

**FACTORS INFLUENCING PAIN ASSESSMENT AND MANAGEMENT AMONG
NURSES AT CASE MEDICAL CENTRE, KAMPALA**

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DECLARATION

I hereby declare that this research proposal is entirely my own work and commitment and thus has never been submitted as any form of assessment at this level in this or any other university.

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APPROVAL

This research dissertation has been submitted for the examination with my approval as the university supervisor.

Signature;

MS. NANTALE GRACE

Date;

DEDICATION

This study is dedicated to my entire lovely family and friends, especially my parents and siblings for their continuous unconditional support, care and commitment to me in pursuit to finishing of accomplishing this proposal.

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OPERATIONAL DEFINITIONS

Acute pain: Is pain of recent onset and probable limited duration. It usually has an identifiable temporal and causal relationship to injury or disease, (Macintyre et al, 2010).

Pre-emptive analgesia: Is defined as administration of an analgesic prior to an acute pain stimulus such as a procedure performed among critically ill patients that are known to be painful (Macintyre et al, 2010).

Critically ill patient: Is a patient with life-threatening health problems. Such a patient has high levels acuity and complex care needs and requires constant physiological monitoring, observation, intervention and evaluation.

Knowledge: Is the awareness of an individual about the key principles of a condition in question.

Practice: Is the performance of interventions based on principles.

Pain: An unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.

LIST OF ABBREVIATIONS

AMREF:	African Medical Research and Education Foundation
EU:	European Union
IASP:	International Association for the Study of Pain
ICU:	Intensive Care Unit
IHSU:	International Health Services University.
MOH:	Ministry of Health
MS EXCEL:	Microsoft Excel
NGO's:	Non-Governmental Organizations
PQRSTU	Position, Quality, Radiation, Severity, Timing and Understanding
VAS:	Visual Analogue Scale
WHO:	World Health Organization

ABSTRACT

Background

Pain assessment is critical to optimal pain management interventions. While pain is highly a subjective experience, its management necessitates objective standards of care. Pain assessment should be ongoing (occurring at regular intervals), individualized and documented so that all individuals involved in patient's care understand the pain problem. Acute and chronic pain if not properly assessed can result in inadequate pain management outcomes and can negatively affect the physical, emotional and psychosocial wellbeing of patients.

Objective: The aim of the study was to assess factors influencing pain assessment and management among nurses at Case Medical Centre Kampala.

Method: A descriptive cross sectional study was employed to assess factors influencing pain assessment and management among nurses at Case Medical Centre Kampala. A total of 50 nurses from the hospital were included in this study using non probability, convenient sampling technique. A structured questionnaire was used to collect data. Data were entered in epi-info 3.5.4 which was transferred using stat transfers into access and analyzed using SPSS version 16.

Results: From the assessment done, years of working experience($X^2=11.73$, $P=0.003$, 95% CI), the units/ward which a nurse worked ($X^2=13.52$, $P=0.002$, 95% CI), being aware about pain assessment($X^2=30.95$, $P=0.000$, 95% CI), knowing the importance of pain assessment ($X^2=21.46$, $P=0.000$, 95% CI), have received training on pain assessment, pain assessment tool and pain management ($X^2=5.83$, $P=0.004$, 95% CI), availability of pain assessment tools($X^2=19.41$, $P=0.000$, 95% CI), if pain assessment tools were important ($X^2=7.25$, $P=0.000$, 95% CI), availability of the pain assessment tools, attitude that pain tools help in effective pain assessment ($X^2=10.00$, $P=0.000$, 95% CI) , availability of guidelines regarding pain assessment in the wards ($X^2=17.54$, $P=0.000$, 95% CI), influence of the guidelines on the way one assesses and manages pain ($X^2=$, $P=12.490.003$, 95% CI) and availability of pain tools in the ward always ($X^2=19.41$, $P=0.000$, 95% CI) had a significant influence on the assessment and management of pain.

Conclusion: pain assessment and management is affected by knowledge, attitude of the nurses on pain assessment, pain assessment tools and pain management, availability of pain assessment tools and hospital set standards on how to manage pain. Thus, providing adequate pain assessment tools,

regular training and supervision on pain assessment and management are recommended to improve the problems of inappropriate pain assessment and management.

CHAPTER ONE

1.0 Introduction

This chapter contains the background to the study, problem statement, objectives of the study, general and specific objectives, research questions, significance of the study, purpose of the study, scope of the study and the conceptual framework.

1.1 Background

Pain is an unpleasant feeling or sensation that varies in degree and severity and results into various consequences in people. Pain can be localized or generalized causing discomfort or agony. When patients are in pain, they are deprived of their sleep, day time energy is limited and the incidence of severe depression and mood disturbance is increased. Pain is the main reason why people seek health care, (Polomano, et al, 2008). Of all patients treated by general practitioners, about 20 to 40% suffer from different pain conditions, (Mclean et al, 2004). It has been reported that 78% of all patients who arrive at the emergency department present with pain, (Tanabe et al, 2009).

Brennan et al, 2007, added that this pain is not only due to pathological disease process, trauma or surgery but also the invasive procedures performed on these patients cause pain, for example line insertion, suctioning and among others.

Pain assessment is a comprehensive evaluation of various aspects and presentations of pain which include patient's report of description, location and intensity, (Yeager et al, 1995). Pain assessment and management is the most fundamental part of the nurse's responsibility when it comes to patients in pain, (Innis et al, 2004). However assessing and managing pain present particular challenges to nurses, and other medical staff, because patients may experience pain from different sources, so it is important for health care providers to assess for pain so that individualized management interventions are provided, (Arif et al, 2007).

Among key principles recommended for effective pain management is routine pain assessment, and assessment of the effectiveness of interventions, (Watt – Watson et al, 1999).

In order to have a comprehensive clinical process of describing pain and its effects on patient function, it requires use of a particular type of pain assessment tool, (Brown, 2008).

According to the National Initiative on Pain control guidelines, diagnostic tools that assist in pain assessment, quality and quantity of pain are, Wong-Baker FACES pain rating scale, whereby the happier the face in appearance, the less the pain experienced and then patients are asked to choose the face that best describes their feeling of pain, (Wong DL et al, 2001). Then 0-10 Numeric Pain rating scale whereby when the patient will not be experiencing pain he is scored 0, then mild pain 1-4, moderate pain 5 and above and worst possible pain 10, (McCaffery M. et al, 1999). Or the patient can be asked to locate where he is feeling the pain and write E1 if both external and internal, E if external or I if internal only.

Findings in Canada showed that, among 140 critical care nurses, majority of them rated pain assessment as moderate using the 0-10 numeric pain rating scale, (Rose et al 2011). Other tools are available to ensure that appropriate pain assessment is done well, for example the PQRSTU and the letters standing for Position, Quality, Radiation, Severity, Other symptoms associated with pain (timing and triggers) and then understanding of pain by the patient, (Arif et al, 2009).

Dynamic pain should be assessed particularly by the patient's ability to cough and move the affected part, (Mcmain, 2008).

Macintyre et al, 2010, emphasized the need for appropriate assessment of pain among the non-verbal patients since inability to communicate verbally does not rule out the possibility that an individual is experiencing pain and in need of a suitable pain relieving treatment.

The American Pain Society guidelines also mandate evaluation of both physiological and behavioral response to pain in patients who are unable to communicate, (Herr et al, 2006).

According to (Rose, et al 2006), there is no universal pain assessment tool suitable for all patients, therefore pain assessment scales must be assessed patient by patient and no one scale should be institutional mandate for evaluation of all patients in a certain group.

The World Health Organization (WHO) analgesic ladder has been enormous for the treatment of cancer pain and therefore recommended worldwide, because several case series documented that the application of this analgesic ladder achieve pain relief in the majority of cancer patients, (Vantafriidda et al, 2005). The analgesic ladder is in 3 steps.

Step 1 involves use of non-opioid analgesics like paracetamol, non-steroid anti-inflammatory drugs like ibuprofen and diclofenac for the treatment of mild pain.

Step 2 involves use of mild opioids like codein with or without a non-opioid for the treatment of mild to moderate pain.

Step 3 involves use of strong opioids like morphine with or without a non-opioid for the treatment of moderate to severe pain, (WHO, 2007).

WHO collaborating Centre at the National Cancer Institute of Milan in a retrospective report of 2 years' experience using the WHO analgesic ladder proved that the ladder was effective in 71% cases (Zech et al, 2005). Colleau et al, 2005 asserts that application of the WHO analgesic regimen can achieve pain relief in 90% of cancer patients.

According to the National Health Policy by the Ministry of Health, application of the WHO analgesic regimen can achieve pain relief in 97% of cancer patients who attend the Cancer Institute at Mulago Kampala, (MOH, 2009).

Therefore adequate pain assessment and management can shorten hospital stay, improve patient outcome, improve patient satisfaction and reduce medication cost, (Polomano et al, 2008). It is therefore against this background that the researcher was prompted to determine factors influencing pain assessment and management among nurses at Case Medical Centre Kampala.

1.2 Problem Statement

Key principles recommended for effective pain management are routine pain assessment and assessment of interventions, (Watt-Watson et al, 2009). A comprehensive clinical process of describing pain and its effects on patient function in detail is recommended, to assist in diagnosis, selection of appropriate medication and anticipating the severity or extent of disease or injury, (Brown, 2006). This requires use of standardized pain assessment tools like the PQRSTU, the numerical rating scale among others. This promotes consistency among the care providers, enhances communication between patients and practitioners by making a subjective experience measurable and facilitating evaluation of pain management decisions according to the WHO analgesic ladder, (Herr, et al, 2006).

A number of serious consequences occur to patients when pain is inappropriately assessed, it leads to its poor management, this is because, without assessing the intensity of pain, one cannot administer an appropriate analgesic and so patients may be at risk of being under dosed or over

dosed with analgesia, addiction to analgesic agents, poor pain management, poor health outcomes for patients (chronic pain) and economic costs to the patient as a result of decreased productivity

This therefore prompted the researcher to identify the factors influencing pain assessment and management among nurses of Case Medical Centre Kampala.

1.3 Study Objectives

1.3.1 General Objective

To determine factors influencing pain assessment and management among nurses at Case Medical Centre Kampala.

1.3.2 Specific Objectives

- To determine health facility related factors influencing pain assessment and management among nurses at Case Medical Centre Kampala
- To determine the nurses' knowledge level towards pain assessment and management among nurses at Case Medical Centre Kampala.
- To identify the nurses' attitudes towards pain assessment and management at Case Medical Centre Kampala.

1.4 Research Questions

1. What are the health facility related factors influencing pain assessment and management among nurses at Case Medical Centre Kampala?
2. What is the knowledge level among nurses towards pain assessment and management at Case Medical Centre Kampala?
3. What are the nurses' attitude towards pain assessment and management at Case Medical Centre Kampala?

1.5 Significance of the Study

Pain assessment and management has been one of the major palliative care components, (Rose, et al, 2011). Organizations like Hospice Africa Uganda have provided a lot of training to health workers and patient caretakers on assessment and management of pain both in hospitals and homes. The research expects to contribute to;

(a) Policy makers

Recommend Ministry of Health to develop evaluation and follow up tools for nurses on pain assessment and management while in practice.

(b) Nurses

Improve their knowledge on pain assessment and management through continuous Nursing Education and use it accurately. Identify their strength and weaknesses in pain assessment and management, and then improve on their weaknesses.

(c) Study area

By creating awareness to health facility authorities of Case Medical Centre Kampala, about the knowledge of nurses in pain assessment and management, the management of Case Medical Centre Kampala will identify ways of improving the knowledge of their nurses on pain assessment and management for example through training.

(d) Organizations

Recommend Hospice Africa Uganda to continue extending training on pain assessment and management to all health facilities. Other Non-Governmental Organizations (NGOs) like the European Union (EU), AMREF to provide financial assistance and training to health workers on pain assessment and management.

1.6 Scope of the study

1.6.1 Content Scope

The study focused on Health facility related factors influencing pain assessment and management among nurses at Case Medical Centre Kampala.

Nurses' knowledge level towards pain assessment and management among nurses at Case Medical Centre Kampala

Nurses' attitudes towards pain assessment and management at Case Medical Centre Kampala

1.6.2 Geographical Scope

The study was conducted at Case Medical Centre Kampala which is located on Plot 69/71 Buganda Road in Central Division Kampala. Approximately 2km from the City centre of Kampala.

1.6.3 Time Scope

The research was carried out from March to September 2014.

1.7 Purpose of the Study

The study was intended to determine factors influencing pain assessment and management among nurses at Case Medical Centre Kampala.

1.8 The Conceptual Framework

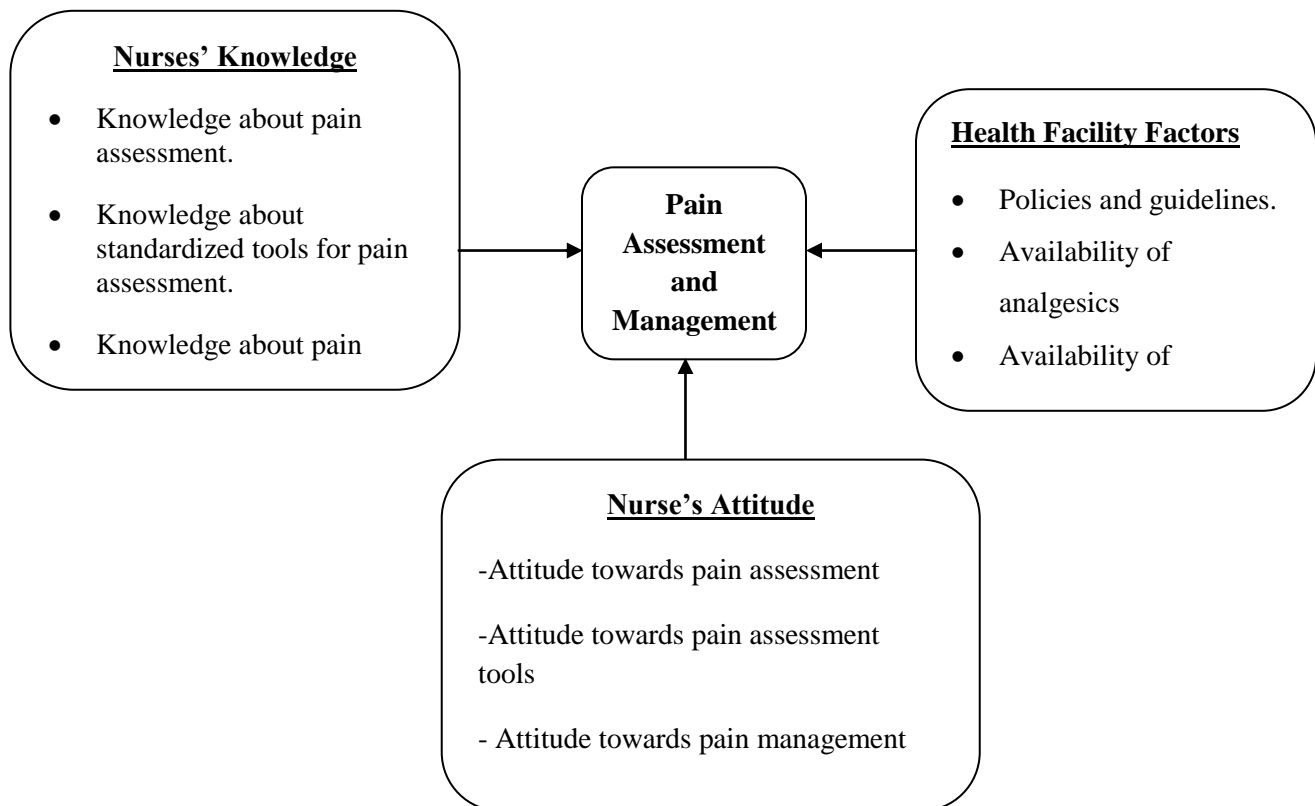


Figure 1: Conceptual Framework

The Conceptual framework above shows the relationship between the dependent variables (Pain assessment and management) and the independent variables (Health facility factors, Nurses' knowledge and attitude).

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter focuses on the contribution of various researchers addressing the literature review in line with study objectives. The output of the review is aimed at conceptualizing factors influencing pain assessment and management among nurses at Case Medical Centre Kampala.

Despite the development of new techniques in pain management, many patients continue to suffer from pain, (Solman, et al 2005). Pain has often been poorly assessed and inadequately managed. Under treatment of pain has been reported for many decades as a major and persistent clinical problem, (Swanson et al 2005).

In Australia it is estimated that one in five people including children will suffer chronic pain in their life time, (Walsh et al, 2008). Pain assessment and management is the most fundamental part of the nurses' responsibility when it comes to patient's care, (Innis et al, 2004). However this could be highly influenced by nurses' knowledge, attitude towards pain assessment and management and hospital related factors.

2.1 Nurses Knowledge

2.1.1 Knowledge about pain assessment

Jones et al, 2004, identified that nurses have knowledge deficits about pain assessment and this affects the way pain is managed. Mezey, 2005, emphasized that knowledge deficit about pain assessment by Nurses leads to inappropriate, incorrect and inadequate pain management practices.

Lack of knowledge about pain and pain assessment by nurses is a significant barrier to effective pain management, (Jones et al, 2004). A number of researchers have indicated that nurses are worried about the possibility of addiction and consequently they under estimate patients' pain, (Schafheute et al, 2011).

In spite of the numerous studies identifying the deficit in general pain management knowledge, the problem remains that patients continue to suffer from unnecessary pain, (Solman et al, 2005). Assessment of procedural pain can be influenced by many factors, some of which are educational, (Rose et al, 2011).

A study in Canada among 140 critical care nurses showed that majority of them rated pain assessment as moderate during line insertion, wound care and repositioning. However the findings for the practice differed as fewer nurses rated pain assessment during procedures occurring 50% of

the time during performing the procedure. It indicated a knowledge deficit due to failure to translate the need to assess pain into practice, (Rose et al, 2011).

Pasero et al, 2009, emphasized that knowledge deficits regarding pain assessment principles is one of the barriers to effective pain assessment and management. And unless nurses recognize that they have inadequate pain assessment knowledge pain will remain a major clinical problem in patients.

A study in Hong Kong showed that participants who had more working years of experience applied their knowledge of pain assessment and management to daily practice and scored highly on knowledge questions, (Lui et al, 2008).

Furthermore, Brown, 2000, analyzed the effects of a pain management project and found out that while the pain knowledge scores for staff were comparable with national averages, they did not represent an acceptable level of knowledge and understanding for optimal pain assessment by nurses.

Similar results were identified by Innis et al, 2004 who examined the impact of pain education for practioners on patient satisfaction. According to Blank et al, 2007, documentation of pre and post treatment pain assessment was virtually non-existent and 60% of patients within a sample group of 100 were discharged with more pain likely to be associated with poor pain assessment, because nurses base their assessment of pain on assumptions.

Tanabe et al, 2000 noted that 44% of a sample of 305 nurses had inadequate knowledge on pain management. In another study, nurses missed pain cues in 27 cases. Such cues ranged from patient telling the nurse that something was “sore” therefore no attention was paid to unmistakable pain cues, (Saunders, 2005). Scafheutle et al, 2007, said that there was evidence that nurses are not knowledgeable about pain assessment and that there is need for a more systematic approach to pain assessment in routine practice.

2.1.2 Knowledge about standardized tools for pain assessment

Poor coordination between patients and nurse’s ratings of pain has been associated with low confidence in the ability to accurately assess pain and time constraints faced in completing nursing tasks, (Kaasalainen, 2007). Rose et al, 2011, added that the more the years of experience nurses have, the less the use of pain assessment tools thus pain assessment will basically be on assumptions. Despite the development of new techniques in pain assessment, few nurses document accurately their pain assessment measures, most nurses rely on their ability to judge a patient’s pain rather than asking the patient himself and rating the pain using one of the universal pain assessment tools (Brennan et al, 2007).

Many nurses assume that a patient who does not appear to be in pain is in no discomfort, (Boston et al, 2004). A number of researchers have demonstrated that there is insufficient education on pain assessment tools throughout the world leading to inappropriate pain assessment thus most nurses do not understand the fundamental principles of pain assessment and so make assumptions and judgments about the amount or type of pain their patients are suffering, (Clarke et al, 2007).

There is also evidence to suggest that nurses and other health care professionals view pain as normal or to be expected and thus under estimate the severity of patient's experience. An important aspect of understanding patient's concerns is to ask about them, listen carefully and rate them accordingly, (Rambus et al, 2011). In a study of cancer patients at home, (Ferrel et al, 1999): asked patient care givers what nurses could do to help to relieve pain. They identified that nurses needed to be there, interview patients about their pain, listen and grade the severity of pain.

Bish et al, 2005 emphasized the importance of nurses' attributes such as use of universal pain assessment tools in the management of cancer patients. Inadequate or no use of tools, leads nursing staff to rely on their clinical judgment which may be influenced by preconceptions and attitudes about patient's pain. This will affect patient's outcome because prescriptions are based on nurse's rating of pain. Majority of the nursing staff use informal screening approaches rather than the recommended pain assessment tools like the numerical rating scale to assess patients' pain, (Kaasalainen et al, 2007).

A study in Kenya identified commonly used pain assessment tools and they included visual analogue scale, verbal description, categorical scale and Mc Grill scale, (Kituyi et al, 2011). Knowledge deficit about pain assessment tools was attributed to lack of formal teaching about pain assessment, either pre or in-service training, (Watt-Watson et al, 2001). They emphasized that it does not only affect the knowledge about tools but also their use.

Another study in Central Africa, (Rampanjoto et al, 2007), reported that more than 80% of nurses in the emergency department could not carry out a formal pain assessment using the Visual Analogue Scale.

Furthermore, a study in Hong Kong noted that out of 143 nurses on the Medical ward, 89% had never used objective tools for pain assessment and only 19% of them had ever attended courses related to pain assessment, (Lui et al, 2008).

The difference in the use of pain assessment tools could be explained by the differences in the support that nurses receive through continuing professional education about pain and its management, (Rose et al, 2011). A study in Canada showed that 84.3% of nurses reported having attended some form of on-going professional development education on topics related to pain and

its management, (Rose et al, 2011). Other approaches that were used for pain assessment among nurses who did not use a formal tool for patients unable to talk included vital signs and various pain behaviors, (Rose et al, 2011).

However, behavioral signs can be used in conjunction with other methods of assessing pain and should not be substituted for self-report as long as the patient can communicate in any other way, (Odhner et al, 2003). To date there is no universal pain assessment tool that is suitable for all patients, (Rose et al, 2011).

2.1.3 Knowledge about pain management

Pain has often been poorly assessed and inadequately managed. Under treatment of pain has been reported for many decades as a major and persistent clinical problem, (Swanson et al, 2005). The consequences of pain mismanagement result in human suffering and economic costs, (Brennan et al, 2007). Effective management of pain among patients is important in maintaining their dignity, (Herr et al, 2006).

Among the key principles recommended for effective pain management is routine pain assessment and assessment of the effectiveness of interventions, (Watt-Watson et al, 1999). Poor coordination between patients and nurse's ratings of pain has been associated with poor pain management, along time constraints faced in completing nursing tasks, (Kaasalainen, 2007).

The inability of many patients to communicate adequately with the nurses providing their care strikes one of the basic tenets of pain control, thus the need for patient's input in pain control decisions given the subjective nature of pain, (Mwarski, et al, 2009).

Nurses need a wide base of knowledge about pain, its assessment, management principles and consequences of poorly managed pain among other concepts about pain, (Gallop et al, 2001). Garfinkel et al, 2007, noted that nurses lack adequate knowledge about pain, under estimate pain, and end up providing inadequate analgesia.

In Kenya, a study aimed at determining knowledge about pain management in post-operative patients at Moi teaching and referral hospital, out of 170 nurses 41% indicated that they had sufficient knowledge to recognize and manage pain, 21% had never had any formal teaching in relation to pain management, (Kituyi et al, 2011).

In addition, findings showed that the duration of service among all health care providers in post-operative care units did not influence the nurse's knowledge and confidence in pain management, (Kituyi et al, 2011).

Documented approaches to improving pain management process by nurses is conducting knowledge and attitude surveys among nurses and other health care providers to uncover gaps in knowledge and other factors contributing to inadequate pain management, (Pasero et al, 2009).

In another survey designed to assess the relationship between nurse's knowledge about patient's outcome related to pain and analgesic intake, among 80 nurses for cardiac post-operative patients and knowledge level was moderate for majority, 53% of the nurses scored 69% or less, with the Toronto pain management inventory tool and only 15% scored 75% or above, (Watt-Watson et al, 2001).

Aslan et al, 2008, reported that 57.1% of 91 nurses for critically ill patients attempted to assess the patient and establish the nature of pain before administering the analgesics. Although it has been noted that differences in pain measurement and reporting style of findings make it difficult to compare findings across studies, there is continued documentation of under estimation of patient's pain by nurses which ultimately impacts on management, (Puntillo et al, 2008).

In another study it was noted that almost one-third of all nurses disagree with their patient's rating of pain more than 25% of the time. This may be attitudinal and or knowledge related issues and may imply that such nurses will not manage patient's pain effectively as they are likely to administer inadequate analgesics in terms of dosage or frequency of administration. In the same study patients who reported moderate to severe pain received only 47% of their prescribed analgesics, (Watt-Watson et al, 2001).

Documentation of pain assessment and management as well as the effectiveness of the interventions such as opioids or patients response to treatment for pain is among the principles for pain management, (Kwekkeboom et al, 2001).

Findings from studies indicate minimal or no documentation practices among nurses caring for the critically ill patients, (Haonga et al, 2011). The continued lack of documentation about pain assessment and management highlights the ongoing gap between research and practice given that there has been strong evidence that documentation of pain assessment improves pain management and more so decreases patient's pain, (Shannon et al, 2008).

A study in Turkey was carried out to determine the knowledge level of pain management among 68 nurses, the study revealed that 35% of nurses had significant knowledge deficit relating to use of

placebo, recommended routes of administration, the over reporting of pain, addiction and an inability in making clinical judgments to determine course of treatment, (Yildirim et al, 2008).

Inadequate information in nursing textbooks and nursing faculties demonstrate inadequate knowledge and misguided attitudes in regard to effective pain management, (Ferrel et al, 2011).

Deandrea et al, 2008, added that nursing education fails to incorporate essential information to adequately prepare the knowledge base of new nurses in the treatment of pain. Knowledge deficit in pain management among nurses leads to inadequate pain management, some of these knowledge deficits include, problems in assessment, pharmacological management with opioids and knowledge of how to use non-pharmacological pain interventions, (Man Warren, 2009).

Keen et al, 2008, found that less than 5% of nurses were able to accurately answer questions related to appropriate analgesic therapy in patient scenarios presented. Chang et al, 2005, found that nurses who lack understanding of the pharmacological effects of opioids were more reluctant to maximize the dose needed for pain relief.

Implications from Puis-Mccoll et al, 2007, support previous research studies identifying deficits in nurses' knowledge base surrounding pain management based on guidelines. Pain management education is deficient regardless of nursing education level or years of experience. Nursing leaders should recognize that ongoing pain management education is necessary for improving the quality of patient's pain, (Rose et al, 2011).

2.2Health Facility related factors

2.2.1 Policies and guidelines

It is true that effective pain management strategies have not been achieved due to various reasons/challenges involved for example inadequate resources, personal principles and feelings affecting one's own ability to assess, decision making and the use of evidence-based information in managing pain. There is also poor consideration of pain and pain management at personal and organizational level, (Seers et al, 2006).

Even at hospital level where pain should be treated effectively, research evidence shows that there is inadequate management of pain and there are large numbers of patients who still suffer from

unrelieved pain, (Dollin et al, 2002). Absence of protocols and guidelines on pain assessment and management has been cited to hinder effective pain management, (Kituyi et al, 2011).

Busy units, inadequate staffing, limited time, inadequate staff nurse's training, reluctance to prescribe opioids, poor communication, lack of accountability, patient's attitude and health status are the commonly cited organizational barriers to adequate pain assessment and management, (Rampanjota et al, 2006).

The shortage of nurses and heavy workloads associated with caring for the critically ill patients limit the time given to the interaction between patients and nurses for adequate pain assessment and management. Other challenges reported in emergency situations include inability to administer medication until diagnosis is made, (Tanabe et al, 2000).

According to the prescription monitoring programme, when prescribing opioids for an acute pain condition greater than 50% of acute pain patients have received an opioid from a different health care provider, termed as non-prescriber and the programme includes nurses on the non-prescribers list, so this makes the nurses reluctant in the process of pain assessment and management, (Volkow et al, 2011).

Some factors have been considered as enablers for nurses caring for critically ill patients to practice adequate pain assessment and management. These include prioritization of pain assessment and management by the intensive care team, working with a team that is motivated to provide effective pain relief, prescription of analgesia with adequate dosing and support from nurse and medical colleagues, (Rose et al, 2011).

Most nurses are demotivated by prescribers who most times do not base the dosing on the nurse's rating of pain, (Rose et al 2011). It is important for nurses to be aware of discrepancies that exist in modern hospitals, whereby the minority group receives less pain medication than their white counterparts. This is commonly seen in emergency rooms, post operatively and in the labour ward, (Ezenwa et al, 2006).

The principle of justice states that all persons should be treated fairly according to their condition, (Velasqueze et al, 1990). In some hospitals the principle is violated when treatments are withheld or are not administered solely based on a person's sex, age, race or religion, unless those factors have a distinct bearing on treatment, (Hudcova et al, 2005).

Brennan et al, 2007, added that nurses should be aware that when choosing a pain medication, of an 80 years old patient, it should be considered as would be for a 30 years old or so patient. Or when a demanding and wealthy socialite receives more consideration in the management of her pain than a quite unassuming, poor single mother then the principle of justice is violated.

In modern hospital settings, it is very rare that pain must be allowed for diagnostic reasons it is even rarer that severe pain cannot be controlled in some fashion, (Cousins et al, 2007).

The principle of authority in pain management is violated when nurses and other health care providers dishonor patient's rights to choose how they want their pain to be treated, withholding of information from patients about how much and how often they can receive pain medication while in the hospital. Yet when patients are fully extended their right to autonomy, their pain is often managed better, (Hudcova, et al 2005). Although pain research has resulted in a better understanding of pain modalities and development of new treatments, patients report little increase in satisfaction with the management of their pain while hospitalized.

2.2.2 Availability of standardized tools for pain assessment

To date there is no universal pain assessment tool that is suitable for all patients, (Rose et al, 2001). Therefore inappropriateness of a scale must be assessed patient by patient and no one scale should be institutionalized for evaluation of pain among patients, (Bucknail et al, 2006).

Several tools are available to ensure that appropriate pain assessment is done well. One of the methods used in assessing the patient's pain is the Mnemonic PQRSTU which helps in conducting a comprehensive interview of pain. Letters stand for provocation or position, quality, radiation, severity of pain and other symptoms associated with pain, timing or triggers and understanding of pain by the patient respectively, (Arif et al, 2009).

After the pain experience has been well described, the nurse regularly monitors the intensity of pain which can be measured by various scales. For example the numerical rating scale (NRS-0-10), FACES pain scale and visual analog scale (VAS) are the commonly used scales for subjective pain measurement for patients who can self-report pain, either verbally or other means like pointing or nodding the head , (Arif et al, 2009).

2.2.3 Availability of analgesic agents

In a survey conducted by World Health Organization, (Harding R et al, 2014), essential drugs list can control the highly prevalent pain and symptoms among patients. Availability of essential medicines like analgesic agents directly influences clinicians' ability to effectively manage distressing manifestations of pain among patients.

The survey also showed that non-opioid analgesics (73%) were the most commonly available drugs and morphine (7%) the least. Drug availability was higher in hospitals and lower in health centers, health posts and home-based care facilities. Facilities generally did not use minimum stock levels, and stock-outs were frequently reported. The most common drugs had each been out of stock in the past 6 months in 47% of facilities stocking them. When a minimum stock level was defined, probability of a stock-out in the previous 6 months was 32.6%, compared to 45.5% when there was no defined minimum stock level (Harding R et al, 2014).

The survey also demonstrated poor essential drug availability, particularly analgesia, limited by facility type. The lack of strong opioids, and pediatric formulations was also a concern. Inadequate drug availability prevents implementation of simple clinical pain and symptom control protocols, causing unnecessary distress. They concluded that research would be needed to identify supply chain mechanisms that lead to these drug unavailability problems.

2.3 Nurses' attitude

Previous studies documented how practice is often led by myths and bias rather than evidence based knowledge. Myths include treatment of older patients and children (Yonke et al, 2004), and disbelieving patient's pain reports, (Boston et al, 2004). Reliance on such practice and ritual results in ineffective pain management, (Adriaansen et al, 2005)

2.3.1 Attitude towards pain assessment

Social attitudes and cultural beliefs prevail and can limit effective assessment and management of pain, (Ashley, 2009). The following are myths and misconceptions surrounding pain assessment by nurses:

- We can rely on our personal values and intuitions to judge whether the person is in pain or not.
- Pain is largely an emotional or psychological problem especially in a person who is anxious or depressed or whose pain is unclear.

- Lying about pain is common among patients.
- A patient who obtains benefits because of pain medication exaggerates his pain.
- Pain is accompanied by physiological and behavioral changes which can be used to confirm the existence and severity of pain.
- Similar physical stimuli produce similar pain in different people.
- People with pain should have a high tolerance for pain.
- People who obtain pain relief from placebos are malingering and their pain is not real, (Scafheutle et al, 2001).

Bennett et al, 2007, added that barriers to conducting successful pain assessment include the following failure to follow good pain assessment practices by nurses and when patients are not asked to rate their pain intensity, nurse's assessment of patient's pain is based purely on assumptions.

Most nurses assume that a patient who does not appear to be in pain is in no discomfort, when the opposite may be true, (Dalton et al, 2006). Furthermore there is evidence that nurses make judgments about pain based on whether or not they believe it has a cause, while other nurses believe that pain assessment should be carried out when ordered or for a specific person (Wallefield et al, 2005).

Many of these themes are addressed by other authors and affirmed in other research studies and emphasize the importance of nurses' attributes such as assessing the intensity of pain in contributing to their pain management, (Saunders, 2005). And it is therefore important for nurses to assess pain so that individualized management interventions can be provided, (Arif et al, 2009).

2.3.2 Attitudes towards Pain assessment tools

Inadequate or no use of pain assessment tools by nurses is influenced by many of the preconceptions and attitudes about patient's pain, and that is why most nursing staff only rely on their clinical judgment, (Kaasalainen et al, 2007).

The difference in the use of pain assessment tools could be explained by the differences in the support nurses receive through continuing professional education on pain and its management, (Rose et al, 2011).

Jones et al, 2004, identified that nurses have knowledge and incorrect beliefs about pain assessment and management that affect the way patient's pain is assessed. Nurses continue to rely on their

ability to judge patient's pain than asking the patient himself about it. A number of researchers have indicated that nurses are worried about the possibility of addiction and consequently they underestimate patient's pain and analgesic doses, (Schafheute et al, 2011).

A study in Hong Kong indicated that 89% of 143 nurses reported having never used objective tools for pain assessment and only 19% of them had even attended a course related to pain assessment, (Lui et al, 2008).

In Canada, other approaches used for pain assessment among nurses who do not use a pain assessment tool for patients unable to self-report pain include vital signs and various pain behaviors like facial expression, (Rose et al, 2011).

Rampanjoto et al, 2007, reported that more than 80% of nurses in emergency departments in Central Africa were unable to carry out a formal assessment of pain using the visual analogue scale. Pain is difficult to assess and manage because of being inherently a subjective experience influenced by multiple factors like patient's perception, expression and tolerance of pain may vary because of different psychological and social influences, (Miller et al, 2006).

There is also evidence of ethnic differences in pain perception, this makes pain an individualized experience with many dimensions, and nurses need to remember this in their practice of pain assessment, (Bower et al, 2009). Pain assessment and management is the most fundamental part of the nurses' responsibility, and it is influenced by nurse's knowledge and attitude towards pain, (Innis et al, 2004).

2.3.3 Attitudes towards Pain management

Understanding of the pharmacological/physiological aspects of pain assessment and management is a direct contrast to isolating attitudes and beliefs of nurses, (King et al, 2004). Results of this study indicated that nursing staff had incorrect or incomplete knowledge regarding basic concepts and principles in the areas of;

- Differences between acute and chronic pain
- True risks of addiction Duration of the action of analgesia
- Equivalent doses of analgesia

Therefore authors concluded that inadequacies in the pain management process, may be tied to myths and bias originating from general attitudes and beliefs of nurses, (King et al, 2004). Nurses act as barriers to successful pain management in different ways, for example, previous personal exposure to pain, self-management of pain by pharmacological and non-pharmacological strategies

and one's family or close relative past or exposure to pain relieving measures or even those that interfere with one's state of mind, (Jessica Drauphon et al, 2011).

Nurses have reported in some studies that taking pain medication is a sign of weakness and that pain is a logical consequence of injury, (Rampanjoto et al, 2007). These social attitudes and cultural beliefs prevail and can limit effective pain management, (Ashley, 2009).

The consequences of pain mismanagement results in human suffering and economic costs, (Brennan et al, 2007)

Lack of knowledge about pain and pain treatment and myths about addiction is considered a significant barrier to effective pain management, (Jones et al, 2004).

Mezey, 2005, added that incorrect beliefs, misconceptions about pain by nurses can lead to inappropriate, incorrect and inadequate pain management practices. Multiple studies have been conducted in various settings have shown that inadequate knowledge and poor attitudes of nurses contribute to inadequate management of pain, (Yildirim et al, 2008).

The scope of nursing is comprised of knowledge based features possessed by individuals involved in nursing care. This knowledge is achieved by appraising one's attitudes, values, beliefs, culture and related issues and control of own making as an individual, (Jessica Drauphon et al, 2011).

CHAPTER THREE: METHODOLOGY

3.0 Introduction

This chapter will focus on the methodology which consists of research design, research variables, study population, sample size and sampling procedure, data collection, management and analysis, inclusion and exclusion criteria, ethical consideration and study limitations.

3.1 The study Area

The study was carried out at the Case Medical Centre located at Buganda Road Kampala, a clinic among a chain of clinics under the Case Medical Centre brand. This medical Centre was selected due to the fact that they see many patients, about 80 to 100 patients daily, that express different levels of pain on both inpatient and outpatient basis.

3.2 The Study Design

The study design was a cross-sectional study design, which used quantitative and qualitative methods of data. A cross-sectional study enabled the researcher to determine the factors influencing pain assessment and management among a cross-section of the nurses at a single point in time.

3.3 Population

3.3.1 Target Population

Nurses that work at Case medical centre.

3.3.2 Accessible Population

The accessible population was the nurses who had worked at Case medical centre and were available during the period of data collection.

3.3.3 Study Population

The study population was the nurses who work at Case medical centre who voluntarily consented to take part in the study and met the selection criteria below.

3.4 Eligibility Criteria

3.4.1 Inclusion

- Nurses involved in direct patient care.
- Nurses working in the intensive care unit, causality ward and post-operative wards.
- Nurses who consented to take part in the study.

3.4.2 Exclusion

- Nurses involved in administrative roles
- Nurses who did not consent to take part in the study.

3.5 Study Variable

3.5.1 Dependent variable

The dependent variable for this study was pain management and assessment.

3.5.2 Independent Variables

The Independent variables for this study were;

- Social-demographic factors; age, sex, marital status, religion, tribe and income status.
- Personal factors; attitude towards pain, cultural issues/myths about pain assessment and management.
- Knowledge factors: level of awareness, knowing the tools of pain assessment and management, availability of pain assessment and management training programs for nurses.
- Hospital Related factors; Failure to recognize pain, availability of pain mitigating tools, and the ease of patients to respond to the pain dosage.

3.6 Sampling Procedure and Sample Size

3.6.1 Sample Size Estimation

The size was calculated using the Slovin's formulae (2010) as shown below:

$$n=N/ \{1+ (N*. e^2)\}$$

Where:

n=number of samples

N = total population

e = margin of error

Therefore, with the population of about 135 nurses in Case medical Centre, then the size was as follows

$$n=135/ \{1+ (135*.05^2)\}$$

$$n=135/ \{1+ (135*.000125)\}$$

$$n=135/ \{1+ (135x0.0125)\}$$

$$n=135/ (1+1.6875)$$

$$n=135/2.6875$$

$$n=50.2325$$

$$n=50$$

Therefore the sample size was 50 nurses.

3.6.2 Sampling procedure

The sampling design was a non-probability, convenient sampling procedure, since the data to be collected was highly confidential and these practices are secretive in nature. All the shifts worked by the nurses were covered, considering both the day and the night shifts. The sample selected represented the whole population of the nurses in Case medical centre, Kampala.

3.7 Data collection techniques and tools.

Data was collected using the self-administered questionnaires. The questionnaire comprised of four parts which contained 53 questions. The first part consisted of questions which covered demographic information; the second part contained questions which assessed the knowledge of the participants towards pain assessment and management. The third part contained questions which assessed the attitude factors and then the fourth part contained questions that assessed the hospital related factors.

3.7.1 Pre-testing of the tool

To ensure the validity and reliability; the pretest of the tool was carried out by interviewing 5 (five) nurses that had worked in the morning shift at International Hospital Kampala, then the tool was refined according to the challenges/ issues observed during pretesting.

3.8 Data procedure and analysis

An informed written consent from the study participants was gained, and the questionnaires were administered to the study participants. The study participants were tasked on how knowledgeable they were about pain assessment and management, their attitude towards pain assessment and management, availability of pain assessment tools and hospital related factors affecting pain assessment and management in Case Medical Centre Kampala.

Data cleaning was done at the end of the data collection and the questionnaires given numbers for identification. Data was entered into the Epi-data and analyzed using MS Excel and STATA.

Collected information was edited during and after collection, coded, data tabulated and analyzed.

Descriptive statistics was used to provide information on measures of the tools used to measure assessment and management of pain from the data.

Frequency distribution tables and computation of proportions in percentage were used in analyzing the socio-demographic (categories) variables and main reasons for effective assessment and management of pain. Univariate and multivariate analysis were performed to calculate odds ratios, OR. Ages, marital status, number of years in service, were selected as potential explanatory factors contributing to the effective assessment and management of pain. Strength of association was measured using P-value and 95% confidence intervals.

Ordinal measurement scales were used to measure knowledge (YES/NO and I don't know) and Likert scale was used to measure the perceptions (Agree, disagree, neutral and I don't know).

3.9 Quality control

To increase the accuracy of data collection, research assistants were recruited and trained on basic data collection and guidelines for sampling and questionnaire administration, the questionnaires were pretested prior to data collection to make sure it is exhaustive. There was a study meeting to review collection process and evaluate the study. Questionnaires were examined at the end of each day to ensure that they are collected, completed and stored safely.

3.11 Dissemination of Results

The study report will be submitted to International Health Sciences University, (IHSU) as partial fulfillment of the requirement for the award of Bachelors Degree in Nursing Sciences.

3.12 Ethical Considerations

- An introductory letter was presented to Case medical centre from International Health Sciences University.
- An authorization signature and stamp from Case medical Centre were obtained.
- Informed verbal and written consent were obtained from respondents.
- Strict confidentiality was maintained all through data collection and analysis. No writing names on the questionnaires.
- The collected data was restricted to the principal investigator.

3.13 Limitations of the study

The limitations of the study might be;

- The study population might be a busy one; they might hardly have time to fill in the questionnaire.
- The topic under study might have tendencies of answers based on subjectivity, what is right for one may be wrong for another party. This may tend to bias the results.
- The high influx of patients in the ward might leave the nurses with limited time to participate in the survey.

CHAPTER FOUR:PRESENTATION OF RESULTS

4.0 Introduction

This presents the findings following the analyses of the data collected. It specifically presents the findings related to the factors influencing pain assessment and management among nurses at Case Medical Centre, Kampala

Specifically we looked at;

- The nurses' knowledge level towards pain assessment and management among nurses at Case Medical Centre Kampala.
- Nurses' attitudes towards pain assessment and management at Case Medical Centre Kampala.
- Health facility related factors influencing pain assessment and management among nurses at Case Medical Centre Kampala.

4.1 Demographic factors

4.1.1 Uni-variate analysis

Table 1: Socio-demographic factors of the respondents

Variables	Frequency(n)	Percentage (%)
Gender		
Male	8	16.0
Female	42	84.0
Age in complete years		
20 -29	14	28.0
30-39	20	40.0
40-49	10	20.0
50 and above	6	12.0
Level of qualification		
Enrolled	4	8.0
Doubled trained	8	16.0
Diploma	30	60.0

Degree	6	12.0
Master	2	2.0
How many years of working experience do you have?		
< 5 years	19	38.0
≥ 5 years	31	62.0
Which unit/ward do you currently work?		
Causality department	14	28.0
Intensive Care Unit	21	42.0
Post-operative ward	15	30.0

Majority of the respondents 42(84.0%) were female while male made only 16% of the respondents, with 20(40.0%) in the age group 30-39 years. 30(60.0%) were diploma holders by qualification, 31(62.0%) had worked for more than five years, 21(42.0%) worked in ICU, 15 (30.0%) in post-operative ward and 14(28.0%) in causality department.

4.1.2 Bi-variate analysis

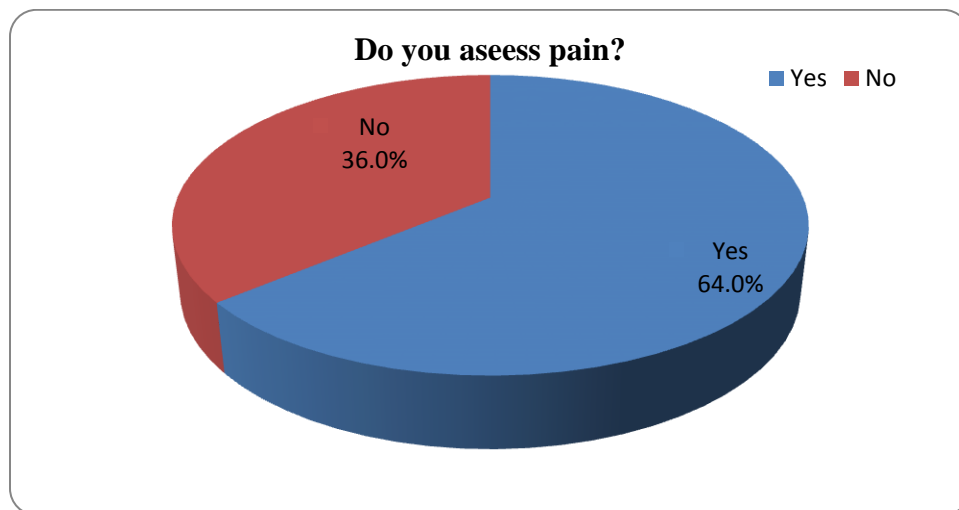
Table 2: Socio-demographic factors associated with pain assessment

Variables	Asses pain				X ²	P-value
	Yes	%	No	%		
Gender						
Male	5	15.6	3	16.7	4.72	.264
Female	27	84.4	15	83.3		
Age in complete years						
20 -29	8	25.0	6	33.3	2.69	.082
30-39	14	43.8	6	33.3		
40-49	6	18.7	4	22.3		
50 and above	4	12.5	2	11.1		
Qualification						
Enrolled					3.94	.067
Doubled trained	3	9.4	1	5.6		
Diploma	6	18.7	2	11.1		

Degree	20	62.5	10	55.6		
Masters	2	6.3	4	22.3		
	1	3.1	1	5.6		
How many years working experience do you have?						
< 5 years	11	34.4	8	44.4	11.73	.003*
≥ 5 years	21	65.6	10	55.6		
Which unit/ward do you currently work?						
Causality department	9	28.1	5	27.8	13.52	0.002*
Intensive Care Unit	13	40.6	8	44.4		
Post-operative ward	10	31.3	5	27.8		

The years of working experience($X^2=11.73$, $P=0.003$), the units/ward which a nurse currently worked ($X^2=13.52$, $P=0.002$), had a significant association with pain assessment while the rest of other demographic factors did not have a significant association with pain assessment in the hospital.

Figure 2: Showing the level of pain assessment among nurses.



Majority of the respondents 64.0% assessed pain and 36.0% of the respondents did not assess pain.

4.2 Knowledge factors

4.2.1 Univariate analysis

Table 3: Knowledge factors of the respondents

Variables	Frequency(n)	Percentage (%)
Are you aware about pain assessment during patient care?		
Yes	46	92.0
No	4	8.0
What do you understand by pain assessment?		
Assessing patient with pain.	7	14.0
Rating the severity/intensity of the pain in a patient	17	34.0
Ways patient rate pain on a scale of 0-10	26	52.0
Do you assess pain when providing care to the patients?		
Yes	32	64.0
No	18	36.0
How important is pain assessment during patient's care?		
Extremely important	34	68.0

Moderately important	15	30.0
Not important	1	2.0
Have you received any training on pain assessment?		
Yes	44	88.0
No	6	12.0
Are you aware of pain assessment tools?		
Yes	48	96.0
No	2	4.0
Do you use pain assessment tools?		
Yes	28	56.0
No	22	44.0
If yes, what is the frequency of assessing pain using the pain assessment tools?		
Always	10	35.7
Sometimes	18	64.3
If No, then how do you use assess pain		
Don't assess pain	22	
Are pain assessment tools available in your word/unit?		
Yes	35	70.0
No	15	30.0
Do you think pain assessment tool is in important?		
Yes	40	80.0
No	10	20.0
What are some of the benefits of pain assessment tools?		
Easy pain assessment and management	50	100.0
Have you received any training on pain assessment tools?		
Yes	44	88.0
No	6	12.0
Source of information on pain assessment		
During training	44	88.0
Fellow health workers	24	48.0
CME/workshop	48	96.0

Internet/others	5	10.0
Have you had earlier experience managing pain among patients?		
Yes	41	82.0
No	9	18.0
Have you attended any training on pain management within the last one year?		
Yes	44	88.0
No	6	12.0
How do you manage pain in this ward?		
According to a fixed schedule	2	4.0
According to WHO analgesic ladder of pain management	2	4.0
When patients ask for the analgesics	5	10.0
When necessary (PRN)	41	82.0
Are you aware of any consequences of poor pain management?		
Yes	42	84.0
No	8	16.0
State some of the consequences? If yes.		
Cost effect to the patient	38	90.5
Poor recovery	34	81.0
Not having enough rest	40	95.2

Majority of the respondents 46(92.0%) were aware about pain assessment during patient care, most of the respondents 26(52%) defined pain assessment as rating the severity/intensity of pain in a patient, 32(64.0%) did assess pain when providing care. When asked how important pain assessment during care was, most of the respondents 34(68.0%) reported that it is extremely important, 15(30.0%) said it is moderately important with only 2.0% saying it is not important.

Most of the respondents 44(88.0%) had received training on pain assessment, 48(96.0%) of the respondents were aware about pain assessment tools. 28(56.0%) used pain assessment tools with 10(35.7%) and 18(64.3%) of them using it always and sometimes respectively. And those who did

not use the tool did not use any other methods to assess pain. 35(70.0%) of the respondents mentioned that the pain assessment tool is always available in their ward.

Majority of the respondents 40(80.0%) said that the pain assessment tool is important. All the respondents said pain assessment tool is important for easy pain assessment and management. Most of the respondents 44(88.0%) said they had training on pain assessment tool, with almost all of the respondents 48(96%) mentioning CME/workshop as the main source of their information, 44(88.0%) of the respondents mentioned training as their source of the information, 24(84.0%) of them stated that obtained information from nursing career and 5(10%) mentioned internet and other sources. 41(82.0%) had managed pain earlier in the experience, 44 88% of the respondents had attended training on pain management within the last one year. 41(82%) managed pain whenever it was necessary, 42(84%) were aware of consequences of poor pain management and 40(95.2%) said poor pain management will interfere with the normal rest of the patient.

4.2.2 Bi-variate analysis

Table 4: Knowledge factors associated with pain assessment

Variables	Asses pain				X ²	P-value
	Yes	%	No	%		
Are you aware about pain assessment during patient care?						
Yes	30	93.8	16	88.9	30.95	.000*
No	2	6.2	2	11.1		
What do you understand by pain assessment?						
Assessing patient with pain.	4	12.5	3	16.7	3.84	0.726
Rating the severity/intensity of the pain in a patient	12	37.5	5	27.8		
Ways patient rate pain on a scale of 0-10	16	50.0	10	55.5		
How important is pain assessment during patient's care?						
Extremely important	23	71.9	11	61.1	21.46	.000*

Moderately important	9	28.1	6	33.3		
Not important	0		1	5.6		
Have you received any training on pain assessment?						
Yes	30	93.8	14	77.8	5.83	.004*
No	2	6.2	4	22.2		
Are you aware of pain assessment tools?						
Yes	31	96.9	17	94.4	12.85	0.000*
No	1	3.1	1	5.6		
Are pain assessment tools available in your ward/unit?						
Yes	23	71.9	12	66.7	19.41	.000*
No	9	28.1	6	33.3		
Do you think pain assessment tool is important?						
Yes	28	87.5	12	66.7	7.25	.000*
No	4	12.5	6	33.3		
Have you received any training on pain assessment tools?						
Yes	30	93.8	14	77.8	5.83	0.004*
No	2	6.2	4	22.2		
Have you attended any training on pain management within the last one year?						
Yes	31	96.9	13	72.2	5.83	0.004*
No	1	3.1	5	27.8		
How do manage pain in this ward?						
According to a fixed schedule	1	3.1	1	5.6	16.48	.000*
According to WHO analgesic	1	3.1	1	5.6		

ladder of pain management						
When patients ask for the analgesics	4	12.5	1	5.6		
When necessary (PRN)	26	81.3	15	83.2		
Are you aware of any consequences of poor pain management?						
Yes	26	81.3	16	88.9	3.77	.092
No	6	18.7	6	11.1		

Being aware about pain assessment ($X^2=30.95$, $P=0.000$), knowing the importance of pain assessment ($X^2=21.46$, $P=0.000$), have received training of pain assessment, pain assessment tool and pain management ($X^2=5.83$, $P=0.004$), availability of pain assessment tool ($X^2=19.41$, $P=0.000$), if pain assessment tool was important ($X^2=7.25$, $P=0.000$) and how pain is managed had significant association with pain assessment in the wards while other knowledge factors did not have a significant association with pain assessment.

4.3.1 Uni-variate analysis

Table 5 :Attitude factors of the respondents

Variables	Frequency(n)	Percentage (%)
Pain is assessed correctly in this ward		
Strongly disagree	46	92.0
Agree	4	8.0
Pain tools are always used in this ward		
Disagree	15	30.0
Agree	35	70.0
Pain tools help in effective pain assessment		
Agree	17	34.0
Strongly agree	33	66.0
Pain tools help in effective pain management		
Disagree	2	4.0
Agree	16	32.0

Strongly agree	32	64.0
Pain medication should only be given to patients suffering from severe pain		
Strongly disagree	3	6.0
Disagree	4	8.0
Agree	17	34.0
Strongly agree	26	52.0
Patients are often prescribed too much pain medication		
Strongly disagree	1	2.0
Disagree	45	90.0
Agree	4	8.0
Pain is always managed correctly in this ward		
Strongly disagree	2	4.0
Disagree	2	4.0
Agree	43	86.0
Strongly agree	3	6.0

Most of the respondents 46(92%) of the respondents strongly disagreed that pain was assessed correctly in their wads, 35(70%) agreed that pain assessment tools are always available on the ward. 33(66%) of the respondents mentioned that pain assessment tools help in the effective pain assessment, and 32(64%) agreed that pain tool helps in effective pain management. Most of the respondents strongly agreed that pain medication should only be given to patient experiencing severe pain, 45(90.0%) of the respondents disagreed that patients are often prescribed too much medication and 43(86%) of the respondents agreed that pain was managed correctly in their wards.

4.3.2. Bi-variate analysis

Table 6: Attitude factors associated with pain assessment.

Variables	Asses and manage pain				X ²	P-value
	Yes	%	No	%		
Pain is assessed correctly in this ward						
Strongly disagree	31	96.9	15	83.3	7.70	0.412
Agree	1	3.1	3	16.7		
Pain tools are always used in this ward						
Disagree	4	12.5	6	33.3	19.4	0.000*
Agree	28	87.5	12	66.7		
Pain tools help in effective pain assessment						
Agree	6	18.8	11	61.1	10.0	0.000*
Strongly agree	26	81.2	7	38.9		
Pain tools help in effective pain management						
Disagree	1	3.1	1	5.6	11.0	0.000*
Agree	6	18.8	10	55.6		
Strongly agree	25	78.1	7	38.8		
Pain medication should only be given to patients suffering from severe pain						
Strongly disagree	2	6.3	1	5.6	8.02	.087
Disagree	1	3.1	3	16.7		
Agree	8	25.0	9	50.0		
Strongly agree	21	65.6	5	27.7		
Patients are often prescribed too much pain medication						
Strongly disagree	0		1	5.6	7.41	.079
Disagree	30	93.8	15	83.3		
Agree	2	6.2	2	11.1		
Pain is always managed correctly in this ward						
Strongly disagree	1	3.1	2	11.1	5.84	.528
Disagree	28	87.5	4	22.2		
Agree	3	9.4	12	66.7		
Strongly agree						

Attitude factors that were found to have a significant association with pain assessment and management are, availability of the pain assessment tool($X^2=19.41$, $P=0.000$), pain assessment tools

help in effective pain assessment ($X^2=10.00$, $P=0.000$) pain assessment tools help in effective pain management ($X^2=11.07$, $P=0.000$, 95% CI).

4.4 Health facility factors

4.4.1. Uni-variate analysis

Table 7: Health facility factors of the respondents

Variable	Frequency(n)	Percentage (%)
Are there any guidelines in this ward regarding pain assessment?		
Yes	35	70.0
No	15	30.0
Do these guidelines influence the way you manage and assess pain?		
Yes	30	60.0
No	20	40.0
If yes, please state how?(n=30)		
It will always remind you to assess pain	21	70.0
Its guide you when you are doing the wrong things	18	60.0
Its keeps you updated.	12	40.0
Are pain tools always available on this ward?		
Yes	35	70.0
No	15	30.0
Are analgesics always available on this ward?		
Yes	50	100
No	0	
Any comment on pain assessment		
Pain assessment should be encourage by all nurse	34	68.0
It should be done by all nurses before management of pain	30	60.0

Majority of the respondents 35(70.0%) reported the presence of guidelines for pain assessment in the ward, 30(60.0%) mentioned that these guidelines had an influential effect on the way they

assess and manage pain in the ward with 21(70.0%) of those who are influenced by the presence of these guidelines said it reminds them on assessment of pain, and 18 of them mentioned that the guidelines guides them in-case they are not sure and 12 of them said the guidelines keep them updated. 35 (70%) of the respondents said the wards always have pain assessment tools. All the respondents 50(100.0%) reported that analgesics are always available in their ward. When asked on any comment on pain assessment, 34(68.0%) of the respondents commented that pain assessment should be encourage by all nurses as it allows proper management of patient’s pain while 30(60.0%) commented that it should be done by all nurses before pain management when good results are expected.

4.4.2. Bi-variate analysis

Table 8:Health facility factors associated with pain assessment

Variable	Asses and manage pain				X ²	P-value
	Yes	%	No	%		
Are there any guidelines in this ward regarding pain assessment?						
Yes	26	81.3	9	50.0	17.54	.001*
No	6	18.7	9	50.0		
Do these guidelines influence the way you manage and assess pain?						
Yes	22	68.8	8	44.4	12.49	0.003*
No	10	31.2	10	55.6		
Are pain tools always available on this ward?						
Yes	28	87.5	7	38.9	19.41	.000*
No	4	12.5	11	61.1		

At bi-variate analysis, availability of guidelines regarding pain assessments in the wards (X²=17.54, P=0.000), influence of the guidelines on the way one assesses and manages pain (X²=, P=12.490.003) and availability of pain assessment tools in the ward always (X²=19.41, P=0.000) had a significant association with pain assessment and management.

CHAPTER FIVE:DISCUSSION

5.0 Introduction

This chapter discusses the research findings in relation to other reviews of studies conducted elsewhere which are in line with the specific study objectives. It also explains the obtained results from the study.

The level of pain assessment by nurses in this study was moderate (64.0%); this finding is justified by the fact that pain assessment and management in the wards was a crucial part in the management of patients and nurses were knowledgeable about pain assessment and management. This finding was inconsistent with findings from a study by Swanson et al, 2005, who stated that pain has often been poorly assessed and inadequately managed by nurses due to failure to appreciate the need to translate theoretical knowledge about pain into practice (Swanson et al, 2005).

In this study, the general knowledge about pain assessment was adequate as most of the respondents (92.0%) were aware about pain assessment; knowledge about pain assessment was found to have a significant association with pain management (P-values of 0.000). This could be because all the nurses interviewed worked in wards with patients who required pain management and therefore; nurses had to assess pain before managing it.

This finding was inconsistent with a study by Pasero et al, 2009, who emphasized that knowledge deficits regarding pain assessment principles among nurses is one of the barriers to effective pain assessment and management (Pasero et al, 2009). This study also noted that most (88%) of the nurses had training on pain assessment which had a significant association (P-value 0.000) with pain assessment and management by nurses. Similar results were identified in a study by Innis et al, 2004 which noted the impact of education among nurses in the management of pain (Innis et al, 2004).

Availability of pain assessment guidelines in the hospital had a significant association (P-value 0.001) with pain assessment and management. This could be due to the presence of the pain management guidelines which highly ward influenced the nurses' ability to assess and manage pain. This was consistent with a study done by Kituyi et al, 2011 who noted that absence of protocols and guidelines on pain assessment and management has been cited to hinder effective pain assessment and management (Kituyi et al, 2011). Other hospital related factors such as busy units and

inadequate staffing did not have a significant association ($P>0.05$) with pain assessment and management. This findings was inconsistent with the study by Rampanjota et al, 2006 who noted that busy units, inadequate staffing, limited time, inadequate staff nurse's training, reluctance to prescribe opioids, poor communication, lack of accountability, patient's attitude and health status are the commonly cited organizational barriers to adequate pain assessment and management (Rampanjota et al, 2006).

Nurses' Attitude towards use of pain assessment tools was significantly associated of (P-value 0.000) with pain assessment and management. This could be because pain assessment in the hospital was a mandate and most of the nurses have been trained about pain assessment and management. This finding is consistent with a study by Kaasalainen et al, 2007 who found out that inadequate or no use of pain assessment tools by nurses is influenced by many of the preconceptions and attitudes about patient's pain, and that is why most nursing staff only rely on their clinical judgment (Kaasalainen et al, 2007).

This study also found that majority of the nurses strongly agreed that pain assessment tools help in effective assessment and management. These findings are in consistent with King et al, 2004 who had concluded that inadequacies in the pain management processes are due to myths and bias originating from general attitudes and beliefs of nurses (King et al, 2004).

CHAPTER SIX: CONCLUSION AND RECOMMENDATION

6.0 Introduction

This chapter presents a brief summary of study findings and recommendations.

6.1 Conclusions

The study found out that;

Awareness about pain assessment using pain assessment tools during pain care was found to play a crucial role in the assessment and management of pain.

Knowledge about the importance of pain assessment during patient care and going through training on pain related topics was significantly associated with pain assessment and management.

The attitude related factors that had significant association with pain assessment and management were; availability of the pain assessment tool, pain assessment tools help in effective pain assessment, and pain assessment tools help in effective pain management

The hospital related factors that had significant association with pain assessment and management were; availability of guidelines regarding pain assessments in the wards, influence of the guidelines on the way one assesses and manages pain and availability of pain assessment tools in the ward.

6.2 Recommendations

The following are recommended in response to findings revealed by this study

To the study site

- The hospital should provide all types of pain assessment tools to the health care providers so that different types of pain are easily assessed without relying on only one single tool.
- The hospital should ensure that all nurses are trained continuously about pain assessment and management through internally organized trainings, and supervisory and monitoring bodies must be appointed to ensure compliancy by nurses.
- The hospital should provide guidelines to the nurses and others health care professionals in the hospital regarding pain assessment and management.
- The hospital should provide facilitators and monitor the training of the workers of pain and related topics.

- The hospital should ensure that there are always adequate pain relief medications in all classes according to the analgesic ladder.

To the nurses

- The nurses should reinforce their knowledge on pain assessment by attending training and continuous medical education on pain assessment and management.
- The nurses should change attitude towards patient experiencing pains and adhere to the universal set standards of pain assessment and management.

To policy makers

- Ministry of health and ministry of education should in-cooperate pain assessment and management in the in-service training of health workers.

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APPENDIX I: CONSENT FORM

Topic under study: Factors influencing pain assessment and management among nurses at case medical center Kampala.

Questionnaire No. Date

Introduction and consent:

My is name Mary Kabahenda of International Health Sciences University, pursuing a bachelors of nursing science i would like to request you to kindly take part in the above mentioned study by responding to the questions that i am going to ask you. This research is a basic requirement for study purposes. The participation in this study is free and voluntary, the information you will provide will be confidential, and will serve the purpose of this study. Taking part and responding to these questions will take you the minimum of ten and a maximum of fifteen minutes. Taking part in this study by giving your information will be a proof that you took part in the study.

All information given will be confidential

Have understood? Yes No

Do you agree to participate Yes No

Initials of respondent.....

Signature of respondent.....

Signature of the research assistant....., Date.....

APPENDIX II: QUESTIONNAIRE
PART ONE: DEMOGRAPHIC FACTORS

1. Gender

Male []

Female []

2. Age in complete years

20 -29 []

40-49 []

30-39 []

50 and above []

3. Level of qualification

Enrolled []

Doubled trained []

Diploma []

others

Degree []

Master []

4. How many years of working experience do you have?

< 5 years []

≥ 5 years []

5. Which unit/ward do you currently work?

Causality department []

Intensive Care Unit []

Post-operative ward []

PART TWO: KNOWLEDGE

1. Are you aware about pain assessment during patient care?

Yes [] No []

2. What do you understand by pain assessment?

.....

3. Do you assess pain when providing care to the patients?

Yes [] No []

4. How important is pain assessment during patient’s care?

Extremely important [] moderately important []

Not important []

5. Have you received any training on pain assessment?

Yes [] No []

6. Are you aware of pain assessment tools?

Yes [] No []

7. Do you use pain assessment tools?

Yes [] No []

8. If yes, what is the frequency of assessing pain using the pain assessment tools?

Always [] Sometimes [] Never []

9. If No, then how do you use assess pain?

10. Are pain assessment tools available in your ward/unit?

Yes [] No []

11. Do you think pain assessment tool is in important?

Yes []

No []

12. What are some of the benefits of pain assessment tools?

.....
.....

13. Have you received any training on pain assessment tools?

Yes []

No []

14. Source of information on pain assessment

During training []

Fellow health workers []

CME/workshop []

Others (specify).....

15. Have you had earlier experience managing pain among patients?

Yes []

No []

16. Have you attended any training on pain management within the last one year?

Yes []

No []

17. How do manage pain in this ward?

According to a fixed schedule []

According to WHO analgesic ladder of pain management []

When patients ask for the analgesics []

When necessary (PRN) []

18. Are you aware of any consequences of poor pain management?

Yes []

No []

19. State some of the consequences?

.....

PART THREE: ATTITUDE

SD-Strongly Disagree, D-Disagree, N-Neutral, A-Agree and SA-Strongly Agree

		SD	D	N	A	SA
1	Pain is assessed correctly in this ward					
2	Pain tools are always used in this ward					
3	Pain tools help in effective pain assessment					
4	Pain tools help in effective pain management					
5	Pain medication should only be given to patients suffering from severe pain					
6	Patients are often prescribed too much pain medication					
7	Pain is always managed correctly in this ward					

PART FOUR: HEALTH FACILITY FACTORS

1. Are there any guidelines in this ward regarding pain assessment?

Yes []

No []

2. Do these guidelines influence the way you manage and assess pain?

Yes []

No []

3. If yes, please state how?

.....

4. Are pain tools always available on this ward?

Yes []

No []

5. Are analgesics always available on this ward?

Yes []

No []

6. Any comment on pain assessment

.....

.....

Thank you for your participation

APPENDIX III: INTRODUCTORY LETTER



Office of the Dean, School of Nursing

Kampala, On the 19th day of November, 2014

TO WHOM IT MAY CONCERN

Re: Assistance for Research

Greetings from International Health Sciences University.

This is to introduce to you **Kabahenda Mary** Reg. No. **2010-BNS-FT-014**, who is a student of this University. As part of the requirements for the award of a Bachelor of Nursing Sciences of this University, the student is required to carry out field research for the submission of a Research Project.

Mary would like to carry out research on issues related to: **Factors influencing pain assessment and management among nurses at Case Medical Center, Kampala**

I therefore request you to render her such assistance as may be necessary for her research.

I, and indeed the entire University are thanking you in anticipation for the assistance you will render to her.

Sincerely Yours,



Fr
MRS. WAFULA ELIZABETH
DEAN

Approved 24/11/2014
Nalwadda Claire HR.



MAKING A DIFFERENCE IN HEALTH CARE

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