# FACTORS AFFECTING HEALING OF BURNS AMONG CHILDREN UNDER FIVE YEARS OF AGE IN PAEDIATRIC WARD, APAC GENERAL HOSPITAL, APAC DISTRICT. A CROSS-SECTIONAL STUDY.

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# Abstract. Background.

It was estimated that over 30,000 people get burned each day was 11 million cases globally, most cases of burns occur in low-developing countries due to poor housing facilities and overcrowding. The study aimed to assess factors affecting the healing of burns among children under 5 years in the pediatric ward, Apac General Hospital, Apac District.

# Methodology.

This was a cross-sectional descriptive study that employed quantitative data collection. A sample size of 32 respondents was selected using a convenience sampling procedure. A questionnaire was used to collect data. Analysis was done using SPSS version 20

### Results.

The majority 18 (56.3%) of the respondents were in the age range of 20-25 years, 20 (63%) of the respondents were female, and 20 (63%) of the respondents were enrolled Nurses. 62.5% of respondents agreed uncooperative patients affected burn healing in children under 5, and 100% noted issues with patient practices and adherence to self-care advice. Despite team efforts, 65.6% of health workers were motivated, but 78.2% reported high-stress levels impacting burn management. Additionally, 100% cited inadequate staffing, 56.3% had inconsistent supplies, and 78.2% did not perform support supervision.

# Conclusion.

Respondents faced various patient, health worker, and health facility-related factors affecting the healing of burns in children under 5 years.

# **Recommendations.**

There should be improved provision of supervision and monitoring, onsite workshops and refresher training, staffing, provision of guidelines as well as more health education of patients.

**Keywords.** Burn wound management, Paediatric ward, Burn injuries in children, Apac General Hospital. *Submitted:* 2024-06-17 Accepted: 2025-12-06

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# Background.

Burns are tissue injuries resulting from direct contact with flames, hot liquids, gases, or surfaces; caustic chemicals; electricity; or radiation. Internal burn injuries can also result from smoke inhalation. Burn injuries were characterized by coagulative necrosis of the skin or other affected body tissues. The skin was commonly damaged with resultant loss of function as a barrier to injury and infection and as a regulator of body temperature, fluid loss, and sensation (WHO, 2018). Therefore, to save a life there was a need for first aid, wound assessment, wound dressing, and provision of medication given to burn patients and the main goal of burn management is to control pain, remove dead tissue,

prevent infection, reduce scarring, and regain function (Alemayehu et al, 2020).

Most burns occurred at homes and the major factors causing burns included low socioeconomic status, lack of designated, protected space for cooking, use of risky sources of lighting such as paraffin lanterns and candles, substance/alcohol abuse by caretakers as well as poor supervision and monitoring (Spronk et al, 2018).

It was estimated that over 30,000 people get burned each day was 11 million cases globally, most cases of burns occur in low-developing countries due to poor housing facilities and overcrowding. It was argued that 55.6% were poorly managed resulting in complications, prolonged hospitalization, and high mortality due to burns. (WHO,

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2020). However, in developed countries such as Spain, there were a total of 4300 cases of burns reported and out of these, 59.2% were properly managed as they did not develop any early complications while 40.8% were not properly managed, leading to patient deaths from lack of fluid resuscitation within 24 hours, malnourishment, shock, sepsis among others in the last decade. The major factors affecting the healing of burns in children under 5 years included lack of skills, inexperience, lack of resources as well as understaffing (Bayuo et al, 2019).

In Sub-Saharan Africa, studies showed that burns were estimated at 120,000 cases annually and out of these cases 36.3% were treated and discharged, 63.7% developed sepsis which led to loss of life, and few who recover end up with disabilities such as amputations. The important factors affecting the healing of burns in children under 5 years included lack of support, lack of resources, heavy workload as well as inadequate or unavailability of guidelines for burn management (Aghaei et al, 2019).

In East Africa, Lerma et al, (2018) reported that burns were estimated at 43,000 cases annually, and out of these, 29.5% recovered well and patients were discharged while 70.5% had poor response to recovery which led to patients' deaths and disabilities and the major factors affecting the healing of burns in children under 5 years included lack of guidelines on burns management, lack of resources, heavy workload, being exposed to physical hazards such as infections, medical team contravention and unsuitable behavior of managers (Lerma et al, 2018).

In Uganda, the situation remained similar to the above as a study carried out in Mulago National Referral Hospital to assess the level of burn patients and management revealed that 11,900 cases of burns are recorded annually, 38.1% being managed to recovery and discharged,61.9% end up with disabilities and some die. It was reported that factors affecting the healing of burns in children under 5 years included cultural beliefs and practices of caretakers of patients, incompetency, depersonalization, high-stress levels, burnout, lack of support, inadequate provision of equipment, resources and lack of cooperation of patients (Odoch et al, 2016).

Statistics from the Ministry of Health (MoH, 2019) revealed that between 70% to 75% of domestic accidents are due to open fires and hot liquids and many low-income families risk fire accidents because they use candles that are very risky. Social factors such as the lack of partitioned or separated rooms for cooking meant that children under 5 years were severely exposed to risks of getting burns (MoH, 2019). Burns mostly affected children under 5 years as well as entire families due to lost productivity as they spent time in the hospital caring for the children as well as increased health care expenditure. The study aimed to assess factors

affecting the healing of burns among children under 5 years in the pediatric ward, Apac General Hospital, Apac District.

# Methodology.

# Study Design and rationale.

The study design was cross-sectional and descriptive, employing quantitative data collection methods. It was a cross-sectional type of design because it involved the collection of data from a single point in time and from a group of respondents whose characteristics such as age, marital status, level of education, and occupation were described. The design was descriptive as it described the data as it was without any changes.

# Study setting and rationale.

The study was carried out in the pediatric ward, surgical ward, and Gynecological ward at Apac General Hospital, Apac District. Apac district is bordered by Oyam district to the northeast, Kole district to the north, Lira district to the northeast, Dokolo district to the east, Amolator district to the south, Nakasongola district to the southwest, and Kiryandongo district to the west. Apac Hospital is located approximately 62 kilometers (39 miles), by road, southwest of Lira, and about 230 kilometers (140 mi) by road, north of Apac. The hospital offers many health services including immunization, obstetrics and emergency care, HIV/AIDS management services, surgical, medical, and pediatrics, laboratory services, nutrition services, family planning services, antenatal and post-natal services, EMTCT, and RCT services. There are two doctors, four clinical officers, ten nurses, and three cleaners. The pediatric ward is subdivided into three portions and the front portion next to the nurse's table is for admitting children with burns. The study setting was selected because of the manifestation of the problem on the ground.

# Study population.

The study included all health workers providing health care services to patients in the pediatric ward, surgical ward, and gynecological ward at General Hospital, Apac District. The study population was 32 respondents.

# Sample size determination.

In this study, the sample size was calculated using a formula that was originally developed by Yamane (1967)

$$n = \frac{N}{1+N(e)^2}$$

Where n = Desired sample size

N = Study population

e = The margin error in the calculation.

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$$n = \frac{35}{1+35(0.05)^2}$$

$$n = 32.1$$
  
:. = 32

Therefore, the study population was 32 participants.

# Sampling procedure.

A simple random sampling procedure was used to select the respondents for the study. In this procedure, the researcher wrote the words YES and NO on pieces of paper, folded them, put them in an enclosed box, shook them, and then invited respondents to participate by picking a paper from the enclosed box. Any respondent who picked a paper from the box with the YES written on it was requested to participate in the study. This continued until the number of respondents to be interviewed for the day was achieved. The research targeted 10 respondents per day for 4 days.

# Inclusion criteria.

The study included only health workers providing health care services to patients in the pediatric ward, Surgical ward, and Gynaecological ward at Apac General Hospital who were available and willing to voluntarily consent to participate in the study.

# **Exclusion criteria.**

The health workers who were busy as well as those who refused to voluntarily consent to participate in the study were excluded.

# **Definition of Variables.**

The study included both dependent and independent variables.

# Independent variables.

Patient-related factors, Health worker-related factors, and Health facility-related factors.

# Dependent variables.

Healing of burns in children under 5 years.

## **Research Instruments.**

Data was collected using an approved semi-structured questionnaire which consisted of both open and closed-ended questions. This tool was selected because the study involved only literate respondents who were able to read, write, and understand English was used to develop the questionnaire. The research questionnaire was pretested among 3 health workers providing health services to patients in pediatric wards at Olel Pek H/C III to enable the researcher to assess its clarity, accuracy, and reliability and thereafter, make any necessary adjustments before the questionnaire in the study.

### **Data Collection Procedure.**

An approval letter was received from the Principal of Florence Nightingale School of Nursing and Midwifery introducing me to the medical director. The medical director introduced the researcher to the In-Charge of the pediatric ward, Surgical ward, and Gynaecological ward who introduced the researcher to the respondents. The researcher then explained the purpose and objectives of the study to respondents and assured them of maximum confidentiality and privacy of all information given, then asked for their permission to participate in the study. Each respondent participated for a total of 10-15 minutes to fill the tool. The researcher interviewed one respondent at a time.

### Data management.

Data management included data editing before leaving the area of study to ensure that there were no mistakes or areas left blank and that any found were corrected before leaving the area of study. Data was stored under lock and key and only accessed by the researcher while the results were stored on a flash disk for easy retrieval.

# Data analysis and presentation.

The collected data was first analyzed manually by the use of papers and pens and tallying, after which the researcher

presented them in tables, graphs, and pie charts generated by SPSS version 20.

# Results of the study.

# Socio demographic characteristics of the respondents.

Table 1, indicates that majority 18 (56.3%) of the respondents were in the age range of 20-25 years while the least 6 (18.7%) were 36 years and above, majority 20 (63%) of the respondents were female while the least 12 (37%) were male, almost two third 20 (63%) of the respondents were enrolled Nurses while the least 12 (37%) were registered Nurses and almost half 15 (46.8%) of the respondents had 6-10 years of experience while the least 2 (6.4%) had 16 years and above.

Table 1: Socio-demographic characteristics of the respondents (n=32).

Variables	Frequency (n)	Percent (%)	
Age of respondents			
20-25	18	56.3	
26-35	8	25	
36 years and above	6	18.7	
Sex of the respondents			
Female	20	63	
Male	12	37	
Designation			
Enrolled nurse	20	63	
Registered nurse	12	37	
Years of experience			
0-5 years	8	25	
6-10 years	15	46.8	
11-15 years	7	21.8	
16 years and above	2	6.4	



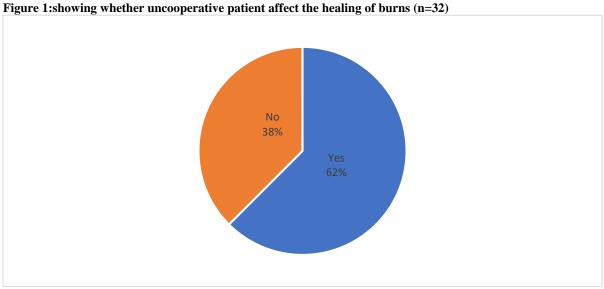


Table 2: showing whether patients practices affect the healing of burns (n=32)

Responses	Frequency (n=32)	Percentage (%)
Yes	32	100
No	0	0

Figure 2: showing whether patient's caretaker provided nutritious diet to patient as advised by nurse (n=32)

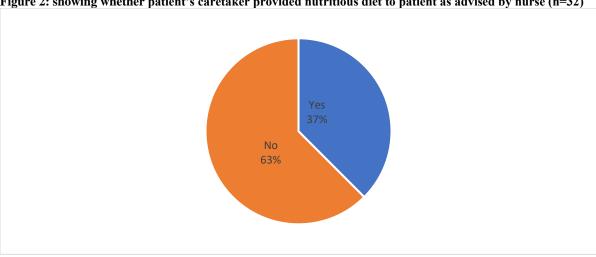


Table 3:showing whether failure to follow health workers advice on self-care and wound management affect the healing of burns (n=32)

Responses	Frequency (n=32)	Percentage (%)
Yes	32	100
No	0	0

Table 4: showing whether patient buy drugs when hospital has failed to provide (n=32)

Variables	Frequency (n=32)	Percentage (%)
Yes	32	100
No	0	0

Page | 6 Table 5:showing whether health workers have ever received training in burns management (n=32)

Responses	Frequency (n=32)	Percentage (%)
Yes	11	34.4
No	21	65.6

Figure 3: showing whether respondents ever had CMEs in burn management (n=32)

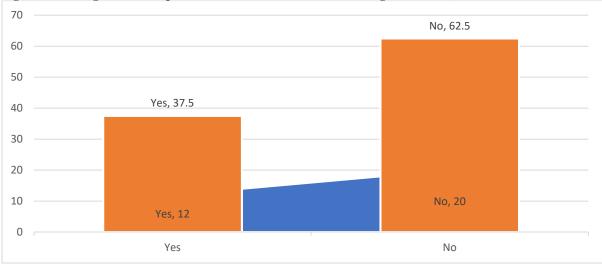


Figure 3, indicates that majority of the respondents 20 (63%) did not receive CMEs in burns management while the least 12 (37%) did.

Figure 4: showing whether respondents got motivation in the ward (n=32)

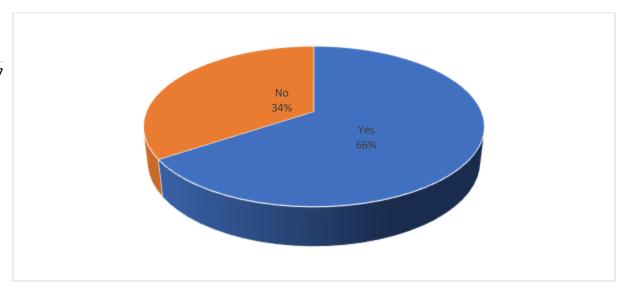


Table 6:showing whether respondents worked as a team in ward(n=32)

Responses	Frequency (n=32)	Percentage (%)
Yes	32	100
No	0	0

Table 7:showing whether respondents got many patients which made them fail to provide the necessary care to the patient (n=32)

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Responses	Frequency (n=32)	Percentage (%)
Yes	25	78.2
No	7	21.8

Figure 5: showing whether health workers always practiced hand hygiene when working on burns patients (n=32).

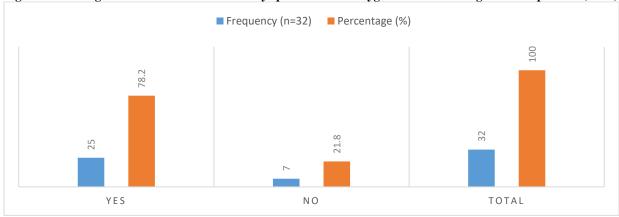


Table 8: showing level of stress among the respondents (n=32)

Responses	Frequency (n=32)	Percentage (%)
High	25	78.2
Low	7	21.8

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# Patient related factors affecting the healing of burns in children under 5 years.

Figure 1, shows that almost two third of the respondents 20 (62%) agreed that uncooperative patients affect healing of burns in children under 5 years while the least 12 (38%) disagreed.

Table 2 shows that all 32 (100%) of the respondents agreed that patients' practices such as application of herbs and substances to the wound in burns management and affects wound healing.

Figure 2, indicates that majority of the respondents 20 (62.5%) disagreed that patient's caretaker provided nutritious diet to patient as advised by nurse while the least 12 (37.5%) agreed.

Table 3, indicates that all 32 (100%) of the respondents agreed that failure to follow health workers advice on self-care and wound management burns management and wound healing.

Table 4, indicates that all 32 (100%) of the respondents reported that they bought drugs when hospital had failed to provide needed drugs for healing of burns in children under 5 years.

# Health worker related factors affecting the healing of burns.

Table 5, shows that more than two third of the respondents 21 (65.6%) did not receive training in burns management while the least 11 (34.4%) received training.

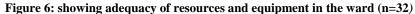
Figure 4, shows that majority 21 (66%) of the respondents had motivation to work in the burn's unit while the least 11 (34%) did not get motivation.

Table 6, shows that all 32 (100%) of the respondents reported they worked as a team in the ward.

Table 7, shows that majority 25 (78.2%) reported getting many patients which made them fail to provide the necessary care to the patient in the ward while the least 7 (21.8%) did not. Figure 5, shows that majority of the respondents 25 (78.2%) reported that they always practiced hand hygiene when working on burns patients while the least 7 (21.8%) did not. Table 8, shows that majority of respondents 25 (78.2%) rated the level of stress in the burns unit as high while the least 7 (21.8%) rated the level of stress as low.

Table 9:showing level of staffing at the facility (n=32)

Responses	Frequency (n=32)	Percentage (%)
Adequate	0	0
Inadequate	32	100



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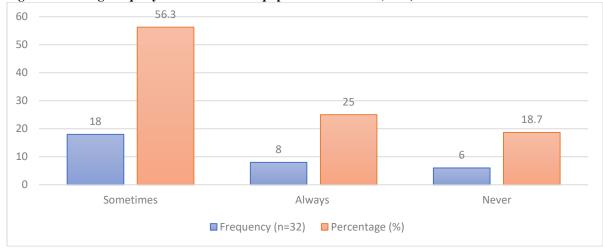
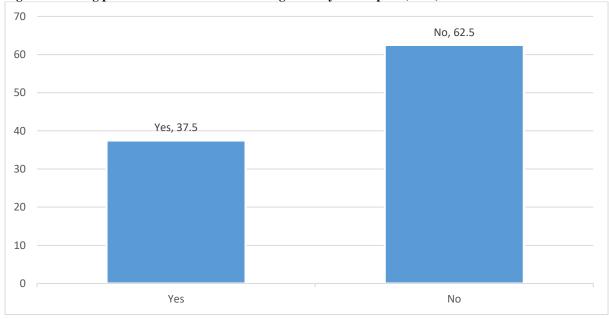


Table 10:showing provision of guidelines (SOPs) about burns management (n=32).

Responses	Frequency (n=32)	Percentage (%)
Yes	7	21.8
No	25	78.2

Figure 7:showing provision of CME on burn management by the hospital (n=32)



Health facility related factor affecting the healing of burns in children under 5 years.

Table 9, shows that all 32 (100%) of the respondents reported that the level of staffing in the burn's units was inadequate.

Figure 6, shows that more than half 18 (56.3%) of the respondents reported sometimes having adequate supplies in

the burn's unit while the least 6 (18.7%) never had adequate supplies.

Table 10, shows that majority 25 (78.2%) of the respondents were not provided with guidelines (SOPs) about burns management while the least 7 (21.8%) were provided with the guidelines.

10 Figure 7, shows that the majority of the respondents 20 (63%) did not receive CMEs in burns management while the least 12 (37%) did.

## Discussion of results.

# Patient-related factors affecting the healing of burns in children under 5 years.

Study results indicated that 20 (62.5%) of the respondents agreed that uncooperative patients have a significant impact on burns management and wound healing. This is likely due to poor management, as healthcare workers may struggle to provide effective care to such patients. A similar study by Aghaei (2018), conducted in Iran to identify factors related to pediatric burn management, found that 60% of uncooperative patients experienced complications associated with burns, often linked to a failure to adhere to nurses' advice. These findings highlight the need for improved patient care strategies to address non-compliance and enhance treatment outcomes.

The researcher found that all 32 (100%) respondents agreed that patients' practices, such as applying herbs and substances to their wounds, significantly influence burns management and wound healing. This is often attributed to the risk of infection from these substances, which can lead to delays in the healing process. These findings align with a study by Alemayehu et al. (2020) conducted at Ayder Referral Hospital in Tigray, Ethiopia, which revealed that 52% of patients applied herbs and other substances to their wounds, resulting in delayed wound healing. The prevalence of such practices underscores the importance of addressing patient education and cultural beliefs in burn management protocols to improve treatment outcomes.

The study revealed that all 32 (100%) respondents agreed that failure to adhere to health workers' advice regarding self-care and wound management significantly impacts burns management and wound healing. This non-compliance often leads patients to engage in practices contrary to recommended management strategies, resulting in delayed wound healing. Similarly, a case study conducted in Iran to identify factors related to pediatric burn management found that 60% of uncooperative patients experienced burn complications due to their failure to follow nurses' advice. These findings emphasize the urgent need to

enhance patient care strategies and improve patient compliance to optimize treatment outcomes.

# Health worker-related factors affecting the healing of burns in children under 5 years.

The study revealed that 21 (65.6%) participants did not receive training in burns management, and 20 (62.5%) did not receive Continuing Medical Education (CME) in burns management. This lack of training is directly linked to poor management of burn conditions, leading to delays in healing. A similar finding was reported in a study by Rezaei et al. (2015), which assessed factors associated with the length of hospital stay among pediatric patients with burn injuries in Kermanshah Hospital, West of Iran. The study found that 60% of nurses lacked Continuous Nursing Education (CNE), resulting in outdated knowledge of burns management, thereby affecting burns management and wound healing. These findings highlight the critical importance of providing comprehensive and continuous training and education to healthcare professionals to improve the management and outcomes of burn injuries. The researcher discovered that 21 (65.6%) participants had the motivation to work in the burn unit, which encouraged

The researcher discovered that 21 (65.6%) participants had the motivation to work in the burn unit, which encouraged them to perform their duties effectively, thereby contributing to improved healing of burns. A similar study by Shivanpour et al. (2020), conducted in Iran, focused on nurses' experiences in the burn unit and found that health worker-related factors affecting the healing of burns in children under 5 years included low levels of morale and motivation (67%). These findings highlight the significant impact of healthcare professionals' motivation on patient care outcomes, emphasizing the importance of fostering a supportive work environment to enhance burn management and wound healing.

The study found that all 30 (100%) respondents reported working as a team in the burn unit, highlighting the importance of teamwork in fostering a conducive working environment. This collaborative approach encourages effective coordination and communication among healthcare professionals, ultimately contributing to improved patient care and outcomes. This finding resonates with a study by Marwa et al. (2019) conducted at Muhimbili National Hospital in Dar es Salaam, Tanzania, which aimed to assess the provision of care among pediatric patients in the burn unit. The study identified several challenges, including inadequate staffing leading to increased workload among nurses, lack of standard skills in burn care among nurses, and insufficient access to water, which is crucial for infection prevention control. Additionally, there was a shortage of specimen collection equipment. These findings underscore the importance of addressing systemic

challenges and investing in resources to support effective teamwork and enhance patient care in burn units.

The study findings revealed that 25 (78.2%) respondents always practiced hand hygiene when working with burn patients, while 18 (56.3%) sometimes faced challenges with the supply of water and soap needed for hand hygiene. Ensuring consistent hand hygiene practices is crucial for preventing nosocomial infections and promoting proper wound healing, as it helps eliminate harmful germs. This finding aligns with the qualitative study by Marwa et al. (2019) conducted at Muhimbili National Hospital in Dar es Salaam, Tanzania, which identified various challenges impacting patient care in the burn unit. These challenges included inadequate staffing leading to increased workload among nurses, lack of standard skills in burn care, and insufficient access to water, which is essential for infection prevention control. Additionally, there was a shortage of specimen collection equipment. Addressing challenges is vital for maintaining proper hygiene practices and ensuring optimal care for burn patients.

# Health facility-related factors affecting the healing of burns in children under 5 years.

All 30 (100%) respondents reported that the staffing levels in the burn unit were inadequate. This lack of sufficient staffing poses significant challenges for the already limited staff in effectively managing patients, potentially leading to delays in wound healing. This study finding is consistent with research by Sommerhalder et al. (2020), conducted in Pittsburgh, USA, which focused on current issues in burn hypermetabolism. Their findings indicated that understaffing is a critical health facility-related factor affecting the healing of burns, particularly among children under 5 years old, with approximately 58% prevalence in low-developed countries. Addressing staffing shortages is imperative to ensure the delivery of quality care and optimize outcomes for burn patients.

Study results indicated that 18 (56.3%) of the respondents reported sometimes having adequate supplies in the burn unit. However, inadequate supply can disrupt the wound healing process as essential medications and materials may be unavailable when needed. This finding aligns with a study by Steele and Atkins (2016) conducted in the United Kingdom, which investigated factors at the scene related to the development of hypothermia among burn patients. The study found that 48% of respondents reported a lack of resources and equipment, contributing to instances of hypothermia among patients. Ensuring consistent access to necessary supplies and resources is crucial for effective burn care management and optimal patient outcomes.

Study findings revealed that 25 (78.2%) respondents did not conduct support supervision in burns management. This lack of supervision can lead to reluctance among healthcare workers, thereby hindering the wound-healing process. This finding is supported by research conducted by Lang et al. (2019) in China, focusing on the critical update of the assessment and acute management of patients with severe burns. Their study reported that 63% of respondents identified a lack of monitoring and supervision among nurses as a major determinant of nursing care among burn patients. Effective support supervision is essential for ensuring adherence to best practices and standards of care, ultimately facilitating optimal outcomes for burn patients. Study findings indicated that 25 (78.2%) respondents were not provided with guidelines (SOPs) about burns management, and the same number, 25 (78.2%), reported that inadequate provision of guidelines affected burns management and wound healing. This lack of guidelines can result in healthcare professionals lacking current protocols for wound healing, consequently leading to delays in the healing process. This finding resonates with a study by Rizzo et al. (2017) in Australia, which focused on perioperative temperature management during burn care. Their study found that 51% of healthcare facilities lacked guidelines about burns management, leading nurses to rely on their experience, resulting in a deviation from standardized patient care approaches. Having comprehensive guidelines is essential for ensuring consistency and effectiveness in burn management practices, ultimately optimizing wound healing outcomes.

### Conclusion.

The study found that respondents faced patient-related factors affecting the healing of burns in children under 5 years as reported that uncooperative patients' burns management and wound healing, most respondents agreed that patients' practices such as the application of herbs and substances to the wound and most participants agreed that failure to follow health workers advice on self-care and wound management burns management and wound healing. The established health worker-related factor affecting the healing of burns in children under 5 years; respondents had the motivation to work in the burns unit, respondents reported getting many patients, and others rated the level of stress in the burns unit as high and some agreed that highstress levels affected burns management and wound healing. The established health facility factors affecting the healing of burns in children under 5 years: inadequate level of staffing in the burn unit, inadequate staffing levels in the burn's unit affected burns management and wound healing,

sometimes had adequate supplies in the burn unit, and Lack of support supervision in burns management.

# Limitations of the study.

Page | 12 There was a challenge in getting adequate and accurate information from respondents due to the sensitive nature of the study.

There was a challenge in getting respondents for the study due to their busy and fixed nature.

There was the challenge of getting wrong information from the respondents.

# Recommendations.

The Ministry of Health should make it mandatory for all health staff in the burns units to receive regular training and onsite workshops aimed at improving their knowledge and skills in burns management.

The administration of Apac General Hospital should endeavor to recruit adequate numbers of staff to reduce workload, fatigue, and stress among health staff.

There is a need for regular provision of CNE to all staff in the burns unit in an effort to improve skills and knowledge. There is a need for increased provision of supervision and monitoring during the provision of burns management services.

# **Acknowledgment.**

Glory be to the almighty GOD, who has been most gracious and merciful to me and made everything I did a success.

With sincere thanks and gratitude to the Ministry of Education and Sport, administrator of Florence Nightingale School of Nursing and Midwifery, and administrators of Apac General Hospital, and would also love to honor and appreciate my supervisor, Mr. Awoi Ronald for his valuable time spent to guide me and ensuring that this research report is completed.

My deepest gratitude goes to my wife and parents who paid not only what was required for my school life but also shared with me spiritually and morally.

Thanks to my friends in the discussion group for their endless support and encouragement throughout my study period

I would also like to acknowledge all respondents who spent their time and shared their experiences for this research and others who did much but did not record

May the almighty lord bless you all.

### List of abbreviations.

**CME:** Continuous Medical Education.

**MoH:** Ministry of Health.

NGOs: Non-Governmental Organizations. SOPs: Standard Operating Procedures.

SSA: Sub-Saharan Africa.
USA: United States of America.
WHO: World Health Organization?

**EMTCT:** Elimination of mother-to-child Transmission.

HIV: Human Immunodeficiency Virus. CNE: Continuous Nursing Education.

# Source of funding.

This study was not funded

### Conflict of interest.

The authors declare no conflicting interest.

# Availability of data.

Data used in this study is available upon request from the corresponding author.

# **Authors contribution.**

BO designed the study, conducted data collection, cleaned and analyzed data, and drafted the manuscript, RA supervised all stages of the study from conceptualization of the topic to manuscript writing and submission, and MFO supported in study conceptualization general supervision and mentorship.

# **Ethical approval.**

An introductory letter was obtained from the Principal of Florence Nightingale School of Nursing and Midwifery which was taken to the medical director of Apac General Hospital. After permission was granted, introduction by the study team was made to the In-Charges of the pediatric ward, Surgical ward, and Gynecological ward who introduced him to the respondents. Respondents were assured of maximum privacy and confidentiality and only numbers instead of names were used to identify the respondents. The study only commenced after the objectives of the study had been well explained to participants and they had consented to participate in the study.

Informed consent.

The purpose and objectives of the study were explained to the participants, and they understood and voluntarily consented to participate in the study. The participants will benefit from improved wound management which will result in faster wound healing once the study recommendations have been implemented.

# **Authors biography.**

Bonny Okello is a student with a diploma in nursing extension at Florence Nightingale School of Nursing and Midwifery.

Ronald Awoi is a research supervisor at Florence Nightingale School of Nursing and Midwifery, and Filder Monica Odella is the research supervisor at Florence Nightingale School of Nursing and Midwifery.

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