

KIBOGORA POLYTECHNIC

FACULTY OF HEALTH SCIENCES

DEPARTEMENT OF GENERAL NURSING AND MIDWIFERY

FACTORS CONTRIBUTING TO INEFFECTIVE PRESSURE SORES PREVENTION AMONG NURSES WORKING IN SURGERY, INTERNAL MEDICINE AND INTENSIVE CARE UNIT AT KIBUYE REFERRAL HOSPITAL

Case study: KIBUYE Referral Hospital

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DECLARATION

Declaration by the candidate

We, MUTETERI Musisi and GANZA Aimee hereby declare that this is our own original work and not a duplication of any similar academic work. It has therefore not been submitted to any other institution of higher learning. All material cited in this paper which are not our own have been duly acknowledged

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Declaration by supervisor

I declare that this work has been submitted for examination with my approval as KP supervisor

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ABSTRACT

Background: Pressure ulcers are associated with long stay in the hospital and notably create a financial burden to family and health care system as well. Pressure ulcers can result in mortality and psycho-social consequences

Aim of the Study: The aim of this study was to Assess Factors Contributing to Ineffective Prevention of Pressure sores among nurses working in Surgery, Internal medicine and Intensive Care Unit at KIBUYE Referral Hospital.

Methods: A non-experimental, quantitative research approach and cross-sectional descriptive design was used. The sample size consisted of all 45 nurses caring for patients with or at risk of Pressure ulcers and who were willing to participate in the study. The research instrument was a structured Questionnaire used to collect the data and a response rate of 100 % (45) was achieved. Data were analyzed using SPSS (version 24). Frequencies, means, and standard deviations were used to summarize socio-demographic characteristics and to Determine mean scores of barriers they meet among participants.

Results: Participants who are concerning multidisciplinary team are 38(84.4%), those who are not concerning multidisciplinary team are 7 (15.6%) The majority of nurses who have poor access to literature are 28(62.2%) and who have access to literature are 17(37.8%) mean(1.38),std(0.49), nurses who complain inadequate staff are 28(62.2%) and who don't complain inadequate staff are 17(37.8%), nurses who know guideline and protocol of prevention of pressure ulcers are 8(17.8%) and who don't know guideline and protocol of pressure sores are 37(82.2%), nurses who have inadequate trainings are 28(62.2%) and who had trainings are 17(37.8%), nurses who have shortage of resources and equipments are 19(42.2%), and who do not have shortage of resources are 26(57.8%), nurses who have Inadequate knowledge are 38(84.4%), and who doesn't have Inadequate knowledge are 7(15.5%).

Conclusion: the findings from the study showed that ineffective prevention of pressure sores is very high in which nurse's level of Knowledge due to poor access to literature, protocol and guideline of prevention of pressure ulcers, lack of multidisciplinary team, shortage of resource and equipment and level of practice due to insufficiency of equipments were identified among nurses as the most factors associated to pressure ulcers with recommendation should be put in consideration to diminish pressure ulcer development.

DEDICATION

First of all, we thank God for being with us on this journey of studying .our dedication of this work goes to our lovely parents, brothers, sisters lectures and our friends who kept giving us all kinds of support that led us to the accomplishment of this research project .May God bless them for their support

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LIST OF ABBREVIATION AND ACRONYMS.

ICU: Intensive Care Unit.

KP: Kibogora Polytechnic

NPUAP: National Pressure Ulcer Advisory Panel.

EPUAP: **European** pressure ulcer advisory panel.

PEARS: Position every two hours, Elevate the heels, Apply protective barrier, Relay the
massager-consult wound care

Re-consult wound care.

PU; Pressure ulcers.

WHO: World Health Organization.

TABLE OF CONTENTS

DECLARATION	i
ABSTRACT	ii
DEDICATION	iii
LIST OF ABBREVIATION AND ACRONYMS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF APPENDICES	xi
CHAPTER ONE: GENERAL INTRODUCTION	1
1.0. INTRODUCTION	1
1.1. BACK GROUND TO THE STUDY	1
1.2. PROBLEM STATEMENT	3
1.3. OBJECTIVES OF THE STUDY	4
1.4. PURPOSE OF THE STUDY	4
1.5. RESEARCH QUESTIONS	4
1.6. SIGNIFICANCE OF THE STUDY	4
1.6.1. Personal interest	4
1.6.2. Social interest	4
1.6.3. Scientific Interest	5
1.7. LIMITATION OF THE STUDY	5
1.8. SCOPE OF THE STUDY	5
1.8.1. In space	5
1.8.2. In domain	5

1.8.3. In time.....	5
CHAPTER TWO: LITERATURE REVIEW.....	6
2.0 Introduction.....	6
2.1. Definition of key concepts/ terms to be used here.....	6
2.2. Literature relating to the objectives.....	7
2.4. Other relevant and related literature to support the study.....	10
CHAPTER 3: RESEARCH METHODOLOGY.....	16
3.0. INTRODUCTION.....	16
3.1. RESEARCH APPROACH AND DESIGN.....	16
3.2. TARGET POPULATION.....	16
3.3. SAMPLING PROCEDURE.....	16
3.4. SAMPLE SIZE.....	16
3.5. RESEARCH INSTRUMENTS FOR DATA COLLECTION.....	16
3.7. ETHICAL ISSUES.....	17
3.8. DATA ANALYSIS.....	18
3.9. RELIABILITY AND VALIDITY MEASURES.....	18
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, INTERPRETATION AND SUMMARY.....	19
4.0. Introduction.....	19
4.1. Distribution of nurses by demographic data.....	19
4.2. BARRIERS CONTRIBUTING TO INNEFFECTIVE PREVENTION OF PRESSURE SORES.....	21
CHAPTER FIVE; CONCLUSION AND RECOMMENDATIONS.....	29
5.0. INTRODUCTION.....	29
5.1. CONCLUSION.....	29
5.2. RECOMMENDATION.....	29

5.3. SUGGESTION FOR FURTHER STUDY	30
REFERENCES	31
APPENDICES	a

LIST OF TABLES

Table 1: The table below shows the content validity which highlights items of objectives, research questions and questionnaire.....	18
Table 4.1.1. Distribution of Nurses By Demographic Data	19
Table 4.1. 2: BARRIERS CONTRIBUTING TO INNEFFECTIVE PREVENTION OF PRESSURE SORES	21
Table 4.1. 3: BARRIERS CONTRIBUTING TO INNEFFECTIVE PREVENTION OF PRESSURE SORES	24

LIST OF FIGURES

Figure4.1. 1:Distribution of Nurses by demographic data.....	21
figure4.1. 2:Barriers Contributing to Innefective Prevention of Pressure Sores	26

LIST OF APPENDICES

Appendix A: Individual informed consent form

Appendix B: Consent form

Appendix C: Questionnaire designed to respondents

CHAPTER ONE: GENERAL INTRODUCTION

1.0. INTRODUCTION

This chapter are included background of the study, problem statement, purpose of the study, objective of the study, research questions, significance of the study, limitation of the study, and scope of the study.

1.1. BACK GROUND TO THE STUDY

pressure sores also known as Pressure ulcers or bedsores, is defined by the National Pressure Ulcer Advisory Panel (NPUAP) as a “localized injury to the skin or underlying tissue usually over a bony prominence, as a result of pressure or pressure in combination with shear and friction”(European Pressure Ulcer Advisory Panel and National Panel, 2014)). Pressure ulcers result in both physical and psychological complications such as pain, discomfort, interrupted skin integrity, anxiety, and interrupted family role ((Nuru, 2015) . In addition, Pressure ulcers can be a financial burden to family as patients can spend more time confined to bed without being productive. ((Mwebaza, 2014)

According to.(Gordillo, 2009) as further cited by (Mwebaza, 2014) , each year, an average of 60,000 people per year worldwide die from Pressure ulcer related complications such sepsis. Around 3 millions of people in united state of America are affected by Pressure ulcers. ((AHRQ., 2013), in European hospitals, Pressure ulcers prevalence was ranged between 1% to11% in internal medicine and 4.7% to 66% in surgical inpatient service . In Sweden, in university hospitals, specifically in the intensive care unit the prevalence was 23.9% as described by Gunnigberg (2004) and further cited by Adegoke and colleagues in 2013.In Dutch intensive care Unit, the prevalence was 28.7% as described by Bours and colleagues and further more cited by (Adegoke, 2013)

In addition to this Pressure ulcers prevalence, Woodbury MG & Houghton PE. revealed that, among patients admitted in Canadian hospital settings in 2017, 26 percent developed Pressure ulcers this was further more cited by Mwebaza and colleagues in 2014 (Mwebaza, 2014).

In African countries such as Ethiopia, the prevalence of Pressure ulcers was 16.8% in which 62% of them being stage I and 26.8% being stage II and 2.8 being stage IV (Gedamu, 2014) .Furthermore in 2014 in Nigeria, referring to the study done by Onche 2014 as further cited by

Uba, 2015 in their research: 16 out of 24 spinal cord injured patients developed pressure ulcer. The most attributable cause of that high incidence were insufficient knowledge of health care providers about preventive measures and lack of institutional or hospital policy on usage of pressure redistributing materials, risk factors associated with Pressure ulcers development included limitation in activity, altered level of consciousness, increased age, impaired nutrition and urinary incontinence (Adegoke2013; Gedamu, Hailu and Amano, 2014). Moreover, the research done by(Etafaetal 2018) in Addis Ababa, Ethiopia, revealed other factors associated with Pressure ulcers such as heavy work load, shortage of staff, low level of nurses knowledge (63.85%), poor access to literature , shortage of resources or equipments ,poor nurses attitude (52%), and low level of practice (33.42%) . (Adegoke, 2014)

In Rwanda, in 2015,a survey conducted by Gedeo M. and Jessie S. in ICU Kigali University Teaching Hospital showed that Pressure ulcers incidence was 15%, and prevalence of 41% (Mutabazi .& Silver, 2015). Clinical measurements to prevent the Pressure ulcers have been established by the national pressure ulcer advisory panel and are summarized into five categories including: risk assessment, skin care, support surfaces repositioning and provision of nutritional Pressure ulcer prevention is an obligation to all health care practitioners but nurses are more concerned. According to Florence Nightingale and further cited by (Leathery E. Smith, 2014) , if a patient develops a pressure ulcer, it is the fault of the nursing and not her/his disease”. In the same perspective, Leathery Smith (2014) states that the presence of Pressure ulcers in a hospital can be a mirror of quality of care in Nursing.

It has been proved that Pressure ulcers are caused by intrinsic and extrinsic factors. The intrinsic factors include immobilization, cognitive deficit, chronic illness (e.g., diabetes mellitus), poor nutrition, use of steroids, and aging, there are 4 extrinsic factors that can cause these wounds pressure, friction, humidity, and shear force. Pressure is a crucial factor in Pressure ulcers development. Pressure of 70 mmHg over a bony prominence for 2 hours or more is enough to cause an ischemic wound. These factors might predispose a patient to Pressure ulcer development.

Several scales are used to analyze Pressure ulcers risk factors. One of these is the Braden Scale, which is based on PU physiology. The Braden Scale considers intensity and duration of pressure and tissue tolerance as critical determinants for Pressure ulcers development ((Marta

Magalhaes2017) nurses have strong impact on the quality of care they provide. Therefore nurses should prevent pressure ulcer, risk factors, stages, complications and the usage of various scales to predict pressure ulcer risk of development (Ingwu, 2015) , are of the crucial importance to reduce Pressure and their related cost at large.

1.2. PROBLEM STATEMENT

Pressure ulcers are real and defined problem in our medical system even though we have new equipment and we know how to treat them, pressure ulcers are not on a downward trend. Pressure ulcers are growing in incidence and it is usually the most vulnerable elderly and weak of our societies who face these complications. Pressure ulcers cause the patients pain and misery and are expensive to treat (WerkuEtafaEbi G. , 2019). They can also be an aspect in patients' mortality rates. High incidences of pressure ulcers in an organization may imply a diminished quality of care ((Garcia-Fernandez, Lopez-Medina, and I. M. , 2016) .

Each year an estimate of 60,000 people worldwide die from Pressure ulcers related complications with an estimate of\$355millions being spent to medical care related to Pressure ulcer (Gedamu,HailuandAmano2014). This is a critical issue because PU extends the patient period of stay in the hospital(Bwanjugu&Rhoda,2012).The causes behind this situation are not identified and different practices put in place to solve the problem. With reference to Uba et al. (2009) statement ,the cost of care to PU can be less than half to the total cost if prevention measures are put in place with this in mind ,the literature has shown that nurses are in the primary position to prevent PU(Nuru $etal.$,2015). However, this would be only possible if they know factors contributing to ineffective prevention of pressure sores among nurses ((Ingwu, 2015)

Pressure sores is a major health problems worldwide which varies in the prevalence of pressure ulcers among hospitalized patients across the globe has been seen in the evidence, such as 14.9% in Sweden, 18.2% in Norway, 10.1% in São Paulo, Brazil, 1.58% in China, 3.3% in Turk, 18.7% in Brazil, 17.23% in a sub-Saharan tertiary care center, 3.22% in Southwest Nigeria, and 19.3% in Tunisia (Wondimeneh Shibabaw Shiferaw , 2020).During clinical placement we realized that KIBUYE Referral Hospital have 45 number of patients with pressure sores, but not research findings available to explain this increase. Therefore, this study was conducted to assess factors contributing to ineffective prevention of pressure sores

1.3. OBJECTIVES OF THE STUDY

Assessment of Factors contributing to ineffective pressure sores prevention among nurses working in surgery, internal medicine and Intensive care unit at KIBUYE Referral Hospital.

1.4. PURPOSE OF THE STUDY

The purpose of this study is the assessment of factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and intensive care unit at Kibuye referral hospital.

1.5. SPECIFIC OBJECTIVE

1. To assess the demographic factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and ICU at Kibuye referral hospital.
2. To identify the barriers contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and Intensive care unit at Kibuye referral hospital.

1.5. RESEARCH QUESTIONS

1. What are demographic factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and ICU at Kibuye referral hospital?
2. What are barriers contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and ICU at Kibuye referral hospital?

1.6. SIGNIFICANCE OF THE STUDY

1.6.1. Personal interest

As students of Nursing Sciences, we want to improve our knowledge about factors contributing to ineffective prevention of pressure sores and In addition, we will be able to provide advice and advocacy to the clients we have to care.

1.6.2. Social interest

Assessing factors contributing to ineffective prevention of pressure sores among nurses was indirect way to motivate them to learn more. After assessment, suggestions are elaborated in order to improve services rendered to clients reducing hospital stay and medical costs.

1.6.3. Scientific Interest

Any scientific study is still a source of reference for other studies. Researcher was used our findings to generate new ideas, thus, increasing the body of knowledge in nursing.

1.7. LIMITATION OF THE STUDY

Limitations and problems when conducting the study was to get permission for data collection, limited time period for data collection and data analysis due to COVID-19 in combination of other school scheduled academic tasks including pre council evaluations and other academic evaluations. Additionally, financial problem, transport problem, places where to be living while conducting the research and difficulty accessibility of participants which may include participant who did not meet criteria of the study.

1.8. SCOPE OF THE STUDY

This study was been limited in time, in space and in the field (domain).

1.8.1. In space

This research was been done at Kibuye Referral Hospital (KRH) located in Rwanda country, Western province, Karongi district, Bwishyura sector, Kibuye cell and Gatwaro Village.

1.8.2. In domain

Our specific domain was limited in medical surgical nursing domain especially in internal medicine, surgery and intensive care units wards.

1.8.3. In time

The research was been conducted in 26th December 2021 to 19th february 2022

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

The current study aims to assessing factors contributing to ineffective prevention of pressure sores among nurses working at Kibuye Referral Hospital, A literature review refers to theoretical and research publication ,textbooks, government reports ,policy statement and in scientific journals ,references books and materials about the theory ,practices and results of scientific(Judithgarrard,2022) . It helps the researcher to identify the existing evidence or what known and not known about the research topic. It also serves as guidance while choosing the method to be used for the research and interpretation of its findings, ((Polit and Beck, 2014).

Therefore, this chapter discusses the literature review carried out to identify factors contributing to ineffective prevention of pressure sores.

2.1. Definition of key concepts/ terms to be used here

Pressure Ulcers (PU)

Also called bed sores, Pressure ulcers are areas of localized damage to the skin and underlying tissue; and can cause pain, immobility, and delay recovery, impacting on health-related quality of life. The individuals who are most at risk of developing a pressure ulcer are those who are seriously ill, elderly, have impaired mobility and/or poor nutrition; thus, many nursing home residents are at risk.(Jacqueline,2018)

Nurse

A licensed health-care professional who is trained to care for sick or people and who usually works in a hospital (Merriam,2019)

Blanch able: Is when there is a red ulcer that you've pushed and the redness goes away then comes back. On the other hand, non-blanch able is when you push the skin of your client, and the area stays red that means that there is little or no blood flow going to that area(Mike2018)

Pressure Reducing Surface:

A surface that reduces the interface pressure between the body surface and the resting surface, but does not consistently maintain pressure below capillary closing pressure (AHCPR, 1994; Mulder, Fairchild & Jeter, 1991; WOCN, 1987).

Dynamic devices;

Dynamic devices have moving parts and are attached to an electrical power source. These devices compensate for the motionless or compromised body movement by shifting the weight or load from areas with bony prominences to areas under lower pressure. If a patient has large Stage III or IV pressure ulcers on multiple turning surfaces, a low-air loss bed or an air-fluidized bed may be indicated (AHCPR, 1994).

2.2. Literature relating to the objectives

2.2.0. Demographic Factors Contributing To Ineffective Prevention of Pressure Sores Among Nurses Working In Surgery, Internal Medicine and Intensive care unit

Pressure ulcers (PUs) prevention remains a significant challenge for nurses and its incidence is considered an indicator of poor quality of care. Patients and families know that pressure ulcers are painful and slow to heal; some risk factors for the development of pressure ulcers/injuries include advanced age, immobility, incontinence, inadequate nutrition and hydration, neuron-sensory deficiency, device-related skin pressure, multiple co morbidities and circulatory abnormalities, Ninety-five percent (95%) of pressure ulcers are avoidable and the incidence of pressure ulcers in adults varies from 0 to 12% in acute care settings, 24.3 to 53.4% in critical care settings and 1.9 to 59% in elderly care settings. The prevalence of pressure ulcer has decreased over time in the USA 2016, in Ethiopia reported 16.8 and 14.9% overall prevalence rate of PU, respectively Moreover, these studies identified risk factors PU such as prolonged hospitalization.((bmc nursing, 2019) .The demographic factors such as, level of education, pressure sore trainings, age of nurses, gender, habitation, and marital status may lead to pressure sore development

Level of education; when nurses don't have availability of educational opportunities on prevention,ulcer risk assessment within the organization or health facility may lead to the development of pressure sores, then to improve on this, Pressure ulcer risk assessment should be conducted including Skin inspection, and Risk assessment score, Evidence

of documentation in client's record consistent with guideline recommendations should also be considered, Plan of care for prevention including collaborative/ interdisciplinary care are Implementation of interventions, evaluation of interventions and Provision of client/family education should also be considered to improve level of education in prevention of pressure ulcer. (DorisGrinspun, 2011)

Pressure ulcer trainings; Number of nurses attending educational sessions and availability of ongoing support for clinical application of educational content related to pressure ulcer prevention are very low, Nurses' self-assessed knowledge of the etiology and risk factors for pressure ulcer development and use of risk assessment tools, such as the Braden scale assessment and analysis of result should be trained and put in practice for prohibiting the development of pressure sores.

2.2.1 Barriers Contributing To Ineffective Prevention Of Pressure Sores Among Nurses Working In Surgery, Internal Medicine And Intensive care unit.

The common cited barriers are shortage of pressure relieving devices, lack of staff/ inadequate staffs, heavy workload, lack of training, lack of multidisciplinary initiative, Shortage of pressure relieving devices (inadequate equipments and resources), lack of job satisfaction and lack of universal guidelines are the most frequently cite perceived barriers for nurses to practice Pressure ulcer prevention. (Etafaetal.BMCNursing, 2018)

2.2.1.1. Nursing workload and lack of time

Nursing workload definitely affects the time that a nurse can do to various tasks, Under a heavy workload , nurses may not have sufficient time to perform tasks that can have a direct effect on patient safety such as turning the patient to appropriate position for prevention of pressure ulcer development, it may also reduce the time spent by nurses collaborating and communicating with physicians, therefore affecting the quality of nurse-physician collaboration, A heavy workload can lead to poor nurse-patient communication where by health education to patients are not given.(WerkuEtafa,2019)

2.2.1.2. Job dissatisfaction

Several studies have shown the relationship between nurses' working conditions, such as high workload, and job dissatisfaction. Job dissatisfaction of nurses can lead to low morale and poor job performance, and potentially threaten patient care quality and organizational effectiveness, Researchers have found positive associations between job satisfaction and job performance leads to patient satisfaction and quality of care. (Etafaetal.BMCNursing, 2018)

2.2.1.3. Impact of workload on nursing stress and burnout

High workload is a key job stressor of nurses in a variety of care settings, such as ICUs, A heavy nursing workload can lead to distress (e.g., cynicism, anger, and emotional exhaustion) and burnout, Nurses experiencing stress and burnout may not be able to perform efficiently and effectively because their physical and cognitive resources may be reduced; this suboptimal performance may affect patient care with pressure sores and its safety. (WerkuEtafaEbi G. , 2019)

2.2.1.4 .Lack of dietitian at health facilities

Although there are few studies to support this idea, it is widely accepted (based on anecdotal evidence) that patients who are compromised nutritionally are at higher risk for the development of pressure ulcers; for this reason, patients with poor nutritional status may benefit from a dietary consult. (Langer, 2014). Once a pressure ulcer has developed, nutrition plays a vital role in the healing process; this is because the body needs protein, energy (calories), vitamins and minerals (such as vitamin, iron, and zinc) and plenty of fluids to support the wound healing process. (BDA, 2021)

2.2.1.5. Adequate knowledge level of pressure ulcers prevention in nursing staffs

The study at Mulago, Ugandan teaching hospital also found poor access to literature and inadequate coverage about pressure ulcers during training, Samuriw, &Dowding indicated that nurses rely on their own knowledge and experience rather than research evidence to decide what skin care to deliver. (WerkuEtafaEbi G. , 2019)

2.4. Other relevant and related literature to support the study

2.4.0. Mechanism of development of pressure ulcers and staging

According to Perth's physiology, prolonged unrelieved pressure to the tissues reduces local blood supply and consequently the amount of oxygen and nutrients to the tissue reduces; the skin becomes pale. When the pressure is maintained for more than two hours, blood cells clot and damage the capillary wall allowing blood cells and plasma to leak into surrounding interstitial space. This results in skin discoloration and non-blanchable erythema normally known as first category of pressure ulcer. If no intervention done to relieve the pressure, the prolonged tissue oxygen deprivation (ischemia) will lead to skin tissues necrosis (death) and break down. From there, different categories or stages of pressure ulcers may develop depending on the amount and Duration of pressure ((islam,sae_sia and khupantavee,, 2010); (grossman, 2015)). Bony prominences are the most areas of pressure ulcer development. These include: ischium (43,6%), sacrum (18.8%), Greater trochanter (10.3%), heels (7.7%), low back (9.0%), occiput (2.6%), upper back and shoulder (2.6%) malleolus (2.3%), ((npppu, 2015)). 7 National Pressure Ulcer Advisory Panel and European Pressure Ulcer Advisory Panel classify pressure ulcer in four categories.

Several staging systems exist. The most widely used system is from the National Pressure Injury Advisory Panel (NPIAP), which classifies pressure injuries into four stages (1 to 4) according to the extent of soft-tissue damage. However, the numerical staging does not imply linear progression of pressure injuries. That is, pressure injuries do not always manifest as stage 1 and then progress to higher stages. Sometimes, the first sign is a deep, necrotic stage 3 or 4 injury. In a rapidly developing pressure injury, subcutaneous tissue can become necrotic before the epidermis erodes. Thus, a small injury may in fact represent extensive subcutaneous necrosis and damage. Similarly, the scale does not imply that healing progresses from stage 4 through stage 1. The updated NPIAP staging system also includes definitions for unshakable, deep-tissue, medical device-related, and mucosal membrane pressure injuries advisory panel and national pressure ulcers (pressure, 2014))

Stage 1; Pressure ulcer is an observable pressure-related alteration of intact skin whose indicators as compared to an adjacent or opposite area on the body may include changes in one or more of the following: skin temperature (warmth or coolness), tissue consistency (firm or boggy feel) and sensation (pain, itching).The ulcer appears as a defined area of persistent redness in lightly pigmented skin, whereas in darker skin tones, the ulcer may appear with persistent red, blue, or purple

Stage 2; Partial thickness skin loss involving epidermis, dermis, or both. The ulcer is usually superficial and presents clinically as an abrasion, blister, or shallow crater

Stage 3; full thickness skin loss involving damage to or necrosis of, subcutaneous tissue that may extend down to, but not through, underlying fascia. The ulcer presents clinically as a deep crater with or without undermining of adjacent tissue

Stage 4; Full thickness skin loss with extensive destruction, tissue necrosis, or damage to muscle, bone or supporting structures (e.g., tendon, joint, capsule). Undermining and sinus tracts also may be associated with Stage IV pressure ulcers.

When estimating the depth of pressure injuries for purposes of staging, it is important to take into account the anatomical location, especially in the case of stage 3 injuries. For example, the bridge of the nose, ear, occiput, and malleolus do not have subcutaneous tissue and, consequently, pressure injuries in those locations will be very shallow. However, they are still graded as stage 3 because they are as significant as deeper stage 3 injuries over locations with significant subcutaneous tissue (e.g., the sacral region). Pressure injuries are characterized by full-thickness skin and tissue loss in which the extent of tissue damage cannot be determined because it is obscured by debris, slough. If the slough is removed, a stage 3 or stage 4 pressure injuries will be revealed. However, stable, non fluctuant lesions with dry eschar should never be debrided for the sake of staging.

Deep-tissue pressure injury is characterized by intact or non intact skin with a localized area of damage to underlying tissue due to pressure and/or shearing forces. Findings include persistent, nonblanchable, purple to maroon discoloration of intact skin, and blood-filled vesicles or bullae. The area may feel firmer, boggier, warmer, or cooler compared with surrounding tissue. In this context, the term deep-tissue pressure injury should not be used to

describe underlying vascular, traumatic, neuropathic, or dermatologic conditions ((medscap, 2020)Pressure ulcers (PU) are defined as skin breakdown and continuum of tissue damage of ischemic etiology secondary to high external pressure, which usually occurs over bony prominences, Seventeen percent of hospitalized patients have or will end up having Pressure ulcers. In the worldwide geriatric population, 71% of patient's ≥ 70 years have Pressure ulcers, According to Brazilian estimations, 14% of the population will be 60 years old or more by 2025

In Brazil, national policy considers elderly citizens to be 60 years old or older. Pressure ulcers are caused by intrinsic and extrinsic factors. The intrinsic factors include immobilization, cognitive deficit, chronic illness (e.g., diabetes mellitus), poor nutrition, use of steroids, and aging, there are 4 extrinsic factors that can cause these wounds pressure, friction, humidity, and shear force. Pressure is a crucial factor in Pressure ulcers development. Pressure of 70 mmHg over a bony prominence for 2 hours or more is enough to cause an ischemic wound.

These factors might predispose a patient to Pressure Ulcers development. Several scales are used to analyze Pressure ulcers risk factors. One of these is the Braden Scale, which is based on PU physiology. The Braden Scale considers intensity and duration of pressure and tissue tolerance as critical determinants for Pressure ulcers development ((Marta G Magalhaes2017))

After unrelieved pressure, shear and friction, there are other factors that contribute to pressure ulcers. These other factors are listed below.

Other factors that increase the risk of pressure sores include:

Age; The skin of older adults is generally more fragile, thinner, less elastic and drier than the skin of younger adults. Also, older adults usually produce new skin cells more slowly. These factors make skin vulnerable to damage.

Lack of sensory perception; Spinal cord injuries, neurological disorders and other conditions can result in a loss of sensation. An inability to feel pain or discomfort can result in not being aware of bedsores or the need to change position.

Weight loss; Weight loss is common during prolonged illnesses, and muscle atrophy and wasting are common in people with paralysis. The loss of fat and muscle results in less cushioning between bones and a bed or a wheelchair.

Poor nutrition and hydration; People need enough fluids, calories, protein, vitamins and minerals in their daily diet to maintain healthy skin and prevent the breakdown of tissues.

Excess moisture or dryness; Skin that is moist from sweat or lack of bladder control is more likely to be injured and increases the friction between the skin and clothing or bedding. Very dry skin increases friction as well. (BritishDieteticAssociation, 2021)

Bowel incontinence; Bacteria from fecal matter can cause serious local infections and lead to life-threatening infections affecting the whole body.

Medical conditions affecting blood flow; Health problems that can affect blood flow, such as diabetes and vascular disease, increase the risk of tissue damage.

Smoking; Smoking reduces blood flow and limits the amount of oxygen in the blood. Smokers tend to develop more-severe wounds, and their wounds heal more slowly.

Limited alertness; People whose mental awareness is lessened by disease, trauma or medications may be unable to take the actions needed to prevent or care for pressure sores.

Muscle spasms; People who have frequent muscle spasms or other involuntary muscle movement may be at increased risk of pressure sores from frequent friction and shearing.

Some needed resources to prevent pressure sores are also indicated below

The sores develop when pressure builds in a specific area of the body over time, and repeated pressure exposure on the same area will result in the degradation of the skin's integrity, leading to the opening of the skin and infection occurs. Caregivers can work to reduce pressure sores among patients, as well as healing people of any age, by following these steps and resources.

Depending on the needs of each patient, specialty beds, such as water or air mattress toppers, or special, cushioned padding, such as heel protectors, may be needed to reduce the amount of pressure placed on sensitive areas of the body. These additional materials should not be limited

to mattresses or modifications to footwear. Instead, keep the options open for what may and may not be the most comfortable and beneficial to the needs of patient.

Keep the Skin Dry and Clean

Incontinence is one of the biggest factors associated with the development of pressure sores. When bowel movement or urine stays in contact with the skin, acids and enzymes in them will begin to cause degradation of the skin faster than usual. When combined with limited ability to reposition oneself, a senior may develop a pressure sore in the perineal area faster.

If the area appears to become reddened, the patient may have developed a Stage I pressure sore. When this occurs, it is best to assume the area has been subject to more intense pressures and proceed with an appropriate treatment, such as the use of a barrier cream massage to help prevent further generation of pressure sores.

Encourage patients Maintain a Healthy Diet

The research finding revealed that balanced diet with enough carbohydrates(30 to 35 calories/kg body for individuals at risk of nutritional deficiency and at risk of a pressure ulcer development), proteins (1,25 to 1,5gr of protein to individual at risk of developing pressure ulcer), mineral salt, vitamins and enough fluid have a great benefit to the patients with pressure ulcers to strengthen the skin integrity and assist in healing of existing pressure ulcer (preventing it from developing in other form/category of pressure ulcer For further prevention of pressure ulcers, the NPUAP, EPUAP & PPP recommend to consider the use of some emerging therapies such as: microclimate control, prophylactic dressings, use of silk-like fabrics rather than cotton or cotton-blend fabrics and the use of electrical stimulation of the muscles in spinal cord injured individuals ((NPUAP, EPUAP & PPP, 2014).

Mechanical load management

According to Agency of health care research and quality (AHRQ) and NPUAP and other international agencies for pressure ulcer prevention and management, bedridden patient should be turned every two hours and every hour for chair-bound persons while avoiding to put him/her on prominent/bony areas or existing erythema. They recommend posting a written paper

indicating the turning schedule on the patient's bed or anywhere for easy view and access. The research done in united states of America revealed that utilization of risk assessment tool for predicting pressure ulcers and turning the patient on regular basis are one of the key preventive measures of pressure ulcer development among bedridden patients. Another comparative study done in teaching hospital of Korea revealed that Position change was the most performed nursing practice to prevent pressure ulcer development followed by skin care The same study revealed majority of nurses were tending to frequently provide the skin care and nutritional care in the risk group than in the pressure-ulcer group (Cho, Park and Chung , 2011).

Health care providers have to consider patient's conditions, alignment, balance, stability, and weight distribution while turning the patient in the bed or positioning him/her in a wheel chair. Fifteen minute is a reasonable time for weight shift among chair bound persons and whenever possible they should be thought how to do these themselves if they can. (European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel, , 2014).

Pressure should be minimized as much as possible by using pressure equalizers or redistributing pressures surfaces such as standardized mattress: air mattress, overlay mattress, and chair cushion surfaces. Donut-type devices and sheepskin for pressure redistribution are avoided. Lifting devices such bed linen, trapeze or others are used to move the patient while avoiding dragging him/her during transfer or position change to prevent shears. Pillows, blankets; foam wedges are used to protect bony prominences from direct contact with each other. The skin under medical device is regularly assessed to prevent pressure. In conscious and cooperative patients, pillows are placed under the patient's calf to raise the heels of the bed. Patient's head is kept at or below 30° to minimize the pressure ((AHRQ, 2013).Pressure ulcer prevention and management require a multidisciplinary collaboration. Inclusive educational program involving health care providers, patients and family caregivers should be planned, implemented, monitored and evaluated to reduce pressure ulcer incidence and prevalence. For this reason, health providers and caregivers should be equipped with specific knowledge and skills regarding pressure ulcers prevention and management. Appropriate documentation of relevant data should also be assured to improve the quality of care provided in relation to pressure ulcer prevention

CHAPTER 3: RESEARCH METHODOLOGY.

3.0. INTRODUCTION.

This chapter describes the methodology that was used. It describes the study approach ,study design, target population, sampling procedures, sample size ,research instruments for data collection ,data collection method and procedures were used ,ethical issues, it also shows data analysis, reliability and validity measures

3.1. RESEARCH APPROACH AND DESIGN

To meet the research objectives, a quantitative research approach and descriptive cross-sectional study design was used. This is a design where by data are collected at one point in time or multiple times in short period for describing phenomena at fixed point (beck, 2014)

3.2. TARGET POPULATION

The population of the study was composed of 45 bedside nurses working in medical surgical, internal medicine and Intensive care unit services at KIBUYE referral hospital from January to December 2021.

3.3. SAMPLING PROCEDURE.

This study was used the total population, a non- probability sampling method was used with a convenience sampling technique based on easy availability of participants was used to examine the entire population of nurses admitting and caring adult patients with or at high risk of pressure ulcer development. This will include nurses working in internal medicine, surgery service and emergency service at KIBUYE referral hospital.

3.4. SAMPLE SIZE.

The sample size for our research was comprised 45 registered nurses working in mentioned services and who have a will in participation of the study

3.5. RESEARCH INSTRUMENTS FOR DATA COLLECTION.

Through our research, we were used questionnaire as data collection tool. This is a structured questionnaire was consist of two sections by assessing the demographic factors and barriers contributing to ineffective prevention of pressure sores at KIBUYE referral Hospital. Each section will consist of a set of structured questions developed in a simple language that the

respondents were able to understand so that they were able to complete it without researchers assistance in order to minimize bias during data collection

3.6.1. DATA COLLECTION

Data collection is the process of gathering information needed for research. The data may be collected in numbers or words (Creswell, 2014)

3.6.2. DATA COLLECTION PROCEDURE

After getting approval from KIBOGORA, the researcher was able to apply for permission to conduct research from KIBUYE referral Hospital ethical committee. Once permission is granted the researcher was able to meet the manager of KIBUYE referral Hospital in surgery, internal medicine and Intensive care unit to introduce oneself and explain the study purpose and ask permission to conduct the study in their institution. The ones who agreed to participate in the study were signed the consent form written in English language. Then the researchers were able to administer the questionnaire to respondents and respondents were given back the complete questionnaire to the researchers after completion and this process took about one month so that the research will find the time to reach to all nurses.

3.7. ETHICAL ISSUES.

The defense of ethical guidelines refer to whether research demonstrates competence, maintains honesty in the management of the resources and acknowledges source and the input of supporters during the study and present in accurate report of the findings. The researcher was able to respect the following ethical protocol: request for permission of conducting the study from Kibogora polytechnic then was submitted to research committee at KIBUYE referral hospital. The informed consent of participants was obtained and assured by explaining to them the purpose of the study, the methods of data collection and significance of the study in order to maintain the privacy of the participants. The researcher was able to guide participants not to indicate their names on the questionnaire in any case there is any need to withdraw from the study participants are allowed freely to withdraw at any time without experiencing penalty or sanction. Confidentiality is maintained by hiding the identity of respondent and by declining. Any authorized access to the information or data from the subjects. The researcher will inform the participant that there would

be no payment for the participation in the study. The result obtained from the study will assist the researcher to formulate conclusion and recommendation basing on findings

3.8. DATA ANALYSIS

After data collection, Data is going to be analyzed and entered into SPSS spreadsheet version 16, where is analyzed using descriptive statistics and a result is presented on graphs and tables. Data base was on researchers’ computer and user name and password was necessary to get access.

3.9. RELIABILITY AND VALIDITY MEASURES

The validity of a research tool refers to the extent to which a tool really measures what it intends to measure ((beck, 2014)Content validity refers to extent to which an instrument is made of appropriate items for the concept to be measured (Polit and Beck, 2014). In the current study, content validity was assured by checking items in the data collection tool against the study objectives.

Table 1: The table below shows the content validity which highlights items of objectives, research questions and questionnaire. (Cahill et al., 201 4)

OBJECTIVES	Research question	Questionnaire	Validity
1. TO assess the demographic factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and Intensive care unit at KIBUYE Referral hospital.	1. What are demographic factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and ICU?	Composed of 2 sections. I &II have 37 questions	This used test is valid as it strongly measure what is supposed to measure and the participants can understand all asked questions which gives reliable data
2.To identify the barriers contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and ICU	2. What are barriers contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and ICU?	Section 2 has 30 questions.	This used test is valid as it strongly measure what is supposed to measure and the participants can understand all asked questions which gives reliable data

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, INTERPRETATION AND SUMMARY

4.0. Introduction

This chapter presents the study findings according to the objectives of the study, which were (1), To assess the demographic factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and ICU at Kibuye referral hospital (2) What are barriers contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and ICU at Kibuye referral hospital. About 45 questionnaires were distributed to 45 respondents and the respondents had the free right to not answer some questions depending on their will. Questionnaires were distributed to the respondents after obtaining their consent and data entry was done using a computer and analysis was done using the Statistical Package for the Social Sciences (SPSS) software Version 24

4.1. Distribution of nurses by demographic data.

Table 4.1. 1: Distribution of nurses by demographic data.

Variables	Frequency: n:45	Percentage:%
Distribution of nurses by Gender		
Male	15	33.3%
Female	30	66.7%
Total	45	100%
Distribution of nurses by Marital status		
Single	10	22.2%
Married	30	66.7%
Widow	5	11.1%
Total	45	100%
Distribution of nurses by Age		
Between 20 – 29	16	35.6%
Between 30 – 39	20	44.4%
Between 40 – 49	8	17.8%
Above 50	1	2.2%

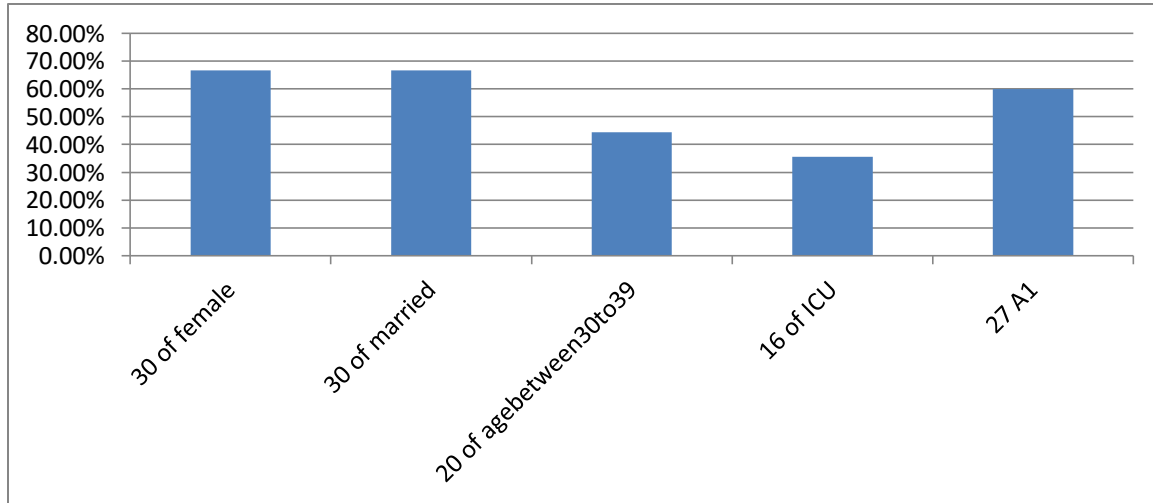
Total	45	100%
Distribution of nurses by Working Services		
Internal medicine	14	31.1%
Surgery	15	33.3%
Intensive care unity	16	35.6%
Total	45	100%
Distribution of nurses by Working Experience		
Less than one year	1	2.2%
1 – 5years	20	44.4%
6 – 10years	16	35.6%
Above10	8	17.8%
Total	45	100%
Distribution of nurses by Educational level		
Advanced Diploma(A1)	27	60%
Bachelor degree(A0)	16	35.6%
Others	2	4.4%
Total	45	100%
Distribution of Nurses who are trained		
Yes	17	37.8%
No	28	62.2%
Total	45	100%

In the table above, shows that participants who are male are 15(33%) and female are 30 (67%), marital status those who are single are 10 (22%), married are 30(67%),no one is divorced(0%) widow are 5 (11%) ,about participants who are aged between 20 to 29 are 17 (39%) between 30 to 39 are 20 (44%) between 40 to 49 are 7 (16%) and above 50 is 1(2%).about working services , those who work in IM are 16 (36%) ,in surgery 15 (33%) and in ICU are 14 (31%). Working experience ,participants who worked less than 1year are 5(11%), between 1 to 5 are 20(44%) between 6 to 10 are 17(38%) above 10 are 3 (7%), about education level A2 are 0(0%) about A1

are 27(60%),A0 are 16 (36%) and other degree are 2(4%), Concerning trainings, those who attended trainings are 17 (38%) and those who did not attend are 28 (62%).

Figure4.1. 1: Distribution of nurses by demographic data.

The bar chart below represents the demographic factors of respondents with high frequencies on the horizontal line and high percentages on the vertical line according to the distributions.



In the table above shows that participants who are female are 30(66.7%), and Married are 30(66.7%), and those who are aged between 30-39 are 20(44.4%), About working services Intensive care unit are 16(35.6%), about education level A1 are 27(60%)

4.2.BARRIERS CONTRIBUTING TO INNEFFECTIVE PREVENTION OF PRESSURE SORES

Table 4.1. 2: BARRIERS CONTRIBUTING TO INNEFFECTIVE PREVENTION OF PRESSURE SORES

Variable	Frequency	Percentage
Do you have Poor access to literature reading facilities?		
Yes	28	62.2%
No	17	37.8%
Total	45	100%
Do you face Heavy workload and inadequate staff?		
Yes	28	62.2%
No	17	37.8%
Total	45	100%

Lack of universal guidelines on prevention of pressure sores		
Yes	8	17.8%
No	37	82.2%
Total	45	100%
Inadequate training coverage of pressure sores prevention		
Yes	17	37.8%
No	28	62.2%
Total	45	100%
Do patients cooperated		
Yes	40	88.9%
No	5	11.1%
Total	45	100%
Lack of job satisfaction in nursing profession		
Yes	21	46.7%
No	24	53.3%
Total	45	100%
Presence of other priorities than pressure sores		
Yes	12	26.7%
No	33	73.3%
Total	45	100%
Shortage of resource and equipments		
Yes	19	42.2%
No	26	57.8%
Total	45	100%
Presence of other priorities than pressure sores		
Yes	38	84.4%
No	7	15.5%
Total	45	100%
Lack of multidisplinary team		
Yes	38	84.4%
No	7	15.6%
Total	45	100%

Figure4.1. 2:BARRIERS CONTRIBUTING TO INNEFFECTIVE PREVENTION OF PRESSURE SORES

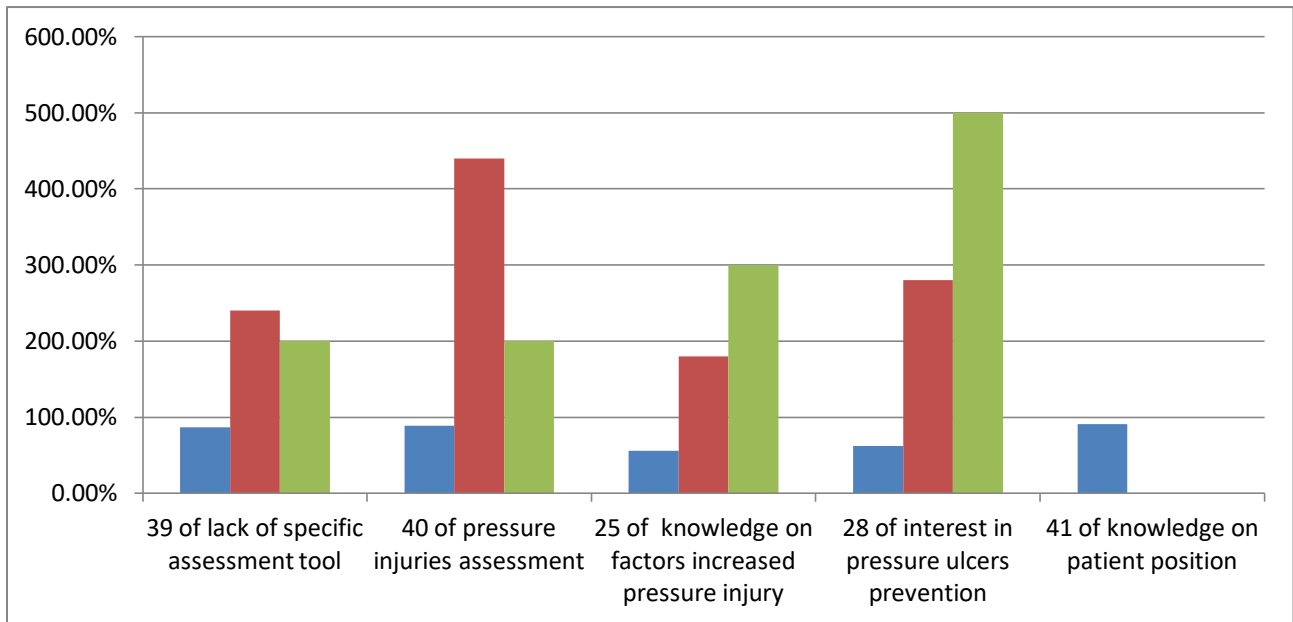


Table 4.2.1 , shows res(nurses) respondents who have poor access to literature are 27(60%) and who have access to literature are 18(40%),nurses who complains inadequate staff are 28(62.2%) and who don't are 17(37.8%), nurses who know guideline and protocol are 8(17.8%) and who don't are 37(82.2%) nurses who have inadequate trainings are 28(62.2%) and who have trainings are 17(37.8),nurses who complains with incorporated patient are 40(88.9%) and who cooperate with patient are 5(11.1%),nurses have job satisfaction are 21(46.7) and who are not are 24(53.3%),nurses who priotise other cases than pressure ulcers are 33(73.3%) and who don't are 12(26.7) nurses who complains shortage of equipment are 19(42.2%) and who don't are 26(57.8%),nurses with inadequate knowledge are 38(84.4%) and those with knowledge are 7(15.6%),nurses who complain lack of multidisciplinary team are 38(84.4%) and who don't are 7(15.6%),

Table 4.1. 3:BARRIERS CONTRIBUTING TO INNEFFECTIVE PREVENTION OF PRESSURE SORES

Variables	Frequency	Percentage
What were Barriers to prevention of pressure sore		
Yes	35	77.8%
No	10	22.2%
Total	45	100.0%
There are no evidence based practice is known to reduce the risk factors for developing pressure sores		
Yes	31	68.9%
NO	14	31.1%
Total	45	100%
Lack of specific assessments tools to prevent formation of pressure sores		
Yes	39	86.7%
No	6	13.3%
Total	45	100 .0%
I don't know how to assess pressure injuries		
Yes	40	88.9%
No	5	11.1%
Total	45	100.0%
I have no idea on factors that increase the developing of pressure injury		
Yes	20	44.4%
No	25	55.6%
Total	45	100.0%
I am less interested in pressure ulcer prevention than other aspects of care		
Yes	17	37.8%
No	28	62.2%
Total	45	100.0%
I have no knowledge on position to be avoided for a patient at the greatest risk for the development of pressure sore		
Yes	41	91.1%
No	4	8.9%
Total	45	100.0%

I know areas of the body that are most likely to be susceptible to pressure areas but I lack time to do it.		
Yes	27	60.0%
No	18	40.0%
Total	45	100.0%
Can pressure ulcers be avoided		
Yes	45	100.0%
No	0	0.0%
Total	45	100.0%
Presence of physical therapist in appropriate seating position		
Yes	14	31.1%
No	31	68.9%
Total	45	100.0%
Occupation therapist in appropriate seating position		
Yes	0	0.0%
No	45	100.0%
Total	45	100.0%
Absences of dietitian who monitors patient nutritional needs and recommends a good diet		
Yes	1	2.2%
No	44	97.8%
Total	45	100.0%
No doctors who are specialized in conditions of the skin (dermatologist)		
Yes	3	6.7%
No	42	93.3%
Total	45	100.0%
No neurosurgeon, vascular surgeon, orthopedic surgeon or plastic surgeon.		
Yes	2	4.4%
No	43	95.6%
Total	45	100.0%
I do not have enough time to provide health education to family members about Pressure ulcer		
Yes	20	44.4%
No	25	55.6%
Total	45	100.0%
Lack of Financial resources among patient at risk of pressure development		
Yes	23	51.1
No	22	48.9
Total	45	100.0

Figure 4.1. 2: BARRIERS CONTRIBUTING TO INNEFFECTIVE PREVENTION OF PRESSURE SORES

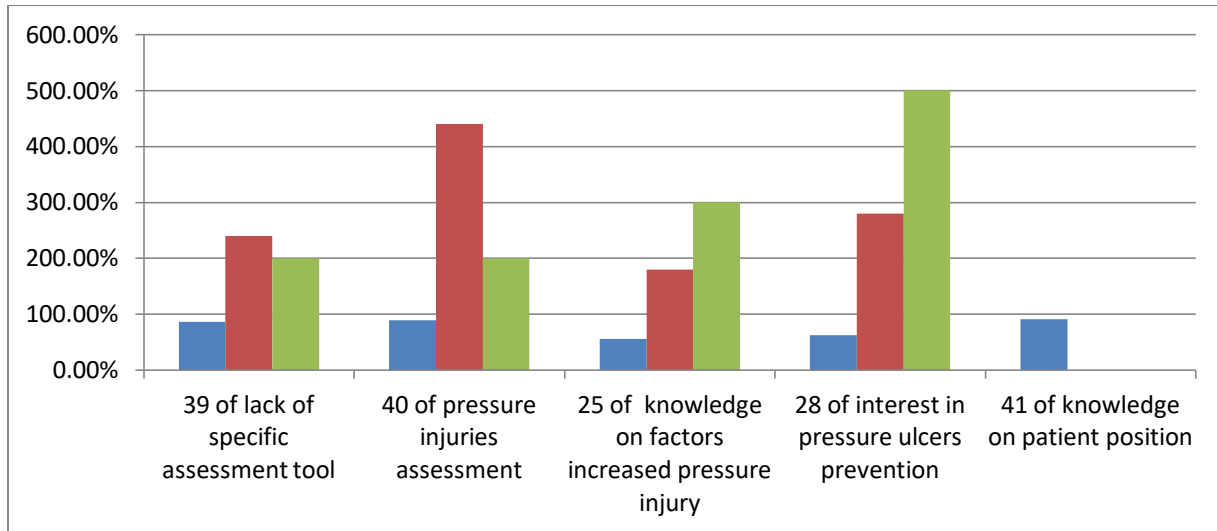


Table 4.3 showed nurses who have barriers to prevention of pressure ulcers are 35(77.8%) and who don't have are 10(22.2%), nurses who complain lack of specific assessment tools are 39(86.7%) and who don't are 6(13.3%), nurses who assess pressure injury are 5(11.1%) and who don't are 40(88.9%) nurses who have knowledge on factors that increase pressure injury are 20(44.4%) and who don't are 25(55.6%), nurses who are interested in pressure ulcers prevention are 17(37.8%) and those who are not are 28(62.2%), nurses who have knowledge on patient position are 41(81.1%) and who don't are 4(8.9%), nurses who compare pressure ulcers with other care areas are 10(22.2%) and who don't are 35(77.8%) nurses who know body area susceptible for pressure injury are 42(83.3%) and who don't are 3(6.7%), nurses who do regular assessment on pressure ulcer are 19(42.2%) and who don't are 26(57.8%) nurses who say pressure ulcer prevention consuming time are 27(60%) and who don't are 18(40%), nurses who say pressure ulcer can be avoided are 45(100%), nurse who complains physical therapist for appropriate sitting position are 31(68.9%) those who don't are 14(31.1%), nurses who complain occupational therapist are 45(100%), nurses who complain dietitian in recommendation of good diet are 44(97.8%) and who don't are 1(2.2%), nurses who complain dermatologist are 42(93.3%) and who don't are 3(6.7%), nurses who complain orthopedist surgeon are 43(95.6%) those who don't are 2(4.4%), nurses who provide health education are 20(44.4%) those who

don't are 25(55.6%),nurses who complains financial resources among patient at risk for pressure ulcer development are 23(51.1%) and who don't are 22(48.9%).

.4.2 DISCUSSIONS OF FINDINGS

4.2 BARRIERS CONTRIBUTING TO INEFFECTIVE PREVENTION OF PRESSURE SORES

The result from the study showed that the majority of participants had inadequate knowledge on pressure sore prevention and awareness in which the average range is 38 (84%) while 7(15.6%) of participant were found to have a low score indicating adequate knowledge on the prevention of pressure sores ,this is mainly caused by lack of trainings on pressure sores in which the study showed the findings of 28(62.2%) and also poor access to literature showed 27(60%) as findings and all those leads majority to have inadequate knowledge on pressure sore prevention. This finding contrasts the study conducted by (JamalQaddumi&AbdullahKhawaldeh, 2014) who found 73%, (141) of nurses had inadequate knowledge about pressure ulcer prevention among nurses working in Jordan Regional State Jordanian nurses about pressure ulcer prevention based on National Pressure Ulcer Advisory Panel guidelines. Also, the low level of nurses' pressure ulcer knowledge suggests poor dissemination of pressure ulcer knowledge in Jordan, a suggestion supported by the lack of relationship between years of experience and pressure ulcer knowledge. The study also showed Lack of universal guideline and protocol as a barrier where the study findings showed 37(82.2%) while 8(17.8%) participants knew the universal guidelines of pressure sores. Lack of universal guidelines to be followed becomes a barrier in prevention of pressure ulcers where there is no daily pressure injury assessment with average range of 40(88.9%) and those who do daily pressure injury assessment are equally to 5(11.1%) but there is abig problem where even those who know the guideline and protocol of prevention of pressure sores they don't put in practice its regulation such as use of Braden scale assessment tool and mostly complain of inadequate staff which leads them to heavy work load as our literature review states it in details . similarly according to the study carried out in Addis Ababa, Ethiopia by (Werku,2018), the study revealed several barriers need to be resolved to put in to practice the strategies of pressure ulcer prevention; Heavy workload and inadequate staff (83.1%), shortage of resources/equipment (67.7%) and inadequate training (63.2%) were among the major barriers identified in the study.

The barriers cited by 45 nurses working in surgical ward, intensive care unit and internal medicine wards on prevention of pressure sores was assessed by using the structured questionnaire. The findings from this study showed that 38 (80.7%) participants working in Surgical, internal medicine and Maternity wards had common barriers while nurses 7(19.3%) had no barriers barriers in prevention.

4.3 SUMMARY OF FINDINGS

A total of 45 responses were analyze,14 were in surgical ward, 15in internal medicine and 16 from intensive care unit, Study findings revealed that the majority of the participants of the study were female with 30 (**67%**) participants. The high proportion of respondents dominated the sample in the range of ages from 30-39years with 20(44%) where nearly a half included in this range. About 27(60%) of the respondents have an A1 Degree in nursing while for clinical experience; the participant who had never trained about pressure sores prevention were 28(62%) whereas those had been trained were17 (38%).

This study show that the participant with access were 18 (40%) while those with poor access were 27(60%).About nurses who complains inadequate staff were 28(62.2%) while participants with no complaints were 17(37.8%).The nurse has low knowledge on pressure sores because of lack of trainings

in prevention of pressure sores among patients in surgical, internal medicine and intensive care unit words compare to their practice which is low whereby most of them knows that changing position properly is the single most effective method to prevent pressure sores at the level of 26(86.7%) whereas those with low knowledge on pressure sore are only 3(10%).

CHAPTER FIVE; CONCLUSION AND RECOMMENDATIONS

5.0. INTRODUCTION

This chapter covers conclusion recommendation and suggestions for further studies.

5.1. CONCLUSION

The research about assessment of factors contributing to ineffective prevention of pressure sores among nurses working in internal medicine, surgery and intensive care unit at Kibuye Referral Hospital found that nurses have common barriers in pressure sore prevention and some that were been cited are; have poor access to literature about pressure ulcer prevention, lack of adequate staffs, lack of enough equipments for control and prevention ,lack pressure sore trainings , lack of universal guidelines and protocols about pressure sore prevention ,lack of assessment tools, nurses priotise other cases than pressure sores . Early detection and prevention of pressure ulcers will reduce prolongation of hospitalized patients and this will reduce staff activities and time consuming as we have seen staff is inadequate and also promotes health

5.2. RECOMMENDATION

According to our research done we suggest the following recommendation to;

5.2.1. Kibuye Referral Hospital

Hospital should provide trainings about pressure ulcers to its staff and also staff members should provide health education to patients and next of kin about position changing , and the hospital also should increase materials such as water mattress, bedsheats etc.

5.2.2. Kibogora Polytechnic

Kibogora Polytechnic should provide many out reaches in communities in order to educate them about pressure ulcers and how they can prevent them.

Kibogora Polytechnic also should carry out many researches on pressure sores on how to prevent it and its management as well. Pressure sores should also be planned and put in culcurrum as a subject to be studied so as to develop more knowledge on this.

In addition Kibogora Polytechnic should support all student projects by giving funds to those that came up with high grades in their project so that they may carry out their research projects and publish them.

5.3. SUGGESTION FOR FURTHER STUDY

Educational programs for the prevention of pressure ulcers should be structured, organized, and comprehensive and should be updated on a regular basis to incorporate new evidence and technologies, Programs should be directed at all levels of health care providers including clients, family or caregivers

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APPENDICES

Appendix A- Individual Informed Consent Form

Our names are MUTETERI MUSISI and GANZA AIMEE students in bachelors of nursing Science in Kibogora Polytechnic; our bachelor's research dissertation is Assessment of factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and intensive care unit at Kibuye referral hospital.

As partial full fillment of our studies. This study will help to increase the knowledge and enhance support through identification of factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and intensive care unit at Kibuye referral hospital.

The study seeks to inform about factors contributing to ineffective prevention of pressure sores among nurses. With your permission, I kindly request you to give as much information as possible seek by responding to the questions in the questionnaire will be addressed to you. There are no anticipated risks associated with this study. Your decision whether or not to participate in this study will not affect you at all. The participation in this study is voluntary, and there is no penalty for early withdrawal.

The information you provide will be confidential. Your identity will not be disclosed in any published and written material resulting from the study and will be shared only with the research team.

I agree to participate in this study.

Signature_____

Date and Signature of Participant __/__/_____

Witness_____

Appendix B- Consent Form

Introduction

The study seeks to inform about Assessment of factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and intensive care unit at kibuye referral hospital.

Purpose of the Study

The purpose of this study is the Assessment of factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and intensive care unit at Kibuye referral hospital.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. All the services you receive in this context of care will continue, and nothing will change. If you choose not to participate in this research project, you may withdraw at any time without risk of penalty. May change your mind later and stop participating even if you agreed earlier.

Confidentiality

The information that we collect from this research project will be kept confidential. Information about you that will be collected during the research will be put away, and no-one but the researchers will be able to see it. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is and we will lock that information up with a lock and key. It will not be shared with or given to anyone except who will have access to the information

The knowledge that we get from doing this research will be shared with you through in job training/workshops and morning staff in your services. Confidential information will not be shared. There will be small meetings in your setting, and these will be announced.

If you have any questions, you may ask them now or later, even after the study has started. If you wish to ask questions later, you may contact any time on: 0781873188&0785133354 I have read

the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it, and any questions that I have asked to, have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.

Name of Participant _____

Signature of Participant _____

Date _____ Witness _____

Appendix C

QUESTIONNAIRE

ENGLISH VERSION

Introduction;

Our names are MUTETERI MUSISI and GANZA AIMEE, students at KIBOGORA POLYTECHNIC in bachelors of nursing. We are inviting you to participate in our research titled “Assessment of factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and intensive care unit at KRH.”**The Purpose of this study is to assess factors contributing to ineffective prevention of pressure sores among nurses working in surgery, internal medicine and intensive care unit at KIBUYE Referral Hospital.**

Instructions

This questionnaire comprises two sections and it has been only designed for research purpose. Below you are given some questions, please; provide your most appropriate answer by ticking (Put a √) in the appropriate box and filling in the provided space the name should not appear on the question paper.