

**FACTORS AFFECTING NURSING CARE OF PATIENTS WITH BURNS ON  
SURGICAL WARD AT ST FRANCIS HOSPITAL MUTOLERE KISORO DISTRICT.**

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

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

**KANGABE IMACULATE**

**REG NO Jan22/U024/DNE/004**

**MAY, 2023.**

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## ABSTRACT

Burns are a major public health issue worldwide, but they are especially severe in low- and middle-income countries (LMIC). In both developing and developed countries, burn is a major public health concern in terms of infection control and treatment costs. The main purpose of the study was to explore factors affecting nursing care of patients with burns on surgical ward at St Francis Hospital Mutolere. The study was designed to achieve the following objectives; to determine health workers related factors affecting nursing care of patients with burns on surgical ward at St Francis Hospital Mutolere and to find out patient related factors affecting nursing care given to patients with burns on surgical ward at St Francis Hospital Mutolere.

**Methodology:** In this a descriptive cross-sectional study, data collection was conducted on 10 nurses and 20 patients and care givers in a period of two weeks using an interviewer administered structured questionnaire. Purposive sampling procedure sampling was used to select respondents from surgical ward. To analyze all data was cleaned then entered in the Statistical Package for Social Sciences (SPSS) 16.

**Results:** Majority of the respondents said that they always have 2-3 staffs on duty per shift, 30% 3-4 staffs while 10% said they usually have 1-2 staffs on duty per shift.

**Conclusion:** The care received by patients with burns was less optimal. The results revealed that majority (84.2%) of the respondents said they were dressed once in a day while 15.8% were dressed twice in a day. The patients who were dressed once in a day may easily contract infections unless other measures are taken. The care of patients was associated with health worker related factors such as; cadre or rank of health worker, work experience and number of health workers on the ward per day. The care was also linked to patient/caregiver related factors such as; distance to health facility, number of days of admission and feeding.

## **DECLARATION**

I hereby declare that this research report titled “**FACTORS AFFECTING NURSING CARE OF PATIENTS WITH BURNS ON SURGICAL WARD AT ST FRANCIS HOSPITAL MUTOLERE KISORO DISTRICT** hospital ” is entirely my own work and has not been presented anywhere for academic or other purposes.

Sign.....

Date.....

**KANGABE IMACULATE**

**(Researcher)**

## **AUTHORIZATION**

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## **DEDICATION**

I dedicate this dissertation to my beloved husband Uwayezu Prospel and my Children.

## **ACKNOWLEDGEMENT**

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

Sincere gratitude to Mr Ndagijimana Julius my supervisor for his guidance throughout the research period. May almighty God reward him abundantly

Special appreciation to my husband Uwayezu Prospel , my children, my parents and my classmates for the moral and spiritual support during the course of my studies.

May God bless you all

Special appreciation to my brothers and sisters Uwayezu Prospel



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## **DEFINITION OF TERMS**

Chemicals, substances which are artificially prepared.

Hospitalization being admitted in the hospital.

Trauma distressing or disturbing experience.

## **LIST OF ACRONYMS**

DALYs: Disability Adjusted Life Years

LMIC :Low- And Middle-Income Countries

WHO: World Health Organization



## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background**

A burn is defined broadly by the World Health Organization (WHO) as an injury caused by heat (hot objects, gases, or flames), chemicals, electricity and lightning, friction, or radiation (Rybarczyk et al., 2017). Burns are one of the most common causes of hospitalization and one of the leading causes of injury worldwide (Babakir-Mina, 2017). Burns are generally regarded as a severe illness with devastating consequences and a lengthy hospital stay (AbdelWahab et al., 2018).

Burns are a major public health issue worldwide, but they are especially severe in low- and middle-income countries (LMIC) (Amissah et al., 2017). The World Health Organization (WHO) estimates that burns kill 265,000 people each year, with the majority of these deaths occurring in low and middle-income countries (Marwa & Tarimo, 2019). In both developing and developed countries, burn is a major public health concern in terms of infection control and treatment costs (Babakir-Mina, 2017). The most common type of burn injury are scald burns (Kruger et al., 2020).

The nurse form the largest group of burn care treatment team who cares for a patient with burn injury. Burn care requires knowledge about the physiologic changes that occur after a burn, as well as assessment skills to detect elusive changes in the patient's condition. This makes each burn patient very unique and provides a variety of challenges to the patient's plan of care (Ismail et al., 2019).

Insufficient nursing care in low- and middle-income countries (LMICs) has resulted into high mortality rate estimated to be eleven higher than in developed world, with the World Health

Organization (WHO) estimating that 43,000 people die of burns in Africa each year, at a rate of 6.1 per 100,000 (Alemayehu et al., 2020). This is most attributed to poverty, overpopulation, and illiteracy. This results into consequences ranging from physical impairments and disabilities to emotional and mental consequences (B. S. Atiyeh et al., 2009). Burns cause more than 7.1 million injuries, nearly 18 million disability adjusted life years (DALYs) (Rybarczyk et al., 2017).

Nursing care provided by specialized professionals is required to minimize injuries and death following a severe burn. This is difficult to accomplish in a developing country with few specialized burn centers and trained burn professionals (Lindén, 2015). Because of limited resources, caring for patients with burn injuries may be more difficult in low and middle-income countries (Marwa & Tarimo, 2019). Burn management in developing countries faces enormous challenges at every stage (B. Atiyeh et al., 2009b). Inadequate access to burn care facilities and an ill equipped health care system impede appropriate care. long distances to health facilities, poor transport systems from rural to urban areas where specialized burn care is available, limited space and supplies all result into poor nursing care, with far reaching implications for both patients and nurses who care for them (Marwa & Tarimo, 2019).

Burn injuries account for 11% of all childhood injuries in Uganda, and Mulago Hospital is the only hospital in the country with a specialized burns care unit (Odoch et al., 2016).

It is thus important to understand how patients with burns and scalds at non-specialized units are managed and treated. This study seeks to explore factors affecting nursing care of patients with burns at St. Francis Hospital, Mutolere.

## **1.2 Problem statement**

Every year, burns cause the loss of approximately 18 million DALY and more than 250000 deaths, with more than 90% occurring in LMIC. These countries bear a significant social and economic burden as a result of burn trauma.

According to the Mutolere Hospital annual report of 2021/2022, patients with burns constituted 0.3% of all admitted patients in the hospital. The hospital has no specialized burn unit thus burns patients are predisposed to infections leading to overstay in the hospital with its related hospital bills and complications. The prolonged stay in hospital implies more psychological, social and economic costs to the patient and care givers. Despite numerous interventions by the hospital like staffing and provision of sundries, burn patient are always mixed up with other patients which affects the quality of nursing care given to them. This study will seek to find out factors that affect nursing care of patients with burns at St Francis Hospital Mutolere.

## **1.3 Purpose of the study**

To identify factors affecting nursing care of patients with burns at St Francis Hospital Mutolere.

## **1.4 Specific objectives**

- a) To determine health workers related factors affecting nursing care of patients with burns on surgical ward at St Francis Hospital Mutolere
- b) To find out patient related factors affecting nursing care given to patients with burns on surgical ward at St Francis Hospital Mutolere.

## **1.5 Research questions**

- i) What are health workers related factors affecting nursing care of patients with burns on surgical ward at St. Francis Hospital Mutolere?

iii) What are patient related factors affecting nursing care given to patients with burns on surgical ward at St. Francis Hospital Mutolere?

### **1.6 Justification of the study**

The study will provide information on the factors affecting nursing care given to patients with burns in the district. This will inform policy and assist program managers as well as the district to come up with interventions to improve nursing care given to patients with burns.

It will also help them come together and look for the solutions for the hindrances they meet during nursing care.

The information generated will also be used by different stakeholders including researchers and other interested agencies and organizations for further reference. In addition, it will give direction to future research and provide information for improving the existing service delivery approaches for patients with burns.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 Introduction**

This chapter reviews literature related to factors affecting nursing care of patients with burns. The literature is largely from PubMed, and Google scholar.

### **2.1 Health worker related factors affecting nursing care of patients with burns**

It is argued that the ability of health workers to innovate and use existing resources is one of the factors affecting the management of burns in especially low resource settings. For instance, a systematic review of literature on management of burns contended that local health care providers must continue to be innovative in adapting existing resources and facilities to address the needs of their patients, such as using locally available materials for burn wound care such as honey or to fashion dressings (Gupta et al., 2014).

The availability of surgeons and anesthesiologists as well as their capacity for providing specialized care have an impact on burn management (Jordan et al., 2022). Burn care in LMICs continues to face significant challenges due to a lack of basic health care personnel (Gupta et al., 2014).

The treatment of burn patients requires extensive time and effort. This is because each bandaging takes hours to complete, there is a heavy workload, and there are not enough nurses to cover each shift. The nurses' lack of time is seen as a major obstacle to providing high-quality care, as they are unable to sympathize with and interact with the patients (Bijani & Mohammadi, 2021).

The results of a study conducted in Dar es Salaam, Tanzania, indicated that a lack of human resources, particularly nurses, had an impact on the care given to burn patients. Despite the fact that this issue was organizational in nature, the burn unit felt the effects more so than the other

units due to the greater needs of burn patients. The care of a burn victim requires routine observation of feeding, fluid intake and output, dressing of the wound, and general cleanliness (Marwa & Tarimo, 2019).

Additionally, the study conducted in Tanzania revealed that there weren't enough resources to meet the needs of patients who had suffered burn injuries. Despite the fact that dressing material was given priority, crucial resources like laboratory equipment for gathering specimens were lacking. Burn care needs multidisciplinary approach, and a laboratory is the critical area where diagnosis of the underlying problem like causes of fever takes place. Due to a scarcity of laboratory equipment, it posed challenge to manage fever properly. This problem affects the provision of care (Marwa & Tarimo, 2019).

Interactions among the members of the treatment team and poor coordination consequently results in physical and psychological tensions to burn patients. Correspondingly, this is against one of the most important ethical principles in healthcare, namely protecting the patient from injuries and tension (Alemayehu et al., 2020).

LMIC hospitals are generally underequipped for burn management (Gupta et al., 2014). Many hospitals in LMICs are competent at basic resuscitation and initial burn management, but fall short on later burn management standards (Gupta et al., 2014). The majority of existing burn centers are in major cities and are insufficient for the high number of injuries (B. Atiyeh et al., 2009a). Burn treatment facilities frequently struggle with a lack of resources, a lack of operating hours, and a blood shortage in addition to having inadequate physical structures (B. Atiyeh et al., 2009a). Due to infrastructure constraints, practitioners in LMICs are unable to manage burns with the same level of technical assistance and resources as in high income countries (Gupta et al., 2014). Critical resources like operating time, specialized burn surgeons, anesthetists, and

nurses are lacking in numerous burn treatment facilities in low-income countries (Jordan et al., 2022).

## **2.2 Patient related factors affecting nursing care of patients with burns.**

The management of burns including surgery is influenced by patient related factors such as preexisting malnutrition or anemia (Jordan et al., 2022). Furthermore, nutritional status of a patient is a crucial factor for a successful burn recovery (Jordan et al., 2022).

Early feeding helps promote healing in patients with severe burn injuries by reducing the effects of hypermetabolism and catabolism, and lowering the risk of malnutrition (Jordan et al., 2022).

The nature of the burn that the patient suffered also affects burn care among patients. It is reported that minor burn injury patients recovered well after intensive follow-up efforts (Gabbe et al., 2015). It is also asserted that Patients with larger burns, a longer length of stay, and an older age have significantly higher odds of wound infection (Fuzaylov et al., 2014) which may affect the nursing care received.

The duration of hospitalization for burn management is related to urbanity. A study conducted in Iran found that sixty-seven percent of the patients in this study came from rural areas and had the lowest socioeconomic status, which has been linked to poor health and an increased susceptibility to injury and hospitalization, as well as lower standards of healthcare provision, greater complications, and higher costs (Ghaed Chukamei et al., 2021).

## **CHAPTER THREE: METHODOLOGY**

### **3.1 Introduction**

This study described the study design, study area, study population, sample size determination, sampling procedures, inclusion criteria, variable definitions, research instruments, and data collection procedures. Data management, data analysis, ethical considerations, study limitations, and results dissemination.

### **3.2 Study design and Rationale**

The researcher employed a descriptive cross-sectional research design that incorporated both qualitative and quantitative data collection methods. The use of descriptive methods aided in the description of the research problem based on personal experiences, allowing respondents to express their views and concerns, and data collection in a short period of time without the respondents being followed up on.

### **3.3 Study setting and Rationale**

The research was carried out on surgical ward at St. Francis Hospital Mutolere, a Private Not for Profit (P.N.F.P) hospital located in Gasiza parish, Nyakabande sub-county in Southwestern Uganda, 4 kilometers from Kisoro town and approximately 500 kilometers from Kampala, Uganda's capital city. It is associated with the Roman Catholic Church's registered trustees of the Kabale diocese. It serves the residents of its catchment area as well as the neighboring districts of Rubanda (East), Kanungu (North), neighboring Rwanda (South), and Democratic Republic of Congo. It has a bed capacity of 210 beds (West). The hospital's departments include surgery, pediatrics, obstetrics and gynecology, internal medicine, laboratory, and community-based health care services such as immunization, family planning, growth monitoring, HIV and syphilis



testing, among others. The hospital also has visiting physicians who visit various departments on occasion.

### **3.4 Study population**

The target population were staffs on surgical ward at St. Francis Hospital Mutolere, Kisoro district and patients who were receiving treatment for burns at the wards. .

#### **3.4.1 Sample size determination**

The study's sample size was 30 respondents who included 10 nurses at the ward, 10 patients and 10 caretakers. This was due to the fact that they produced reliable results that can be generalized to the entire population.

#### **3.4.2 Sampling procedure**

When selecting participants for this study, the researcher employed a purposive sampling procedure. This was based on the researcher's judgement of those respondents with knowledge and experience on burns care. Participants were expected to be engaged in their various departments, so the researcher would approach them there. This was done throughout the week in all shifts of morning and evening duties in order to capture the views of all respondents, regardless of duty.

#### **3.4.3 Inclusion criteria.**

Staff who had spent one year on the ward, patients who could describe the type of care they received, and attendants to children with burns on surgical ward at St. Francis Hospital Mutolere during the study period were included in the study.

### **3.5 Definition of variables**

**Dependent variable;** nursing care of patients with burns.

**Independent variables;** health workers related factors such as; knowledge; work over load, motivation, training, work experience and health facility-related factors such as; proper equipment, medical supplies, and appropriate burns unit.

### **3.6 Research instruments**

To collect data, pretested questionnaires with both open and closed ended questions were developed. This was due to the fact that open ended questions provided detailed information about the subject matter, whereas close ended questions are more specific and thus more likely to communicate a similar meaning, as well as being easier to analyze and requiring less time.

Patients Interview guide was also be used.

### **3.7 Data collection procedure**

Following the successful recruitment of participants, the researcher requested their consent. The researcher distributed self-administered questionnaires to staffs, clarifying some questions that did not appear clear to the respondents in a side room. Using an interviewer-administered questionnaire, the researcher also interviewed patients who were able to respond on their own as well as caretakers of minor patients with burns. Data collection took a week. They were cross-checked to ensure that they were properly filled when the respondents returned before they leave. Throughout the study, confidentiality was maintained by using identification codes other than respondents' true names. In addition, Patient interview guide was held with selected patients of burns.

### **3.7.1 Data management**

This entailed checking the questionnaires for errors and omissions in order to ensure the consistency, completeness, and accuracy of the data collected. This was done in the field immediately after the questionnaires were collected to ensure consistency and to correct any errors that arise. Following that, questionnaires were kept in a drawer under lock and key to ensure their safety.

### **3.7.2 Data analysis**

The data was entered into Epidata data entry software without identifiers and analyzed quantitatively using statistical package for social science (SPSS). The analysis yielded frequencies and percentages that were used to interpret the findings.

## **3.8 Ethical considerations**

The research proposal was submitted to the research committee of Mutolere School of Nursing and Midwifery and after its approval, a letter of introduction was given by the committee introducing the researcher to the medical director of St. Francis Hospital, Mutolere. From him, the researcher obtained approval to carry out her study in the hospital; after this approval, another approval was sought from In-charges of departments patients with burns and scalds are cared for and finally consent was obtained from respondents. Voluntary informed consent was sought from the respondents before interviews. The respondents' responses were kept private by using identification codes not real names.

### **3.9 Limitations of the study**

Respondents (staff) were preoccupied with routine clinical tasks. The researcher overcame this by employing questionnaires with closed-ended questions and short-answer open-ended questions that are simple to answer and take less time to complete.

Staff feared to give sensitive information for fear of reprisals from hospital administration.

Some respondents were unwilling to participate in the study; the researcher clarified the purpose of the study and assured them of the confidentiality of their opinions. The researcher also established a rapport with the respondents so that they could freely participate.

### **3.10 Dissemination of results**

The study's findings were compiled into a report, and three copies of the final report were printed. One copy of the final report was submitted to the Uganda Nurses and Midwives Examination Board as an academic requirement for the award of a Diploma in Nursing, a second copy was donated to the school library, and a third copy was kept for personal use. Later, feedback was provided to the institution's and hospital's stakeholders.

## CHAPTER FOUR: RESULTS

### 4.1 Introduction

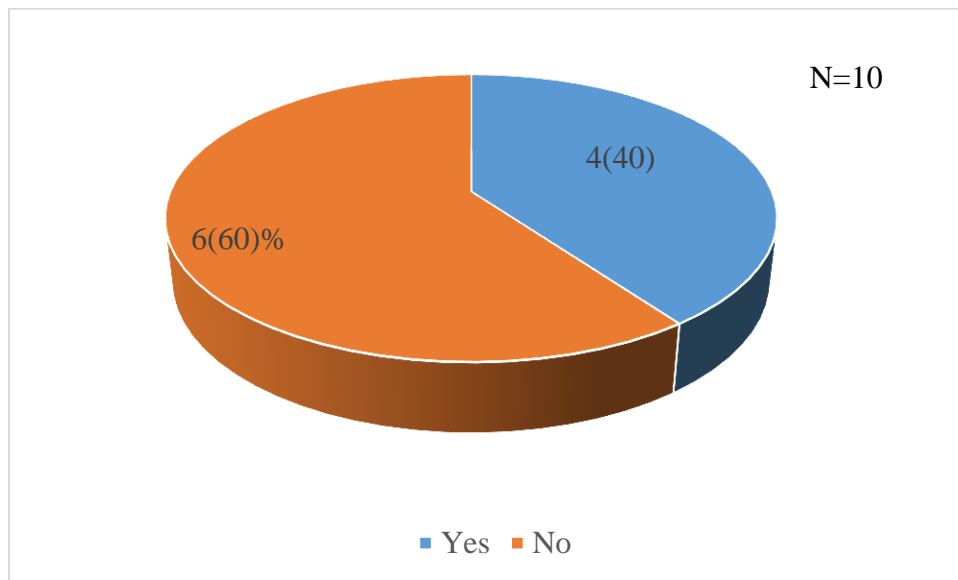
This chapter presents the characteristics of the study sample. It describes the characteristics of health workers and then proceeds with a description of the patients and caregivers.

#### 4.2.1 Health worker related factors affecting nursing care of patients with burns

*Table 1: Health worker characteristics*

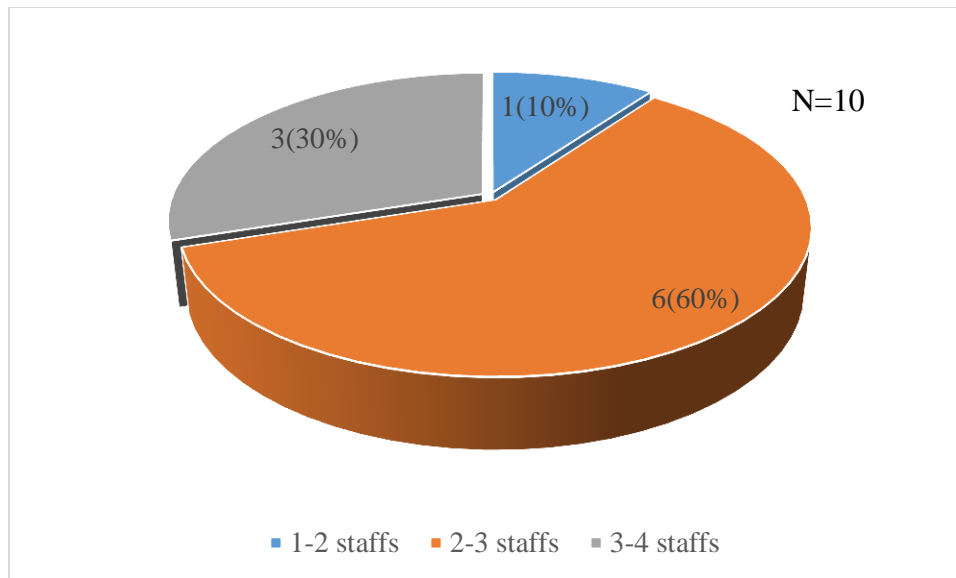
Variable	Frequency (N=10)	Percent (%)
<b>Cadre of the health worker</b>		
Enrolled nurse	7	70
Registered nurse	3	30
<b>Working experience</b>		
1 year	4	40
2 years	6	60

Findings in table 1 indicate that majority 7(70%) of the respondents were enrolled nurses and only 3(30%) were registered nurses. More than a half of the respondents 6(60%) had a working experience of 2 years on the ward while 4(40%) 1 year.



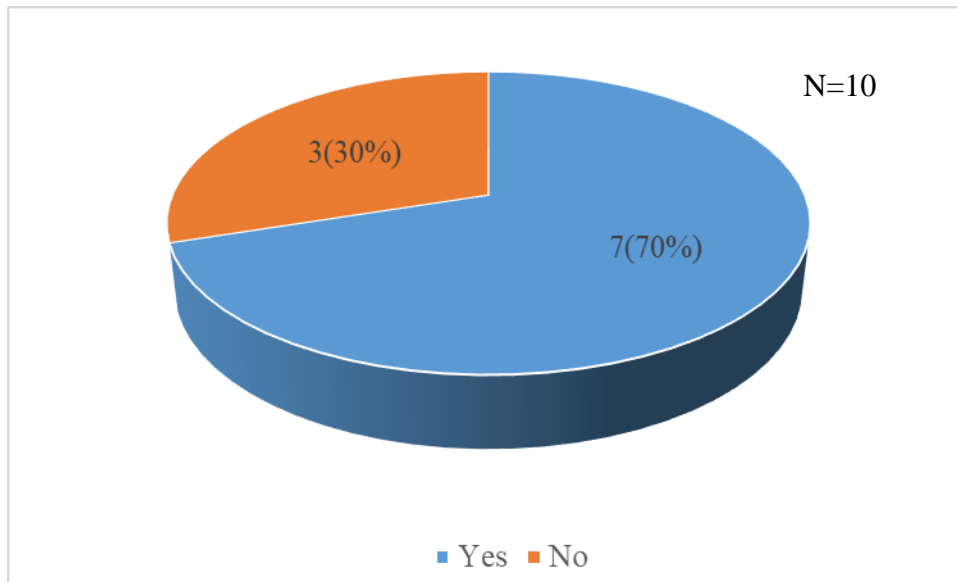
***Figure 1: Showing whether they have enough staff to care for patients with burns***

Results from figure 1 indicate that more than a half 6(60%) of the respondents reported that the hospital did not have enough staff to care for patients with burns while 4(40%) said that staffs were not enough.



***Figure 2: Showing number of staff always on duty per shift***

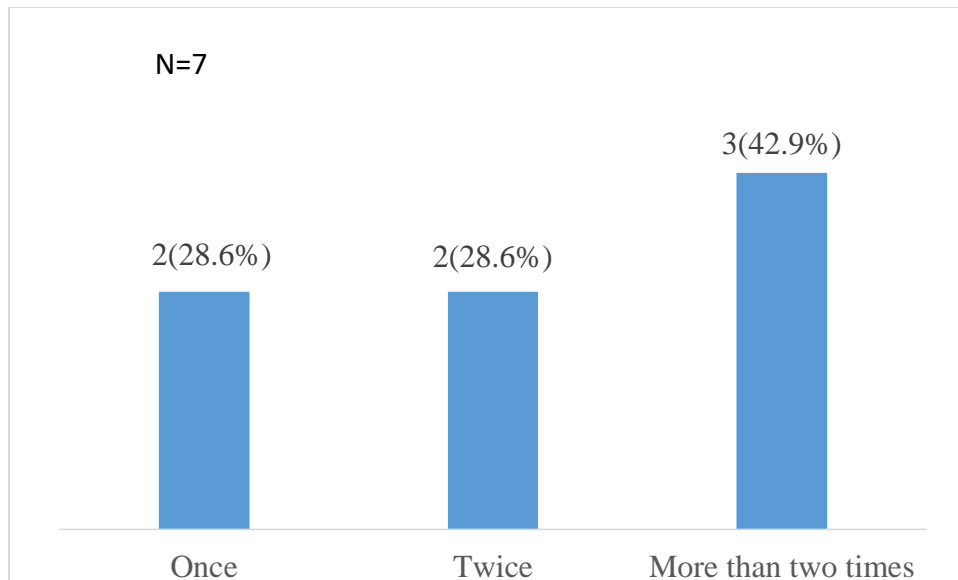
Findings presented in figure 1 indicate that majority 6(60%) of the respondents said that they always have 2-3 staffs on duty per shift, 3(30%) 3-4 staffs while 1(10%) said they usually have 1-2 staffs on duty per shift.



***Figure 3: Showing whether the staffs have been additionally trained on how to give nursing care to patients with burns***

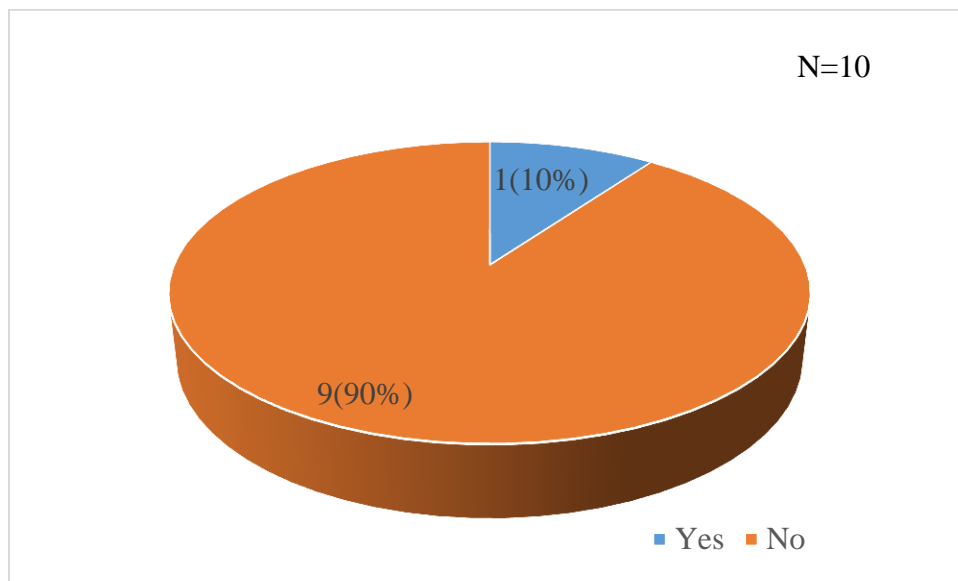
Results in figure 2 indicate that most of the respondents 7(70%) had ever been trained while 3(30%) had never been trained on how to give nursing care to patients with burns.





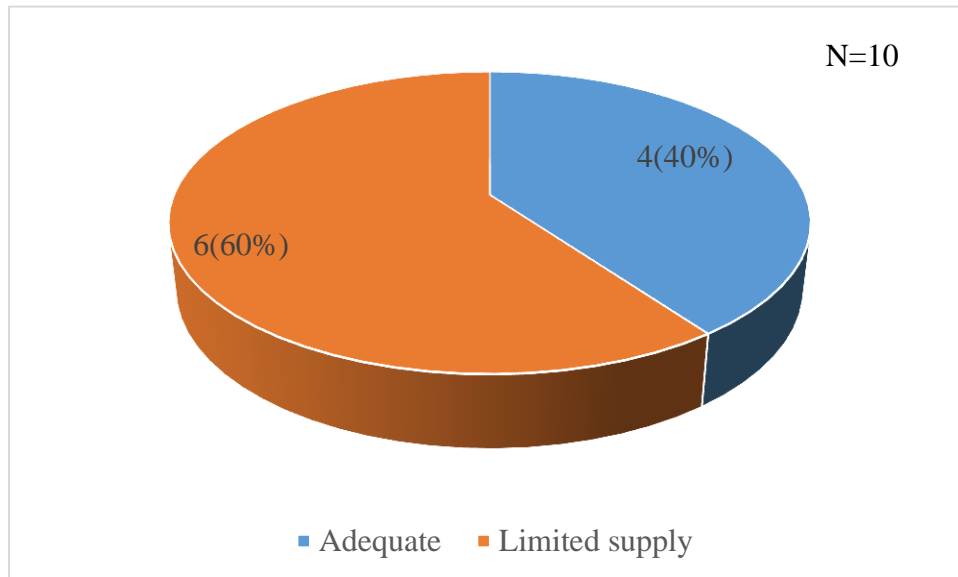
***Figure 4: Showing number of times the staff were trained on how to give nursing care to patients with burns***

Findings in figure shows that most of the respondents 3(42.9%) had been trained more than two times, 2(28.6%) twice and 2(28.6%) only once.



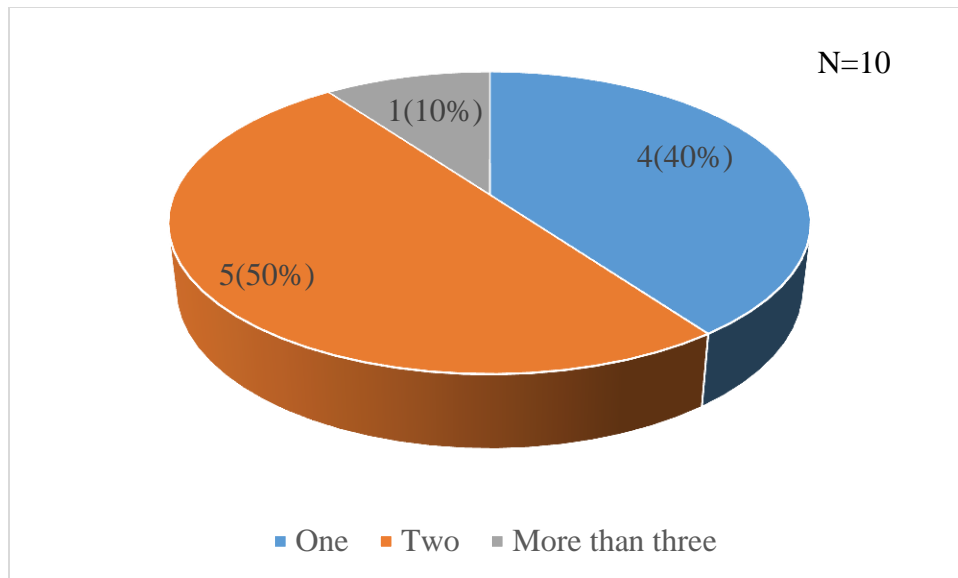
***Figure 5: Showing whether there is a specific ward for burns***

Findings in figure 5 indicates that majority 9(90%) of the respondents said patients with burns had no specific ward while 1(10%) said patients with burns had specific ward.



***Figure 6: Showing whether there are adequate supplies for dressing burns***

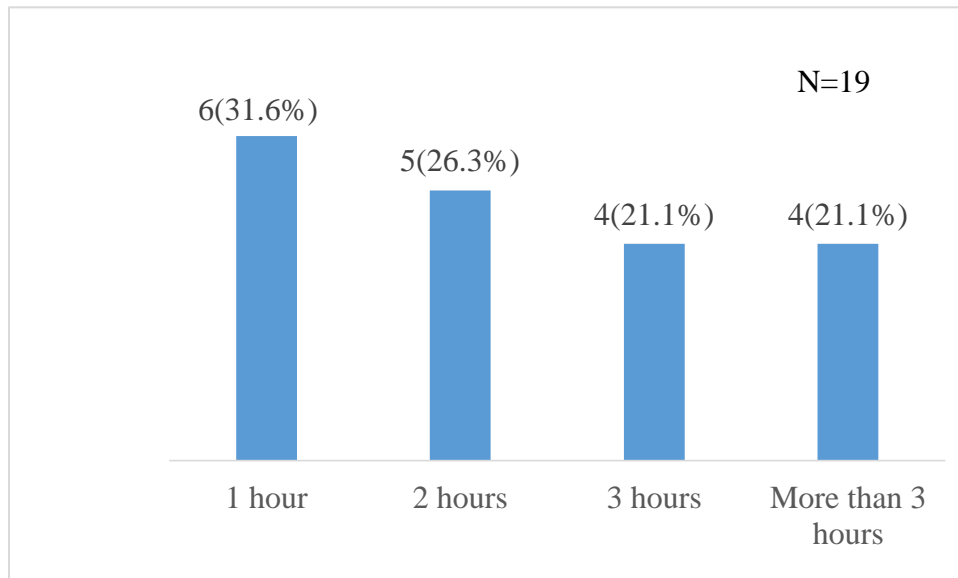
Results in figure 6 shows that more than a half 6(60%) of the respondents don't receive adequate supplies for dressing burns, while 4(40%) said had limited supply. Results indicate that all 10 (100%) of the burns patients were admitted on general surgical ward.



***Figure 7: Showing average number of patients admitted with malnutrition***

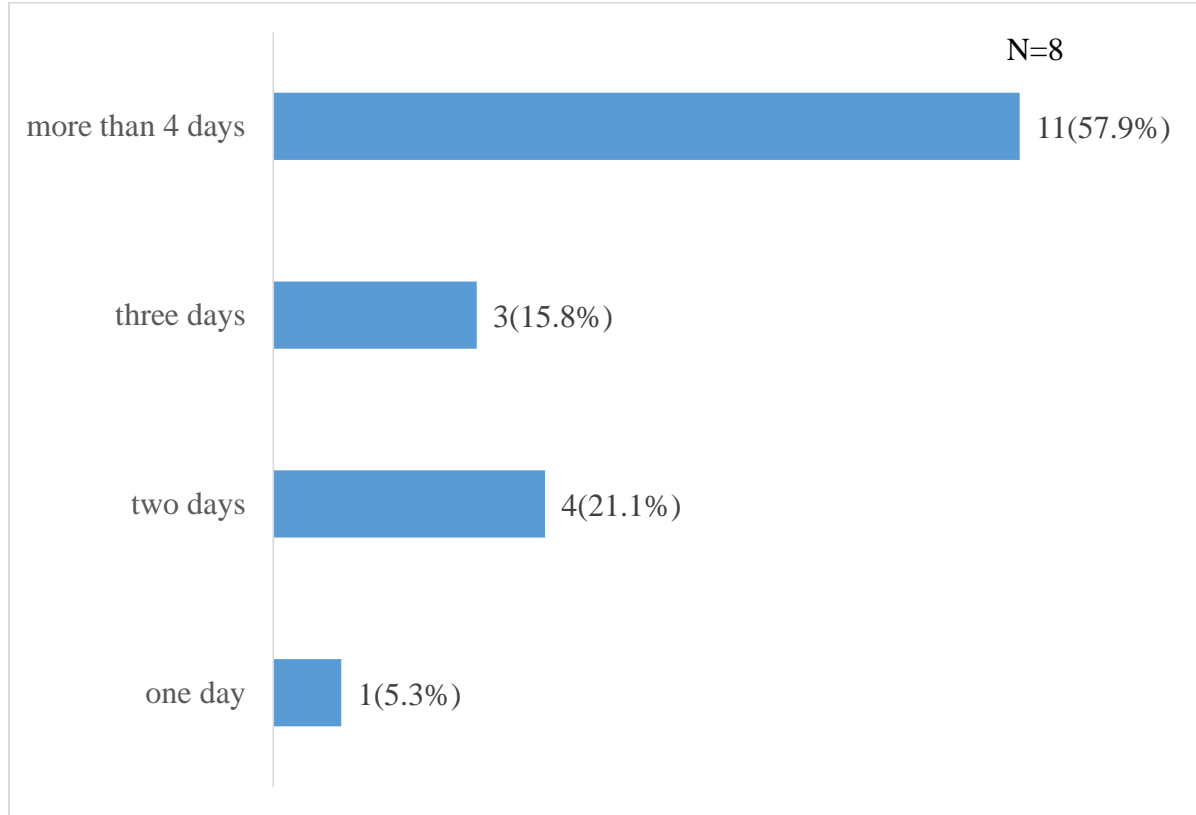
Results in figure 2 above show that a half 5(50%) of the respondents reported on average, two patients admitted with malnutrition, 4(40%) reported an average of one patient while 1(10%) reported an average of more than three patients admitted with malnutrition.

#### 4.2.2 Patients related factors affecting nursing care of patients with burns



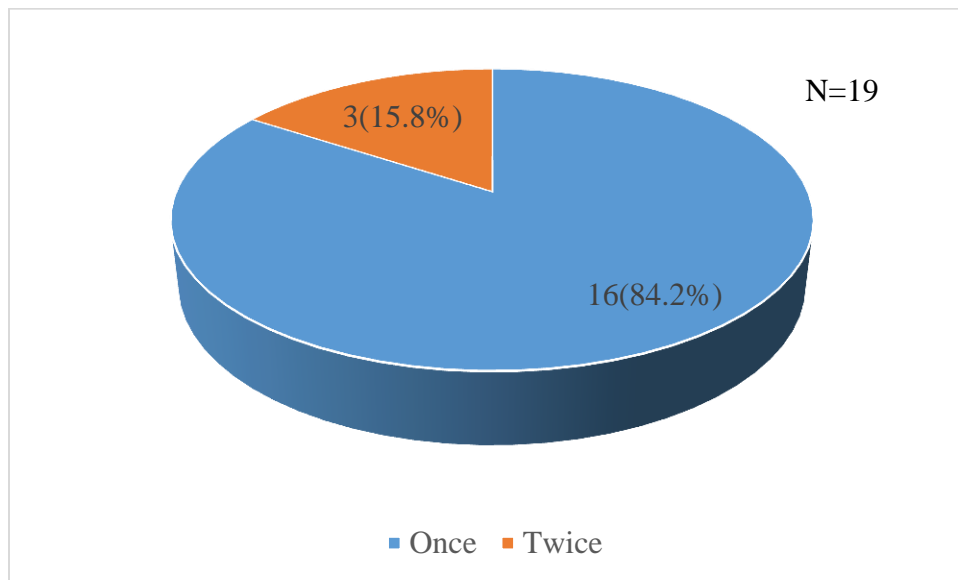
***Figure 8: Estimated time taken to arrive at the hospital***

The findings in Figure 8 show that more than half 6(31.6%) of the respondents said arrived at the hospital after 1 hour, 5(26.3%) after 2 hours, and 4(21.1%) after 3 hours while 4(21.1%) arrived at the hospital after more than 3 hours.



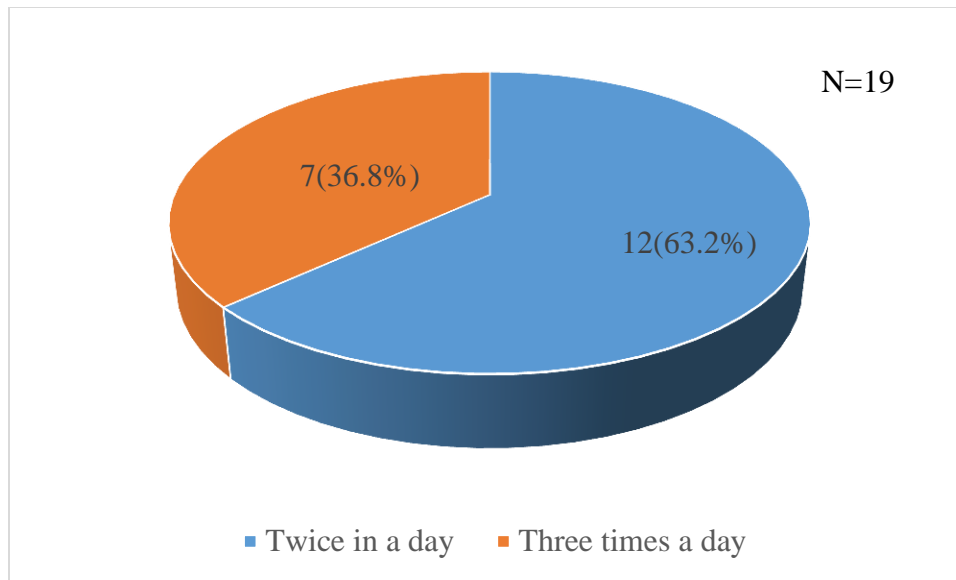
***Figure 9: showing days of admission***

Findings in figure 9 above show that more than a half 11(57.9%) of the respondents were admitted for more than 4 days on the ward, 4(21.1%) two days, 3(15.8%) three days and only 1(5.3%) had one day admission on the ward.



***Figure 10: Showing number of times the patients were dressed in a day***

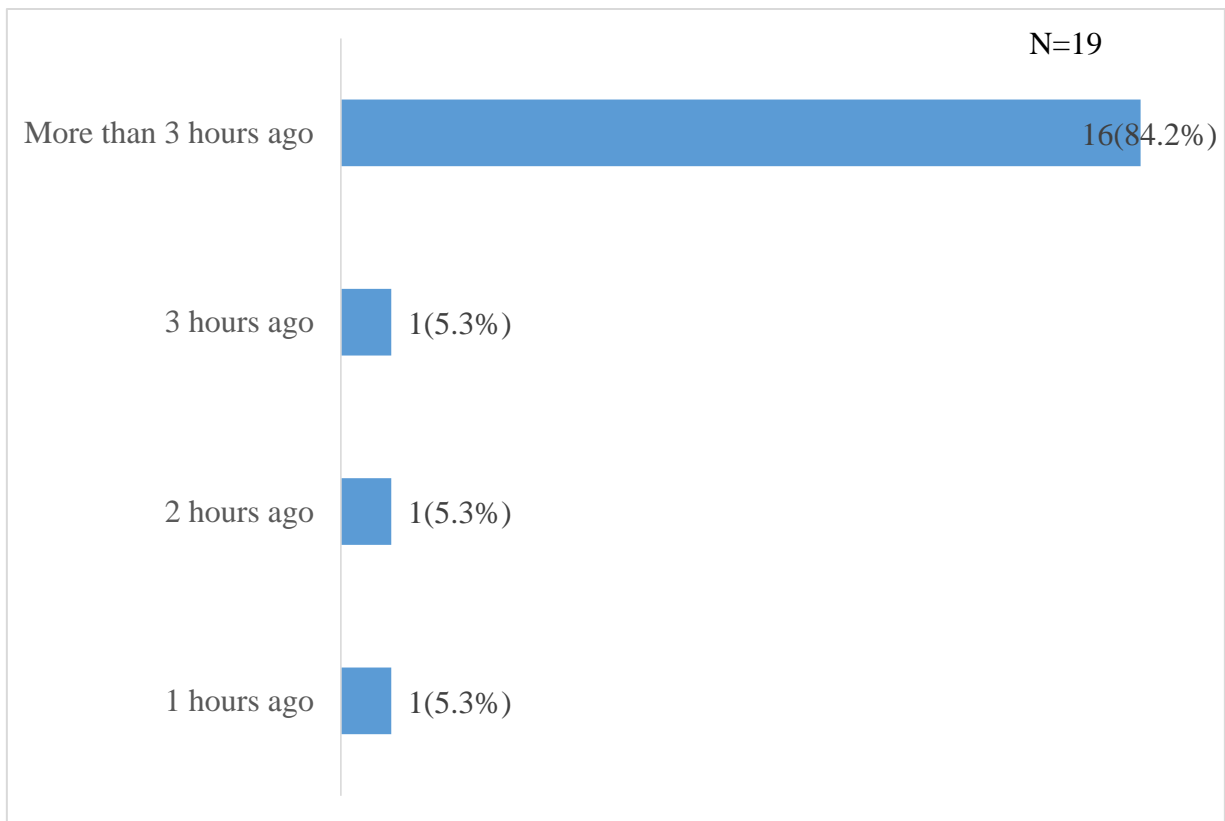
Results from figure 10 show that majority 16(84.2%) of the respondents were dressed once in a day while 3(15.8%) were dressed twice in a day.



***Figure 11: Showing number of times patients feed per day***

Findings in figure 6 indicate that most 12(63.2%) of the respondents reported of feeding twice in a day while 7(36.8%) feed three times a day.





***Figure 12 : Showing when the last feed was taken after admission***

Results in figure 7 shows that majority of the respondents 16(84.2%) had received a feed more than three hours after admission, 1(5.3%) 3 hours, 1(5.3%) 2 hours, while 1(5.3%) received a feed 1 hour after the admission.

## **CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

### **5.0 Introduction**

This chapter discusses the findings, concludes and proposes recommendations for the care of patients.

### **5.1 Health worker-related factors affecting nursing care of patients with burns**

The findings revealed that more than half (57%) of the enrolled nurses said that they dressed the burn patient once a day while 43% dressed the patient twice a day. On the other hand, all the registered nurses dressed the burn patients once a day. This may mean that lower cadre health workers are more likely to provide adequate care to burn patients. This study finding is in line with the findings of Bijani & Mohammadi, (2021) who stated that treatment of burn patients requires extensive time, experience and effort

The table also shows that all the health workers who had worked on the ward for 1 year said that they dressed the burn patient once a day while an equal proportion of those who had worked on the ward for 2 years reported dressing the burn patients once and twice daily. Work experience thus affects the quality of burn care administered to the patients.

The study findings revealed that limited number of staff on wards affected the care given to patients with burns. For instance, half (50%) of the health workers who said that the hospital had enough staff to care for patients with burns reported dressing burn patients twice daily compared to only 17% who reported inadequate staffing and dressed patients only once daily. Relatedly, 33% of the health workers who stated that there were always 2-3 and 3-4 staff on duty per shift reported that they dressed the patients with burns twice daily. This may imply that having more health workers on the ward to care for patients with burns may translate to better care received

by patients with burns. This is in line with the observation by Jordan et al., (2022) that lack of specialized burn surgeons, anesthetists, and nurses in numerous burn treatment facilities in low-income countries affects the quality of burn care received. The study findings also partly concur with Gupta et al., (2014) who reported that low and middle income country (LMIC) hospitals are generally underequipped for burn management, many are competent at basic resuscitation and initial burn management, but fall short on later burn management standards.

The findings also reveal that 30% of the health workers had not been additionally trained on nursing patients with burns. More so, 90% of the respondents said that they did not have a specific ward for patients with burns. This might mean poor standards of care due to inadequate training and lack of proper facilities for burns patients. This is in line with Gupta et al., (2014) who reported that low and middle income country (LMIC) hospitals are generally underequipped for burn management, many are competent at basic resuscitation and initial burn management, but fall short on later burn management standards.

### **5.1.2 Patient/caregiver related factors affecting nursing care of patients with burns**

The results in the table indicate that 19% of the patients and caregivers who said that they had completed primary level of education said that they were dressed twice daily. On the other hand, all the respondents who stated their level of education as either secondary education or had never attended school reported that the patients were dressed once in a day.

The results revealed that (31.6%) of the patients and caregivers who said that they took 1 hour to arrive at the hospital and (21.1%) of those who said that they took more than 3 hours to arrive at the hospital said that they (the patients with burns) were dressed twice in a day while all (100%) those said that they took 1 and 2 hours to arrive at the hospital reported that the patients with

burns were dressed once in a day. This may point to variation in care by distance to the health facility.

The results indicated that all the respondents who reported 1-3 days as the number of days of admission with burns were dressed once in a day while 50% of those who reported 2-4 days of admission as well as 9% who reported their days of admission as more than 4 days said that the patients were dressed twice a day. This partly implied that the care received by patients with burns may be associated with the number of days they have spent on the ward. It is important to note however that the duration of stay in admission depends on the severity of the burn and so, they may most likely get better care compared to their counterparts who may not have severe or large burns. This is partly in agreement with the assertion that patients with larger burns, a longer length of stay, are more likely to receive better care so as to reduce chances of wound infection (Fuzaylov et al., 2014).

The findings of the study seemed to indicate that patients who had been fed more than three hours of admission to the hospital had more dressing compared to those who fed within 3 hours or less after admission. This is partly in line with the observation that early feeding helps promote healing in patients with severe burn injuries by reducing the effects of hypermetabolism and catabolism, and lowering the risk of malnutrition (Jordan et al., 2022).

## **5.2 Conclusion**

The care received by patients with burns was less optimal. The results revealed that majority (84.2%) of the respondents said they were dressed once in a day while 15.8% were dressed twice in a day. The patients who were dressed once in a day may easily contract infections unless other measures are taken. The care of patients was associated with health worker related factors such

as; cadre or rank of health worker, work experience and number of health workers on the ward per day. The care was also linked to patient/caregiver related factors such as; distance to health facility, number of days of admission and feeding.

### **5.3 Recommendations**

There is need for refresher training programs for all health workers on burn care and management. This will ensure that patients receive optimal care and attention that will improve treatment outcomes as long as the health workers practice what they were taught during refresher training courses.

### **5.4 Implications to the nursing practice.**

Number of nurses should be increased per shift to improve nursing care to patients with burns

There should be continuous medical education on management of patients with burns

The results will be reference for students in future in case they want to know any information about factors affecting nursing care of patients with burns.

## Reference

- AbdelWahab, M. E., Sadaka, M. S., Elbana, E. A., & Hendy, A. A. (2018). Evaluation of prognostic factors affecting length of stay in hospital and mortality rates in acute burn patients. *Annals of Burns and Fire Disasters*, 31(2), 83–88.
- Alemayehu, S., Afera, B., Kidanu, K., & Belete, T. (2020). *Management Outcome of Burn Injury and Associated Factors among Hospitalized Children at Ayder Referral Hospital*, . 2020.
- Amissah, N. A., van Dam, L., Ablordey, A., Ampomah, O.-W., Prah, I., Tetteh, C. S., van der Werf, T. S., Friedrich, A. W., Rossen, J. W., van Dijk, J. M., & Stienstra, Y. (2017). Epidemiology of *Staphylococcus aureus* in a burn unit of a tertiary care center in Ghana. *PloS One*, 12(7), e0181072. <https://doi.org/10.1371/journal.pone.0181072>
- Babakir-Mina, M. (2017). Characteristics of Burn Injury and Factors in Relation to Infection among Pediatric Patients. *MOJ Gerontology & Geriatrics*, 1(3), 57–66. <https://doi.org/10.15406/mojgg.2017.01.00013>
- Bijani, M., & Mohammadi, F. (2021). Ethical challenges of caring for burn patients : a qualitative study. *BMC Medical Ethics*, Bijani, M., & Mohammadi, F. (2021). *Ethical challenges of caring for burn patients : a qualitative study. BMC Medical Ethics*, 1–10. <https://doi.org/10.1186/s12910-021-00582-x>, 1–10. <https://doi.org/10.1186/s12910-021-00582-x>
- Botman, M., Hendriks, T. C. C., & Haas, L. E. M. De. (2018). *Access to Burn Care in Low- and Middle-Income Countries : An Assessment of Timeliness , Surgical Capacity , and Affordability in a Regional Referral Hospital in*. 657–664.
- Fuzaylov, G., Murthy, S., Dunaev, A., Savchyn, V., Knittel, J., Zabolotina, O., Dylewski, M. L.,

- & Driscoll, D. N. (2014). Improving burn care and preventing burns by establishing a burn database in Ukraine. *Burns*, 40(5), 1007–1012. <https://doi.org/10.1016/j.burns.2013.11.013>
- Gabbe, B. J., Cleland, H., Watterson, D. M., Schrale, R., McRae, S., Parker, C., Taggart, S., & Edgar, D. W. (2015). Long term outcomes data for the Burns Registry of Australia and New Zealand: Is it feasible? *Burns*, 41(8), 1732–1740.  
<https://doi.org/10.1016/j.burns.2015.09.005>
- Ghaed Chukamei, Z., Mobayen, M., Bagheri Toolaroud, P., Ghalandari, M., & Delavari, S. (2021). The length of stay and cost of burn patients and the affecting factors. *International Journal of Burns and Trauma*, 11(5), 397–405.
- Gupta, S., Wong, E. G., Mahmood, U., Charles, A. G., Nwomeh, B. C., & Kushner, A. L. (2014). Burn management capacity in low and middle-income countries: A systematic review of 458 hospitals across 14 countries. *International Journal of Surgery*, 12(10), 1070–1073. <https://doi.org/10.1016/j.ijssu.2014.08.353>
- Ismail, M. S., Sc, D. N., Seloma, Y. A., Sc, D. N., Shaheen, T. A., & Sc, M. (2019). *Factors Affecting Mortality among Patients with Major Burn at Intensive Care Units*. 87(3), 1945–1950.
- Jordan, K. C., Di Gennaro, J. L., von Saint André-von Arnim, A., & Stewart, B. T. (2022). Global trends in pediatric burn injuries and care capacity from the World Health Organization Global Burn Registry. *Frontiers in Pediatrics*, 10(Lmic).  
<https://doi.org/10.3389/fped.2022.954995>
- Kruger, E., Kowal, S., Bilir, S. P., Han, E., & Foster, K. (2020). Relationship Between Patient Characteristics and Number of Procedures as well as Length of Stay for Patients Surviving

Severe Burn Injuries: Analysis of the American Burn Association National Burn

Repository. *Journal of Burn Care & Research*, 41(5), 1037–1044.

<https://doi.org/10.1093/jbcr/iraa040>

Lindén, J. (2015). *Paediatric Burns and its Related Infections - a Qualitative Study Emphasizing the Preventive Work Conducted by Nurses in Dar es Salaam*.

Marwa, N. P., & Tarimo, E. A. M. (2019). *Provision of care to hospitalized pediatric burn patients : a qualitative study among nurses at Muhimbili National Hospital , Dar es Salaam , Tanzania*. 1–10.

Odoch, R., Atuhairwe, C., & Amogin, D. (2016). *Predictors of Length of Hospital Stay among Burns Patients in Mulago National Referral Hospital , Kampala- Uganda*. 29, 32–39.

Rybarczyk, M. M., Schafer, J. M., Elm, C. M., Sarvepalli, S., Vaswani, P. A., Balhara, K. S., Carlson, L. C., & Jacquet, G. A. (2017). A systematic review of burn injuries in low- and middle-income countries: Epidemiology in the WHO-defined African Region. *African Journal of Emergency Medicine*, 7(1), 30–37. <https://doi.org/10.1016/j.afjem.2017.01.006>

Tusiime, M., Musoke, D., Muneza, F., Mutto, M., & Kobusingye, O. (2022). Prevalence , risk factors and perceptions of caregivers on burns among children under 5 years in Kisenyi slum , Kampala , Uganda. *Injury Epidemiology*, 1–9. <https://doi.org/10.1186/s40621-022-00382-w>



## APPENDIX I: CONSENT FORM

Hello,

My name is Kangabe Imaculate, a student of Diploma in nursing extension at Mutolere school of Nursing and Midwifery. I am conducting a study entitled “**Factors affecting nursing care of patients with burns at St Francis Hospital Mutolere**”. This study is purely academic. You have been selected to participate in this study on random basis and the views you present are important because they represent those of many other patients with burns and scalds. The information will be kept confidential and your participation is voluntary.

If you have any questions to ask regarding the study, feel free to ask.

Do you accept to participate in the interview?

1. Yes

2. No (circle an option)

Signature.....Date .....

.....

Researchers signature

.....

Date

## **APPENDIX II: PARTICIPANT QUESTIONNAIRE**

QUESTIONNAIRE NUMBER..... DATE: .....

1. Cadre of health worker

- a) Enrolled nurse
- b) Registered nurse
- c) Nursing assistant
- d) Others specify.....

2. How long have you worked on this ward

- a) Less than 6 month
- b) 6 month
- c) 1 year
- d) 2 years and above

3. Do you have enough staff to care for patients with burns?

- a) Yes
- b) No

4. On average how many staffs are always on duty per shift?

- a) 1-2
- b) 2-3
- c) 3-4

5. Have you been trained on nursing patients with burns?

- a) Yes
- b) No

6. If yes from question above how many times have you been trained on how to give nursing care to patients with burns?

- a) Once
- b) Twice

c) More than two times

7. Do you have specific ward for burns

a) Yes

b) No

If No from question 11 above where do you admit patients with burns?

.....

8. Are there adequate supplies for dressing burns?

a) Adequate

b) Not adequate

c) Limited supply

9. Averagely on monthly basis, how many malnourished patients with burns are admitted on this ward?

a) One

b) Two

C) three

d) More than three

### **APPENDIX III: PATIENTS INTERVIEW GUIDE**

1. What is your education level?
2. After how long did you arrive at the hospital?
3. How long have you been admitted here
4. How many times are you dressed in a day?
5. How often do you get food?
6. When did the patient get the first feed?


### APPENDIX III: RESEARCH REPORT APPROVAL FORM

Name of student: **KANGABE IMMACULATE**

Title of the research study: **Factors affecting nursing care of patients with burns at St. Francis Hospital Mutolere.**

I hereby agree to serve as the supervisor of the research study of the above named student.


Name: **Mr. NDAGIJIMANA JULIUS**

Signature.....

Date.....17.3.2023

Approved by:

Principal: **Sr. KEMIGISHA CATHELINE**

Signature.....

Date.....17<sup>th</sup> march 2023



## APPENDIX IV: INTRODUCTORY LETTER.



MUTOLERE SCHOOL OF NURSING  
AND MIDWIFERY  
P.O. BOX 26, KISORO

Email: mutolereht@ucmb.co.ug

Your Ref: .....

Our Ref: NMT/023

DATE: 10/03/2023

TO:  
THE MEDICAL DIRECTOR  
ST. FRANCIS HOSPITAL MUTOLERE  
P.O BOX 26,  
KISORO.

*Handwritten signature*  
27/3/23

Dear Sir,

**RE: RESEARCH PROJECT FOR DIPLOMA NURSING EXTENSION.**

This is to introduce **KANGABE IMMACULATE** who is a student Nurse at Mutolere school of Nursing and Midwifery in her final year of study.

She is required to prepare an individual research project as part of the requirements for the award of Diploma in Nursing Extension. She has written her research proposal and is at the stage of data collection. She is interested in the area of **"FACTORS AFFECTING NURSING CARE OF PATIENTS WITH BURNSON SURGICAL WARD AT ST. FRANCIS HOSPITAL MUTOLERE, KISORO DISTRICT"**

She seeks to collect data in your health facility/Department and therefore requests for your support.

I will be grateful for any relevant support you shall accord her regarding her research study.

Thank you.

Yours Sincerely,

*Handwritten signature of Sr. Kemigisha Catheline*

SR. KEMIGISHA CATHELINE  
PRINCIPAL



**APPENDIX IV: A PROPOSED BUDGET FOR A RESEARCH STUDY.**

<b>ITEM</b>	<b>QUANTITY</b>	<b>UNIT COST (Ug shillings)</b>	<b>TOTAL COST (Ug shillings)</b>
<b>STATIONARY</b>			
Reams of ruled papers(A4)	<b>3</b>	15,000	45,000
Folder file	<b>1</b>	6,000	6,000
Pens	<b>4</b>	500	2000
A flash disk(8GB)	<b>1</b>	16,000	1,6000
<b>SUB TOTAL</b>			<b>69,000</b>
<b>COMMUNICATION</b>			
Internet			50000
Transport			20,000
<b>SUB TOTAL</b>			<b>70,000</b>
<b>SECRETARIAL</b>			
Binding proposal books	3 copies	4,000	12,000
Printing dissertation	3 copies(70 pages)	35,000	105,000
Binding dissertation	3 copies	4,000	12,000
Research supervisor	1		200,000
Miscellaneous			50000
<b>SUB TOTAL</b>			<b>367,000</b>
<b>GRAND TOTAL</b>			<b>506,000</b>

## APPENDIX V: WORK PLAN

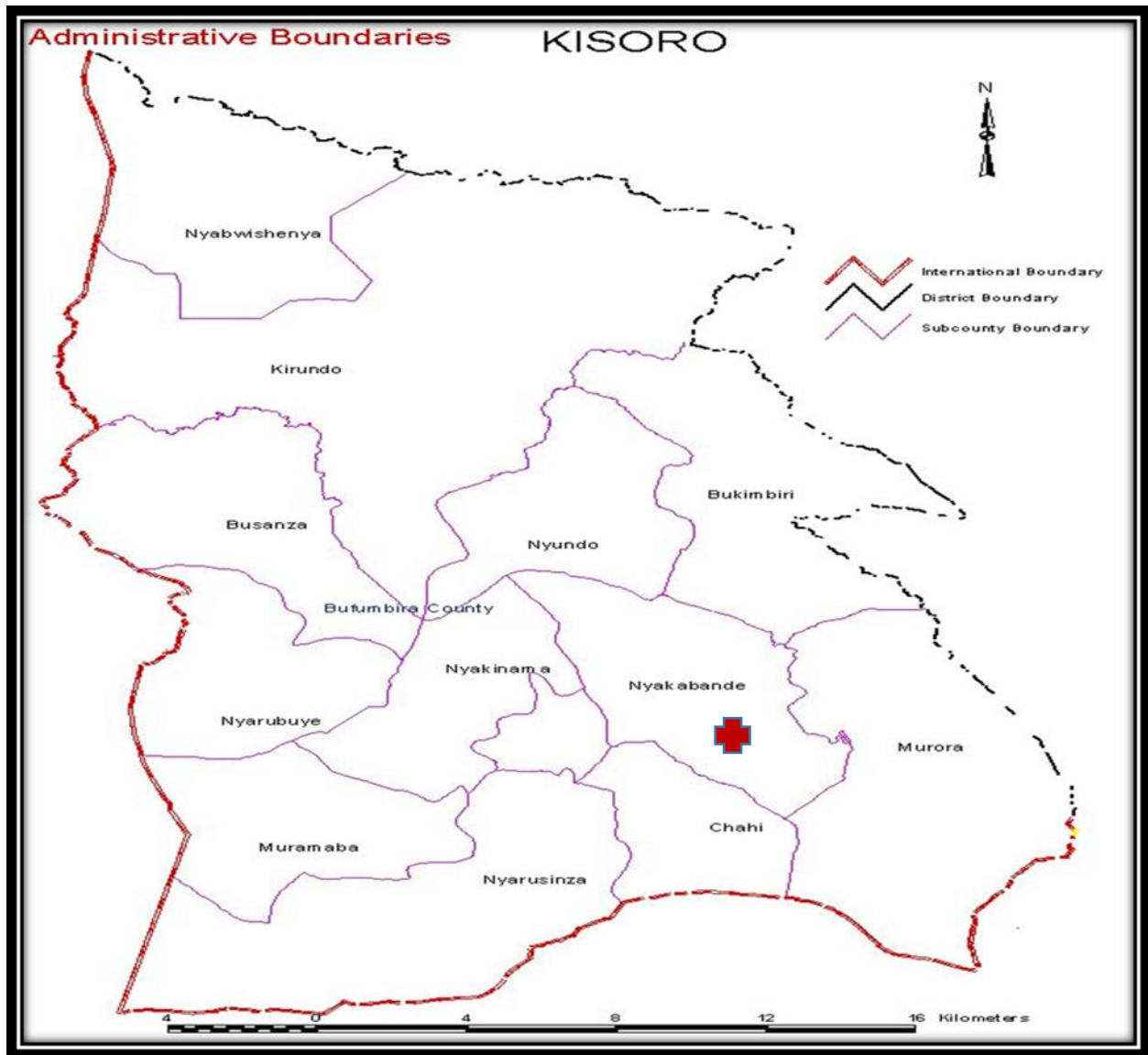
Month Activity	OCT 2022	NOV 2022	DEC 2022	JAN 2023	FEB 2023	MARCH 2023	APRIL 2023	Responsible person
Topic identification and approval								Researcher and supervisor
Proposal writing								Researcher
Proposal defense and submission								Researcher and research committee
Data collection								Researcher
Data entry and analysis								Researcher
Report writing								Researcher
Research report approval and submission								Researcher, supervisor and school administration



**DISTRICT.**



**APPENDIX VI: MAP OF UGANDA SHOWING THE LOCATION OF ST.  
FRANCIS HOSPITAL MUTOLERE**



KEY;  ST. FRANCIS HOSPITAL MUTOLERE