ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF ALLIED HEALTH SCIENCE
DEPARTMENT OF NURSING AND MIDWIFERY

KNOWLEDGE AND ATTITUDE OF NURSES TOWARDS PALLIATIVE CARE IN GOVERNMENT HEALTH HOSPITALS OF ADDIS ABABA, ETHIOPIA, 2016

BY: SISAY GEDAMU

A RESEARCH THESIS TO BE SUBMITTED TO ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCES SCHOOL OF ALLIED HEALTH SCIENCE DEPARTMENT OF NURSING AND MIDWIFERY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTERS OF SCIENCE IN ADULT HEALTH NURSING

MAY, 2016
ADDIS ABABA, ETHIOPIA

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APPROVED BY BOARD OF EXAMINERS

This research thesis by Sisay Gedamu Addis is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of masters of Science in adult health nursing

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Acknowledgement

First I would like to acknowledge and wish to express my gratitude towards Addis Ababa University, College of Health Sciences, Department of Nursing and Midwifery for giving me the opportunity to enroll in this graduate study program.

I would like to extend my heartfelt thanks to my advisor, S/r. Emebet Berhane (RN. Bsc. Msc.) at AAU for her unreserved guidance, constructive comments and moral support in caring out research thesis and keen interest to read the report by devoting her precious time till the end of this thesis work.

I am also grateful to school of medicine library, college of health science central library and librarians for providing me valuable reference materials.

My deepest gratitude also goes to selected hospitals administrators for providing information regarding the number of nurses available in the hospitals which helps me in organizing the sampling procedure used to undertake the study.

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List of abbreviations and acronyms

- AIDS – Acquired immunodeficiency syndrome
- AINs-assistants in nursing
- AOR-Adjusted Odds Ratio
- CI - confidence interval
- DNR - Do not to resuscitate
- EOL - End-Of-Life
- ER –Emergency room
- ETB - Ethiopian Birr
- FATCOD - Frommelt Attitude Toward Care of the Dying
- HIV- Human Immunodeficiency Virus
- ICU - Intensive care unit
- MD - Medical Doctor
- NCDs -Non-communicable diseases
- OPD - Outpatient department
- OR – Operation room
- PC- palliative care
- PCKT- palliative care knowledge test
- PCQN- Palliative Care Quiz for Nurses
- RN - Registered nurse
- SPSS - Statistical Program for Social Sciences
- WHO –World Health Organization

Abstract

Introduction: To provide quality palliative care, nurses must have good knowledge and attitude about palliative care. Different Studies have documented that nurses and other health care professionals are inadequately prepared to care for patients in palliative care. In the case of nurses several reasons have been identified including inadequacies in nursing education and lack of in-service training related to palliative care.

Objective: To assess knowledge and attitude towards palliative care among nurses working in Addis Ababa government hospitals, Ethiopia, 2016.

Methods: An institution based cross-sectional study was conducted among 392 nurses in four randomly selected government hospitals in Addis Ababa. To select the study participants, the total sample size was allocated proportionally based on the number of nurses from each selected hospitals. Again proportional allocation was done for each work area in each selected hospitals. Finally from each work areas, nurses were selected by using a systematic random sampling method to attain the final individuals. The knowledge and attitude of nurses towards palliative care was measured using questionnaires which are adopted and modified from the Palliative Care Quiz for Nursing and Frommelt Attitude toward Care of the Dying scale respectively. Epidata and SPSS version 23 software were applied for data entry and analysis respectively.

Results: the response rate was 392 (92.02%) of total 426 participants. Study results have shown that only 104(26.5%) of the respondents had good knowledge and 331(84.4%) had favorable attitude towards palliative care. Level of Education, working department, years of working experiences in nursing, experience in caring chronically ill patient and in-service training of palliative care had significant association with the knowledge of nurses. Level of education, experience in caring chronically ill patient and in-service training were found to be statistically significant with the attitude of nurses towards palliative care.

Conclusion and recommendations: The nurses had poor knowledge but their attitude towards palliative care was favorable. Attention should be given towards palliative care by the health policy and needs to be incorporated in the national curriculum of nurse education.

Keywords: knowledge, attitude, palliative care, nurses, Addis Ababa, government hospitals.

UNIT ONE: INTRODUCTION

1.1. Background

The word 'palliate' originates from the Greek and translates "to cloak", meaning that when caring for a dying person, it intend to "cloak" or prevent the patient from experiencing pain or other distressing symptoms (1). Palliative care can be defined as a philosophy and an organized care which is provided to patients and their families going through a progressive, chronic, life-threatening disease to relieve the symptoms of the disease by incorporating psychosocial and spiritual care(2,3).

According to World Health Organization definition of palliative care "Palliative care (PC) 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 impeccable assessment, early identification and treatment of pain and other problems like physical, psychosocial and spiritual"(4).

Since the early 1980s, the need for palliative care for cancer patients has been progressively acknowledged worldwide. However, this remains as a huge unmet need on palliative care in most part of the world. More recently, there is increased awareness of the need for palliative care for other chronic diseases such as acquired immunodeficiency syndrome (AIDs), congestive heart failure, cerebrovascular disease, neurodegenerative disorders, chronic respiratory diseases, drug-resistant tuberculosis, diseases of older people and others. Palliative care can be provided wherever places such as patient's own home, care facility, hospice unit, in hospital out-patient or day care service(5).

Palliative care focuses on both patients with life-limiting illnesses and their family members(6). It differs from other healthcare specialties in that it uses a developmental approach to disease and recognizes the changes on the client and family needs. Initially, palliative care focuses on cancer and end-of life care, but now a day, it evolves to focus onto an approaches that of: diagnosis of a life-threatening disease, progress of chronic disease, and focusing on optimizing quality of life throughout the disease course(7).

For palliative care to be developed it must have appropriate policy, drug availability, education and implementation at all levels of a nation's health service through an integrated approach for ensuring effective pain and symptom management of palliative care. Palliative care education should be provided during initial pre-registration training as well as during in-service and postgraduate training programmes(8).

Palliative care is a health care provided by interdisciplinary team professionals. The palliative-care team must be skilled and knowledgeable in care of the patient population to be served to raise the level of "best practices" to meet the needs of the patients and their families(3,9). Palliative-care teams may be expanded to include a range of professionals based on the services needed. They may include group of professionals from medicine, nursing, social work, volunteer coordinators, bereavement coordinators, psychologists, pharmacists, nursing assistants, home attendants, dietitians, speech and language pathologists, physical, occupational, play, music, and child-life therapists, case managers and trained volunteers(3).

1.2. Statement of the Problem

Globally, in 2011, over 29 million (29,063,194) people died from diseases requiring palliative care. The estimated number of people in need of palliative care at the end of life was 20.4 million. The biggest proportion, 94%, corresponds to adults of which 69% were over 60 years old and 25% were 15 to 59 years old. Only 6% of all people in need of palliative care were children. The great majority of adults in need of palliative care died from cardiovascular diseases (38.5%), and cancer (34%), followed by chronic respiratory diseases (10.3%), HIV/AIDS (5.7%), diabetes (4.5%) and drug-resistant TB (0.8%)(5).

By 2020, the world health organization (WHO) estimates that non-communicable diseases (NCDs) will be as prevalent as communicable diseases, which have been the main cause of high morbidity and mortality in sub-Saharan Africa. Due to limited development of PC across Africa many patients have not received formal PC services(10). Out of 54 African countries, only four countries have palliative care integrated into their health services were reported. These challenges are exacerbated by poor health and social care infrastructures as well as limited health financing in many African countries. In addition, there is lack of understanding of what PC is and what its benefits are(11).

Cancer and HIV/AIDS account for 80% of the patients in need of palliative care in Uganda. Patients with cardiovascular, liver, renal, neurological and respiratory diseases may also require such care. The minimum palliative healthcare burden in Uganda is approximately 137,700 patients. Given that an additional two family or voluntary caregivers per patient may also need support, it is therefore likely that the total number of people requiring help is nearer 413,000. Nearly 90% of patients in Uganda who need palliative care do not access such services(12).

Undeniably, Ethiopia is attempting to move forward in its policy development process for establishing PC. However, most people who are suffering from cancers, human immunodeficent virus / acquired immunodeficient syndrome (HIV/AIDS), and other chronic illnesses are often diagnosed late stage. This creates a huge burden of suffering for the Ethiopian people with extremely limited access to pain medications and other PC interventions(13).

Of the important factors influencing a successful delivery of palliative care, one is the health care professionals' knowledge, attitudes and experiences(14). As valuable palliative care team

members nurses should enhance their professional caregiver's capacity and confidence in offering palliative care as they play a key role in addressing physical, psychosocial, and spiritual needs(9). But usually nurses are not adequate and competent in the care of chronically ill patients. Low level of knowledge and poor attitude about palliative care can be responsible for these inadequacies. Many studies claim that nurses do not appropriately prepared to care for patients in palliative care. Reasons have been identified including inadequacies in nursing education and absence of curriculum content related to palliative care. Nurses' knowledge deficiency and negative attitude have significant barrier to providing appropriate palliative care(15–17). Nurses who have a low level of knowledge about palliative care are not able to skillfully assess patient's needs and are not competent to develop an effective communication with chronically sick patients and their families(17). Negative attitudes toward palliative care is also frequently mentioned as a barrier to appropriate care provision and it influences nurses' not to accept patients and their families as in charge decision makers or involve them in the care(18).

There are several studies that actually assessed nurses' knowledge and attitude about palliative care in different settings. A Study in Palestine has shown that only 20.8 % of the nurses had good knowledge and 56.2% of participants had moderate attitude towards palliative care(19). In Egypt 46.7% of nurses had unsatisfactory total knowledge scores about palliative (20).In Addis Ababa only 30.5% of nurses had good knowledge and 76% had favorable attitude towards palliative care(21). In contrary another study in Addis Ababa revealed that 53.7% of the nurses' have a negative attitude towards cancer pain management(16).

Therefore, the value of nurses on PC who deliver majority of care at the end of life and chronically ill patients is unquestionable, so that there is a need to support and educate nurses for the provision of high quality palliative care for patients and their families. First it is necessary to assess their current knowledge and attitudes with its contributing factors to support and educate nurses about PC. This study was done in Addis Ababa governmental hospitals where no emphasis is given concerning nurses' knowledge and attitudes towards palliative care. Therefore the purpose of this study is to provide clear findings regarding knowledge and attitude towards PC with its associated factors on behalf of nursing profession which may help to show direction to solve problems based on the result.

1.3. Research questions

1. What is the level of knowledge of nurses regarding palliative care?
2. What is the level of the attitudes of nurses' towards palliative care?

1.4. Significance of the Study

Firstly this study benefit to the policy makers by identifying the gaps of nurses on palliative care that helps to influence the higher education to revise nursing curriculum in order to incorporate palliative care content in nursing course. This will help for nurse's educators to give great emphasis on palliative care nursing education for nursing students that improve palliative care services in the hospitals.

Secondly benefit the community as good knowledge and positive attitude of nurses can address for those patients of all ages and a broad range of diagnostic categories that needs palliative care from life threatening to chronically ill patients.

Thirdly it will benefit to the nursing personnel to see themselves and respond accordingly. So that nurses can put their effort on updating the existed knowledge of palliative care through reading or taking short term training. This benefit the individual patients in terms of by improving the quality of life as nurses' knowledge and attitude gabs identified and corrected.

Lastly the findings of this study will serve as a base for other researchers who want to study about palliative care in advance.

So the investigator of this study is intended to explore overall nurses' knowledge and attitude towards palliative care in Addis Ababa government hospitals that could have an impact throughout palliative patient care.

UNIT TWO: LITERATURE REVIEW

In this literature review, palliative care is explored from the nurses' perspectives to understand their knowledge and attitude towards palliative care with its associated factors. This literature review is used as in purpose of gathering data from the numerous previously done researches concerning the topic of nurses' palliative care knowledge and attitude. Those finding can be useful for nursing students and nurses who are likely to be exploring about palliative care service.

2.1. Nurses' knowledge towards Palliative care

A cross-sectional descriptive survey using self-administered questionnaire sent to 15 hospitals in Lebanon to determine the knowledge, attitudes, and practices of physicians and nurses towards PC in Lebanon, and to assess the need and model for service delivery. Result showed that around 93% of nurses and 96% of physicians were able to identify the goals of PC. Questions required identifying the components of palliative care, more RNs than MDs failed to consider medical care, social care and physical care as components of PC. Around 100% of the respondents believe that PC services need to be developed in Lebanon warranting the need for continuing education in this field(22). Similarly another study acknowledged that formal education in palliative care and development of palliative care services are very much needed in Lebanon to provide holistic patients care(23).

Descriptive, cross sectional study was done to assess the nurses' knowledge and attitudes towards PC among nurses working in selected hospitals in Northern districts, Palestine. A study result showed that around half of the nurses 44(45.8%) had poor knowledge level of palliative care, 32 (33.3%) had fair knowledge, and only 20 (20.8%) had good knowledge(19).

Quantitative non experimental study carried out at selected nursing educational institution in Mangalore, India to assess the level of knowledge and attitude of nursing students regarding palliative care. The finding revealed that 68% nursing students had 'Average' knowledge, 28% had 'Poor 'knowledge and 4% of nursing students had 'Good' knowledge regarding palliative care(24).

An analytical study was done to identify residential aged care nurses' current knowledge of palliative care for older residents in need of end-of-life care on registered Nurses and assistants in nursing working in five high care residential aged care facilities in inner city region of Sydney, Australia. Results showed the total Palliative Care Quiz for Nursing score possible was 20. The range of quiz scores for RNs was 6–19 with the mean score of 11.7 (SD = 3.1) and the score range for AINs was 0–13 with a mean score of 5.8 (SD = 3.3). For both RNs and AINs the conceptual category of the quiz that scored the highest percentage of correct answers was that of psychosocial and spiritual care (RNs 62%, AINs 39%) and the category which scored the lowest was the philosophy and principles of palliative care (RNs 50% AINs 22%).Misconceptions in palliative care were identified for both groups of care giver(25).

A qualitative study was conducted to identify community nurses 'understanding of life review as a therapeutic intervention for younger people requiring palliative care in one Primary Care Trust in Northern England. Result findings suggested that community nurses have limited knowledge pertaining to the use of life review and tend to confuse the intervention.Tthe participants concur that with appropriate training they would find life review a useful intervention to use in palliative care(26).

In India a cross-sectional survey of 363 nurses in a multispecialty hospital carried out to assess the knowledge about palliative care among Indian professionals nurse using the palliative care knowledge test (PCKT). The study utilized a self-report questionnaire which had 20 items (statements about palliative care) for each of which the person had to indicate 'correct', 'incorrect', or 'unsure.' The PCKT had 5 subscales (philosophy- 2 items, pain- 6 items, dyspnea- 4 items, psychiatric problems- 4 items, and gastro-intestinal problems- 4 items).Results showed that the overall total score of PCKT was 7.16 ± 2.69 (35.8%). The philosophy score was 73 ± .65 (36.5%), pain score was 2.09 ± 1.19 (34.83%), dyspnea score was 1.13 ± .95 (28.25%), psychiatric problems score was 1.83 ± 1.02 (45.75%), and gastro-intestinal problems score was 1.36 ± .97 (34%). (P = .00)(27).

A descriptive study was conducted by using a self-administered structured questionnaire from 100 staff nurses to assess the knowledge and practice of staff nurses on palliative care in selected hospitals of Guwahati city, Assam. The study showed that maximum 79% have inadequate

knowledge, 21% have moderately adequate knowledge and no one has adequate knowledge on palliative care(15).

Quantitative descriptive study was conducted to assess the level of knowledge and attitude of staff nurses regarding palliative care in Sree Gokulam Medical College and Research Foundation, Venjaramoodu. The study finding revealed that 20% of staff nurses have adequate knowledge while majorities (69%) were having moderate knowledge and 11% were having poor knowledge(28).

A cross-sectional, descriptive study was conducted on 140 oncology and intensive care unit (ICU) nurses in three hospitals supervised by Kerman University of Medical Sciences to examine oncology and intensive care nurses' knowledge about palliative care in Southeast Iran by using the Palliative Care Quiz for Nursing (PCQN). Results showed that the mean score was 7.59 (SD: 2.28). The most correct answers were in the category of management of pain and other symptoms (46.07%). The lowest correct answers were in the category of psychosocial and spiritual care (19.3%). The most correct answers belonged to item the adjuvant therapies are important in managing pain (85.3%). The fewest correct answers belonged to item the accumulation of losses renders burnout inevitable for those who seek work in palliative care (8.3%). In this study, some misconceptions also were found. The most important misconception was "the loss of a distant or contentious relationship is easier to resolve than the loss of one that is close or intimate," with 83.5% agreeing with that statement. The second misconception was "the extent of the disease determines the method of pain treatment," with 74.6% agreeing(29).

A study was done in 2011 aimed at identifying the level of knowledge and attitude of nursing students who are the future caretakers of patients, which helps to make recommendations in incorporating palliative care concepts in the nursing curriculum by using cluster sampling method from selected nursing schools of Udupi district. The result revealed that only 43.4% of them were aware of the term palliative care and it was during their training period. The data showed that 79.5% of students had poor knowledge (6.4± 1.64) on palliative care. This study concluded that Palliative care aspects should be incorporated in the diploma nursing curriculum (30).

A cross sectional quantitative survey study done in Saudi Arabia to identify nurses' attitude, knowledge and experiences on prioritizing palliative care in selected hospitals in Taif City and to assess adequacy of the palliative care content in the undergraduate nursing curriculum from teaching members' perspectives in Nursing Department, Taif University. Result revealed that above half of nurses (62%) had poor knowledge regarding palliative care(17).

Qualitative semi- structured interviews were conducted to explore nurses' knowledge about palliative care in an intensive care unit in Saudi Arabia. Results revealed that palliative care concept was not familiar for most ICU nurses but it was applied in their daily work. Most nurses provided physical care at the end of life to keep the body intact. Some nurses highlighted that dying patients did not feel pain to be treated and did not have emotions to be supported. It concludes that nurses had insufficient knowledge of palliative care and how to apply it in ICU setting. The provision of additional education in palliative care is recommended in order to improve the knowledge of palliative care among nurses(31).

A cross-sectional questionnaire based study was carried out to investigate the knowledge and attitude of nurses toward palliative care in a tertiary level hospital in Southwest Nigeria. Result revealed that regarding the definition of palliative care, 71.8% of the respondents understood palliative care to be about pain medicine, 55% thought it to be geriatric medicine, while 90.2% felt palliative care is about the active care of the dying. Exactly 80.5% respondents agreed that palliative care recognizes dying as a normal process while 84.1% respondents were of the opinion that all dying patients would require palliative care. The use of morphine would improve the quality of life of patients according to 68.9% of respondents. This study conclude that there are gaps in the knowledge of healthcare workers in the area of palliative care and this call for a review of the current nursing curriculum and practice guidelines in Nigeria(32).

A descriptive exploratory research design was carried out to assess nurses' knowledge and practice regarding palliative care at The National Cancer Institute, Cairo University, Egypt. The study result showed that more than half (53.3%) of the studied sample had satisfactory total knowledge scores about palliative care with a mean scores of 57.7 ± SD = 13.28; around two thirds (63.3%) had unsatisfactory general knowledge level, with a mean scores of 5.53 ± SD = 1.678; more than half (53.3%) had unsatisfactory knowledge about physical symptoms requiring

palliative care, with a mean scores of 15.56 ± SD = 3.56 and around two third (60%) had satisfactory knowledge about psychological symptoms requiring palliative care, with a mean scores of 9.44± SD =1.423 (20).

A study conducted in Addis Ababa, to assess knowledge of nurses regarding cancer pain management showed that a deficit in knowledge to cancer pain management on nurses was prominent. Only 35.4% of the respondents had good knowledge on cancer pain management(33).

Another study in Addis Ababa on nurses showed that out of the total study participants only 30.5% had good knowledge towards PC. Nearly 70% of the respondents knew the definition of PC and 82.1% agreed that PC is being given when patient's conditions are deteriorating. Similarly 82.1% of nurses responded that addiction is noticed as the major health problem when morphine is used in long term. Of the total respondents 69.5%, 66% and 71.6% agreed that adjuvant therapies are important in pain management, that the patients right not to resuscitate (DNR) should be respected, and that terminally ill patients should be encouraged to have hope, respectively(21).

2.2. Nurses' attitude towards Palliative care

A study done in Palestine, assessment of the nurses' attitude of palliative care result showed that the most respondents' attitudes levels towards palliative care were moderate attitude 54 (56.2%), 36 (37.5%) poor attitude, and 6(6.2%) good attitude level. More than half of the nurses were more likely to disagree of Palliative care is given only for dying patient (63.5%), as well as they also disagree if the nurse should withdraw from his/her involvement with the patient (56.7%). On the other hand, approximately half of the respondents (56.3%) of nurses agreed with beneficial for the chronically sick person to verbalize his/her feelings. The attitudes toward the length of time required to give nursing care to a dying person would frustrate the nurse were slightly different from agree to disagree (agree 44.8%, disagree 15.6%). Nurses' attitudes toward Family should maintain as normal an environment as possible for their dying member agrees 34.4%. Whereas the attitudes toward the family should be involved in the physical care of the dying person were 44.8% agree and 8.3% disagree. Most of nurses said that it is difficult to form a close relationship with the family of a dying member (47.9%). Approximately half of nurses (38.5%) agreed with nursing care for the patient's family should continue throughout the period

of grief and bereavement. It is interesting to note that nursing care should extend to the family of the dying person (approximately 40%). In the opposite, the nurse thought that he/she would be uncomfortable if he entered the room of a terminally ill person and found him/her crying (21.9%). Their attitudes were slightly different regarding the afraid to become friends with chronically sick and dying patients (agree 37.5, disagree 22.9%). Surprising 26.0% agreed that when a patient asks, “Nurse am I dying?'I think it is best to change the Subject to something cheerful(19).

Quantitative non experimental study carried out at selected nursing educational institution in Mangalore, India to assess the level of knowledge and attitude of second year diploma and B.sc nursing students regarding palliative care. The result showed that, majority of (59%) nursing students had ‘Average’ attitude, 41% had ‘Poor’ attitude and none of the nursing students had ‘Good’ attitude regarding palliative care(24).

A research was conducted to describe Iranian nurses’ attitudes as well as their experiences in the field of end of life care. FATCOD questionnaire was used to examine 55 oncology nurses’ attitudes towards caring for dying persons. Most of the nurses in this study were likely to giving care and emotional support to the persons at the end of life and their families as well. They acknowledge care of the people at the end of life as a worthwhile experience. Most of the participants had not tendency to involve the persons who are dying and their families in the care and accept them as in charge decision makers. They also reported themselves unlikely to talk about death with persons at the end of life and even educate them about death and dying. Furthermore, they stated that they are not likely to give the honest answer to the dying persons about their conditions(18).

Another study was conducted to examine oncology and intensive care unit nurses' attitudes toward palliative care in south-east Iran. A self-administered questionnaire was used to assess the palliative care attitudes of 140 oncology and ICU nurses from three hospitals. The study revealed that the participants had moderately negative to neutral attitudes toward palliative care (2.99 ± 0.29 out of 5). Among all categories, the highest mean score came from the category of ‘patient’s preferences’ (mean=3.66) and the lowest from the category of ‘withholding and withdrawing treatment’ (mean=2.42)(34).

A study conducted in Sree Gokulam Medical College and Research Foundation, Venjaramoodu revealed that among 200 subjects majority (79.5%) have moderate attitude, (17.5%) had adequate attitude and only (3%) had poor attitude regarding palliative care(28).

A study done in Lebanon showed that attitudes of RNs and MDs towards PC, nurses were twice as likely as physicians to disagree to give the right of "Do not resuscitate" to terminally ill patients (17.8% vs. 8.6%; p = .001) whereas MDs were twice as likely as RNs to disagree with giving hope to terminally ill patients against all odds (7.5% vs. 3.6% ; p = .011). The majority (94% to 99%) believes terminally ill patients and their families should be informed of the diagnosis and prognosis. Though most of RNs and MDs agreed that having the same religious back- ground as the patients enhances the caring process, the percent among RNs (67.3%) was significantly higher than among MDs (59.6% ; p = .036). The preferred place of death was reported by both RNs and MDs to be the home of the patient (91.7% and 91.0%). It is interesting to note that 40% of RNs and MDs did not consider the hospital as a right place to die and 66.9% of RNS and 60.2% of MDs did not consider hospice as a good place to die(22).

A study was done in Udupi district, to assess the level of knowledge and attitude of nursing students towards palliative care. The data analyzed showed that 92.8% of them had favorable attitude (56.7± 8.5) towards palliative care(30).

A cross sectional quantitative survey study was conducted on 100 nurses working in selected hospitals in Taif City, in Saudi Arabia. Result revealed that most of them (83%) have positive attitude regarding end-of-life care (17).

A cross sectional study done 2012 in nurses in Addis Ababa result showed that nurse's attitude according to degree of agreement towards items of FATCOD, nearly half (49%) of the participant nurses strongly disagreed that PC was given only for dying patients. More than half of the respondents strongly disagreed to withdrawing their involvement with patients who are at the verge of death. 134 (39.3%) and 43 (12.6%) agreed and strongly agreed; respectively, that it is possible for nurses to help patients prepare for death using various psychological mechanisms. On the other hand, over half of the nurses 174 (51%) agreed that family should be concerned about helping their dying member; like- wise, nearly half of the respondents 170 (49.9) agreed that patients and family should be in charge of making decisions about patients care. In contrast

103 (30.2%) and 83 (24.3%) of respondents felt uncomfortable talking about death with a dying patient and they usually refused to be assigned to give care for dying people, respectively. In general, more than three quarters of the respondent (76%) had favorable attitude towards PC(21). On the contrary another study in Addis Ababa city to assess nurses' attitude, practice and barriers regarding cancer pain management at selected health institutions showed that more than half, 53.7%, of the nurses' have a negative attitude towards cancer pain management(16).

2.3. Associated factors of nurses' palliative care knowledge and attitude

A study done in Northern districts Palestine to assess the nurses' knowledge and attitudes towards PC showed that a highly statistically significant relation between Nurses' qualification, Nurses' experience and training of palliative care with total mean score of knowledge (0.020, 0.004, 0.015) respectively. But there was no statistical significant relation among total mean of knowledge of palliative care with the hospitals and departments of work(19).

A descriptive analysis of the background information in Iranian nurses' revealed that among demographic characters, the experience of caring for a family member who is dying (r=0.315) found positively correlated with attitude towards giving care to the people at the end of life. A positive correlation was found between intrinsic religiosity (belief in God) and participants' attitudes towards caring for dying people (r=0.261)(18).

A study done in South-east Iran, the attitudes of student nurses from Kerman and Bam towards death and caring for dying patients were compared. The Bam student nurses, who had more experience of death due to the Bam earthquake in December 2003, were found to be less afraid of death and also less likely to give care to people at the end of life compared to their counterparts in Kerman. In both groups, those who were educated about death and dying had more positive attitudes towards caring for people who are dying than non-educated participants. The study suggests that adding palliative care education, accompanied by a reflective narrative approach, to the nursing curriculum is necessary to improve quality of care at the end of life(35). Similarly finding in Italy suggests a need for nursing education on care of the dying and on all of the end-of-life aspects and issues(36).

Another study done in south-east Iran revealed that significant correlation between nurses' attitude towards palliative care and some demographic characteristics including marital status, type of ward, palliative care education, personal study about palliative care, level of education and experience of caring for a dying family member. It suggests specific courses about death and palliative care in undergraduate and postgraduate nursing curricula should be included (34).

A study done in Thailand to review factors relating to nurses' caring behaviors for dying patients from existing literatures results showed that factors related to a nurse's caring behavior for a dying patient can be classified into three groups. These include; Nurse's personal factors, Technological influencing factors and Environmental factors. A nurse's personal factors including age, years of work experience in nursing, training experience, direct experience in taking care of their own EOL family member, educational level, self-awareness and moral distress are the factors related to the caring behaviors of nurses in providing care for dying patients(37).

A descriptive quantitative design was done to assess how Jordanian nurses providing care for terminal ill patients feel about death and caring for dying patients and to examine any relationships between their attitudes and certain nursing characteristics. The study result revealed that older registered nurses with more experience tended to have more positive attitudes toward death and caring for dying patients. Registered nurses (RNs) without this experience had more negative attitudes, reported more feelings of fear toward death, and avoided thoughts of death as much as possible(38). Similarly in Greek hospitals nurses with more work experience tended to have more positive attitudes toward death and caring for dying patients(39).

A descriptive study in Southeast Iran analysis of background information revealed that no significant correlation was found between total PCQN score and its subscales with age, gender, education, ward, religiosity, years of nursing experience, and years of experience of caring for dying people but there was a significant correlation between the subscale of management of pain and other symptoms, and participants' length of experience caring for a dying family member ($p= 0.01$). The Significance of findings suggests that nurses' knowledge about palliative care can be improved by establishing specific palliative care units and by incorporation of palliative care nursing education curriculum into undergraduate nursing studies(29).

A survey using cluster sampling method was conducted among 83 third-year Diploma Nursing students from selected nursing schools of Udupi district. The chi-square showed a significant association between knowledge and age ($\chi 2=18.52, P<0.01$) of the nursing students but there was no significant association between attitude and variables among nursing students(30).

A study done in Saudi Arabia to assess adequacy of the palliative care content in the undergraduate nursing curriculum from teaching members' perspectives showed that most of the content of End-Of-Life (EOL) cares in nursing educational program was perceived by faculty members as inadequate with a percentage of (77.3%) and they agreed on the importance of EOL as a part of nursing curriculum. They also perceived that the greatest barriers for improving EOL care were "Inadequate content", "No special training for end of life", and "No special governmental hospital"(17).

A Quasi experimental design study conducted in Egypt, Menoufiya University Hospital in pediatric medical ward and ICU unit to evaluate the impact of palliative care education on nurses' knowledge, attitude and experience regarding care of chronically ill children. It was concluded that there were significant difference in nurses' knowledge pre/ post intervention regarding care of chronically ill children and highly significant difference in nurses' attitude and practice pre/ post intervention related to care of chronically ill children(40).

A study in Egypt, on nurses' knowledge and practice regarding palliative care finding revealed that a positive correlation between years of experience and age ($r = 0.893$, at $p < 0.000$); years of experience and total practices scores ($r = 0.437$, at $p< 0.016$); general knowledge scores and physical symptoms ($r= 0.389$, at p0.033); physical symptoms and psychological symptoms($r = 0.683$ at $p< 0.000$); physical symptoms and total knowledge scores($r=0.949$,at $p<0.000$); psychological symptoms and total knowledge scores($r=0.788$,at $p<0.000$)(20).

A quantitative study was carried out to assess the nurse's knowledge, skills, and attitudes and associated factors towards PC in Addis Ababa hospitals. Result showed that medical and surgical wards as well as training on PC were positively associated with knowledge of nurses. Institution, level of education, ward, and training had significant association with attitude of nurses. Nurses working in Hayat Hospital (nongovernmental) had a 71.5% chance of having unfavorable attitude towards PC than those working in Black Lion Hospital (governmental)(21).

A study in Addis Ababa city to assess nurses' attitude, practice and barriers regarding cancer pain management showed that lack of courses related to pain in the under graduate classes, lack of continuing training and work overload, role confusion, lack of motivation including salary were the identified barriers for adequate pain management(16).

Another study in Addis Ababa, on cancer pain management knowlege on nurses showed that a statistical significance was observed in nurse's work experience with pain knowledge at $P<0.05$. However, no statistical significance was observed for other socio demographic variables(33).

In summary different literature findings showed that nurses have poor knowledge and negative to favorable attitude towards palliative care and most of them recommended that attention should be given on palliative care by the national health policy and it should be incorporated in the national curriculum of nursing education.

2.4. Conceptual framework

Concepts that are directly and indirectly related to the major variables of the study developed from literature review. Among these: personal information of nurses, education, experience and area of work are expected to affect the dependent variable of the study(18,19,21,34,37,38)

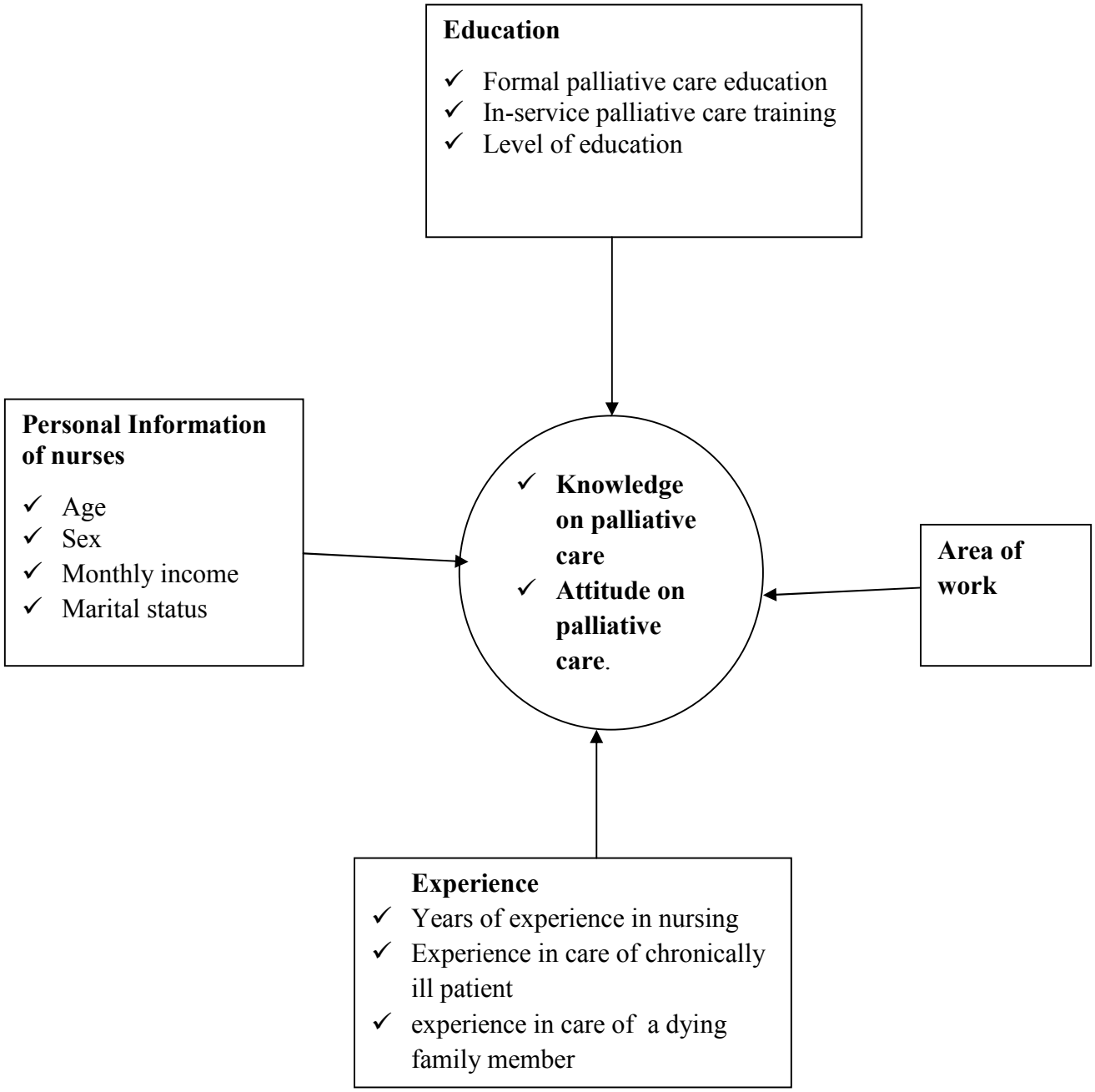

Figure 1 Diagrammatic representation developed to show interactions between the dependent and independent variables

UNIT THREE: OBJECTIVES

3.1. General objective

The general objective of this study is to assess knowledge and attitude towards palliative care among nurses working in Addis Ababa governmental hospitals, Ethiopia, 2016.

3.2. Specific objectives

1. To assess nurses' level of knowledge towards palliative care
2. To identify nurses' attitude towards palliative care
3. To identify association factors related to nurses knowledge and attitude towards palliative care

UNIT FOUR: METHODS AND MATERIALS

4.1. Study Area:

This study conducted in Addis Ababa, governmental hospitals. Addis Ababa is the capital city of Ethiopia and it has a population size of 3,048,631 of whom 1,595,968 were females and the rest 1,452,663 were males. The city is divided in to 10 sub-cities. The city is located at the heart of the country, at an altitude ranging from 2,100 meters at Akaki in the south to 3,000 meters at Entoto Hill in the North(41).

With regard to health institutions the city totally holds 13 government hospitals (5 federal, 6 under Addis Ababa health bureau, 1 owned by police force and 1 armed force hospital) distributed throughout 10 sub cities. Those government hospitals throughout the city are Black lion hospital, St Paul hospital, Amanuel hospital, ALERT Hospital, St Peter hospital, Police hospital, Armed force hospital, Zewditu memorial hospital, Menilik II memorial hospital, Ras Desta memorial hospital, Yekatite12th hospital, Tirunesh Beijing hospital and Gandi memorial hospital.

In this study from the total of 13 governmental hospitals in 10 sub cities 4 hospitals selected randomly. Those are: Tirunesh Beijing hospital, Black lion hospital, Menilik II memorial hospital and Zewditu memorial hospital.

4.2. Study design

Institutional based cross sectional study design was used.

4.3. Study period

The study was conducted in Addis Ababa governmental hospitals from March 1 - 10, 2016.

4.4. Populations

4.4.1. Source population

All nurses who are working in Addis Ababa governmental hospitals.

4.4.2. Study population

All nurses working in randomly selected governmental hospitals in Addis Ababa and are meeting the inclusion criteria.

4.4.3. Inclusion and exclusion criteria

- **Inclusion criteria** –Nurses with work experience of at least 6 months or more in randomly selected governmental hospitals who were available during data collection period and willing to participate in the study were included.
- **Exclusion Criteria** – Nurses working in central sterilization supply department and those not willing to participate in the study were excluded. Nurses with work experience of less than 6 months also excluded in this study.

4.5. Sample size determination

The sample size was determined by using formula for estimating a single population proportion formula. The sample size for this cross sectional study calculated by assuming knowledge prevalence to be 30.5% in previous study in Addis Ababa with 5% marginal error, 95% confidence interval (CI) and a none response rate of 10%. Based on this assumption, the actual sample size for the study was as follows.

$$n = \frac{(Z_{\alpha/2})^2 P (1-P)}{d^2}$$

Where n=Sample size

Z=value corresponding to a 95% level of significance=1.96

p= prevalence in previous study=30.5%=0.3

q= (1-p) = (1-0.3) =0.7

d= Margin of error, assumed to be 5%

None response rate=10%

Therefore, based on using the above single population proportion formula the sample size calculated as:

$$n = \frac{(1.96)^2\ 0.3(1-0.3)}{(0.05)^2}$$

$$n = 323$$

Since the study population is less than 10,000 we used population correction formulas in order to get the required minimum sample.

$$\mathbf{n_f = \frac{n}{1+ (n/N)}}$$

Where n_f =desired sample size

n= the calculated sample size

N= total population (nurses in all selected hospitals)

$$n_f = \frac{323}{1+ (323 /1274)}$$

$$n_f = 258$$

However, as the sample selection passed through multistage sampling, we were used a design effect of 1.5 and then adds 10% for non response rate to reach a total sample size of **426 nurses**.

4.6. Sampling technique and Sampling procedure

Addis Ababa city has 13 governmental hospitals from which one-third of the hospitals i.e.4 governmental hospitals selected randomly by lottery method. The hospitals selected randomly are Tirunesh Beijing hospital, Black lion hospital, Menilik II memorial hospital and Zewditu memorial hospital. To select the study participants, the total sample size was allocated proportionally based on the number of nurses from each selected hospitals. Again proportional

allocation was done for each work area in each selected hospitals. Finally, from each work area, nurses were selected using a systematic random sampling with replacement method to attain the final individuals by using list of nurses in each work area as a sampling frame. The sampling interval (K=1274/426≈3) of study participants were every third participants. The first study subject was selected by using lottery method then every third study participants were involved in this study.

4.7. Proportional allocation

Based on proportionate the total sample size (426) was allocated to each selected hospitals.

$$\mathbf{n_j = \frac{n \times N_i}{N}}$$

Where

n_j=is the sample size of the j th hospital

N_j=is population size of the j th hospital

$n= n_1+ n_2+n_3+n_4$ is the total sample size (426)

$N=N_1+N_2+N_3+N_4$ is total population size of hospitals

- Again proportional allocation was done for each work area in each selected hospitals based on the number of nurses in each work area or wards. We were use this formula:

$$n_w = \frac{n_j \times N_w}{Nj}$$

Where

n_w=is the sample size of the w th work area

n_j=is sample size of the j th hospital

N_w = is population size of the w th work area

N_j=is population size of the j th hospital

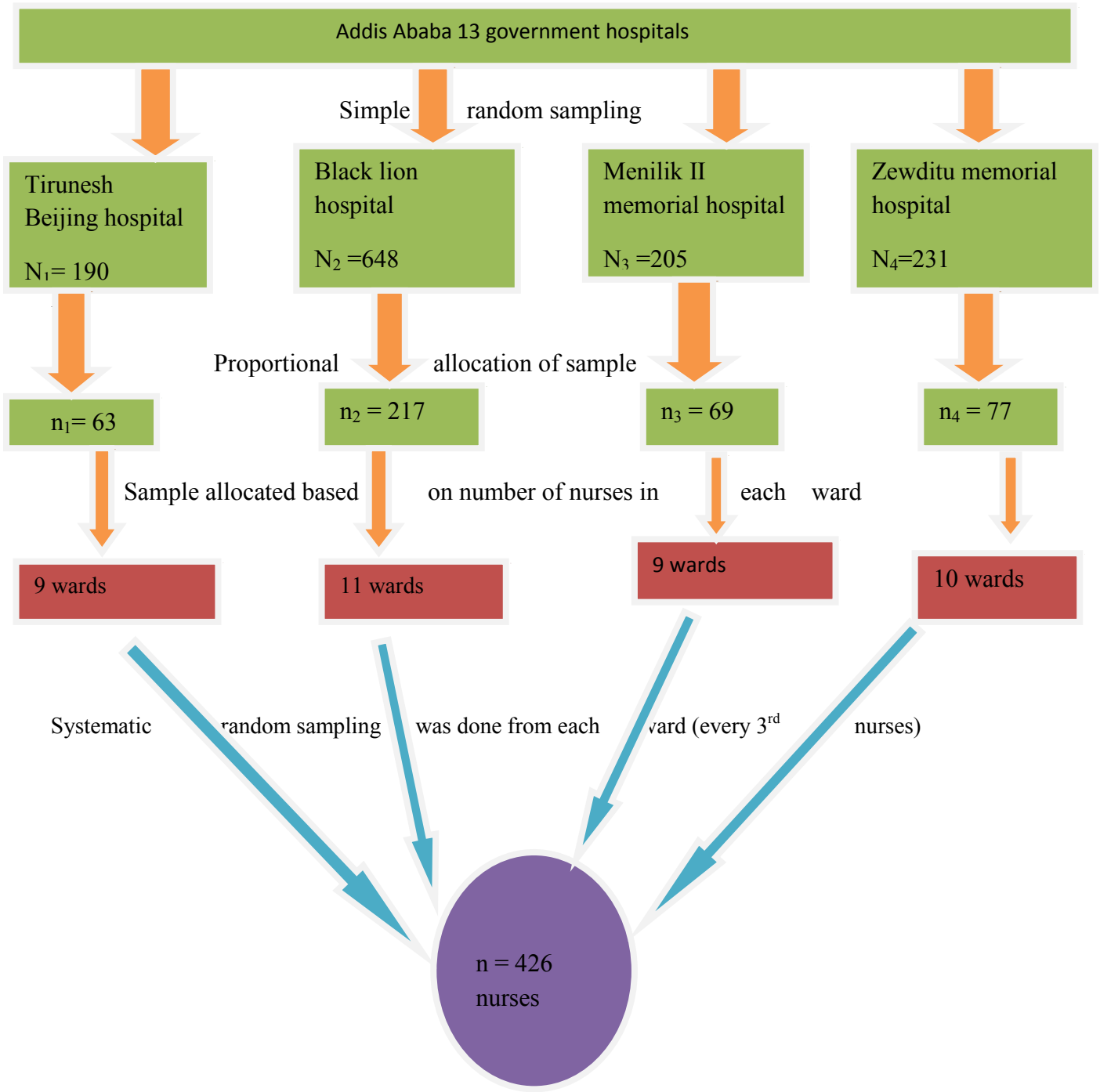

Figure 2 Schematic representation of sampling procedure in Addis Ababa government hospitals, 2016

4.8. Variables of the Study

4.8.1. Dependent Variables

- Knowledge on palliative care
- Attitude on palliative care

4.8.2. Independent Variables

- Age
- Sex
- Monthly income
- Marital status
- Palliative care education
- In-service palliative care training
- Level of education (diploma, degree, MSc nurse…)
- Year of experience(service) in nursing
- Experience in care of chronically ill patient
- experience in care of a dying family member
- Area of work (Medical ward, Surgical ward, pediatric ward, neonatolotolgy ward ,Oncology ward, orthopedic ward, OPD, post operation recovery room, ICU,ER)

4.9. Operational definition

- Good knowledge = ≥75% of total score of the Palliative Care Quiz for Nursing (PCQN) scale.
- Poor knowledge = <75% of total score of the PCQN scale(21).
- Favorable attitude = ≥50% of the total score of Frommelt Attitude Toward Care of the Dying (FATCOD) Scale.
- Unfavorable attitude= <50% of total score of the FATCOD Scale(21).

4.10. Methods of data collection

4.10.1. Data collection tool

A self administered questionnaire was used for data collection. The knowledge questions adopted and modified from the Palliative Care Quiz for Nursing (PCQN). The reliability coefficient of the tool was 0.56 and the internal consistency of the 20-item quiz was 0.78(42). The attitude scale adopted from Frommelt Attitude toward Care of the Dying (FATCOD) and modified so as to make it fit to the Ethiopia context(21). The tool not translated to local language because the study participants are health professionals.

The data collection instrument contains three sections.

- Section one: A socio demographic variables include (institution, age, sex, monthly income, work setting, level of education, work experience, experience of caring chronically ill patient, experience of caring a dying family member, formal PC education and PC in-service training).
- Section two: knowledge questions which come from the Palliative Care Quiz for Nursing (PCQN) using questions with Yes, No, or Don't know answers. One point was awarded for each correct answer; incorrect or I don't know answer took zero. A high score indicates better knowledge.
- Section three: The attitude questionnaire which consists of 24 items to measure the attitude of nurses towards palliative care. The tool has a 5 point Likert scale. This was used to represent people's attitudes to a topic scored on 5 point scale, i.e. 1 (Strongly Disagree), 2 (Disagree), 3 (Uncertain), 4 (Agree) to 5 (Strongly Agree). Twelve of the items written positively and the rest twelve items written negatively. The score of negative items were reversed to calculate the attitude. Overall score calculated by adding each individual's scores out of 120. A higher score indicates a more positive attitude toward PC.

4.10.2. Data collection procedure

Pretest in 10 % of the sample nurses was done by the principal investigator in Yekatite12 hospital which is not included in the study, to assess the content, approach of the questionnaire and to correct unclear and vague issues on the questionnaire. Four degree nurses as data

collectors (one for each hospital) and 1 master nurse as supervisor were selected who have an experience of data collection. The data collectors were responsible for the distribution of the self-administered structured questionnaire to all nurses meeting the selection criteria and willing to participate in the study after briefly presenting the study purpose and consenting the individual nurses in the study area. The respondents encouraged to respond to all items in the questionnaire within the time they devoted as much as possible to minimize large non-response rate.

4.10.3. Data quality control

Data quality control was controlled by pretest in 10 % of the sample nurses in Yekatite12 hospital. One full day training was given for data collectors and supervisor regarding the study, the questionnaire and data collection procedure by the main investigator. The Collected data was checked every day by supervisors and principal investigator for its completeness. Problems faced were discussed over night with data collectors and the supervisors. Data was kept in the form of file in secure place where no one can access it except the investigator and confidentiality was insured by not recording names or any personal identity. Data was checked again for its completeness before data entry.

4.11. Data analysis

Data was entered in to epidata and export to SPSS Version 23 and checked for missing values. Cleaning was done by running frequency after data entry. Descriptive statics was done to describe frequency and percentages and displayed in tables, graphs and charts. Binary logistic regression was done to see the crude significant relation of each independent variable with dependant variables. Then independent variables found significant entered to multivariate logistic regressions to control the effect of confounding. Finally significant factors were identified based on AOR include in 95% confidence level at P-value less than 0.05.

4.12. Ethical consideration

Ethical clearance obtained from institutional review board of Addis Ababa University, college of health sciences, department of nursing and midwifery research committee and other responsible bodies. Official letter from department of nursing and midwifery was written to Addis Ababa city administration health bureau and Black Lion Specialized referral hospital. Accordingly

permission was obtained from Addis Ababa city administration health bureau and official letter distributed to hospitals included in the study. Informed oral consent was obtained from all study participants after information is provided about purpose of the study, non- invasiveness of the data collection procedure, confidentiality of the information and respondents was reassured that they would be anonymous(unnamed). Then respondents were given the chance to ask anything about the study and were made free to refuse or stop at any moment they want if that is their choice.

4.13. Dissemination and Utilization of Result

The primary objective of this thesis is for partial fulfillment in the requirements to degree of master in adult health nursing; it will be presented and submitted to the department of nursing and midwifery, school of allied health sciences, Addis Ababa University. In addition copies of the result will be given to Addis Ababa city administration health bureau and Black Lion specialized hospital to utilize the information for further development of strategic and educational plan promotion of nurse's knowledge and attitude towards palliative care. Presentations at professional, local, national and international meetings and publication in peer reviewed national or international journals will be attempted.

UNIT FIVE: RESULTS

5.1. Socio-demographic characteristics of the study participants

Out of the total sample size (n=426), 392 participants have responded completely that gives 92.02% response rate. The data were collected from Black Lion Specialized Referral Hospital 198 (50.5 %), Menilik II memorial hospital 65(16.6%), Zewditu memorial Hospital 71(18.1%) and Tirunesh Beijing 58(14.8%). Among 392 nurses who completed the questionnaires, majority of participants 263 (67.1%) were female and 129 (32.9%) were male and the mean age of respondents was 28.83 years ± 6.077 SD (ranged from 21 to 59). The respondents were working in medical ward 45 (11.5%), surgical ward 40 (10.2%), pediatrics ward 26(6.6%), neonatology ward 19 (4.8%), oncology ward 11 (2.8%), Obstetrics and gynecology ward 20(5.1%), orthopedics ward 16(4.1%), emergency unit 73(18.6%), Post anesthesia care unit 16(4.1%), Intensive care unit 37(9.4%) and Outpatient department 89(22.7%). Regarding academic qualification 57 (14.5%), 327(83.4%), and 8(2.0%), have diploma, degree and master respectively. More respondents 251(64.0 %) had up to 5 years of experience, 97(24.7%), 24(6.1%), 20 (5.1%) had 6 to 10 years, 11 to 15years and more than 15 years of experience, respectively. Majority of respondents 271(69.1%) had daily experiences of caring chronically ill patients. Almost two third of the participants 250(63.8%) took formal palliative care education in college or university but among these respondents who took palliative care education in college or university 142 (56.8) of them said that “palliative care education in college/university was not enough to give quality palliative care for patients.”From study participants the majority 280(71.4%) had no and 112(28.6%) had in-service training about palliative care. (See table 1 below)

Table 1 Socio-demographic characteristics of nurses in Addis Ababa government hospitals, 2016

No	Variables	Responses	Frequency No =392	Percentage (100%)
1	Institution/hospital	Black lion	198	50.5
		Menilik II memorial	65	16.6
		Zewditu memorial	71	18.1
		Tirunesh Beijing	58	14.8
2	Age	21-30 years	303	77.3
		31-40 years	71	18.1
		>40 years	18	4.6
3	Monthly income(ETB)	1500-3000	59	15.1
		>3000	333	84.9
4	Sex	Male	129	32.9
		Female	263	67.1
5	Marital status	Single	230	58.7
		Married	162	41.3
6	Level of Education	Diploma nurse	57	14.5
		Bsc nurse	327	83.4
		Msc nurse	8	2.0
7	Current working area or ward	Medical ward	45	11.5
		Surgical ward	40	10.2
		pediatric ward	26	6.6
		Neonatology ward	19	4.8
		Oncology ward	11	2.8
		Obstetrics and gynecology ward	20	5.1
		Orthopedic ward	16	4.1
		Emergency room	73	18.6
		Post anesthesia care unit	16	4.1
		Intensive care unit	37	9.4
		Outpatient department	89	22.7

8	Years of working experiences in nursing	≤5 years	251	64.0
		6-10 years	97	24.7
		11-15 years	24	6.1
		>15 years	20	5.1
9	Experience in caring chronically ill patient	Daily	271	69.1
		Once per week	56	14.3
		Once per Month	18	4.6
		Few times per year	37	9.4
		Never	10	2.6
10	Experience of care for a dying family member within last 6 months	Yes	141	36.0
		No	251	64.0
11	Formal palliative care education in college/university	Yes	250	63.8
		No	142	36.2
12	If yes for 11, was it enough to give quality palliative care for patient?	Yes	108	43.2
		No	142	56.8
13	In-service training about palliative care	Yes	112	28.6
		No	280	71.4

5.2. Nurses' Knowledge towards palliative Care

In the PCQN, the minimum and maximum score were 2 and 17 out of 20 respectively with the mean score of 10.46 (SD: 3.722). Most participants' (56.5%) responses rest on the category belongs to correct answers for management of pain and others symptoms with the mean score of 7.34 within its category out of 13 items. The fewest correct answers belonged to Philosophy and principle of palliative care (43.3%) which contains four items. The rate of correct answers ranged from 86.0% to 21.9%. In this study, misconceptions also found. The most important misconception was "the extent of the disease determines the method of pain treatment," with 70.2% agreeing with that statement. The second misconception was "the loss of a distant or contentious relationship is easier to resolve than the loss of one that is close or intimate," with 56.9% agreeing. The third misconception was "Drug addiction is a major problem when morphine is used on a long-term basis for the management of pain," with 54.6% agreeing the statement. See table 2.

Table 2 Distribution of nurses' knowledge toward palliative care in Addis Ababa government hospitals, Ethiopia, 2016

No	Questions	Correct N (%)	Incorrect N (%)	I do not know N (%)	Correct subscale mean (%)
Philosophy and principle of palliative care knowledge questionnaires					**1.73(43.3)**
1	Palliative care is appropriate only in situations where there is evidence of a downhill trajectory or deterioration. (No)	210(53.6)	121(30.9)	61(15.6)	
2	The provision of palliative care requires emotional detachment. (No)	201(51.3)	125(31.9)	66(16.8)	
3	The philosophy of palliative care is compatible with that of aggressive treatment. (Yes)	183(46.7)	133(33.9)	76(19.4)	
4	The accumulation of losses renders burnout inevitable for those who seek work in palliative care. (No)	86(21.9)	212(54.1)	94(24.0)	
Psychosocial and spiritual care knowledge questionnaires					**1.38(46)**
5	It is crucial for family members to remain at the bedside until death occurs. (No)	159(40.6)	211(53.8)	22(5.6)	
6	Men generally resolve their unhappiness	250(63.8)	118(30.1)	24(6.1)	

	more quickly than women. (No)				
7	The loss of a distant or contentious relationship is easier to resolve than the loss of one that is close or intimate. (No)	133(33.9)	223(56.9)	36(9.2)	
Management of pain and other symptoms knowledge questionnaires					**7.34(56.5)**
8	Morphine is the standard used to compare the analgesic effect of other opioids. (Yes)	303(77.3)	54(13.8)	35(8.9)	
9	The extent of the disease determines the method of pain treatment.(No)	91(23.2)	275(70.2)	26(6.6)	
10	Adjuvant therapies are important in managing pain. (Yes)	291(74.2)	50(12.8)	51(13.0)	
11	During the last days of life, the drowsiness associated with electrolyte imbalance may decrease the need for sedation. (Yes)	245(62.5)	78(19.9)	69(17.6)	
12	Drug addiction is a major problem when morphine is used on a long-term basis for the management of pain. (No)	154(39.3)	214(54.6)	24(6.1)	
13	Individuals who are taking opioids should also follow a bowel management. (Yes)	274(69.9)	43(11.0)	75(19.1)	
14	During the terminal stages of illness, drugs that can cause respiratory depression are appropriate for the treatment of severe dyspnea. (Yes)	152(38.8)	190(48.5)	50(12.8)	
15	The use of placebos is appropriate in the treatment of some types of pain. (No)	159(40.6)	191(48.7)	42(10.7)	
16	In high doses, codeine causes more nausea and vomiting than morphine. (Yes)	256(65.3)	57(14.5)	79(20.2)	
17	Suffering and physical pain are synonymous. (No)	238(60.7)	120(30.6)	34(8.7)	
18	Meperidine (Demerol) Demerol is not an effective analgesic in the control of chronic pain. (Yes)	197(50.3)	107(27.3)	88(22.4)	
19	Manifestations of chronic pain are different from those of acute pain. (Yes)	339(86.0)	39(9.9)	16(4.1)	
20	The pain threshold is lowered by anxiety or fatigue. (Yes)	180(45.9)	145(37.0)	67(17.1)	

Yes: correct answer is yes; No: correct answer is no.

Figure 3 showed that around three fourth of the nurses 288(73.5%) have poor knowledge level of palliative care and only 104(26.5%) have good knowledge.

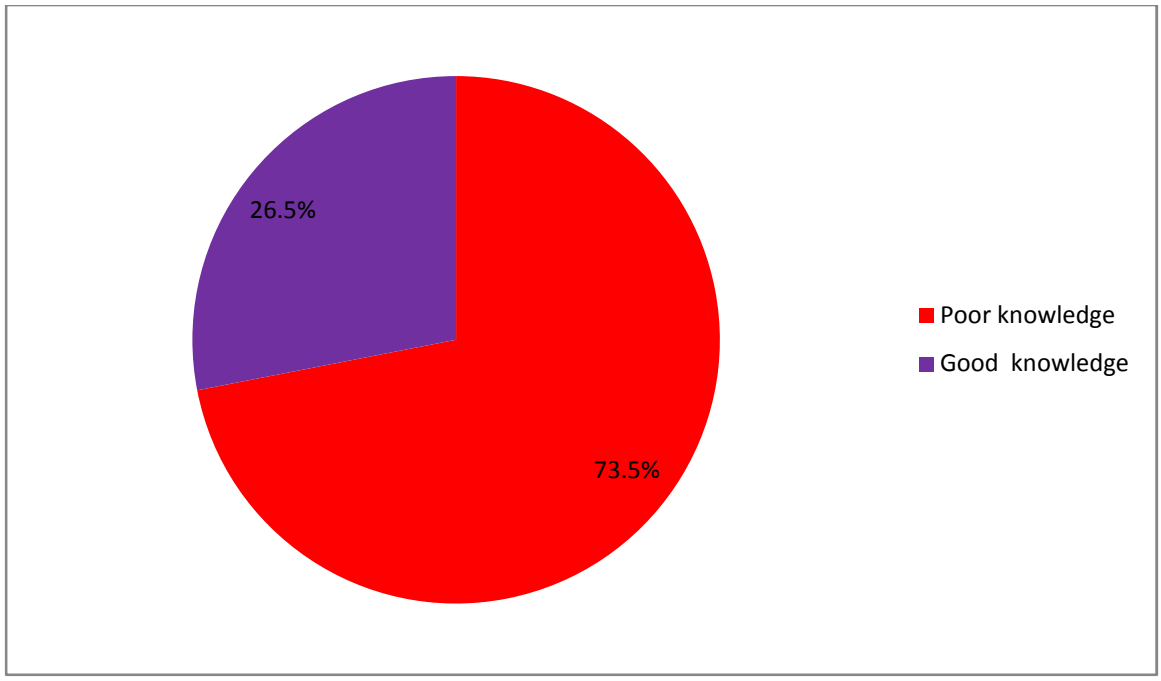

Figure 3 nurses knowledge towards palliative care in Addis Ababa government hospitals, 2016

5.3. Nurses' attitude towards palliative care

Regarding to that palliative care is given only for dying patient, 261(66.5%) participants respond disagree while 84 (21.4%) agreed. The participants' response to that of withdrawal of nurses' involvement with the patient at verge of death, 302(77%) participants respond disagree and 62 (15.9%) agreed. To that of benefit of verbalizing feeling by chronically sick person also 186 (47.4%) and 103 (26.3) found being agree and strongly agree, respectively. On the other hand, over half of nurses 212(54.1%) agreeing that family members who stay close to chronically sick person often interfere with professionals' cares of the patient. Majority of nurses 261(66.6%) agreeing with the statement that the chronically ill person and his/her family should be the main decision makers. More than two third of nurses 273(69.6%) said that families should be concerned about helping their chronically ill member make the best of his/her remaining life. Half of the respondents (33.4% agreed and 17.6% strongly agreed) that the family should be involved in the physical care of the dying person. It is interesting to note that nursing care should extend to the family of the dying person by 169(43.1%) agreed and 80(20.4%) strongly agreed of the respondent. Surprising 151(38.5%) agreed and 89(22.7%) strongly agreed that nursing care

for the patient's family should continue throughout the period of grief and bereavement. Likewise, 214(54.6%) and 246(62.7%) of nurses refuse statements of; it is difficult to form a close relationship with the family of a dying member and afraid to become friends with chronically sick and dying patients respectively. In contrast 152(38.7%) and 117(29.8%) of respondents felt uncomfortable talking about death with a dying patient and they usually refused to be assigned to give care for dying person respectively. Similarly, 134(34.2%) of the nurse thought that he/she would be uncomfortable if he/she entered the room of a terminally ill person and found him/her crying. In general the minimum and maximum score were 43 and 101 respectively out of 120 with the mean score of 78.31 (SD: 12.884). (See table 3)

Table 3 Distribution of nurses' attitude according to their degree of agreement toward items of FATCOD in Addis Ababa government hospitals, 2016

No	Attitude	Strongly disagree N (%)	Disagree N (%)	Uncertain N (%)	Agree N (%)	Strongly agree N (%)
1	Palliative care is given only for dying patient.	95(24.2)	166(42.3)	47(12.0)	53(13.5)	31(7.9)
2	As a patient nears death; the nurse should withdraw from his/her involvement with the patient.	131(33.4)	171(43.6)	28(7.1)	32(8.2)	30(7.7)
3	Giving nursing care to the chronically sick patient is a worthwhile learning experience.	60(15.3)	53(13.5)	51(13.0)	146(37.2)	82(20.9)
4	It is beneficial for the chronically sick person to verbalize his/her feelings.	35(8.9)	37(9.4)	31(7.9)	186(47.4)	103(26.3)
5	Family members who stay close to chronically sick person often interfere with professionals' cares of the patient.	23(5.9)	96(24.5)	61(15.6)	148(37.8)	64(16.3)
6	The length of time required to give nursing care to a dying person would frustrate me.	59(15.3)	146(37.2)	59(15.3)	67(17.1)	61(15.6)
7	Families should be concerned about helping their chronically ill member make the best of his/her remaining life.	37(9.4)	39(9.9)	43(11.0)	195(49.7)	78(19.9)
8	Family should maintain as normal an environment as possible for their chronically sick member.	36(9.2)	30(7.7)	59(15.1)	205(52.3)	62(15.8)

9	The nurse should not be the one to talk about death with the dying person.	49(12.5)	131(33.4)	62(15.8)	92(23.5)	58(14.8)
10	The family should be involved in the physical care of the dying person.	69(17.6)	59(15.1)	64(16.3)	131(33.4)	69(17.6)
11	It is difficult to form a close relationship with the family of a dying member.	73(18.6)	141(36.0)	57(14.5)	60(15.3)	61(15.6)
12	There are times when death is welcomed by the chronically ill person.	37(9.4)	91(23.2)	108(27.6)	120(30.6)	36(9.2)
13	Nursing care for the patient's family should continue throughout the period of grief and bereavement.	53(13.5)	66(16.8)	33(8.4)	151(38.5)	89(22.7)
14	The chronically ill person and his/her family should be the main decision makers.	31(7.9)	46(11.7)	54(13.8)	132(33.7)	129(32.9)
15	Addiction to pain relieving medication should not be a nursing concern when dealing with a dying person.	86(21.9)	150(38.3)	67(17.1)	61(15.6)	28(7.1)
16	Nursing care should extend to the family of the dying person.	70(17.9)	48(12.2)	25(6.4)	169(43.1)	80(20.4)
17	When a patient asks, “Nurse am I dying?'I think it is best to change the Subject to something cheerful.	24(6.1)	56(14.3)	152(38.8)	97(24.7)	63(16.1)
18	I am afraid to become friends with chronically sick and dying patients.	106(27.0)	140(35.7)	25(6.4)	56(14.3)	65(16.6)
19	I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying.	39(9.9)	140(35.7)	79(20.2)	90(23.0)	44(11.2)
20	I would be uncomfortable talking about impending death with the chronically sick patient.	83(21.2)	137(34.9)	20(5.1)	88(22.4)	64(16.3)
21	It is possible for nurses to help patients prepare for death.	47(12.0)	82(20.9)	104(26.5)	124(31.6)	35(8.9)
22	Death is not the worst thing that can happen to a severely ill person.	111(28.3)	134(34.2)	29(7.4)	70(17.9)	48(12.2)
23	I would feel like running away when the person actually died.	141(36.0)	132(33.7)	24(6.1)	42(10.7)	53(13.5)
24	I would not want to be assigned to care for a dying person.	122(31.1)	131(33.4)	22(5.6)	53(13.5)	64(16.3)

Figure 4 showed that the majority of the respondents' 331(84.4%) have favorable attitude level of palliative care and 61(15.6%) have unfavorable attitude of palliative care.

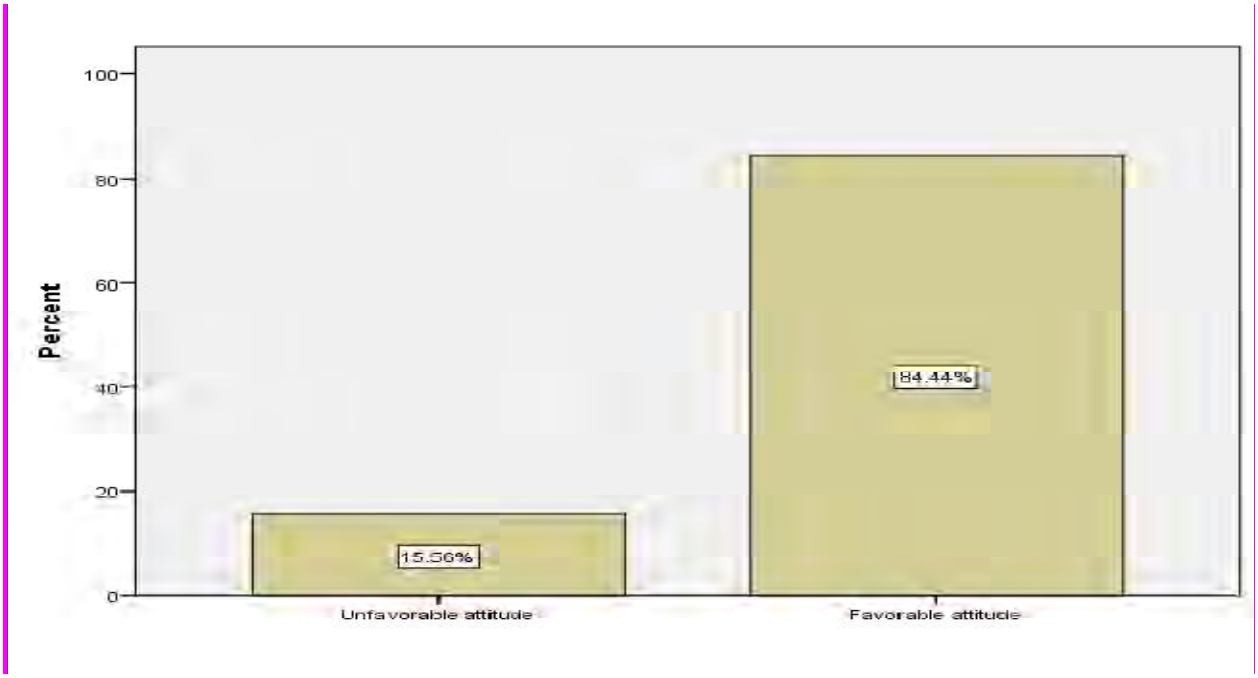

Figure 4 Attitude of nurses towards palliative care in Addis Ababa government hospitals, 2016

5.4. Association between selected variables and nurses knowledge towards palliative care

Table 4 revealed that Level of Education, working department, years of working experiences in nursing, experience in caring chronically ill patient and in-service training of palliative care had significant association with the knowledge of nurses. However; in this study there were no statistically significant relationships between nurses' knowledge towards palliative care and other variables. Respondents with BSc degree and above level of education had more knowledgeable (AOR=5.098, CI=1.801-14.430, P=0.002) than diploma nursing holder. Nurses working in inpatient department (AOR =2.159, CI=1.009-4.621, p=047) had better knowledge than outpatient department nurses. Nurses whose work experience 6-10 years had more knowledgeable (AOR = 2.790, CI=1.518-5.128; p = 0.001) compared to those whose work experience in nursing ≤5 years. On the other hand nurses experience in caring chronically ill patient once per week (at p value 0.045) and once per month and less (at p value 0.000) had less knowledgeable than from those nurses who had experience in caring chronically ill patient daily.

Lastly nurses who had in-service training on palliative care had more knowledge (AOR = 10.604, CI-5.974-18.819; P = 0.000) than those who had no such training.

Table 4 Associations between selected variables and nurses' knowledge towards palliative care in Addis Ababa government hospitals, 2016

Variables	Response	Knowledge		COR(95% CI)	AOR(95% CI)	P -value
		Good N (%)	Poor N (%)			
Level of Education	Diploma nurse	5(8.8)	52(91.2)	1	1	
	Bsc nurse & above	99(29.6)	236(70.4)	4.322(1.675-11.15)	**5.098(1.801-14.430)**	**0.002***
Current working area or ward	Inpatient department	71(30.9)	159(69.1)	2.392(1.267-4.516)	**2.159(1.009-4.621)**	**0.047***
	Emergency department	19(26.0)	54(74)	1.885(0.869-4.087)	1.458(0.569-3.734)	0.432
	Outpatient department	14(15.7)	75(84.3)	1	1	
Years of working experiences in nursing	≤5 years	52(20.7)	199(79.3)	1	1	
	6-10 years	39(40.2)	58(59.8)	2.573(1.549-4.276)	**2.790(1.518-5.128)**	**0.001***
	>10 years	13(29.5)	31(70.5)	1.605(0.784-3.284)	1.127(0.472-2.691)	0.788
Experience in caring chronically ill patient	Daily	86(31.7)	185(68.3)	1	1	
	Once per week	12(21.4)	44(78.6)	0.587(0.295-1.167)	**0.443(0.200- 0.983)**	**0.045***
	Once per Month and less	6(9.2)	59(90.8)	0.219(0.091-0.526)	**0.157(0.058-0.422)**	**0.000***
Experience of care for a dying family member within last 6 months	Yes	30(21.3)	111(78.7)	0.646(0.398-1.051)	0.566 (0.310-1.034)	0.064
	No	74(29.5)	177(70.5)	1	1	
Formal palliative care education in college/university	Yes	59(23.6)	191(76.4)	0.666(0.421-1.053)	0.945(0.535-1.668)	0.844
	No	45(31.7)	97(68.3)	1	1	
In-service training about palliative care	Yes	65(58.0)	47(42.0)	8.546(5.156-14.164)	**10.604(5.974-18.819)**	**0.000***
	No	39(13.9)	241(86.1)	1	1	

NB: variables having a (P≤0.25) in bivariable (unadjusted) analysis included in the multivariable (adjusted) analysis.
*Statistically significant at p-value ≤0.05

5.5. Association between selected variables and nurses attitude towards palliative care

Only level of education, Experience in caring chronically ill patient and in-service training had a significantly association with level of nurses attitude. Nurses who had a bachelors degree and above had revealed more positive attitude (AOR = 4.207. CI=2.214-7.993; p = 0.000) compared to those who held a diploma. On the other hand nurses experience in caring chronically ill patient once per month and less (AOR=0.478, CI=0.236-0.970, P=0.041) had less favorable attitude than from those nurses who had experience in caring chronically ill patient daily. Nurses who took in-service training on palliative care had more favorable attitude towards palliative care(AOR=2.948 (1.334- 6.518;P=0.008) compared to nurses who did not take palliative care inservice training. (See table 5)

Table 5 Associations between selected variables and nurses' attitude towards palliative care in Addis Ababa government hospitals, 2016

Variables	Response	Knowledge		COR(95% CI)	AOR(95% CI)	P-value
		Good N (%)	Poor N (%)			
Sex	Male	105(81.4)	24(18.6)	0.716(0.408-1.258)	0.583(0.317-1.072)	0.083
	Female	226(85.9)	37(14.1)	1	1	
Level of Education	Diploma nurse	36(63.2)	21(36.8)	1	1	
	Bsc nurse & above	295(88.1)	40(11.9)	4.302(2.288-8.089)	**4.207 (2.214-7.993)**	**0.000***
Years of working experiences in nursing	≤5 years	209(83.3)	42(16.7)	1	1	
	6-10 years	86(88.7)	11(11.3)	1.571(0.773-3.195)	1.389(0.661-2.916)	0.386
	>10 years	36(81.8)	8(18.2)	0.904(0.392- 2.084)	0.687(0.278-1.701)	0.418
Experience in caring chronically ill patient	Daily	235(86.7)	36(13.3)	1	1	
	Once per week	47(83.9)	9(16.1)	0.800(0.361-1.771)	0.682(0.296-1.571)	0.368
	Once per Month and less	49(75.4)	16(24.6)	0.469(0.241-0.912)	**0.478(0.236-0.970)**	**0.041***
In-service training about palliative care	Yes	104(92.9)	8(7.1)	3.035(1.393-6.613)	**2.948 (1.334- 6.518)**	**0.008***
	No	227(81.1)	53(18.9)	1	1	

NB: variables having a (P≤0.25) in bivariable (unadjusted) analysis included in the multivariable (adjusted) analysis.

*Statistically significant at p-value ≤0.05

UNIT SIX: DISCUSSION

In the present study nurses who gave correct answer for philosophy and principle of PC, psychosocial and spiritual PC, and management of pain and other symptoms were (43.3%), (46%) and (56.5%) respectively. In this study the most correct answers belonged to the category of management of pain and other symptoms. This is similar with the study done in southeast Iran even if the percentage is slightly higher in the present study(29). The possible reason might be due to the similarity of study design in this study and southeast Iran.

The most correct answers belonged to item manifestations of chronic pain are different from those of acute pain (86.0%) in the present study. It is interesting to note that nurses were aware of the different manifestations of pain. This could be an indication that participants are receiving critical information on the basic manifestation of pain. But in southeast Iran it was (79.4%) for this item question. The possible difference may be due to the presence of difficulty to differentiate manifestations of chronic pain from acute pain in Southeast Iran nurses(29). The finding of this study almost agreeing by the item of the most correct answers with the previous study in Addis Ababa manifestations of chronic pain are different from those of acute pain (87.1%)(21).

The result of this study showed that the majority of nurses (73.5%) had poor knowledge towards palliative care. This showed that presence of big problem in nursing knowledge concerning to palliative care that needs immediate attention. The possible reason for this might be that only 28.6% nurses took in-service training about Palliative care in the present study. In addition to this in the present study 36.2% of the participant reported that they did not take formal palliative care education in their college/university stay and 56.8% of nurse from those who took palliative care education in their college/university said that it was not enough to give quality palliative care for patients. Past researchers have also documented the serious deficiencies in undergraduate nursing education curriculum and inadequacy in nursing knowledge related to palliative care in Guwahati city, Saudi Arabia and Nigeria(15,17,32).

Even if in this study knowledge scores have shown only 26.5% as good knowledge about palliative care, it is higher than a study done in Palestine which was only 20.8 % had good knowledge(19). The present study nurses level of knowledge lower than the previous study done

in Addis Ababa which was 30.5%.The possible difference might be questionnaires that is the present study uses the 20 items of Palliative Care Quiz for Nursing (PCQN) which has been used widely throughout the world but the previous study used only 11 questions from Palliative Care Quiz for Nursing and 3 items from others(21,42).

The findings of this study had revealed the significant association of level of education, working department, years of working experiences in nursing, experience in caring chronically ill patient and in-service training of palliative care with the knowledge of nurses. In this study level of education and years of working experiences in nursing had significant association with knowledge of nurses towards palliative care. Holding BSc. and above degree in nursing were more knowledgeable than diploma nurses. This might be due to duration and in-depth training as well as university/college admission criteria for Bachelors and above nursing are different from those of diploma nurses. With regard to more knowledge for experienced nurses the possible reason might be senior nurse may get more knowledge through experience than junior nurse until certain experience. These two findings agreed with a study in Northern districts Palestine which revealed a highly statistically significant relation between Nurses' qualification and Nurses' experience with total knowledge of palliative care(19). The possible reason might be due to similarities of the study subject in the present study and Palestine. Level of education disagreed with other studies in Addis Ababa which did not show significant relationship between level of education and knowledge of palliative care (21,33). The possible reason for this difference may be due to the fact that in the current study majority of the participants were bachelors and above holder (85.5%) when we compare with the previous one.

Nurses working in inpatient department had significant association with nurses palliative care knowledge. This finding contradicts with a study done in Palestine that revealed no statistical significant relation among knowledge of palliative care with departments of work(19). The possible reason for this might be chronic illnesses patients are mostly admitted to the inpatient department and, thus, nurses who worked in this department had daily contact with those patients and may have developed good knowledge towards palliative care in the present study. This result agreed with studies conducted in previously in Addis Ababa that showed working in medical and surgical ward affected palliative care positively (21). The reason might be due to the similarities of the study subjects in the current and previous study. Nurses experience in caring chronically ill patient daily had more knowledgeable than from those nurses who had experience in caring

chronically ill patient once per week (at p value 0.045) and once per month and less (at p value 0.000) experience. This may be due to as nurse contact with the patient frequently; they may have developed good knowledge towards palliative care.

In this study nurses who had in-service training on palliative care revealed an association with nurses' knowledge. This means when the nurses had training on palliative care their knowledge also improves when we compare from those nurses who did not take such training. This finding consistent with the study done in Northern districts, Palestine to assess the nurses' knowledge and attitudes towards PC that showed a highly statistically significant relation between training of palliative care and knowledge of nurses(19). This might be due to the similarity of study design and instrument.

Formal palliative care education had no significant relationships with nurses' knowledge towards palliative care in this study. This might be due to inadequate palliative care education as it has been reported by 56.8% of the participant from those who took palliative care education in their college or university.

Regarding attitude in this study the majority (84.4%) of nurses had favorable attitude towards palliative care. The possible reason for this high percentage might be due to, favorable attitude include moderate and good attitude in this study by merging the two operational definition of good and moderate attitude together according to some researchers(16,21). This study in line with the study done in Taif City, in Saudi Arabia in that 83% of the study respondents have positive attitude regarding palliative care(17) and it is lower than a study done in Udupi district, that showed 92.8% of them had favorable attitude (56.7± 8.5) towards palliative care(30).The possible reason for this difference may be due to presence of curriculum education content about palliative care in Udupi district or absence (inadequacy) palliative care education in Ethiopia. But the present study attitude of nurses higher than previous study in Addis Ababa which was 76%, of nurses had favorable attitude towards palliative care. This difference may be due to the Participants' educational preparation because the first degree and above level educated nurse are 85.5% in the current study. The diploma holding nurses in Black Lion Hospital were not involved in this study; since they are currently in school to upgrade their education status in which half of the sample taken from this hospital according to proportional allocation of the sample but in previous study only 50.1% of the participants were degree holder and the rest were

diploma holder. So that holding first degree and above in nursing might be able to understand the FATCOD scale in a better way than that of diploma holder. Moreover this study is higher than in another study in Addis Ababa to assess the attitude, practice of nurses' and barriers regarding cancer pain management at selected health institutions offering cancer treatment which showed 53.7%, of the nurses' have a negative attitude, towards cancer pain management(16). The possible difference may be due to the present study is wider in scope than the previous one as well as due to the instrument variation.

Forty point eight percent of the respondents in the present study believed to change the subject to something cheerful when a patient asks a nurse, "Am I dying?" This finding higher than a study done in Palestine(19). The reason for hiding the truth in this study might be related with fear of nurses to discuss with the dying patient as 38.7% of nurses reported uncomfortable talking about death with the sick patient as well as the culture and belief of the community expectation to hear a hopeful and cheerful speech rather than the fact. However, a study done in Lebanon (94% to 99%) of the participant believes that it is important to tell terminal ill patients and their family about the diagnosis and prognosis of the patient(22). The possible difference might be because of cultural differences related to delivering bad news in front of the patient in Ethiopia culture and can potentially have psychological impact on patients and their families.

Two third of the nurses (66.5%) were more likely to disagree of Palliative care is given only for the dying patient. This means that majority of the nurses have a better understanding about the broadness of palliative care but still it needs a great attention as 21.4% and 12% of nurses agree and neutral in this statement respectively. This is almost similar with a study done in Palestine in which 63.5% of the study participants were disagree with this statement(19). This may be due to the similarity in study design and study participants may also have the same understanding on the broadness of the palliative care as it is appropriate for anyone suffering from progressive, chronic, serious illness (e.g. cancer, cardiac disease, respiratory disease, kidney failure, Alzheimer's, AIDS and others)(2,3). Concerning to the responsibilities of the nurse about drug addiction in the present study 60.2% of the participant believed that drug addiction should be a concern when dealing with a dying person which was similar with the previous study(61.6%) (21).

The findings of this study had confirmed the association of level of education, experience in caring chronically ill patient and in-service training with attitude towards palliative care. This finding supported by a study done in Thailand to review factors from existing literatures results showed that factors related to a nurse's caring behavior for a dying patient including educational level and training experience(37). Nurses who had a higher education degree in this study had approximately four fold increasing favorable attitude compared to diploma graduate nurses. The reason for this might be degree nurses may able to understand the FATCOD scale in a better way than that of diploma graduates. This finding consistent with other studies in Addis Ababa and south-east Iran that revealed significant correlation between nurses' attitude towards palliative care and level of education(21,34). This similarity might be due to the same understanding of FATCOD scale in both Addis Ababa and south-east Iran nurses.

Strength and Limitations of the study

Strength

- The instrument used for knowledge assessment is internationally tested one
- Used standard FATCOD scale tool for assessment of attitude towards palliative care
- Large sample size

Limitations

- Shortage of similar studies carried out in Ethiopia makes the comparison and discussion difficult.
- Unavailability of palliative care unit in the hospitals involved to assess the real nurses palliative care

UNIT SEVEN: CONCLUSION AND RECOMMENDATIONS

7.1. Conclusion

The result of this study suggested that the majority of respondents had poor knowledge but most of them have favorable attitude towards Palliative care. Level of Education, working department, years of working experiences in nursing, experience in caring chronically ill patient and in-service training of palliative care had significant association with the knowledge of nurses in this study. Level of education, experience in caring chronically ill patient and in-service training on the other hand, were found to be statistically significant with the attitude of nurses towards palliative care.

7.2. Recommendations

- Federal Ministry of Health should consider basic education and on job training needed for nurses working in hospitals to provide standardized palliative care in collaboration with Addis Ababa Health Bureau.
- The Departments of Nursing in higher education institutions in Ethiopia should revise the curriculum in order to incorporate palliative care within the nursing courses so as to strengthen their graduates' level of understanding.
- Individual nurse should put their effort on updating the existed knowledge through reading or taking short training.
- Researchers should do further study using triangulated study design to address the unreached problems in this study.

References

1. Connor SR. Hospice and palliative care: the essential guide. Second edi. New York: Taylor & Francis; 2009. 2 p.

2. Meier DE. Palliative Care Facts and Stats :Palliative Care Frequently Asked Questions. New York City: Center to Advance Palliative Care; 2014.

3. Connor S, Dahlin C, Ferrell B, Hutton N, Lentz J, Lupu D, et al. Clinical Practice Guidelines for Quality Palliative Care. Second edi. USA: National Consensus Project for Quality Palliative Care; 2009. 6-10 p.

4. World Health Organization (WHO): WHO definition of palliative care. 2008; Available from: http://www.who.int/cancer/palliative/definition/en/

5. Connor SR, Bermedo MCS. Global Atlas of Palliative Care at the End of Life. London: Worldwide Palliative Care Alliance; 2014.

6. Knapp C, Madden V, Fowler-Kerry S, editors. Pediatric Palliative Care: Global Perspectives. London: Springer Dordrecht Heidelberg; 2012. 3 p.

7. Green K, Horne C. Palliative Care Strategy for HIV and other diseases. Family Health International; 2009. 3 p.

8. Downing J, Atieno M, Debere S, Mwangi-Powell F, Kiyange F, editors. A Handbook of Palliative Care in Africa. Kampala, Uganda: African Palliative Care Association; 2010. 08-09 p.

9. Peden J, Young SK, Bohn U, McDonald A, editors. 99 common questions (and more) about hospice palliative care. Fourth edi. Edmonton,Canada: Edmonton zone palliative care program Alberta Health Services; 2013. ix - x p.

10. Gwyther E. Non-communicable diseases (NCDs) : the future burden looms large. Afr Health. 2011.

11. Mwangi-Powell F, Dix O. Palliative care in Africa : an overview. Afr Health. 2011;19–21.

12. Nabudere H, Obuku E, Lamorde M. Advancing the Integration of Palliative Care in the National Health System. Kampala: Regional East African Community Health (REACH) Policy Initiative; 2013.

13. Ethiopian North American Health Professional Association. Palliative care. 2011; Available from: http://enahpa.org/programs-services/programs/

14. Skår R. Knowledge use in nursing practice: The importance of practical understanding and personal involvement. Nurse Educ Today. 2010;30:132–6.

15. Sorifa B, Mosphea K. Knowledge and Practice of Staff Nurses on Palliative Care. IJHRMLP. 2015;01(02):41–5.

16. Kassa RN, Kassa GM. Nurses ’ Attitude , Practice and Barriers toward Cancer Pain Management ,. J Cancer Sci Ther. 2014;6(12):483–7.

17. Youssef HAM, Mansour MAM, Al-Zahrani SSM, Ayasreh IRA, Abd El-Karim RAK. Prioritizing Palliative Care : Assess Undergraduate Nursing Curriculum , knowledge and Attitude among Nurses Caring End-of-Life Patients. Eur J Acad Essays. 2015;2(2):90–101.

18. Iranmanesh S, Rayyani M, Forouzy MA. Caring at the end of life : Iranian nurses ’ view and experiences. J Nurs Educ Pract. 2012;2(2):9–17.

19. Ayed A. The Nurses ’ Knowledge and Attitudes towards the Palliative Care. J Educ Pract. 2015;6(4):91–100.

20. Youssef W, Morsy M, Ali H, Shimaa E, Mohammed E. Nurses ’ Knowledge and Practices about Palliative Care among Cancer Patient in a University Hospital - Egypt. Adv Life Sci Technol. 2014;24:100–14.

21. Kassa H, Murugan R, Zewdu F, Hailu M, Woldeyohannes D. Assessment of knowledge, attitude and practice and associated factors towards palliative care among nurses working in selected hospitals, Addis Ababa, Ethiopia. BMC Palliat Care. 2014;13(6):1–11.

22. Huijer HA-S, Dimassi H. Palliative care in Lebanon : Knowledge, attitudes and practices of physicians and nurses. J Med Liban. 2007;55(3):121–8.

23. Huijer HA, Dimassi H, Abboud S. Perspectives on palliative care in Lebanon : Knowledge , attitudes , and practices of medical and nursing specialties. Palliat Support Care. 2009;7:339–47.

24. Fernandes ST. A study on knowledge and attitude of second year undergraduate and diploma nursing students towards palliative care at selected nursing educational institution in Mangalore. J Int Acad Res Multidiscip. 2014;2(5):148–53.

25. Ronaldson S, Hayes L, Carey M, Aggar C. A study of nurses’ knowledge of a palliative approach in residential aged care facilities. Int J Older People Nurs. 2008;3:1–9.

26. Trueman I, Parker J. Exploring community nurses ’ perceptions of life review in palliative care. J Clin Nurs. 2006;15:197–207.

27. Prem V, Karvannan H, Kumar SP, Karthikbabu S, Syed N, Sisodia V, et al. Study of Nurses ’ Knowledge about Palliative Care : A Quantitative Cross-sectional Survey. Indian J Palliat Care. 2012;18(2):122–7.

28. Das AG, Haseena TA. Knowledge and Attitude of Staff Nurses Regarding Palliative Care. Int J Sci Res. 2015;4(11):1790–4.

29. Iranmanesh S, Razban F, Tirgari B, Zahra G. Nurses ’ knowledge about palliative care in Southeast Iran. Palliat Support Care. 2013;1–8.

30. Karkada S, Nayak BS, Malathi. Awareness of Palliative Care Among Diploma Nursing Students. Indian J Palliat Care. 2011;17(1):20–3.

31. Alshaikh Z, Alkhodari M, Sormunen T, Hillerås P. Nurses ' Knowledge about Palliative Care in an Intensive Care Unit in Saudi Arabia. MIDDLE EAST J Nurs. 2015;9(1):7–13.

32. Fadare JO, Obimakinde AM, Olaogun DO, Afolayan JM, Olatunya O, Ogundipe K. Perception of Nurses about Palliative Care : Experience from South - West Nigeria. Ann Med Health Sci Res. 2014;4(5):723–7.

33. Nega R, Tachbele E, Kassa GM. Cancer Pain and its Management: Knowledge of Nurses at Selected Health Institutions, Offering Cancer Treatment in Addis Ababa, Ethiopia, 2013. J Pain Reli. 2014;3(2).

34. Razban F, Iranmanesh S, Rafiei H. Nurses' attitudes toward palliative care in south-east Iran. Int J Palliat Nurs. 2013;19(8):403–10.

35. Iranmanesh S, Savenstedt S, Abbaszadeh A. Student nurses' attitudes towards death and dying in south-east Iran. Int J Palliat Nurs. 2008;14(5):214–9.

36. Leombruni P, Miniotti M, Bovero A, Zizzi F, Castelli L, Torta R. Attitudes toward caring for dying patients : An overview among Italian nursing students and preliminary psychometrics of the FATCOD-B scale. J Nurs Educ Pract. 2014;4(3):188–96.

37. Prompahakul C, Nilmanat K, Kongsuwan W. Review : Factors Relating to Nurses ' Caring Behaviors for Dying Patients. Nurse Media J Nurs. 2011;1(1):15–27.

38. Hasheesh MOA, AboZeid SA-S, El-Said SG, Alhujaili AD. Nurses' characteristics and their Attitudes toward Death and Caring for Dying Patients in a Public Hospital in Jordan. Heal Sci J. 2013;7(4):384–94.

39. Maria M, Pavlos S, Kiriaki S, Tatiana S, Kostantinia K, Eleni M, et al. Greek Nurses Attitudes towards Death. Glob J Health Sci. 2011;3(1):224–30.

40. El-nagar S, Lawend J. Impact of Palliative Care Education on Nurses ' Knowledge , Attitude and Experience Regarding Care of Chronically Ill Children. J Nat Sci Res. 2013;3(11):94–104.

41. City Government of Addis Ababa Bureau of Finance and Economic Development. Socio-Economic Profile of Addis Ababa. Addis Ababa: A.A BoFED; 2013. 13-16 p.

42. Ross MM, McDonald B, McGumness J. The palliative care quiz for nursing (PCQN): the development of an instrument to measure nurses ' knowledge of palliative care. J Adv Nurs. 1996;23:126–37.

ANNEX

ANNEX I Information sheet and consent form

1. Information sheet

Hello Dear!!

Dear respondent my name is _____. I am here to collect data for a study which entitled with "Assessment of Knowledge and Attitude towards Palliative Care among Nurses working in Addis Ababa government hospitals, Ethiopia." The study is being conducted by Sisay Gedamu who is MSC adult health nursing student at Addis Ababa University, college of health sciences, school of allied health science, department of nursing & midwifery.

For this study, you are selected as a participant and before getting your consent or permission of your participation, you need to know all necessary information related to the study. Thus, this information will be detailed as;

The objective of this study is to assess knowledge and attitude towards palliative care among nurses working in Addis Ababa government hospitals, 2016. You are being asked to take part in this study and to respond genuinely. You are selected to be involved by chance. This questionnaire focuses on assessing your knowledge and attitude towards palliative care. Your cooperation and willingness is greatly helpful in identifying problems related to palliative care in your work area. This questionnaire may take 20 to 30 minutes to complete.

There is no possible risk associated with participating in this study except the time spent for completing the questionnaire. Your name will not be written in this form and all information given by you will be kept strictly confidential. Your participation is voluntary and if you feel discomfort with any of the questions, it is your right to drop it any time you want. If you have questions regarding this study or would like to be informed of the results after its completion, please feel free to contact the principal investigator.

Address of the principal investigator: Mr. Sisay Gedamu Addis

Tel: +251-920553732/+251-935574801 E-mail: sgsisay4@gmail.com

Are you willing to participate in the study?

If yes please proceed to the consent form on the next page.

2. **Consent form**

In signing this document, I am giving my consent to participate in the study titled "Assessment of Knowledge and Attitude towards Palliative Care among Nurses working in Addis Ababa government hospitals, Ethiopia." I have been informed that the objective of this study is to assess knowledge and attitude towards palliative care among nurses working in Addis Ababa government hospitals, Ethiopia, 2016. I have understood that participation in this study is entirely voluntarily. I have been told that my answers to the questions will not be given to anyone else and no reports of this study ever identify me in any way. I understood that participation in this study does not involve risks except the time spent for completing the questionnaire.

I understood that Mr Sisay Gedamu is the contact person if I have questions about the study or about my rights as a study participant. The following is his contact address.

Address of principal investigator: Sisay Gedamu Addis

Tel: +251-920553732/+251-935574801

E-mail: sgsisay4@gmail.com

Participant's signature: _____date: _____

Thank You for willingness to participate!!!

ANNEX II Questionnaire

Code: _____

Part 1 Socio- Demographic Data (circle your answers)

101. Your institution/hospital_____

102. Age of respondent _____

103. Your monthly income _____Ethiopian birr

104. Sex

1. Female
2. Male

105. Your marital status

1. Single
2. Married
3. Divorced
4. Widowed

106. Level of education

1. Nursing Diploma
2. Bachelors in nursing
3. Masters in nursing
4. Others (Specify) _____

107. Current working area or ward

1. Medical ward
2. Surgical ward
3. pediatric ward
4. Neonatology ward
5. Oncology ward
6. Obstetrics and gynecology ward
7. Orthopedic ward
8. Outpatient department
9. Post anesthesia care unit
10. Intensive care unit
11. Emergency room

108. Years of working experiences in nursing _____(months or years)

109. Experience in caring chronically ill patient

A. Daily
B. Once per week
C. Once per Month
D. Few times per year
E. Never

110. Do you have an experience of care for a dying family member within last 6 months?

1. Yes
2. No

111. Have you learned formal palliative care education in your college/university?

1. Yes
2. No

112. If yes for question number 111, was it enough to give quality palliative care for patient?

1. Yes
2. No

113. Have you take in-service training about palliative care after you start work in nursing?

1. Yes
2. No

Part 2 Palliative care quiz for nursing (PCQN)

Write X for the answer you choose for respective question

No	Questions	Yes	No	I do not know
Philosophy and principle of palliative care knowledge questionnaires				
201	Palliative care is appropriate only in situations where there is evidence of a downhill trajectory or deterioration.			
202	The provision of palliative care requires emotional detachment.			
203	The philosophy of palliative care is compatible with that of aggressive treatment.			
204	The accumulation of losses renders burnout inevitable for those who seek work in palliative care.			
Psychosocial and spiritual care knowledge questionnaires				
205	It is crucial for family members to remain at the bedside until death occurs.			
206	Men generally resolve their unhappiness more quickly than women.			
207	The loss of a distant or contentious relationship is easier to resolve than the loss of one that is close or intimate.			
Management of pain and other symptoms knowledge questionnaires				
208	Morphine is the standard used to compare the analgesic effect of other opioids.			
209	The extent of the disease determines the method of pain treatment.			
210	Adjuvant therapies are important in managing pain.			
211	During the last days of life, the drowsiness associated with electrolyte imbalance may decrease the need for sedation.			
212	Drug addiction is a major problem when morphine is used on a long-term basis for the management of pain.			

213	Individuals who are taking opioids should also follow a bowel management.			
214	During the terminal stages of illness, drugs that can cause respiratory depression are appropriate for the treatment of severe dyspnea.			
215	The use of placebos is appropriate in the treatment of some types of pain.			
216	In high doses, codeine causes more nausea and vomiting than morphine.			
217	Suffering and physical pain are synonymous.			
218	Meperidine (Demerol) Demerol is not an effective analgesic in the control of chronic pain.			
219	Manifestations of chronic pain are different from those of acute pain.			
220	The pain threshold is lowered by anxiety or fatigue.			

Part 3- Attitude questionnaire

Mark each answer on the sheet that corresponds with your personal feelings about the attitudes presented. Indicate your answer by placing a tick (X) in the relevant box next to the question.

No	Attitude	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
301	Palliative care is given only for dying patient.					
302	As a patient nears death; the nurse should withdraw from his/her involvement with the patient.					
303	Giving nursing care to the chronically sick patient is a worthwhile learning experience.					

304	It is beneficial for the chronically sick person to verbalize his/her feelings.					
305	Family members who stay close to chronically sick person often interfere with professionals' cares of the patient.					
306	The length of time required to give nursing care to a dying person would frustrate me.					
307	Families should be concerned about helping their chronically ill member to make the best of his/her remaining life.					
308	Family should maintain as normal an environment as possible for their chronically sick member.					
309	The nurse should not be the one to talk about death with the dying person.					
310	The family should be involved in the physical care of the dying person.					
311	It is difficult to form a close relationship with the family of a dying member.					
312	There are times when death is welcomed by the chronically ill person.					
313	Nursing care for the patient's family should continue throughout the period of grief and bereavement.					
314	The chronically ill person and his/her family should be the main decision makers.					

315	Addiction to pain relieving medication should not be a nursing concern when dealing with a dying person.					
316	Nursing care should extend to the family of the dying person.					
317	When a patient asks, “Nurse am I dying?'I think it is best to change the Subject to something cheerful.					
318	I am afraid to become friends with chronically sick and dying patients.					
319	I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying.					
320	I would be uncomfortable talking about impending death with the chronically sick patient.					
321	It is possible for nurses to help patients prepare for death.					
322	Death is not the worst thing that can happen to a severely ill person.					
323	I would feel like running away when the person actually died.					
324	I would not want to be assigned to care for a dying person.					

Declaration

I, the undersigned, nursing student declare that this thesis is my original work and not done before for similar purpose. All participants of this study also are respected and acknowledged indeed.

Name of the student: Sisay Gedamu

Signature: _____

Date: _____

Advisor: S/R Emebet Berhane (RN. BSC. MSC.)

Signature: _____

Date: _____