinary catheter. | Yes | No |
|------|--|-----|----|
| 1 | Adequate staff on duty | | |
| 2 | Enough equipment for catheter care on ward | | |
| 3 | Commitment and flexibility of staff on duty | | |
| 4 | Creates thorough rapport and listens to patients' complaints. | | |
| 5 | Observes for any signs of catheter associated urinary tract infections | | |
| 6 | Timely changes the urinary catheter | | |
| 7 | Empties urine bags in time | | |
| 8 | Changes patients' linen and carries out bed bath | | |
| 9 | Health educates the patients about catheter care | | |
| 10 | Follows the schedule for catheter care | | |
| 11 | Maximum number of days spent by one patient with indwelling urinary catheter | | |
| 12 | Minimum number of days spent by one patient with indwelling urinary catheter | | |

APPENDIX IV: AN INTERVIEW GUIDE FOR PATIENTS ADMITTED WITH INDWELLING URINARY CATHETER.

1. How many times does a health worker attend to you in a day?

2. Which health education message about the care of your indwelling urinary catheter and bag did you receive from the health worker?

3. Does the hospital staff ask you to purchase any equipment to be used during the care of indwelling urinary catheter?..... if so, are you comfortable with it?

4. How many times do you take a bathe in a day?

5. Do you think there is any relationship between this catheter and sexual performance?
If yes, what is it?

6. Possible patient related factors influencing nursing care of patients admitted with indwelling urinary catheter at surgical ward St. Francis hospital Mutolere

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APPENDIX V. A PROPOSED BUDGET FOR RESEARCH STUDY

| ITEM | QUANTITY | UNIT COST | TOTAL COST |
|------------------------------|--------------|------------------|------------------|
| Stationary | | | |
| Reams of ruled papers | 1 | 15,000 | 15,000/= |
| Folder file | 1 | 1500 | 1,500/= |
| Calculator | 1 | 12000 | 12,000/= |
| Pens | 4 | 500 | 2,000/= |
| A pencil | 1 | 200 | 200/= |
| Flash disk | 1 | 35000 | 35,000/= |
| | | Sub total | 65700/= |
| Communication | | | |
| Air time | | 20,000 | 20,000/= |
| Transport | 10days | 5000 | 50,000/= |
| | | Sub total | 60,000/= |
| Secretarial services | | | |
| Typing and printing proposal | 40 pages x2 | 500 | 40,000/= |
| Printing questionnaires | 3 pages x 36 | 500 | 54,000/= |
| Binding proposal | 2 copies | 3500 | 7,000/= |
| Printing dissertation | 75 pages x 3 | 500 | 107,500/= |
| Binding dissertation | 3 copies | 3500 | 10,500/= |
| Research supervisor | 1 | 200,000 | 200,000/= |
| Internet | | 50,000 | 50,000/= |
| Miscellaneous | | 10000 | 10,000/= |
| | | Sub total | 461,500/= |
| GRAND TOTAL | | | 605,700/= |

APPENDIX VI: WORK PLAN

| Month \ Activity | OCT 2022 | NOV 2022 | DEC 2022 | JAN 2023 | FEB 2023 | MAR 2023 | APRIL 2023 | MAY 2023 | Responsible Person |
|---|----------|----------|----------|----------|----------|----------|------------|----------|--|
| Topic identification and approval | | | | | | | | | Researcher and Supervisor |
| Proposal writing | | | | | | | | | Researcher |
| Proposal defense and submission | | | | | | | | | Researcher and research committee |
| Data collection | | | | | | | | | Researcher |
| Data entry and analysis | | | | | | | | | Researcher |
| Report writing | | | | | | | | | Researcher |
| Research report approval and submission | | | | | | | | | Researcher, supervisor and school administration |

APPENDIX VII: PROPOSAL APPROVAL FORM

Name of the student: KAMPIRE HATEGEKA JULIET

Title of the research study: **FACTORS INFLUENCING NURSING CARE OF PATIENTS ADMITTED WITH INDWELLING URINARY CATHETER AT SURGICAL WARD ST. FRANCIS HOSPITAL MUTOLERE, KISORO DISTRICT.**

I hereby accept this proposal for the above research study and approve it for submission to Mutolere School of Nursing and Midwifery and other concerned organization's institution Review board.

Name of supervisor: **Mr. NDAGIJIMANA JULIUS**

Signature 

Date 17.3.2023

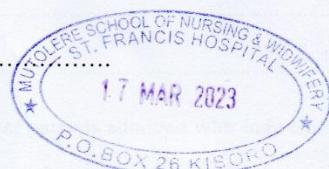
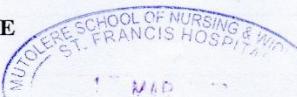
Approved by

Principal Tutor

Name: **Sr. KEMIGISHA CATHELINE**

Signature..... Catheline

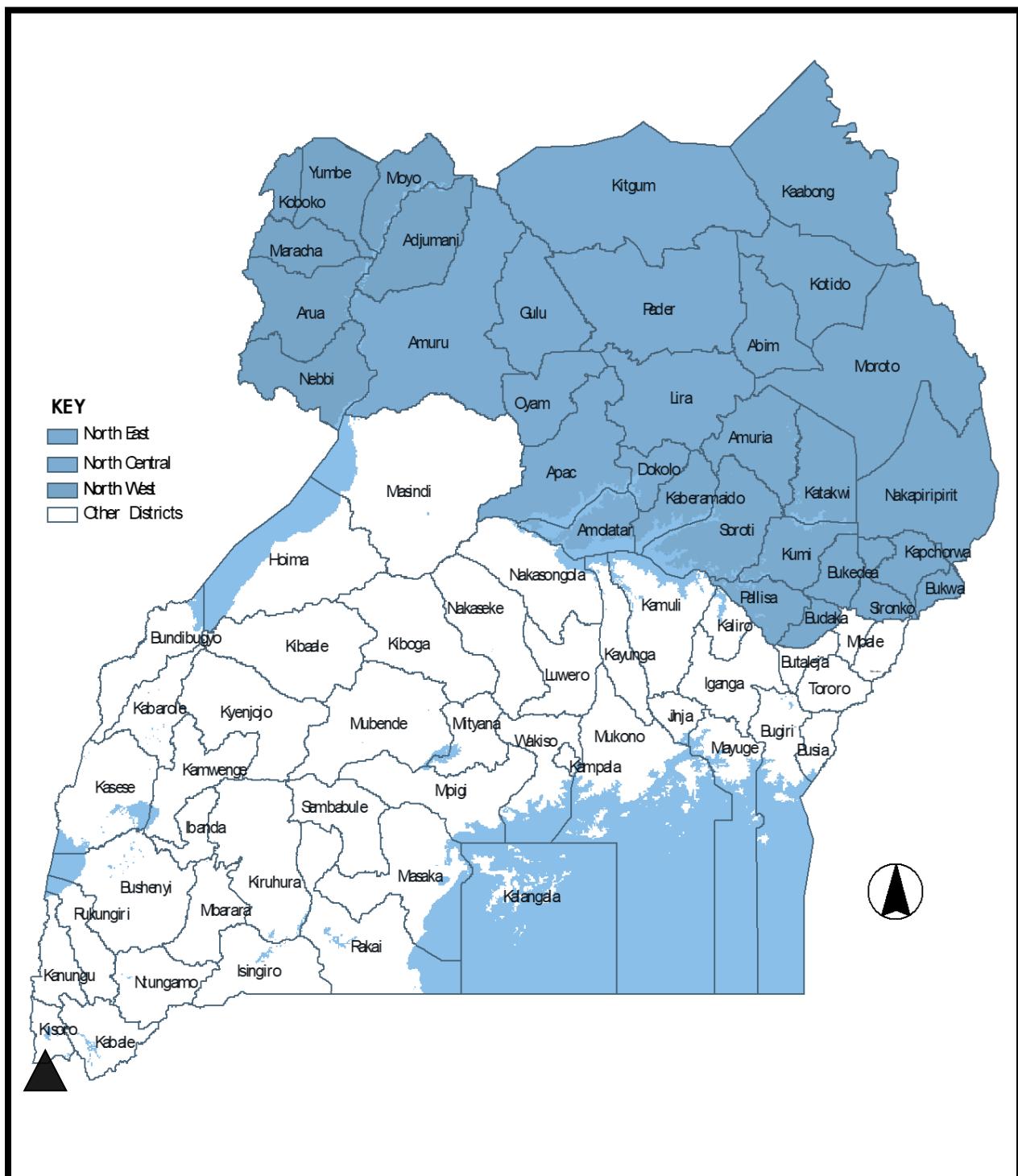
Date..... 17th march 2023



APPENDIX VIII: INTRODUCTORY LETTER



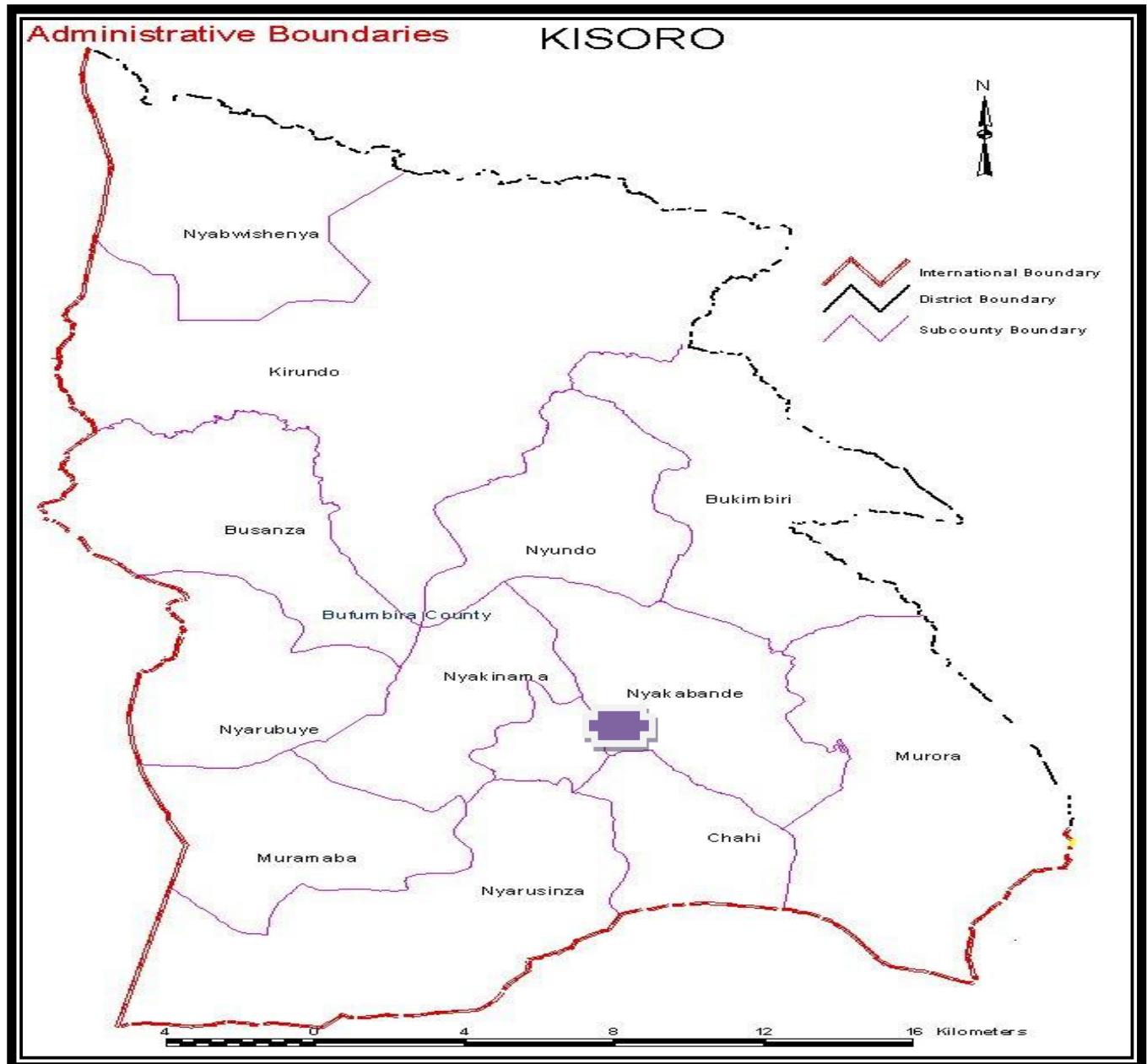
APPENDIX IX: A MAP OF UGANDA SHOWING LOCATION OF KISORO DISTRICT.



KEY. ▲

Location of Kisoro District.

APPENDIX X: A MAP OF KISORO DISTRICT SHOWING LOCATION OF ST. FRANCIS HOSPITAL MUTOLERE.



KEY



Location of St. Francis Hospital Mutolere.