ASSESSMENT OF NURSES’ KNOWLEDGE AND ATTITUDE ABOUT PALLIATIVE CARE AMONG NURSES AT UNIVERSITY TEACHING HOSPITAL OF KIGALI.

KARIKWERA MARIE CLAIRE

College of Medicine and Health Sciences

School of Nursing and Midwifery

Master of Science Degree in Nursing (Pediatric Track)

2017
ASSESSMENT OF NURSES’ KNOWLEDGE AND ATTITUDE ABOUT PALLIATIVE CARE AMONG NURSES AT UNIVERSITY TEACHING HOSPITAL OF KIGALI.

BY

KARIKWERA MARIE CLAIRE

Student Registration Number: 216342430

A dissertation submitted in partial fulfilment of the requirements for the degree of MASTER OF PEDIATRIC TRACK.

In the College of Medicine and Health Sciences.

Supervisor: Dr Lakshmi Rajeswaran

July, 2017
Declaration

I do hereby declare that this dissertation submitted in partial fulfilment of the requirements for the degree of MASTERS OF SCIENCE in NURSING, at the University of Rwanda/College of Medicine and Health Sciences, is my original work and has not previously been submitted elsewhere. Also, I do declare that a complete list of references is provided indicating all the sources of information quoted or cited.

Date and Signature of the student
12/6/2017

a. Authority to submit the dissertation

Surname and First Name of the Supervisor: Dr Rajeswaran Lakshmi

In my capacity as a supervisor, I do hereby authorize the student to submit his/her dissertation.

Date and Signature of supervisor/Co-Supervisor
12/6/2017
Acknowledgements

I am so thankful to god almighty that sustained me and allowed me to achieve this work by his grace.

I would like also to thank the Government of Rwanda through the Ministry of health for the scholarship of my studies.

I deeply address my sincere thanks to my supervisor Dr. Rajeswaran Lakshmi for her guidance, commitment, time and constructive advice throughout this work.

A special thanks goes to the teaching staff of for the knowledge they offered to me.

I recognize all individuals who contributed to the success of this work.

May the almighty God bless you all!
Abstract

Introduction: Palliative care (P.C) is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification, perfect assessment, treatment of pain and other physical, psychosocial and spiritual problems. In previous years palliative care was known as the care of the patient who is close to death but now, the capacity of palliative care has expanded to include patients who may live for many years with chronic disease.

The aim of the Study: The study aimed to assess knowledge and attitude of the nurses working at University Teaching Hospital of Kigali about palliative care.

Methods: Descriptive, cross sectional quantitative study design and the convenience sampling procedure were used for conducting the study. A sample of 139 nurses working in the pediatric and surgical ward was chosen for this study. Data were collected by using questionnaire with demographic data and palliative care Quiz for Nurses (PCQN) which was developed by the researchers. Pilot study was conducted among 16 nurses.

Results: Study results have shown that only 9.3% of the respondents had good knowledge towards PC, 8.63% had in service-education on palliative care and no one had a good attitude towards PC.

Conclusion: The nurses had fair knowledge, but their attitude towards PC was poor. Recommendations are that integration of the national health policy related to PC in the national curriculum of nurse education and provide training related to PC for the nurses.

Keywords: Knowledge, Attitude, Palliative care, Registered nurses.
LIST OF SYMBOLS AND ACRONYMS

AIDS: Acquired Immune Deficiency Syndrome

CMHS: College of Medicine and Health Sciences.

CHUK: Centre Hospitalier Universitaire de Kigali

HIV: Human Immune Virus

IRB: Institute review board.

MOH: Ministry of Health

PC: Palliative care.

WHO: World Health Organization

UTHK: University Teaching Hospital of Kigali

PCQN: Palliative Care Quiz for Nursing

PLWHA: Person Living With HIV/AIDS.

FATCOD: Frommelt Attitude Toward Care Of the Dying scale.

SPSS: Statistical Package for the Social Sciences
TABLE OF CONTENTS

Declaration ..................................................................................................................i
Acknowledgements .................................................................................................ii
Abstract .....................................................................................................................iii
LIST OF SYMBOLS AND ACRONYMS .................................................................iv
TABLE OF CONTENTS .........................................................................................v
LIST OF TABLES ..................................................................................................ix
LIST OF FIGURES ..................................................................................................x
CHAPTER I: INTRODUCTION ...............................................................................1
I.1. Introduction ......................................................................................................1
I.5. Research objectives ............................................................................................4
I.5.1. Main objective ...............................................................................................4
I.5.2. Specific objectives .........................................................................................4
I.6. Research questions ............................................................................................4
I.7. Significance of the study ....................................................................................4
I.8. Conceptual and operational definitions ..........................................................5
I.9. Organization of the study ..................................................................................5
Conclusion ..............................................................................................................6
CHAPTER II: LITERATURE REVIEW .................................................................7
II.1. Introduction ....................................................................................................7
II.2. Theoretical literature ......................................................................................7
II.2.1. Knowledge about palliative care .................................................................8
II.2.3. Empirical Literature ..................................................................................12
II.3. Attitudes toward palliative care .........................................................................13
II.4. Critical Review and Research Gap identification ............................................14
II.5. Conceptual framework ....................................................................................14
CHAPTER III: METHODOLOGY .........................................................................15
# Table of Contents

III.1. Introduction ................................................................. 16
 III.2. Research design ............................................................. 16
 III.3. Research approach .......................................................... 16
 III.4. Research setting .............................................................. 16
 III.5. Population ........................................................................ 18
 III.6. Inclusion and exclusion criteria ........................................... 18
 III.7. Sampling ........................................................................... 19
 III.7.1. Sampling strategy .......................................................... 19
 III.7.2. Sample size ..................................................................... 19
 III.8. Data collection ................................................................... 20
 III.8.1. Data collection instruments .............................................. 20
 III.8.2 Data collection procedure ................................................ 21
 III.9. Data analysis ..................................................................... 22
 III.10. Ethical considerations ......................................................... 22
 III.11. Data management ............................................................... 23
 III.12. Data dissemination ............................................................. 23
 Conclusion .................................................................................. 23

CHAPTER IV: RESULTS ................................................................ 24
 4.1. Introduction ........................................................................ 24

CHAPTER V: DISCUSSION .......................................................... 35
 V.1. Socio-demographic information ............................................ 35
 V.2. Knowledge about palliative care .......................................... 35
 V.3. Attitude about palliative care ................................................ 36
 V.4. Limitations of the study ......................................................... 36
 V.5. Summary .............................................................................. 36

CHAPTER VI: CONCLUSIONS AND RECOMMENDATION ........... 37
 VI.1. Recommendation ............................................................... 37
 VI.1.1. Recommendation for nursing practice .................................. 37
 VI.1.2. Recommendation for nursing education .............................. 37
 VI.1.3. Recommendation for nursing research ............................... 37

APPENDIX II .............................................................................. 40

QUESTIONNAIRE ................................................................. Error! Bookmark not defined.

CONSENT TO PARTICIPATE IN A RESEARCH STUDY ............... 40
APPENDIX II ...........................................................................................................47
PERMISSION OF USING PCQN AS TOOL. .........................................................47
LIST OF TABLES

Table 1.............................................. Error! Bookmark not defined.
Table 2 Table 1.4.1. Demographic and characteristics of the sample ...... 24
Table 3 Table .4.2. The relationship between level of knowledge on palliative care and socio-demographic variables. ................................. 25
Table 4 Table 4.3. the relationship between level of attitude on palliative care and socio-demographic variables. ................................. 27
Table 5 Table 4.4 Nurse’s knowledge about palliative care. ..................... 28
Table 6 Table.4.5 the nurses ‘attitude of palliative care. .......................... 33
LIST OF FIGURES

Figure 1 WHO 3-step Ladder ................................................................. 9
Figure 2 Protocol for analgesic ladder .................................................. 10
Figure 3 Conceptual framework ......................................................... 14
Figure 4 Rwanda map ........................................................................ 18
Figure 5 The nurses' knowledge levels of palliative care ....................... 32
Figure 6 The nurses' attitude of palliative care .................................... 34
CHAPTER ONE: INTRODUCTION

1.1. Introduction

This chapter covers the background of the study, the problem statement, broad objectives, specific objectives, significance of the study.

According to WHO (2016),” Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification, perfect assessment treatment of pain and other problems, physical, psychosocial and spiritual.”

For the children palliative care is the full dynamic care of the mind, spirit as well as the body of the child and its family (WHO, 2016). The goals of palliative care are to relieve the symptoms and not to treat the cause (National Cancer Institute, 2016, p.2). Every woman, man or child with a chronic ill has the right to palliative care and in order to give high-quality palliative care and any health care provider must be trained about palliative care (Downing, Marston, Selwyn, & Ross-gakava, 2013, p.7).

Worldwide palliative care is still a developing science. Yet, it must be accessible and sustainable for all patients living with life limiting diseases as a necessary service (Downing et al., 2016, p.7).

In Africa, palliative care has started in Zimbabwe in 1979 with Island Hospice, while, in 1990 Kenya began palliative care with Nairobi Hospice to help the patients with cancer and those who are affected by HIV/AIDS and in Uganda palliative care began in 1993 and first Ugandan hospice created at Kampala (Kariuki et al., 2013, p.4).

In Rwanda, Palliative care has started in 2011 by a registered Nurse called Grace Mukankuranga, she started the first clinical hospice, known as the Rwanda Hospice and Palliative Care Center (RHPCC) and she started her service after receiving a seed grant and training on palliative care in the UK (Angela & David, 2011, p.8).

In order to increase the understanding of palliative care, in 2004 Rwandan Ministry of Health sent a group of the health care providers to Uganda. Following that, some non-government organizations like the Society of Women Against AIDS (SWAA) and Help the Hospices UK,
and Intra Health International HIV/AIDS Clinical Services Program organized training on palliative care for the health providers coming from in four district hospitals (Kibagabaga, Nyagatare, Rutongo and Byumba) (Rwanda Ministry of Health, 2011, p. 3).

1.2. **Background of the study**

The World Health Organization (WHO’) has improved community wellbeing approach by integrating palliative care into health forces. But until now many persons still have the problem with access to palliative care services as well as effective pain management, the reasons are: providing and sharing, opiophobia for the patients and the health care providers caused by insufficient knowledge about the use opioids (Powell et al. 2014, p. 3).

Kenya, Tanzania, Uganda and South Africa have included palliative care into healthcare plan as a strategic arrangement to support patient with malignant disorders while Rwanda and Swaziland has established national palliative care policies to sustain the strategy (Ntizimira et al., 2014, p. 6). According to Rwanda national palliative care policy (2011, p. 9), palliative care is new approach with several independent community-based organizations or non-governmental organization (NGOs) given that home care to weak people, particularly people living with HIV/AIDS (PLWHIV). Palliative care during domicile care was maintained by Partners in Health which has trained community health workers (CHW) recognized as coaches and they give out antiretroviral medicine and hold up patients in increasing their adherence to medication. But, Rwanda lacks the capacity to deliver palliative care at all levels (Rwanda National Palliative Care Policy 2011, p. 4).

According to Fadare et al (2014, p. 7), the thinking, awareness, approach, experiences and the behaviour of the health care providers during evaluation and treatment of the patients are the key points for successful palliative care deliverance. Palliative care teaching must be focusing on diverse audiences such as policy makers, healthcare providers, non--professional health employees and the common community in order to increase their skills, knowledge and their attitudes (Downing et al. 2010, p. 11). Since palliative care is a new approach in Africa, its teaching must be continuous and be available from early pre-registration schooling for health care professionals and for post-graduate students.
1.3. Problem statement

Palliative care is a recent concept in Rwanda and pain management idea is yet to be included in healthcare structure (Ntizimira, Nkurikiyimfura, Mukeshimana, Ngizwenayo, Mukasahaha et al., 2014, p.2). A study done in Rwanda by Uwimana & Struthers in( 2012), showed that above 50% of health care providers were not educated in palliative care reason why it is difficult to provide palliative care services. Despite many advantages of the palliative care for the patients and their families, many nursing programs do not prepare a separate course in palliative care as part of their curriculum. The nurses also had reduced understanding but had modest feeling towards palliative care. (Ayed, 2015, p.17).

Rwanda National Palliative Care Policy (2011), maintains that by 2020 all people with chronic disease, their families, and caregivers living in Rwanda have right to use palliative care services so this can be achieved by preparing all the health care professionals with adequate knowledge and attitude on palliative care.

Many health care providers are not well trained in palliative care because the lack of course content connected to relieve pain as well as palliative care (Ayed, 2015.p.8).

By 2013, University of Rwanda College of Medicine and Health Sciences School of Nursing and Midwifery (CMHS) included palliative care in it undergraduate curriculum where the nursing students can study this course in level four as “Palliative Care and Hospice in the module of Specialized Nursing”. This course has 30 hours.

Even if CMHS has integrated palliative care in the undergraduate curriculum in the recent year some hospitals are not yet establishing palliative care policy for example at UTHK there is no palliative care policy. This motivated the researcher to embark on assessing the nurses’ knowledge and attitude towards palliative care.
1.4. Aim of the research

The aim of this research was to assess knowledge and attitude of the nurses working at UTHK about palliative care.

1.5. Research objectives

1.5.1. Main objective

To assess knowledge and attitude of the nurses working at UTHK about palliative care.

1.5.2. Specific objectives

1. To assess the knowledge level of palliative care among the Nurses working in the pediatric ward and surgical ward at UTHK.

2. To evaluate the nurses’ attitudes about palliative care among the Nurses working in the pediatric ward and surgical ward at UTHK.

1.6. Research questions

1. What is the existing level of knowledge of Nurses work at UTHK in the Pediatric ward and surgical ward about palliative care?

2. What is the attitude of the Nurses work at UTHK in the Pediatric ward and surgical ward about palliative care?

1.7. Significance of the study

The aim of this study was to assess the knowledge and the attitude of the Nurses work in the pediatric ward and surgical ward at UTHK about palliative care.

The researcher was chose pediatric ward because she was already working in this ward and she needs cared for cases need palliative care. She also choose surgical ward because the children there have surgical problems such as spin cord injuries, burns, and other physical injuries are admitted to this ward.

This study will express real information to the policy maker, about the knowledge and the attitude that Nurses working at UTHK in that wards have on palliative care.
The UTHK and Ministry of health will benefit from this study by acquiring updated information about knowledge and attitude toward palliative care in referral hospitals of Rwanda, specifically in pediatric and surgical wards at UTHK and this will help them to plan and act accordingly in this domain, like to establish palliative care services at all levels of the healthcare system and organize the training of the nurses about palliative care.

The information generated from this study also could be useful for helping the nurses to provide quality palliative care to the patients.

Furthermore, this study will be a basis for future researcher in this field.

1.8. Conceptual and operational definitions

**Knowledge**: Knowledge is an information and understanding about a subject which a person has, or which all people have, or” information and skills acquired through experience or education; or what is known in a particular field or in total; facts and information” (dictionary.com, 2016). In this study, knowledge is conceptualised as nurses understanding and awareness about the principles of palliative care.

**Attitude**: Attitude is a” feeling or opinion about something or someone, or a way of behaving that is caused by this” (dictionary.combridge, 2016). According to oxforddictionaries.com (2016), attitude is” a way of thinking or feeling about something”.

In this study, the attitude is conceptualised as feelings or way of thinking of the nurses toward palliative care.

**Palliative care**: According to WHO(2016 ,para.1),” Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and perfect assessment and treatment of pain and other problems, physical, psychosocial and spiritual”.

Palliative care in this study is all activities done by health providers or care giver for the benefits of a patient who has chronic diseases in order to relieve symptoms without to cure.

1.9. Organization of the study

Introduction of the study, background of the study, problem statement, aim of the study, objectives (main and specific objectives) of the study, research questions, significance of the
study, definition of concepts, conclusion to chapter one, literature review which include introduction, theoretical literature, empirical literature, critical review and research gaps and conceptual framework and methodology which include: Introduction, research design, research approach, research setting, population, sampling, sampling strategy, sample size, data collection, data collection instruments, data collection procedure, data analysis, ethical considerations, data management, data dissemination, limitations and challenges and conclusion to chapter three, chapter four included results, chapter five included discussion and chapter six included conclusion and recommendations of the study.

Conclusion
Palliative care is essential because it has many benefits for the people living with chronic disease, their family as well as the country in terms of health, development and financial benefits as stated above by different researchers. The high prevalence of palliative care need was observed in the developing countries where the 78% of people needs palliative care (WHO, 2015, para.3). Many gaps were observed in developing countries with low prevalence of palliative care services integration into health care system. The support towards palliative care is essential in fighting against major problems related to chronic diseases; such problems are poverty due to prolonged admission of the patient in the hospital (Henry, 2011, p.4).
CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This chapter discusses the introduction of a literature review on palliative care, theoretical literature, empirical literature, critical review, research gap identification and conceptual framework. The research origins such HINARI, Pub med, Google scholar, has been used to identify the relevant literature studies conducted between 2011-2016.

2.2. Theoretical literature

The Center to advance Palliative Care(CAPC) define palliative care as the necessitate for expert interdisciplinary care fixed on sign and excellence of life for persons of any age and at any phase of a grave sickness(McCaskey et al. 2013,p.9). Worldwide, the number of persons living with HIV/AIDS (PLWHA) is increasing and the health care givers and plan creators look for available health care services for those people as well as to improve the quality of their life is needed (Uwimana & Struthers, 2012, p.3).

Each year, 40 million persons require palliative care, 78%of them reside in low and middle income countries global, which only 14% of those can access palliative care services. The major cause is a lack of training in palliative care for health providers (WHO, 2015, para.3).

A study done in Rwanda by Uwimana & Struthers 2012, p.9), with the purpose of investigated meet and unmet palliative care needs of PLWHA in selected areas in Rwanda. The sample was 306 participants include People living with HIV/AIDS, health care providers and coordinators of HIV/AIDS units. They used quantitative and qualitative as methodology; the data were analysed separately and triangulated. The results showed that mainly PLWHA needs palliative care such as pain reliefs, symptom management, financial support, and food maintain but they not found and above 50% of health care providers were no trained in palliative care therefore insufficient procedure and funds were a barrier to provide palliative care services. Although palliative care services is developing, there are many issues that affect the availability of palliative care, such as inconvenience of delivering and sharing, a lost ‘opiophobia’ between patients and health works with inadequate perceptive of how and when to utilize opioids by the doctors and trained nurses working in rural areas( Powell et al.,2014, p.11).
Palliative care is needed in developing countries because there is an increase in chronic diseases such as cancer, human immunodeficiency virus infection and sickle cell diseases (Henry, 2011, p.4).

Palliative care began in 1950 by Dr. Cicely Saunders who expressed her ideas toward modern hospice care based on close observation and pain management of the patient who was nearing the ending of life. In 1960, Psychiatrist in the United States Elisabeth Kübler-Ross, established the importance of effective communication and respect while caring for the patient at the end of life. In 1974, Dr. Balfour Mount, a surgical oncologist at Canada defined the word palliative care to demonstrate the difference between palliative care and hospice (Loscalzo, 2008, p.465).

Before 1928 penicillin was discovered, the common health care was palliative in nature but new therapies to treat as well as expand life have been made available and from 1960, the hospice started to end-of-life care to the people living with terminal illness.

Palliative programs became visible in hospitals similar to the Cleveland Clinic and Medical College of Wisconsin and in 1995 the landmark Support schoolwork mentioned the capacity as well as barriers to give successful, complete care designed for the people living with chronic disease (McCusker et al. 2013, p. 9).

Palliative care services must provide by all health and social care providers working with life limiting conditions patients, this care is given when the patient is awake, death and as well as bereavement period (Ryan 2014, p.4).

2.2.1. Knowledge about palliative care

The word” palliate” is derived from the Latin ward  palliates which means to “cloak or cover.” therefore it is expected to express care to hush-up the patient with another layer of comfort and support (McCusker et al. 2013, p.2).

Hospici is a service or program planned to make available a helpful setting designed for meeting the physical as well as emotional wishes of the terminally sick (Merriam-Webster Dictionary, 2016, p.16).

Pain is a disagreeable sensory and emotional incident connected by real or possible tissue injures (dictionary.combridge, 2016, p.24).
Pain can be caused by physiological factors, psychological factors and ecological factors like background, diagnosis, panic, anxiety and coping strategies and there are many types of pain such as Nociceptive pain (Ministry of Health Rwanda, 2012, p.6).

**WHO 3-step Ladder**

1. **mild**
   - Aspirin
   - Paracetamol
   - NSAIDs
   ± Adjuvants

2. **moderate**
   - A/Codeine
   - A/Dihydrocodeine
   - Tramadol
   ± step 1 and/or Adjuvants

3. **severe**
   - Morphine
   ± step 1 and/or Adjuvants

**Figure 1** WHO 3-step Ladder

(Official, 2016)
Possible hospital protocol for analgesic ladder

Figure 1 Protocol for analgesic ladder

Figure 2 shows the step of drugs prescription for pain management in Rwanda.

The aim of palliative care.

The plan of palliative care is to provide excellence life to the people living with serious illnesses and their families by preventing and taking care of the symptoms and complications of diseases through physical, psychological, spiritual as well as social support and it can be given directly after confirmation of the disease, during treatment, follow-up period and at the ending of living time (WHO, 2016, para.2).

Indications for palliative care

Palliative care is for every one living with the serious disease, such as Cancer, Heart disease, Lung diseases, Kidney failure, Dementia, ALS (amyotrophic lateral sclerosis and HIV/AIDS (WHO, 2016, para.7). Each year, 40 million persons require palliative care, 78% of them reside in low and middle income countries globally, while only 14% of those can access palliative care services. The major cause for this is a lack of training on palliative care for health providers (WHO, 2015, para.3).
Cancer is an up-and-coming community wellbeing crisis and in 2008 around 715 000 recent cases and 542 000 deaths in Africa caused by cancer furthermore in 2030 the number will be nearly doubled related to augmentation of residents as well as based on cancer condition the World Health Organization improved community wellbeing approach for developing palliative care services (Powell et al., 2014, p.7)

**Palliative care and hospice providers**

Palliative care can be delivery by the following people: a group of doctors, Nurses, Registered dieticians, Social workers, Psychologists, Physiotherapists as well as Chaplains and it is can be done at hospitals, home, cancer canters and at long -term care facilities (WHO, 2016 para, 6).

**Benefits of palliative care**

It helps enough control of pain and other symptoms get an intelligence of control, reduce burden on family members and reinforce relationships, increase understanding of the character of the disease, the patient and family participate in decision making and it help to get the care at home and prevent hospitalization as well as help the family cut prolonged grief and posttraumatic stress disorder (WHO, 2016 para, 4).

**The difference between palliative care and hospice**

Palliative care starts at diagnosis of the condition and during time of treatment but hospice care begins after stopping management of the illness as well as hospice care is generally provided just when the patient is likely to survive 6 months or less, both palliative care and hospice care give comfort to patient living with life treating disease (WHO, 2016 p.9).

In 2011 study done by Lynch et al. p.15. Showed that palliative care were well incorporated in 20 countries, despite the fact that 42% had no palliative care services at all as well as more 32% had simply cut off palliative care services.

According to Downing et al.(2010,p.5), the aim of palliative care is neither to accelerate nor to push back passing away, add the emotional component along with other characteristics of patient care which contribute to maintain structure in order to facilitate the patients exist once as dynamically as possible until he/she passes away. It also involves important assisting the
family in coping with the patient’s sickness and also during passing away as well as death counselling.

Although palliative care services are developing, there are many issues that affect the availability of palliative care such as inconvenience of delivering, sharing, as well as ‘opiophobia’ between patients and health care suppliers, and inadequate knowledge about how as well as when to utilize opioids for the doctors and trained nurses working in rural areas (Powell et al., 2014, p.11). Palliative care is needed in developing countries because of the increase in number of chronic diseases such cancer, human immunodeficiency virus infection and sickle cell diseases (Henry, 2011, p.4).

2.2.3. Empirical Literature

In 2013 in sub-Saharan Africa, approximate 24.7million of persons were existing with Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), 70% of total diseases, over 700,000 recent cases of cancer and 600,000 decease related to cancer in 2007, the rate are expected to increase by 400% within next 50years (Ntizimira et al.2014,p.18).Despite the confirmed need, recent condition of palliative care in Africa is inadequate with most components missing, like access to important painkillers, mainly oral morphine and there is general need of government guidelines that make out palliative care as necessary part of wellbeing care and there is poor education for both health care experts and the common community on palliative care (Henry, 2011, p.7).

A study was done by Fadare et al 2014,p.4, in Nigeria with the purpose of assessing the knowledge and attitude of healthcare workers in a tertiary level hospital. A cross-sectional study was conducted and a questionnaire was used to collect data from 400 nurses. and the sample 135(86%) responded that PC was on the dynamic management of the dying as 70.5% of participants equated PC to pain management and they had recognized that nurses plus other wellbeing care specialized are poorly prepared to help the patients in palliative care furthermore some explanation have been recognized are insufficiency in nursing learning, lack of curriculum content linked to ache management in addition to awareness associated with pain as well as palliative care.

Now understanding on PC is improved, the health care experts have a chance to learn right of entry to treatment as well as we can support our hard work to share skills also make a huge
A community health plan, as suggested by the World Health Organization (WHO), recommends the most excellent approach for explaining information as well as skills interested in evidence-based be cost-effective to facilitate access and availability of PC for everyone in developing countries (Henry, 2011, p.8).

### 2.3. Attitudes toward palliative care

Business dictionary (2016, p.9) defines attitude as “a predisposition or a tendency to respond positively or negatively towards a certain idea, object, person, or situation. Attitude influences an individual’s choice of action, and responses to challenges, incentives, and rewards together called stimuli”.

Ayed et al (2015, p.4) conducted a study in Palestine assessing the knowledge and attitude of the nurses towards palliative care on the nurses working in selected hospitals in Northern districts, Palestine by using descriptive, cross sectional study. 96 nurses participated in the study,. 59.4% had education of palliative care, and 6.2% of members had excellent attitude to palliative care and they finish their study with those result: there are large difference among Nurse’ qualification, experience, and training on pc and they found that the nurses had poor knowledge but their attitude about PC is modest and they advised to make the national health policy and curriculum of the nurse education related to palliative care in nursing education program.

Kassa et al.,(2014, p.13) done a study in selected hospitals in Addis Ababa, Ethiopia on 341 nurses for assessment of the knowledge, skills, attitudes and associated factors with PC by using a cross sectional quantitative study design. Systematic random sampling was utilized to choose -two governments with two non government hospitals, they utilized triangulation in study as methodology, palliative care quiz for Nursing (PCQN) and SPSS software statistical packages were applied for data entry and analysis. The result showed that 365 nurses were chosen, 341(94.2%) were registered, 104(30.5%) had fine knowledge and 259(76%) had favourable attitude towards palliative care in medical surgical wards as well as teaching on palliative care were completely related with knowledge of the nurses and they concluded that the nurses had reduced knowledge but their attitude about PC was favourable and the organization, individuals’ level of education, working in medical ward, as well as the
preparation they obtained on PC, were also considerably connected with the attitude the nurses had, and the nurses functioning in Hayat Hospital (nongovernmental) had a 71.5% possibility of having unfavourable attitude towards PC than those work in Black Lion Hospital (governmental) (Kassa et al., 2014, p.6).

A study done by Abudari, Zahreddine, Hazeim, Assi, Emara (2013, p. 11), in Saudi Arabia on 395 nurses with the purpose to establish knowledge and attitudes of the nurses working at King Faisal Specialist Hospital and Research Centre-Riyadh (KFSH & RC-Riyadh) by using questionnaire with demographic data, palliative care Quiz for Nurses (PCQN), and Frommelt Attitude Toward Care of the Dying scale (FATCOD). The results showed the nurses had moderate attitudes about palliative care but their knowledge was a deficient.

2.4. Critical Review and Research Gap identification

As mentioned in many different studies the nurses’ knowledge about palliative care is still poor but their attitude is moderate as the gap is to increase their knowledge as well as the knowledge and attitude of the nurses influenced by integration of palliative care into health care structure and nursing education (Abudari et al., 2013, p.6).

2.5. Conceptual framework

Knowledge-Attitude- Behaviour (KAB) Model

![Conceptual framework](image)

Figure 2 Conceptual framework (Madden, Ellen, Ajzen, 1992 )

The conceptual framework used in this study is the Knowledge, Attitudes, & Behaviors (KAB) Approach developed in 1992 by Madden, Ellen and Ajzen.
The aim of this model was to make improvement in the fields of education and practice facilitates development and change. Research has shown that knowledge instruction alone is a poor agent for influencing changes in behavior so successful outcomes of interventions in education and performance improvement need more increased knowledge in additional knowledge of the nurses about palliative can influence their attitude toward it and then after their attitude change their behaviour and improve the quality of care delivery to the patients who need palliative care as well as patient’s quality of life improved.

In this study, knowledge means nurses’ understanding and awareness of the aim, principles, and domains of palliative care, common drugs used in pain management, indications and benefits of palliative care; while the attitude means a feeling or way of thinking of the nurses toward palliative care. The perception of the nurses towards palliative care and end of life care would be influenced by the knowledge.

**Conclusion:** In this chapter relevant the literature review, the theoretical review, the empirical review and the conceptual framework guiding has been discussed.
CHAPTER THREE: METHODOLOGY

3.1 Introduction
The methodology is the ways of obtaining, organising and analysing data (Polit and Hungler, 2004, p.233). This chapter describes, research design, research approach, research setting, study population, inclusion and exclusion, sampling, sampling strategy, sample size, data collection instruments, data collection procedure, data analysis, data management Ethical considerations, Data dissemination, Limitations, and challenges, them after Conclusion of this chapter.

3.2 Research design
The research design of a study is the vital advance that researchers utilize to respond their research question and for the management of some challenges faced during the research process (Polit & Beck 2010, p.49). In this study, Descriptive, cross-sectional design was used.

Descriptive research is research study has the main objective of getting the correct explanation of the features of people, situations or groups (Polit & Hungler 2004, p.716). A cross-sectional study is a study done once in a given period of time to establish the state of affairs at the particular time (Polit & Beck 2010, p.49).

3.3. Research approach
The quantitative approach occurs as of the belief that individual phenomena with variables in human being behaviour are able to be calculated independently (Parahoo, 2006, p.5). A quantitative approach was used in this study.

3.4. Research setting
This study was conducted in Rwanda specifically at the University Teaching Hospital of Kigali. The setting is described through the following health care system.

3.4.1 Health care system of Rwanda
Health services in Rwanda are provided through the public sector, government-assisted health facilities, private health facilities, and traditional healers. The health system in Rwanda is a
decentralized and it has a three levels pyramidal structure including the central, intermediary and peripheral levels. The central level includes the Ministry of Health, Rwanda Biomedical Center (RBC) and the national referral hospitals whose mission is to provide tertiary care to the population. Its main responsibilities include elaborating policies and strategies, ensure monitoring and evaluation, capacity building and resource mobilization. In addition, this central level organizes and coordinates the other levels of the health system, and provides them with administrative, technical and logistical support (Rwanda Ministry of Health, 2014).

The intermediary level of a health facility is constituted with one provincial hospital in each province, with the objective to serve as an intermediate level of referral hospitals to decrease the services demand in the national referral hospitals. The peripheral level is represented by the health district and consists of an administrative office, a district hospital and a complex of health centres that are either public, government assisted faith based, or private. The responsibilities of the health district include the organization of health services in health centres and the district hospital, administrative functioning and logistics, including the management of health resources and supplies, and the supervision of community health workers and there are also health posts promoted by the Ministry of Health in order to minimize the gap of geographic accessibility (Rwanda Ministry of Health, 2014, p. 12).

According to the Rwanda Annual Health Statistics Booklet by MOH (2014, p.4), Rwanda has five national referral hospitals (King Faisal Hospital (KFH), Rwanda Military Hospital, University Teaching Hospital of Kigali (UTHK), University Teaching Hospital of Butare (UTHB) and Ndera Hospital for psychiatric care). This study was conducted at one those five national referral hospitals which are UTHK (University Teaching Hospital of Kigali) and it was known as Kigali Hospital Centre situated in Kigali city, Nyarugenge District. UTHK is one of the referrals of the Country that began to work as a health centre in 1928. From 1965, it started to work as hospital with the performance law N° 41/41/2000 of 7/12/2000 on the institution and association of Kigali Hospital Centre it has been an important element and became a civic institute with authorized personality recognized as University Teaching Hospital of Kigali (UTHK) It has the following services: Internal medicine services, Gynaecology and Obstetrics/Maternity services, Surgery (Urology, Neurosurgery), Paediatric services, ENT, Ophthalmology services, Radiology, Anaesthetics and resuscitation, Stomatology, Dermatology, Emergency services, Laboratory, Physiotherapy, Orthopaedic services. The researcher was chose pediatric ward because she was already working in this ward and she needs cared for cases need palliative care. She also choose surgical ward
because the children there have surgical problems such as spine cord injuries, burns, and other physical injuries are admitted to this ward. Paediatric ward has 69 nurses and surgical ward has 145 nurses.

![Map of Rwanda](https://worldatlas.com)

**Figure 3** Map of Rwanda

### 3.5. Population

The population is the full amount of units from which information can be collected. (Parahoo, 2006, p. 258). In this study, all registered nurses working in the paediatric ward and surgical ward were chosen to participate in the study. The population of this study was 214 nurses.

### 3.6. Inclusion and exclusion criteria

The inclusion criteria were all registered nurses working in the pediatric ward and surgical ward who were present and the exclusion criteria was all nurses who were not working in the pediatric ward and surgical ward.
3. 7. Sampling
3.7.1. Sampling strategy

Convenience sampling is a type of nonprobability or nonrandom sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time or willingness to participate are included for the purpose of the study (Dornyei, Z, 2007, p.1).

Convenience sampling procedure was used in this study. The most probable nurses were chosen to act as respondents and were interviewed until the sample size was reached. Researcher asked all nurses who were present in the pediatric ward and surgical ward. If nurse failed to participate in the study, another nurse was chosen to fill the sample size and representativeness.

3.7.2. Sample size

Sample size in the quantitative study must be the biggest so that it is representative of the target population (Polit & Beck, 2010, p.49). In this research the sample size was 139 registered nurses.

(Applying Yamane (1967, p.886), the simple method to determine sample sizes is following:

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

\[ N = \text{Study population} = 214 \]

\[ n = \text{sample size} \]

Confidence level= 95

Margin of errors=e=5%
Sample size needed = 139

3.8. Data collection

3.8.1. Data collection instruments

Knowledge on palliative care was assessed by adapting the palliative care quiz for nursing (PCQN). Developed by Ross, Mcdonald & Mcguinness (1996, p.126). Permission to use this tool was obtained from authors. The original tool was in English, and was translated in Kinyarwanda to make the instrument more understandable for the participants.

The validity of a data collection instrument is the ability of a research instrument to show that it is measuring what you have set out to calculate and the reliability of an instrument which refers to consistency and stability in its findings when used repeatedly under constant conditions (Kumar, 2011, p.3).

This validity and reliability measurement for the palliative care quiz for nursing (PCQN) is explained by the fact that these tools were developed by the Experts in research and these tools used in many different studies (Lynch et al, 2013, p.17).

However, to ensure validity and reliability of the palliative care quiz for nursing (PCQN) in the context of this current study in Rwanda, this tool were pre-tested in a pilot study using 16 bedside nurses.

A pilot study is a smaller version of a proposed study conducted to refine the methodology. It is developed much like the proposed study, using similar subjects, the same settings, the same treatment, the same data collection and analysis techniques (Polit & Beck, 2010, p.49).

The researcher determined that it would take fifteen (15) minutes to complete the questionnaire and internal consistency among the questionnaire items was 0.71 Cronbach’s alpha (α) and it was considered within the acceptable range according to Goforth, 2015.

The tool used in this study had three sections. Section one; includes 5 variables describing social demographic and characteristics of the participants but without names for confidentiality issue. Section two includes 46 questions described the knowledge regarding palliative care. It comprises 20 questions with possible responses of ‘true’, ‘false’, and ‘I do not know and 26 questions options which included multiple choices and “Yes” or “No. The
questions measure understanding of the philosophy and principles of palliative care, pain and symptom management, and psychosocial care. Total scores are calculated by assigning a value of 1 to correct responses and 0 to incorrect and ‘I do not know’ responses. Thus, the total score can range from 0 to 46, with a lower score indicating poorer knowledge and the knowledge scores were classified into Poor knowledge (>50%), Fair knowledge (50-69%), and (≥70%) considered Good knowledge (Kim et al, 2011, p.19).

Sections three had 11 items described the nurses’ attitude regarding palliative care with five levels of scale ranging from strongly agree to strongly disagree (strongly agree=5, agree=4, Uncertain=3 disagree=2 and strongly disagree=1). The highest score of 5 for each option and the total possible score was 55. Possible overall scores range from 11 to 55, with higher scores reflecting more positive attitudes. The scale contains both negative and positive statements, with reversed scores assigned to negative statements. The tool was designed as Likert-Scale with 11 items and the scale was used without modification and has previously been validated (Barrere et al, 2008, p.211).

The attitude scores were categorized into good (≥70%), moderate (50-69%), and poor (<50%) (Abudari, Zahhreddine, Hazeim, Assi, Emara,2013,p. 435).

3.8.2 Data collection procedure

After getting the ethical approval from the Institutional Review Board (IRB) of UR/CMHS, and the permission from the Director General of UTHK, the researcher went to the study setting to provide explanation about the study. The participants were targeted in staff meeting where the explanations about the research were provided, the researcher explained the objectives of the study to the participants, also explained about the consent form insisting on their rights, the confidentiality and anonymity, then participants who accepted to participate in the study were requested to put their names and signature on the consent form.

Participants after accepting to participate in the study were met with the researcher in prepared room with privacy. Method of self administered structured questionnaire was used, questionnaires were provided to the participants the same day of data collection. Before filling the questionnaire, the researcher gave clear and homogenous instructions to the participants to remove all difficulties related to the study, then after the participants were requested to complete the questionnaire using information given by the researcher. After completing the questionnaire the researcher collected the filled questionnaire by going to the
place where the participants were given a sit. Data collection took two months from 13\textsuperscript{th}/ February /2017 to 12\textsuperscript{th}/ April/ 2017.

3.9. Data analysis
Data were analysed using computer SPSS version 20. Descriptive statistics of the results was presented in the tables and the charts and the chi-square test was used to determine the association between socio- demographic characteristics and knowledge and attitude level of nurses towards palliative care.

3.10. Ethical considerations
Ethical approval was obtained from IRB the College of Medicine and Health Sciences, University of Rwanda. After obtaining ethical approval, written permission was obtained from UTHK. The participants were explained with respect to the study and those who accepted, contributed to the study after getting their written informed consent. There was confidentiality of participants through using anonymity during data collection, by avoiding putting their names on the questionnaire. Informed consent was obtained from participants on the day of data collection. First, the researcher explained to the participants who she was, and then the researcher told the participant the purpose of the study, the reason why they had been chosen as participants. Also, they were explained about the tool that was used to make it understandable. Moreover, participants were explained how the confidentiality and privacy of the study were guaranteed as well as how the information provided by them could be beneficial for the following days. Furthermore, they were explained how the participation was voluntary and without any reword; they were also explained that they had right to accept or refuse to participate or to withdraw any time without any punishment. At the end, the participants were requested to put their names and signature on consent form if they accepted to participate in the study.

Risk protection
In order to defend the nurse’s privileges who decided to contribute in this schoolwork, a researcher was used some approach like verbal permission given by the nurses before the questionnaire administration, the reason for the study was well explained to the nurses as well as they had the right to refuse to contribute.
3.11. Data management
At the end of the day data collected were entered and stored in the computer that had the password to secure information collected from participants. The data were controlled every time to prevent errors. Data entry and data manipulation were highly checked for regular errors until the researcher finished doing analysis and reporting the findings. Data will be kept for 5 years then after they will be burnt.

3.12. Data dissemination
Data will be disseminated through the presentation of findings in the college of medicine and health sciences, the results findings will also be disseminated in the area of research. The findings of the research will be disseminated in different conferences, meetings, and seminars as well as in other institutions. Data will be also published in a peer reviewed journals.

Conclusion
This study used quantitative, cross sectional design. UTHK were chosen, the data collection was done using structured questionnaire which was translated into Kinyarwanda to make it understandable and participants were given the information about the ethical concern. In addition, the questionnaires were completed after getting instructions; the researcher collected the filled questionnaire and checked for their completeness. Then the data was entered into the computer where the regular checking of error was performed and the computer was protected using a password. Moreover, the data analysis was performed by using descriptive statistics and the chi-square test was used to determine the association between socio-demographic characteristics and knowledge and attitude and data will be disseminated through meetings, conferences and data will be published.
CHAPTER FOUR: RESULTS

4.1. Introduction
This chapter presents the results and its discussion. It includes data obtained from the nurses who work at CHUK/UTHK in the pediatric ward and in the surgical ward on knowledge and attitude that they have toward palliative care, using the self-administrative questionnaires. A total number of participants responded to the questionnaire were 139, the majority of the respondents were females which were 106 and 33 were males. Their ages ranged from 20 to 61 years and above, majority 36% of the respondents were in the group aged 31-35 years and the lowest number of participants were in the group aged 20-25 years was 2.9%. About educational level, the majority of participants were prepared up to Nursing Diploma 86.33% and 13.67% of participants were prepared to Bacheror’s degree. The majority of respondents 38.85% had 2-5 years of experience at work and only 8.63% of the sample size had obtained in service education and 91.37% had not obtained it.

Table 4.1. Demographic and characteristics of the sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-25 years</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td>26-30 years</td>
<td>45</td>
<td>32.4</td>
</tr>
<tr>
<td>31-35 years</td>
<td>50</td>
<td>36</td>
</tr>
<tr>
<td>36-40 years</td>
<td>29</td>
<td>20.9</td>
</tr>
<tr>
<td>41-45 years</td>
<td>5</td>
<td>3.6</td>
</tr>
<tr>
<td>45-50 years</td>
<td>6</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>139</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>106</td>
<td>76.3</td>
</tr>
<tr>
<td>Male</td>
<td>33</td>
<td>23.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>139</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>Work experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>9</td>
<td>6.5</td>
</tr>
<tr>
<td>2-5 years</td>
<td>54</td>
<td>38.8</td>
</tr>
<tr>
<td>5-10 years</td>
<td>41</td>
<td>29.5</td>
</tr>
<tr>
<td>11 years and above</td>
<td>34</td>
<td>24.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>139</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Table .4.1. showed the results related to demographic variable where the majority of respondents (35.97%) were within the age 31 – 35 years, based on gender the result showed that the majority of the respondents were females 106 (76.26%), regarding educational level, the results showed that the majority of participants were prepared to Nursing Diploma 86.33%, while the majority of respondents 38.85% had 2-5 years of experience at work and only 8.63% of the sample size had obtained in service education and 91.37% did not have obtained it.

Table .4.2. The association between the level of knowledge on palliative care and socio-demographic variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Good knowledge</th>
<th>Fair knowledge</th>
<th>Poor knowledge</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td>2.8%</td>
</tr>
<tr>
<td>20-25years</td>
<td>0</td>
<td>0.0%</td>
<td>3</td>
<td>3.3%</td>
</tr>
<tr>
<td>26-30 years</td>
<td>4</td>
<td>30.8%</td>
<td>29</td>
<td>32.2%</td>
</tr>
<tr>
<td>31-35 years</td>
<td>5</td>
<td>38.5%</td>
<td>31</td>
<td>34.4%</td>
</tr>
<tr>
<td>36-40 years</td>
<td>3</td>
<td>23.1%</td>
<td>21</td>
<td>23.3%</td>
</tr>
<tr>
<td>41-45 years</td>
<td>0</td>
<td>0.0%</td>
<td>2</td>
<td>2.2%</td>
</tr>
<tr>
<td>45-50 years</td>
<td>1</td>
<td>7.7%</td>
<td>4</td>
<td>4.4%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>84.6%</td>
<td>68</td>
<td>75.6%</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>15.4%</td>
<td>22</td>
<td>24.4%</td>
</tr>
<tr>
<td><strong>Education level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DiplomaA1</td>
<td>6</td>
<td>46.2%</td>
<td>80</td>
<td>88.9%</td>
</tr>
</tbody>
</table>
Table 4.2 showed that respondents’ knowledge was associated with their increased level of education (p=0.000). Based on the results, the researcher concluded that increased level of education could improve knowledge of the participants.
Table 1. Table 4.3. the association between the level of attitude on palliative care and socio-demographic variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level of attitude</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moderate attitude</td>
<td>Poor attitude</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>percentage</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-25</td>
<td>1</td>
<td>2.2%</td>
</tr>
<tr>
<td>26-30</td>
<td>16</td>
<td>35.6%</td>
</tr>
<tr>
<td>31-40</td>
<td>16</td>
<td>35.6%</td>
</tr>
<tr>
<td>41-45</td>
<td>9</td>
<td>20.0%</td>
</tr>
<tr>
<td>46-50</td>
<td>1</td>
<td>2.2%</td>
</tr>
<tr>
<td>50 and above</td>
<td>2</td>
<td>4.4%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>11</td>
<td>24.4%</td>
</tr>
<tr>
<td>female</td>
<td>34</td>
<td>75.6%</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>29</td>
<td>64.4%</td>
</tr>
<tr>
<td>Degree</td>
<td>16</td>
<td>35.6%</td>
</tr>
<tr>
<td>Work experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 2 years</td>
<td>3</td>
<td>6.7%</td>
</tr>
<tr>
<td>2-5 years</td>
<td>24</td>
<td>53.3%</td>
</tr>
<tr>
<td>5-10 years</td>
<td>6</td>
<td>13.3%</td>
</tr>
<tr>
<td>11 years and above</td>
<td>12</td>
<td>26.7%</td>
</tr>
<tr>
<td>In service-education in palliative care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>6</td>
<td>13.3%</td>
</tr>
<tr>
<td>no</td>
<td>51</td>
<td>86.7%</td>
</tr>
</tbody>
</table>

Table 4.3 showed that respondents ‘attitude was associated with their increased level of education (p=0.000). Based on result well educated participants had good knowledge as well as the knowledge can influence attitude.
Table 4.4 Nurse’s knowledge about palliative care.

Table 4.4.1. Section a: answering the questions by using true/ false / don’t know.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Wrong answer</th>
<th>Correct answer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>1. Palliative care is only appropriate in situations where there is evidence of a simple route.</td>
<td>75</td>
<td>54.0%</td>
</tr>
<tr>
<td></td>
<td>64</td>
<td>46.0%</td>
</tr>
<tr>
<td>2. Morphine is the standard used to compare the analgesics effect of other opioids.</td>
<td>82</td>
<td>59.0%</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>41.0%</td>
</tr>
<tr>
<td>3. The degree of the disease determines the method of pain treatment.</td>
<td>76</td>
<td>54.7%</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>45.3%</td>
</tr>
<tr>
<td>4. Adjuvant therapies are important in managing pain.</td>
<td>87</td>
<td>62.6%</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>37.4%</td>
</tr>
<tr>
<td>5. It is important for the family members to stay at the bedside until death occurs.</td>
<td>106</td>
<td>76.3%</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>23.7%</td>
</tr>
<tr>
<td>6. During the last days of life, lethargy associated with electrolyte imbalance may decrease the need for sedation.</td>
<td>76</td>
<td>54.7%</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>45.3%</td>
</tr>
<tr>
<td>7. Drugs dependence is a major problem when morphine is used on a long-term.</td>
<td>108</td>
<td>77.7%</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>22.3%</td>
</tr>
<tr>
<td>8. Individuals who are taking opioids should also follow a bowel regime.</td>
<td>91</td>
<td>65.5%</td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>34.5%</td>
</tr>
<tr>
<td>9. The condition of palliative care requires emotional detachment</td>
<td>92</td>
<td>66.2%</td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>33.8%</td>
</tr>
<tr>
<td>10. During the terminal stages of an illness, drugs that can cause respiratory depression are appropriate for the treatment of severe dyspnoea.</td>
<td>73</td>
<td>52.5%</td>
</tr>
<tr>
<td></td>
<td>66</td>
<td>47.5%</td>
</tr>
<tr>
<td>11. Men generally resolve their grief more quickly than women.</td>
<td>95</td>
<td>68.3%</td>
</tr>
<tr>
<td></td>
<td>44</td>
<td>31.7%</td>
</tr>
<tr>
<td>12. The philosophy of palliative care is compatible with that of aggressive treatment</td>
<td>95</td>
<td>68.3%</td>
</tr>
<tr>
<td></td>
<td>44</td>
<td>31.7%</td>
</tr>
</tbody>
</table>
Table 4.4.2. Continuation of section a: answering the questions by using true/ false / don’t know.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Wrong answer</th>
<th>Correct answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. The use of placebos is appropriate in the treatment of some types of pain.</td>
<td>71 51.1%</td>
<td>68 48.9%</td>
</tr>
<tr>
<td>14. In high doses, codeine causes more nausea and vomiting than morphine.</td>
<td>86 61.9%</td>
<td>53 38.1%</td>
</tr>
<tr>
<td>15. Suffering and physical pain are the same.</td>
<td>83 59.7%</td>
<td>56 40.3%</td>
</tr>
<tr>
<td>16. Demerol is not an effective analgesic for the control of chronic pain.</td>
<td>105 75.5%</td>
<td>34 24.5%</td>
</tr>
<tr>
<td>17. The accumulation of losses renders burnout inevitable for those who work in palliative care.</td>
<td>97 69.8%</td>
<td>42 30.2%</td>
</tr>
<tr>
<td>18. Manifestations of chronic pain are different from those of acute pain.</td>
<td>92 66.2%</td>
<td>47 33.8%</td>
</tr>
<tr>
<td>19. The loss of an isolated or contentious relationship is easier to resolve than the loss of one that is close or intimate.</td>
<td>105 75.5%</td>
<td>34 24.5%</td>
</tr>
<tr>
<td>20. Pain point (entry) is lowered by fatigue or anxiety.</td>
<td>85 61.2%</td>
<td>54 38.8%</td>
</tr>
</tbody>
</table>

The results showed that Only 24.5% had correct answers on the Demerol is not an effective analgesic for the control of chronic pain.
Table 4.4.3. Section b: answering the questions by using yes / no.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Wrong answer</th>
<th>Correct answer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>1. Palliative care is planned to delay or to prolonged death.</td>
<td>92</td>
<td>66.2%</td>
</tr>
<tr>
<td>2. Palliative care is only about pain.</td>
<td>83</td>
<td>59.7%</td>
</tr>
<tr>
<td>3. A patient suffering from cancer needs palliative care.</td>
<td>5</td>
<td>3.6%</td>
</tr>
<tr>
<td>4. A patient suffering from the HIV/ AIDS needs palliative care.</td>
<td>40</td>
<td>28.8%</td>
</tr>
<tr>
<td>5. A patient suffering from the chronic heart disease needs palliative care.</td>
<td>37</td>
<td>26.6%</td>
</tr>
<tr>
<td>6. A patient suffering from the chronic renal failure needs palliative care.</td>
<td>36</td>
<td>25.9%</td>
</tr>
<tr>
<td>7. Only pharmacological treatments are the kind of the care should be given to the patient with cancer.</td>
<td>58</td>
<td>41.7%</td>
</tr>
<tr>
<td>8. The both pharmacological and non pharmacological treatments are the kind of the care should be given to the patient with cancer</td>
<td>46</td>
<td>33.1%</td>
</tr>
<tr>
<td>9. Only pain management is the kind of the care should be given to the patient with cancer.</td>
<td>74</td>
<td>53.2%</td>
</tr>
<tr>
<td>10. Palliative care is given at hospitals only.</td>
<td>87</td>
<td>62.6%</td>
</tr>
<tr>
<td>11. Palliative care is given at home.</td>
<td>77</td>
<td>55.4%</td>
</tr>
<tr>
<td>12. Palliative care is given at community.</td>
<td>70</td>
<td>50.4%</td>
</tr>
<tr>
<td>13. The nurses only can provide PC</td>
<td>58</td>
<td>41.7%</td>
</tr>
</tbody>
</table>

Many participants 92(66.2%) they didn’t know the plan of palliative care where they responded that the plan of palliative care is to prolong the death but the majority 96.4% of participants knew that the patient suffering from cancer needs palliative care.
Table 4.4.4. Continuation of section b: answering the questions by using yes / no,

<table>
<thead>
<tr>
<th>Statements</th>
<th>Wrong answer</th>
<th>Correct answer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>14. The doctors only can provide PC.</td>
<td>40</td>
<td>28.8%</td>
</tr>
<tr>
<td>15. The social workers only can provide PC.</td>
<td>39</td>
<td>28.1%</td>
</tr>
<tr>
<td>16. A team of health providers such as Physicians, Nurses, Social workers, Dieticians, Physical therapists, mental health counsellors and Chaplains.</td>
<td>35</td>
<td>25.2%</td>
</tr>
<tr>
<td>17. The pain management is a program of PC.</td>
<td>49</td>
<td>35.3%</td>
</tr>
<tr>
<td>18. The spiritual support is a program of PC.</td>
<td>79</td>
<td>56.8%</td>
</tr>
<tr>
<td>19. The social support is a program of PC.</td>
<td>69</td>
<td>49.6%</td>
</tr>
<tr>
<td>20. To prolong death is a program of PC.</td>
<td>77</td>
<td>55.4%</td>
</tr>
<tr>
<td>21. The benefits of PC are to reduce anxiety, depression, and pain.</td>
<td>67</td>
<td>48.2%</td>
</tr>
<tr>
<td>22. The benefits of PC are to increase confidence in navigating their care.</td>
<td>46</td>
<td>33.1%</td>
</tr>
<tr>
<td>23. The benefits of PC are to increase satisfaction with the care received.</td>
<td>73</td>
<td>52.5%</td>
</tr>
<tr>
<td>24. The time you stop to provide PC is immediately after diagnosing incurable diseases</td>
<td>40</td>
<td>28.8%</td>
</tr>
<tr>
<td>25. The time you stop to provide PC is after five years living with chronic disease</td>
<td>31</td>
<td>22.3%</td>
</tr>
<tr>
<td>26. The time you stop to provide PC is when the patient dies.</td>
<td>31</td>
<td>22.3%</td>
</tr>
</tbody>
</table>

The resultats showed that (22.3%) they didn’t know the time you stop to provide palliative care where they responded that the time you stop to provide palliative care is after five years living with chronic disease.
Figure 4. The nurses' knowledge levels of palliative care

The findings showed that only 13(9.3%) had good knowledge, 90(64.7%) had the fair knowledge and 36(25.8%) had poor knowledge.
### Table 4.5: Nurses’ attitude towards palliative care.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>As a patient nears passing away, the nurse must leave from his/her interest with the patient.</td>
<td>9 (6.5%)</td>
<td>11 (7.9%)</td>
<td>4 (2.9%)</td>
<td>38 (27.3%)</td>
<td>77 (55.4%)</td>
</tr>
<tr>
<td>It is helpful for the chronically ill person to express his/her feeling.</td>
<td>63 (45.3%)</td>
<td>60 (43.2%)</td>
<td>8 (5.8%)</td>
<td>7 (5.0%)</td>
<td>1 (0.7%)</td>
</tr>
<tr>
<td>The length of time required to give nursing care to a dying person would frustrate me.</td>
<td>43 (30.9%)</td>
<td>48 (34.5%)</td>
<td>22 (15.8%)</td>
<td>13 (9.4%)</td>
<td>13 (9.4%)</td>
</tr>
<tr>
<td>The family should maintain as normal an environment as possible for their dying member.</td>
<td>16 (11.5%)</td>
<td>52 (37.4%)</td>
<td>18 (12.9%)</td>
<td>29 (20.9%)</td>
<td>24 (17.3%)</td>
</tr>
<tr>
<td>The family should be involved in the physical care of the dying person.</td>
<td>66 (47.5%)</td>
<td>66 (47.5%)</td>
<td>4 (2.9%)</td>
<td>3 (2.2%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>It is difficult to form a close relationship with the family of a dying member.</td>
<td>30 (21.6%)</td>
<td>54 (38.8%)</td>
<td>23 (16.5%)</td>
<td>20 (14.4%)</td>
<td>12 (8.6%)</td>
</tr>
<tr>
<td>Nursing care for the patient's family should continue during the period of grief and bereavement.</td>
<td>59 (42.4%)</td>
<td>52 (37.4%)</td>
<td>18 (12.9%)</td>
<td>4 (2.9%)</td>
<td>6 (4.3%)</td>
</tr>
<tr>
<td>Nursing care should extend to the family of the dying person.</td>
<td>51 (36.7%)</td>
<td>68 (48.9%)</td>
<td>7 (5.0%)</td>
<td>5 (3.6%)</td>
<td>8 (5.8%)</td>
</tr>
<tr>
<td>When a patient asks, “Nurse am I dying?” I think it is best to change the subject to something cheerful.</td>
<td>24 (17.3%)</td>
<td>27 (19.4%)</td>
<td>35 (25.2%)</td>
<td>28 (20.1%)</td>
<td>25 (18.0%)</td>
</tr>
<tr>
<td>I am afraid to become friends with chronically sick and dying patients.</td>
<td>57 (41.0%)</td>
<td>58 (41.7%)</td>
<td>11 (7.9%)</td>
<td>8 (5.8%)</td>
<td>5 (3.6%)</td>
</tr>
<tr>
<td>I would be uncomfortable if I entered the room of a terminally ill person and found</td>
<td>68 (48.9%)</td>
<td>49 (35.3%)</td>
<td>15 (10.8%)</td>
<td>4 (2.9%)</td>
<td>3 (2.2%)</td>
</tr>
</tbody>
</table>
In assessing the attitude of the nurses toward PC 11 items were requested the participants to response as strongly agree, agree, uncertain, disagree and strongly disagree.

Table 4.5 summarized the attitude of the nurses toward PC. More than half (55.4%) of the nurses were more likely to strongly disagree of as a patient nears passing away; the nurse must leave from his/her interest with the patient, as well as (45.3%) of the nurses strongly agree with beneficial for the chronically sick person to verbalize his/her feelings. Unexpected (19.4%) agreed that when a patient asks, “Nurse am I dying?” I think it is best to change the subject to something cheerful.

![Figure 5](image)

**Figure 5. The nurses' attitude of palliative care**

Figure 6.2. showed that the most respondents' attitudes levels towards palliative care were poor attitude 106(76.3%), 33 (23.7%) moderate attitude, and there were no one who had good attitude level on palliative care.
CHAPTER FIVE: DISCUSSION

This study assessed knowledge and attitude toward palliative care among nurses at University Teaching Hospital of Kigali. This chapter discusses the major findings of the study according to the objectives of the study which were to assess the existing level of knowledge and attitude of the nurses working at University Teaching Hospital of Kigali about palliative care.

5.1. Socio-demographic information

The socio demographic information showed that the majority of the respondents were females 106 (76.26%). A low number of the male nurses due to three main problems facing the men in a nursing profession such as understanding like nursing as a feminine profession, male nurses’ donation to heavy manual work and the male nurses has advantages of getting other position like leadership (Zamanzadeh et al., 2013, p. 54). The majority of respondents (35.97%) were within the age 31 – 35 years.

Regarding education level, the majority of participants were prepared to Nursing Diploma (86.33%) and Bacheror’s degree were only (13.67%), these findings agrees with the results of (Ayed, 2015, p.17) and regarding work experience, many participants 54 (38.85%) had 2-5 years of experience so it can cause the issue of low knowledge the results agrees with Fadare et al (2014), while regarding in service- education in palliative care only 12 (8.63%) of the sample size had obtained training, these findings were similar with the results of (Uwimana & Struthers 2012, p.16)

5.2. Knowledge about palliative care

This study is the first of its type conducted in Rwanda to document the knowledge and attitude toward palliative care among nurses at a referral hospital. The findings showed that only 13 (9.3%) had good knowledge. These findings are similar to the study done by Kassa et al., (2014, p.13), Ayed et al (2015, p.4) where the nurses had good knowledge were 30% of the participants.

According to the findings, showed that Only (41.0%) of the participants had correct answers on the morphine is the standard used to compare the analgesics effect of other opioids and it
supported with results of (Powell et al. 2014, p.11), while many participants 92(66.2%) they didn’t know the plan of palliative care where the participants responded that the plan of palliative care is to prolong the death. (WHO, 2016) stated that the plan of palliative care is to get better excellence life of the people living with serious illnesses and their families by avoiding and take care of the symptoms and complications of diseases through physical, psychological, spiritual as well as social support. Many participants (59.7%) had an incorrect answer where they know that palliative care is only about pain and it supported with a study done by Fadare et al 2014, p.4.

5.3. Attitude about palliative care

The attitude was assessed using a 5-items scale (ranging from strongly agree 5 to strongly disagree, 1). It had 11 item ranking scale with the highest score of 5 for each option and the total possible score was 55. The attitude scores were categorized into good (≥70%), moderate (50-69%), and poor (<50%).

The description of attitude scores shows that 76.3% of respondents ‘had a poor attitude towards palliative care. This finding was in disagreement with the findings of Kassa et al.,(2014,p.13) and many results of other studies found the data contrary to this research (Ayed et al 2015, p.4; Zahhreddine, Hazeim, Assi, Emara 2013, p. 11).

5.4. Limitations of the study

As few similar research done in Rwanda about the assessment of nurses ‘knowledge and attitude toward palliative care, it was difficult to compare and to discussion the results from this study to other studies. Lack of a standard tool for practice and unavailability of PC unit in the hospitals involved were challenges of this study to assess the real practice of nurses on PC. Since the study was conducted in one hospital, the results cannot be generalised to the other hospital.

5.5. Summary

The findings from this study highlighted that the nurses had a poor attitude but their knowledge are moderate.
CHAPTER SIX: CONCLUSIONS AND RECOMMENDATION

The purpose of this study was to assess knowledge and attitude toward palliative care among nurses at University Teaching Hospital of Kigali. From the research that has been carried out, it is possible to conclude that nurses are not knowledgeable regarding palliative care in UTHK as this study has shown that the nurses had moderate knowledge but their attitude were poor and some explanation have shown that there are insufficiency in learning, lack of curriculum content related to palliative care, palliative care experience and training and the level of palliative care integration in the health facilities.

6. 1. Recommendations

6.1.1. Nursing practice

In order to improve palliative care in Rwanda will require multi-institutional strategies. Such strategies should focus on establishing palliative care services at all levels of the healthcare system and organize the training of the nurses about palliative care.

6. 1. 2 Nursing education

Palliative care needs to become an integral part of all nursing school curricula and medical education program for undergraduate and postgraduate nurses that cover all aspects of palliative care, such as its principles and philosophy, communication, psychosocial support, pain and symptom management, and cultural views.

6.1.3. Nursing research

More studies are needed in this area to clearly understand the problems met in the practice setting and to show the acceptance of a PC delivery model that is culturally sensitive and meets the needs of the Rwandan population.
REFERENCE LIST


Ayed, A., 2015. The Nurses’ Knowledge and Attitudes towards the Palliative Care. , 6(4), pp.91–100.


Loscalzo, M.J., 2008. Palliative Care: A Historical Perspective,


Ministry of Health Rwanda, 2011. *REPUBLIC OF RWANDA Rwanda National Palliative Care Policy*,


Zamanzadeh, V. et al., 2013. Factors Influencing Men Entering the Nursing Profession, and Understanding the Challenges Faced by Them: Iranian and Developed Countries’ Perspectives. , 2(14), pp.49–56.

Dictionary.com (2016)

Thefreedictionary.com(2016)

Dictionary.com/dictionary/English/attitude.

http://www.merriam-webster.com/dictionary/hospice

http://en.oxforddictionaries.com/difinition/attitide

http://www.who.int/mediacentre/factsheets/fs402/en/

http://www.investopedia.com/terms/s/sampling.asp#ixzz4Lk0t2drH

http://www.raosoft.com/samplesize.html

https://medlineplus.gov/ency/patientinstructions/000536.htm

http://www.worldatlas.com/webimage/countrys/africa/rw.htm
APPENDIX I

QUESTIONNAIRE

QUESTIONS ABOUT PALLIATIVE CARE CONCERNING THE NURSES WORKING IN PEADIATRIC AND SURGICAL WARD AT UTHK.

I am MARIE CLAIRE KARIKWERA; student at CMHS in Masters’ program especially in Pediatric track. I will conduct a research project about the nurses’ knowledge and attitude toward palliative care among the nurses working at UTHK.

I. INSTRUCTIONS

- These questions will be related to knowledge and attitude of the nurses working in pediatric and surgical ward at UTHK about palliative care.
- Your name will not be mentioned anywhere.
- Choose the appropriate answer or fell in the blank if necessary.
- Feel free while answering.
- Please respond carefully.
- I thank you for participation in my research.

II. DEMOGRAPHIC DATA

1. Age

- 20-25 years old
- 26-30 years old
- 31-35 years old
- 36-40 years old
- 41-45 years old
- 46-50 years old
- 51 years and above

2. Gender: Male  Female

3. Education level:

- Diploma
- Degree (A0)
- Masters
4. Professional experience in pediatric or in surgical ward:

<table>
<thead>
<tr>
<th>Years</th>
<th>Checkbox</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 years</td>
<td></td>
</tr>
<tr>
<td>2-5 years</td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td></td>
</tr>
<tr>
<td>11 years and above</td>
<td></td>
</tr>
</tbody>
</table>

In service-education in palliative

### III. QUESTION ABOUT KNOWLEDGE ON PALLIATIVE CARE

**SECTION A:** ANSWERING THE FOLLOWING QUESTIONS BY USING TRUE/ FALSE / DON’T KNOW.

<table>
<thead>
<tr>
<th>Statements</th>
<th>TRUE</th>
<th>FALSE</th>
<th>DON’T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Palliative care is only appropriate in situations where there is evidence of a simple route.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Morphine is the standard used to compare the analgesics effect of other opioids.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Adjuvant therapies are important in managing pain.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. It is important for family members to stay at the bedside until death occurs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. During the last days of life, lethargy (sleepiness) associated with electrolyte imbalance may decrease the need for sedation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Drug dependence is a major problem when morphine is used on a long-term source for the management of pain.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Individuals who are taking opioids should also follow a bowel regime.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. The condition of palliative care requires emotional detachment (disconnection).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. During the terminal stages of an illness, drugs that can cause respiratory depression are appropriate for the treatment of severe dyspnoea.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Men generally resolve their grief (unhappiness) more quickly than women.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. The philosophy of palliative care is compatible with that of aggressive treatment.

13. The use of placebos is appropriate in the treatment of some types of pain.

14. In high doses codeine causes more nausea and vomiting than morphine.

15. Suffering and physical pain are the same.

16. Demerol is not an effective analgesic for the control of chronic pain.

17. The accumulation of losses renders burnout inevitable for those who work in palliative care.

18. Manifestations of chronic pain are different from those of acute pain.

19. The loss of an isolated or contentious relationship is easier to resolve than the loss of one that is close or intimate.

20. Pain point (entry) is lowered by fatigue or anxiety.

**SECTION B:** ANSWER THE FOLLOWING QUESTIONS BY USING **YES / NO**.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Palliative care is planned to delay or to prolonged death?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2. Palliative care is only about pain?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3. The patient suffering with cancer needs palliative care?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4. The patient suffering with HIV/AIDS needs palliative care?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5. The patient suffering with chronic heart disease needs palliative care?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>6. The patient suffering with chronic renal failure needs palliative care?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>7. Only pharmacological treatments are the kind of the care should be given to the patient with cancer.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8. Both pharmacological and non pharmacological treatments are the kind of the care should be given to the patient with cancer.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9. Only pain management is the kind of the care should be given to the patient with cancer.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Statement</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
</tr>
<tr>
<td>10. Palliative care is given at hospitals only.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>11. Palliative care is given at home.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>12. Palliative care is given at community.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>13. The nurses only can provide palliative care.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>14. The doctors only can provide palliative care.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>15. The social workers only can provide palliative care.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>16. A team of health providers such as Physicians, Nurses, Social workers, Dieticians, Physical therapists, mental health counsellors and Chaplains.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>17. The pain management is program of palliative care.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>18. The spiritual support is program of palliative care.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>19. The social support is program of palliative care.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>20. To prolong death is program of palliative care.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>21. The benefits of PC are to reduce anxiety, depression and pain.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>22. The benefits of PC are to increase confidence in navigating their care.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>23. The benefits of PC are to increase satisfaction with the care received.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>24. The time you stop to provide PC is immediately after diagnosing incurable diseases.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>25. The time you stop to provide PC is after five years living with chronic disease.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>26. The time you stop to provide PC is when the patient dies.</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### III. Questions About Attitude on Palliative Care

What are you think about these following statements?

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. As a patient nears passing away; the nurse must leave from his/her interest with the patient.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. It is helpful for the chronically ill person to express his/her feeling or opinion.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The length of time required to give nursing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4. Family should maintain as normal an environment as possible for their dying member.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The family should be involved in the physical care of the dying person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. It is difficult to form a close relationship with the family of a dying member.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Nursing care for the patient's family should continue during the period of grief and bereavement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Nursing care should extend to the family of the dying person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. When a patient asks, “Nurse am I dying?’I think it is best to change the Subject to something cheerful.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I am afraid to become friends with chronically sick and dying patients.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX II

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

TITLE OF STUDY: ASSESSMENT OF NURSES’ KNOWLEDGE AND ATTITUDE ABOUT PALLIATIVE CARE AMONG NURSES AT UNIVERSITY TEACHING HOSPITAL OF KIGALI.

Researcher’s Name: MARIE CLAIRE KARIKWERA

Phone number: 0783269347

email: karikweramarieclaire@gmail.com

Introduction: You are being asked to be in a research study regarding the NURSES’ KNOWLEDGE AND ATTITUDE ABOUT PALLIATIVE CARE AMONG NURSES AT UNIVERSITY TEACHING HOSPITAL OF KIGALI. You were selected as a possible participant because you are a registered nurse working AT UNIVERSITY TEACHING HOSPITAL OF KIGALI in pediatric and surgical wards.

We ask that you read this form and ask any questions that you may have before agreeing to be in the study.

Purpose of Study

The purpose of the study is to assess nurses’ knowledge and attitude about palliative care among nurses at University Teaching Hospital of Kigali.

Description of the Study Procedures

If you agree to be in this study, you will be asked to sign this consent form, take this a questionnaire read it and fill it. You will be required to submit it back to the researcher with in the period of 3 days.

Risks/Discomforts of Being in this Study

There may be unknown risks.

There are no reasonable foreseeable (or expected) risks.

Benefits of Being in the Study
This study will express real information to the policy maker, about the knowledge and the attitude that Nurses working at UTHK in that wards have on palliative care and then act consequently.

Confidentiality

The researcher will not be collecting or retaining any information about your identity.

The records of this study will be kept strictly confidential. Research records will be kept in a locked file and all electronic information will be coded and secured using a password protected file.

The researcher will not include any information in any report he may publish that would make it possible to identify you.

Payments

There will be no payment

Right to Refuse or Withdraw

The decision to participate in this study is entirely up to you. You may refuse to take part in the study at any time without affecting your relationship with the researcher.

You have the right not to answer any single question, as well as to withdraw completely from this research study at any point during the process.

Right to Ask Questions and Report Concerns

You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact me, my name is KARIKWERA MARIE CLAIRE, at email:karikweramarieclaire@gmail.com or by telephone at phone number:0783269347. If you like, a summary of the results of the study will be sent to you. If you have any other concerns about your rights as a research participant that have not been answered by the investigators, you may contact Phil Peake, Co-chair of the Smith College Institutional Review Board at (413) 585-3914.

If you have any problems or concerns that occur as a result of your participation, you can report them to the Phil Peake at the number above. Alternatively, concerns can be reported by
completing a Participant Complaint Form, which can be found on the IRB website at http://www.smith.edu/irb/

Consent

Your signature below indicates that you have decided to volunteer as a research participant for this study and that you have read and understood the information provided above. You will be given a signed and dated copy of this form to keep, along with any other printed materials deemed necessary by the researcher.

Subject's Name (print):

Subject's Signature: ………………………..            Date:……………………………..

Researcher’s Signature: ………………………..            Date:……………………………..

APPENDIX III

PERMISSION OF USING PCQN AS TOOL

Hello Marie Claire. Yes, you are welcome to use the PCQN. I have looked after Dr. Ross correspondence for many years. Good luck with your important project. Frances 04:31 AM 11/27/2016, you wrote:

Content-Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document; name="KARIKWERA UBWE.docx"
Content-Disposition: attachment; filename="KARIKWERA UBWE.docx"
X-Attachment-Id: f_iw0g44qn0

Frances Fothergill Bourbonnais, RN PhD
Emeritus Professor
School of Nursing
University of Ottawa
451 Smyth Road
Ottawa, Ont. K1H 8M5
(613) 562-5800 ext 8423.