



**Title:** Knowledge, attitude and practices towards palliative care services among healthcare providers at Kibagabaga Hospital, Rwanda

**Author's:** Christine Murebwayire<sup>1,2\*</sup>, Solange Nikwigize<sup>2</sup>

**Affiliations:**

<sup>1</sup> Ministry of Local Government

<sup>2</sup> Department of public Health, Mount Kenya University Rwanda Kigali Rwanda.

**Corresponding Author:** Christine Murebwayire

Ministry of Local Government

Kigali City, Gasabo District

E-mail: [chmurebwayire@yahoo.fr](mailto:chmurebwayire@yahoo.fr)

**Abstract**

Palliative care is a holistic approach that improves the quality of life of patients and their families facing the problem associated with chronic and life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other health problems. Little is known about knowledge, attitude and practices of health care providers towards palliative care in Rwanda. Therefore, the objective of this study was to assess health care provider's knowledge, attitude and practices towards palliative care services at Kibagabaga Hospital. A cross-sectional research design with quantitative approach was employed. This study targeted 247 doctors, nurses and midwives working at Kibagabaga hospital. Using Solvin's formula, a sample of 153 health care workers was estimated. Simple random sampling was used to select respondents from Kibagabaga hospital units/Department. A structured questionnaire was used to collect quantitative data. Data was analyzed using SPSS version 21; descriptive analysis performed to establish healthcare provider's knowledge, attitude and practices towards palliative care services. The study findings showed shows that among

respondents that among respondents 42.5% were male while 57.5% were female. For education level, the majority of respondents 56.9% had Bachelor's Degree, 20.3% had Diploma, and 22.9% of them were Medical Doctors. The research findings showed that 50.3% of respondents had low knowledge towards palliative care and 49.7% of respondents had high knowledge towards palliative care, 38.6% of respondents had positive attitude towards palliative care and 56.9% of respondents had good practices towards palliative care. Although, this study revealed that the level of knowledge of health care providers was the factors associated with level practices towards palliative care. To address this, the researcher has provided some recommendations to the Ministry of Health & Rwanda Biomedical Center and its organs which will help to improve awareness towards palliative care related knowledge, attitude and practices.

**Keywords:** Knowledge, Attitude, Practices, Palliative care

## Introduction

Palliative care is a holistic approach that improves the quality of life of patients and their families facing the problem associated with chronic and life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other health problems [1]. Evidence shows that palliative care is effective in improving the Quality of Life by meeting the needs of people with life threatening illness and their families [2]. Critically ill Patients in intensive care units (ICUs) have high symptom burden and experience functional impairments. These patients experience difficulty of communication, pain, dyspnea, and drowsiness [3]. Palliative care (PC) is an important aspect of care for critically ill patients with life threatening illnesses to prevent or relieve physical, psychological, social, emotional and spiritual suffering and improve the quality of life for these patients and their families [4].

PC education increases knowledge of staff, improves nursing skills and enhances their competency [5] Also, it enhances the quality of care for critically ill patients and assists families in making important decisions about their patient's care. PC can be provided at any time during patient's illness [6]. Also, it is provided by a team of doctors, nurses and other specialists who work together with patients to provide an extra support [7]. Furthermore, PC focuses on symptoms such as pain, shortness of breath, fatigue, constipation, nausea, loss of appetite, difficulty of sleeping and depression. It also helps critically ill patients to gain strength for improving their ability to tolerate medical treatments [8].

The care that critically ill patients received at the end of life in ICUs is highly dependent on critical care nurse's knowledge and skills [9]. In addition, the ICU environment is a life-

preserving effort, making it difficult for health care providers to shift their treatment goals from curative to palliative or comfort measures. The transition from curative to comfort care requires excellent clinical and communication skills from all caregivers. Because nurses are the caregivers who provide the most direct care and spend most time with patients and their families, it is essential for them to feel empowered and have necessary education and support to provide optimal end-of-life care [10].

Obstacles and barriers to give end of life care in the ICU settings were categorized as health care provider barriers, patients and family-related barriers, and institutional barriers. Health care provider barriers include lack of training for the ICU nurses and poor role models when dealing with death and dying. Many nurses have a lack of experience with death and report that dealing with death is uncomfortable because they fear their own mortality [11].

Poor communication skills are another barrier to provide excellent end-of-life care. Patients and family related barriers include reluctance on the patient and family' part to address end-of-life issues, patient may not be ready to die or is very young. Furthermore, disagreements over goals of care, or language and cultural barriers may contribute to poor end-of-life care [12].

Barriers from an institutional perspective include lack of leadership support for palliative care and a culture that does not support it in the ICU settings. Poor continuity of care, time constraints, and lack of space or privacy to talk about end-of-life issues with patients and their family also, may contribute to poor-quality end-of-life care. In addition, having no protocol for treating the dying patient's symptoms, lack of communication and challenging in a particular group of patients, such as elderly patients, patients in acute care settings, and terminally ill patients are additional barriers to quality end-of-life care [13].

Many aspects of critical care nurses' work environment present obstacles to provide quality end of life care. These obstacles as disagreement and conflicts that occur between nurses and physicians regarding different aspects on end-of life issues, physicians' disregard of patients' wishes for care, avoidance of patients' families, not providing adequate orders for pain relief and level of aggressiveness of treatments and communication [13].

According to the World Health Organization estimation, by 2020 non-communicable disease will be prevalent as communicable diseases in developing countries especially in sub-Saharan Africa (SSA). This is an indicator for increased need in palliative care service. Despite the needs of palliative care and documented evidence of palliative care in improving the quality of life, the development and access to comprehensive, integrated palliative care service remains limited in

most developing countries. Consequently, only few countries in SSA have integrated the new concept of palliative care into their agenda and currently palliative care provision remains inadequate and available to less than 5%.

A study conducted in Taiwan found that healthcare members' knowledge and attitudes toward PCCS were positively correlated with their practices toward PCCS, signifying that these are positive predictors of the palliative care consultation service [14]. Several key factors are associated with the competence of healthcare providers in palliative care services provision, including their knowledge and attitudes towards palliative care and death. Previous studies indicated that educational training for healthcare professionals had a positive influence on their confidence, knowledge of palliative care, and attitudes towards caring for dying patients and death.

A study conducted in Nigeria reported gaps in the knowledge of the healthcare workers in the area of palliative care. The national policy

There is a lack of data on health care workers' knowledge, attitudes and practices towards palliative care services provision in Rwanda. Therefore, the aim of this study will be to assess knowledge, attitudes and practices towards palliative care services among healthcare providers at Kibagabaga Hospital; Gasabo district; Kigali City in Rwanda.

The implementation of palliative care is a global health challenge, especially in developing countries including Rwanda because; the service is isolated in majorities of African countries, scattered in scope, not well supported, heavily donor dependent, had unclear policies, limited healthcare resource, role unfamiliarity, poor perception, low level of practice and low knowledge about benefits by service users, health care workers and supporting community [15].

There are also insufficient government policies recognizing palliative care as an essential component of healthcare, inadequate training for healthcare professionals and limited awareness among the general public about palliative care. Moreover, there are limited studies in the area of patients' palliative care needs which will support to provide appropriate care. Hence, palliative care needs are often under-assessed and addressed. As a result, up to 80% of pain is under-treated and about two-thirds of palliative care needs are missed [16]. Addressing physical, emotional, social and spiritual needs and supporting people to achieve a sense of peace and meanings of life and prevention of end-of-life sufferings are unthinkable without integration of palliative care [16].

Studies conducted in different countries excluding Rwanda showed that health care providers had poor knowledge and practice towards palliative care services, while they had favorable

attitude [17]. Some healthcare providers expressed inadequate knowledge as one of the barriers to implement PCCS in their work place. Sex, years of experience, working units and training were predicting variables of practice of palliative care [18]. However, the most recent studies have been conducted in other countries; little is known about knowledge, attitudes and practices towards palliative care services provision. It not well known, whether conventional healthcare providers in Rwanda, specifically at Kibagabaga Hospital understand the definition of PCCS, Hospice Palliative Act, and palliative care purposes needs to be investigated; additionally, exploration of their knowledge of, attitudes toward, and practices of symptom management, nursing care, and communication with patients and their family members with terminal illness, as well as their willingness to accept PCCS pushed the researcher to undertake this study.

### **Study design**

A cross-sectional study was applied using quantitative approach. A structured questionnaire was used to collect quantitative data. The design was chosen since it is suitable for quantitative research specifically for this which was conducted at Kibagabaga hospital in Gasabo district.

### **Target Population and Sample size**

The study targeted all healthcare providers of Kibagabaga hospital. The recordings of the hospital show that a total 274 healthcare providers are currently working at the hospital and this number served as target population in this study. Healthcare provider was however anyone who was responsible for the palliative care at the time of the study in that hospital and included nurses, doctors and social workers. This study target 247 doctors, nurses and midwives working at Kibagabaga hospital. Using Solvin's formula, a sample of 153 health care workers was estimated.

### **Sampling procedure**

Simple random sampling was used to select respondents from different hospitals units/Department.

A self-administered questionnaire used for data collection. The attitude scale was adopted from Frommelt Attitude Toward Care of the Dying (FATCOD) and modified so as to make it fit to Rwandan context. The knowledge questions were adopted from the Palliative Care Quiz for Nursing (PCQN) which was also modified according to the prevailing context of health institutions in Rwanda. The practice questions were also adopted from different related studies. The data collection instrument included four sections.

### **Reliability and validity of questionnaire**

To ensure the validity of the research instrument, the researcher designed the questionnaire by reviewing relevant literature and studies in the area of interest.

Reliability is the degree of similarity of the results obtained when the measurement is repeated on the same subject or the same group. The questionnaire was pretested by administering to ten study participants in Kabuga Hospice hospital and the tools was modified if necessary. The research assistants also trained on how to collect data and the overall study objectives. Adjustments were made accordingly, in case required, with the guidance of the supervisor. The Cochrane's coefficient was calculated to measure the percentage agreement between the responses from the two tests. A coefficient of 0.7 and above was considered adequate for field testing of the tool.

### **Data analysis and ethical consideration**

Raw data from the questionnaire were entered into EPI data and transported into SPSS version 21 for analysis. Descriptive statistics used to tabulate and describe the data and Bivariate analysis to assess the association between independent and dependent categorical variables carried out using Chi square ( $X^2$ ). The strengths of the associations were determined with multiple logistic regressions. Inference was made using a 95% confidence interval and a p-value < 0.05. The results will be presented in frequency, cross tabulation tables, and pie charts.

Clearance to conduct the study was obtained from Mount Kenya University and authorization to carry out the study sought and obtained from Kibagabaga hospital. All the information collected from study participants were kept confidential. It was only used for research purposes. The questionnaire was not bear their names but had a number thus their identity was not revealed. The names of study participants were not used in any report of this study or in any publication or presentations. The respondents' consent was obtained and they were informed that their participation is voluntarily and they could withdraw from the study at any time without giving any reason. The findings were treated with utmost confidentiality and it is for the purpose of this research only. The objective and result of the study were explained to the subjects of research participants. Then, the participants were informed that the procedure used was not pose any potential risk and their identities and personal particulars were kept strictly confidential.

## Results

### Demographic Characteristics of Respondents

As indicated in table 1, those are socio-demographic characteristics of 153 respondents all reached and data collected by using questionnaire through face-to-face interview.

**Table 1: Socio-demographic characteristics of respondents**

Variables	Frequency	Percent
<b>Professional cadre</b>		
Nurse	79	51.6
Midwife	41	26.8
Doctor	33	21.6
<b>Age group</b>		
23-35 Years old	56	36.6
36-48 Years old	72	47.1
48 Years and above	25	16.3
<b>Sex</b>		
Male	65	42.5
Female	88	57.5
<b>MARITAL STATUS</b>		
Single	10	6.5
Married	129	84.3
Separated/divorced	14	9.2
<b>Educational Level</b>		
Diploma	31	20.3
Bachelor's Degree	87	56.9
Medical Doctor	35	22.9
<b>Working Experience</b>		
< 5 Years	32	20.9
5-9 Years	51	33.3
10 Years and Above	70	45.8
<b>Month Salary</b>		
100000-200000 RWF	39	25.5
201000-300000 RWF	65	42.5
Above 300000 RWF	49	32
<b>Religion</b>		
Catholic	89	58.2
Protestant	64	41.8
<b>Working Department</b>		
Ambulatory	34	22.2
Inpatient	36	23.5
Surgery and Emergence care	29	19

Critical care and Support  
services

54

35.3

### Source: Primary data

The table above of socio-demographic characteristics of respondents, shows that among respondents 65(42.5%) were male while 88(57.5%) were female. Among respondents 129(84.3%) were married, only 10(6.5%) were single and 14(9.2%) of them were separated. For education level, the majority of respondents 31(20.3%) had Diploma, 87(56.9%) had Bachelor's Degree and 35(22.9%) of them were Medical Doctors. The majority of respondent had 10 Years and above of experience 70 (45.8%) and the majority of them were Catholics 89(58.2%).

### Presentation of findings

The findings of this study are presented according to their research objectives which are to determine the level of knowledge on palliative care services provision, to assess health care providers' attitude towards palliative care services provision, to identify health care providers' practices on palliative care consultation service at Kibagabaga Hospital, and to establish the predictors of practices toward palliative care consultation service among health care providers at Kibagabaga Hospital.

#### Level of knowledge on palliative care services provision among health care providers at Kibagabaga Hospital.

The objective one was to determine the level of knowledge on palliative care services provision among health care providers at Kibagabaga Hospital and was measured by score assessment of variables. Twenty-five (25) statements in the table 2 were used to assess level of knowledge on palliative care services provision among health care providers and all statements are positive where the overall score is 25 and the mean was 13.81. The scores are 0 and 1 for No and Yes respectively.

**Table 2 Level of knowledge on palliative care services provision among health care providers at Kibagabaga Hospital.**

Variables	Frequency	Percent
Do you know definition of palliative care?		
Yes	127	83
No	26	17
PC Is only appropriate in situations of downhill rejection		
Yes	77	50.3
No	76	49.7
Extent of the disease determines the method of pain treatment		



Yes	83	54.2
No	70	45.8
Adjuvant the rapies are important in managing pain		
Yes	108	70.6
No	42	27.5
Don't know	3	2
Drug addiction is a major problem when morphine is used		
Yes	80	52.3
No	71	46.4
Don't know	2	1.3
Provisions of palliative care require emotional detachment		
Yes	44	28.8
No	106	69.3
Don't know	3	2
Drugs that can cause respiratory depression are appropriate for treatment		
Yes	31	20.3
No	42	27.5
Don't know	80	52.3
Philosophy of PC is compatible with that of aggressive treatment		
Yes	48	31.4
No	75	49
Don't know	30	19.6
Use of placebos is appropriate in the treatment of some pain		
Yes	93	60.8
No	57	37.3
Don't know	3	2
Meperidine is not an effective analgesic for the control of chronic pain		
Yes	72	47.1
No	53	34.6
Don't know	28	18.3
Accumulation of losses renders burnout inevitable for those who work in PC		
Yes	92	60.1
No	30	19.6
Don't know	31	20.3
Manifestation of chronic pain are different from those of acute pain		
Yes	118	77.1
No	27	17.6
Don't know	8	5.2
Terminally ill patients have the right to choose "don't resuscitate"		
Yes	107	69.9
No	27	17.6
Don't know	19	12.4
Terminally ill patients should be encouraged to have hope against all odds		

Yes	84	54.9
No	67	43.8
Don't know	2	1.3
PC should only be provided for patient who has curative treatment		
Yes	89	58.2
No	45	29.4
Don't know	19	12.4
Long-term use of morphine can induce addiction		
Yes	84	54.9
No	69	45.1
Adjuvant therapies are important in managing pain		
Yes	93	60.8
No	60	39.2
Getting spiritual support is important to terminally ill patient		
Yes	142	92.8
No	11	7.2
Morphine should be used to relieve dyspnea in cancer patients		
Yes	116	75.8
No	37	24.2
Respiratory desperation will be common when opioids are taken		
Yes	123	80.4
No	30	19.6
PC services extending after mortal care		
Yes	140	91.5
No	11	7.2
Benzodiazepines should be effective for controlling delirium		
Yes	141	92.2
No	12	7.8
Some dying patients will require continuous sedation to alleviate suffering		
Yes	142	92.8
No	11	7.2
Family involvement in patient care is part of PC		
Yes	141	92.2
No	12	7.8
Higher calorie intake needed terminal stage of cancer		
Yes	134	87.6
No	19	12.4

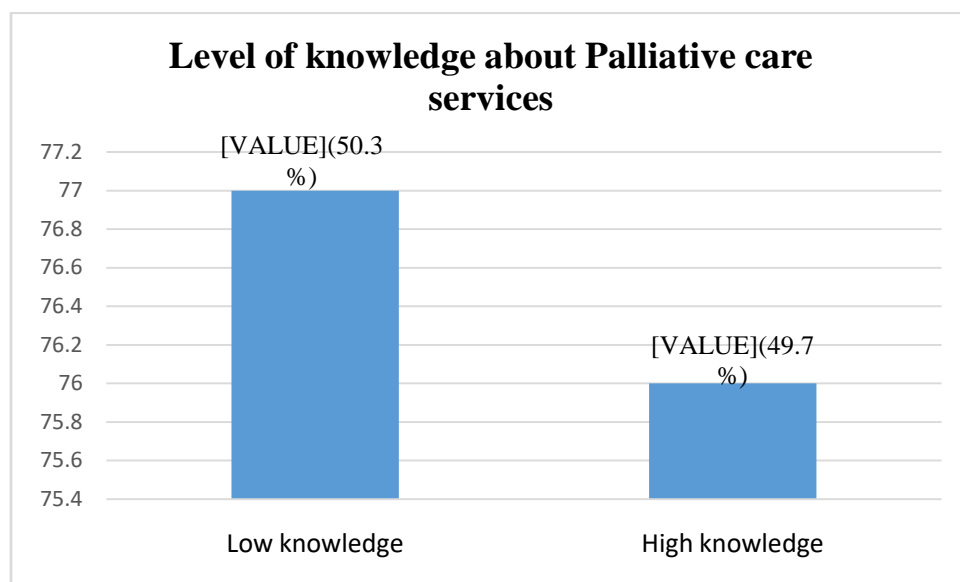
#### Source: Primary data

To determine the level of knowledge on palliative care services provision among health care providers, there were related statements which have been used. Among respondents, 127(83%)

of them said that they knew the definition of palliative care, 118(77.1%) respondents said that manifestation of chronic pain is different from those of acute pain and 84(54.9%) of respondents said that terminally ill patients should be encouraged to have hope against all odds. 142(92.8%) of respondents said that some dying patients will require continuous sedation to alleviate suffering and 141(92.2%) of them said that family involvement in patient care is part of palliative care.

#### **Level of knowledge on palliative care services provision among health care providers.**

The score assessment has been done and the total score was 25 with mean of 13.81. The respondents with score less than mean have been considered to have low knowledge whereas respondents with score greater than the mean have been considered to have high knowledge.



**Figure4.1 Level of knowledge**

As indicated by the figure above 77(50.3%) of respondents had low knowledge towards palliative care services provision and 76(49.7%) of respondents had high knowledge towards palliative care services provision.

## Health care providers' attitude towards palliative care services provision at Kibagabaga Hospital.

The objective two to assess health care providers' attitude towards palliative care services provision at Kibagabaga Hospital and was measured by score assessment of variables. Twenty-four (24) statements in the table 3 were used to assess health care providers' attitude towards palliative care services and all statements are positive where the overall score is 24 and the mean was 12.36.

**Table 3 Health care providers' attitude towards palliative care services provision at Kibagabaga Hospital**

Variables	Frequency	Percent
PC is given only for dying patients		
Strongly disagree	87	56.9
Disagree	50	32.7
Agree	16	10.5
As patient near death HCP should withdraw his involvement		
Strongly disagree	49	32
Disagree	12	7.8
Uncertain	10	6.5
Agree	82	53.6
Giving nursing care is a worthwhile leaning experience		
Strongly disagree	4	2.6
Disagree	14	9.2
Uncertain	4	2.6
Agree	71	46.4
Strongly agree	60	39.2
It is beneficial for chronically sick person to verbalize her feelings		
Strongly disagree	16	10.5
Disagree	61	39.9
Agree	31	20.3
Strongly agree	45	29.4
Close to dying person often interfere with a professional's job		
Strongly disagree	78	51
Disagree	62	40.5
Agree	13	8.5
Strongly agree	0	0.00
Length of time required to give nursing care would frustrate me		
Strongly disagree	58	37.9
Disagree	31	20.3
Agree	62	40.5
Strongly agree	2	1.3
Families should be concerned about helping their dying member		

Strongly disagree	4	2.6
Disagree	8	5.2
Agree	69	45.1
Strongly agree	72	47.1
Family should maintain as normal environment for their dying member		
Strongly disagree	35	22.9
Disagree	14	9.2
Agree	62	40.5
Strongly agree	42	27.5
Healthcare provider are not the one to talk about death with dying person		
Strongly disagree	48	31.4
Disagree	12	7.8
Agree	32	20.9
Strongly agree	61	39.9
Family should be involved in the physical care of the dying person		
Strongly disagree	22	14.4
Disagree	69	45.1
Uncertain	2	1.3
Agree	26	17
Strongly agree	34	22.2
It is difficult to form a close relationship with the family of dying member		
Strongly disagree	34	22.2
Disagree	33	21.6
Uncertain	62	40.5
Agree	13	8.5
Strongly agree	11	7.2
There are time when death is welcomed by the dying person		
Strongly disagree	33	21.6
Disagree	11	7.2
Uncertain	59	38.6
Agree	50	32.7
Strongly agree	0	0.00
HC for the patient's family should continue throughout the period of grief		
Strongly disagree	13	8.5
Disagree	21	13.7
Uncertain	2	1.3
Agree	117	76.5
Strongly agree	0	0.00
Dying person and his family should be the in charge decision maker		
Strongly disagree	15	9.8
Disagree	51	33.3
Uncertain	11	7.2
Agree	58	37.9
Strongly agree	18	11.8

Addition to pain relieving medication should not be a HCP concern

Strongly disagree	14	9.2
Disagree	53	34.6
Uncertain	53	34.6
Agree	15	9.8
Strongly agree	18	11.8

Healthcare should extend to the family of dying person

Strongly disagree	5	3.3
Disagree	13	8.5
Uncertain	48	31.4
Agree	75	49
Strongly agree	12	7.8

When a patient asks HCP am I dying it is better to change a subject

Strongly disagree	4	2.6
Disagree	88	57.5
Agree	60	39.2
Strongly agree	1	0.7

I am afraid to become a friend with chronically sick and dying patient

Strongly disagree	5	3.3
Disagree	128	83.7
Uncertain	2	1.3
Agree	15	9.8
Strongly agree	3	2

I would be uncomfortable if I enter the room and found him crying

Strongly disagree	25	16.3
Disagree	51	33.3
Uncertain	2	1.3
Agree	74	48.4
Strongly agree	1	0.7

Death is not the worst thing that can happen to a person

Strongly disagree	92	60.1
Disagree	1	0.7
Uncertain	1	0.7
Agree	28	18.3
Strongly agree	31	20.3

I would feel like running away when the person died

Strongly disagree	53	34.6
Disagree	79	51.6
Uncertain	4	2.6
Agree	16	10.5
Strongly agree	1	0.7

I would not want to be assigned to care for a dying person

Strongly disagree	24	15.7
Disagree	113	73.9
Uncertain	1	0.7
Agree	14	9.2

Strongly agree

1

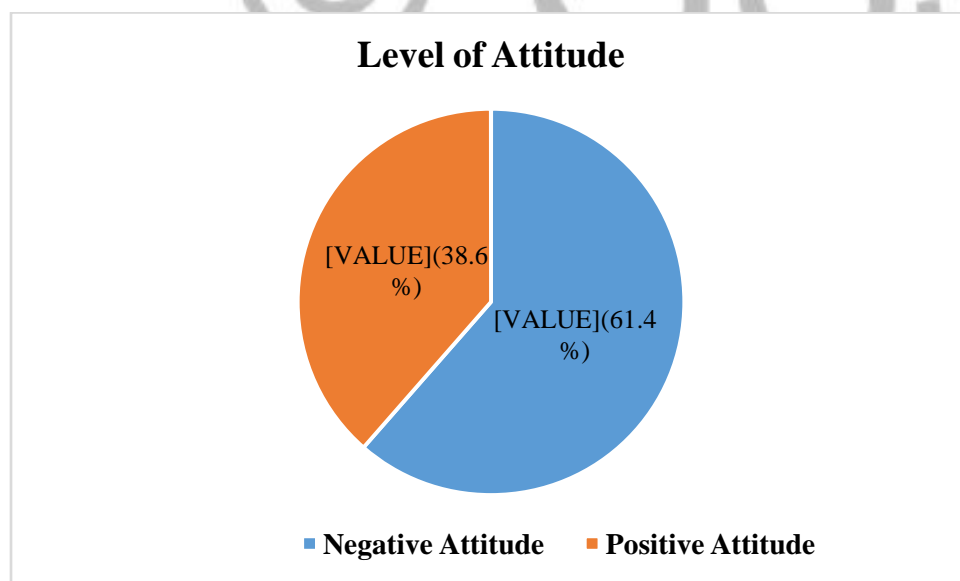
0.7

### Source: Primary data

To assess the health care providers' attitude on palliative care, they had been asked the related questions. Among respondents 87(56.9%) strongly disagreed that palliative care is given only for dying patients, 45(29.4%) respondents strongly agreed that it is beneficial for chronically sick person to verbalize her feelings and 48(31.4%) respondents strongly disagreed that healthcare provider are not the one to talk about death with dying person. Among respondents 88(57.5%) were disagree with the statement which was saying that when a patient asks HCP that am I dying it is better to change a subject to cheering one, 79(51.6%) respondents were disagree with the statement saying that I would feel like running away when the person died and 14(9.2%) respondents were disagree with the statement saying that I would not want to be assigned to care for a dying person.

### Health care providers' attitude towards palliative care services provision

The score assessment has been done and the total score was 24 with mean of 12.36. The respondents with score less than mean have been considered to have negative attitude whereas respondents with score greater than the mean have been considered to have positive attitude.



**Figure 2 Health care providers' attitude towards palliative care services provision**

As indicated by the figure above 59(38.6%) of respondents had positive attitude towards palliative care services provision and 94(61.4%) of respondents had negative attitude towards palliative care services provision.

## Health care providers' practices on palliative care consultation service at Kibagabaga

### Hospital

The objective three was to identify health care providers' practices on palliative care consultation service at Kibagabaga Hospital and was measured by score assessment of variables. Ten (10) statements in the table 4 were used to assess level of practices among health care providers, the overall score is 10, and the mean was 6.58.

**Table 4 Health care providers' practices on palliative care consultation service at Kibagabaga Hospital**

Variables	Frequency	Percent
Time for PC discussion		
During diagnosis	93	60.8
When the problem progress	43	28.1
At the end of life	17	11.1
Do you inform terminally ill person about their diagnosis		
Yes	141	92.2
No	12	7.8
Factors considered when dealing with terminally ill		
Culture	36	23.5
Psychological	30	19.6
Medical situation	23	15
Social	64	41.8
<b>Things considered before addressing the spiritual issue</b>		
Listen with empathy	48	31.4
Impose own view	55	35.9
Connect with spiritual	50	32.7
<b>Addressing the psychological aspect of the patient during PC</b>		
Emotional support	45	29.4
Counselling the patient	74	48.4
Hiding the truth	34	22.2
<b>Who do you involve in decision making</b>		
Patient	41	26.8
Family	77	50.3
My own	18	11.8
Other professionals	17	11.1
<b>Perception for terminally ill patient concern</b>		
Patient right	65	42.5
Needing treatment	54	35.3
Doubting your professionalism	16	10.5
Attention seeking behavior	18	11.8
<b>Communication to the terminally ill patient depend on</b>		
Family's ability to assimilate	34	22.2
Their involvement in decision making	99	64.7



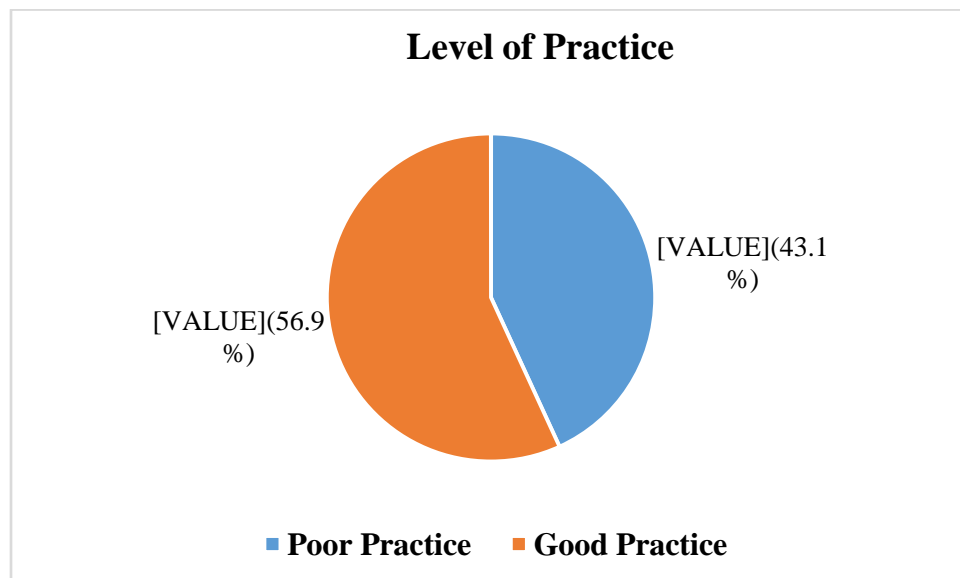
Your willingness to disclose information	20	13.1
<b>Commonly used medication for severe pain</b>		
Paracetamol	48	31.4
Morphine	77	50.3
Pethidine	6	3.9
Codeine	22	14.4
<b>How do you assess patient pain</b>		
Grade with face	98	64.1
Intensity	29	19
Location	8	5.2
Quality	18	11.8

**Source: Primary data**

To assess the health care providers' practices on palliative care, they have been asked how often they use to discuss about the topics related to palliative care and 93(60.8%) respondents said that the time to discuss about palliative care is during diagnosis. The majority of respondents 64(41.8%) said that the social is the factors considered when dealing with terminal ill patient, 48(31.4%) respondents said that the thing to be considered before addressing the spiritual issue is to listen with empathy, 74(48.4%) respondents use to give the counselling to the patient while addressing the psychological aspect of the patient during palliative care and 77(50.3%) respondents used to involve the family of the patient in decision making.

**Health care providers' practices on palliative care consultation service**

For determining the Health care providers' practices on palliative care consultation service, the score assessment has been done and the total score was 10 with mean of 6.58. The respondents with score less than mean have been considered to have poor practices whereas respondents with score greater than the mean have been considered to have good practices.



**Figure 3 Health care providers' practices on palliative care**

As indicated by the figure 3, 66 (43.1%) of respondents had poor practices towards palliative care and 87(56.9%) of respondents had good practices towards palliative care.

### **Predictors of practices toward palliative care consultation service among health care providers at Kibagabaga Hospital**

To determine predictors of practices toward palliative care consultation service among health care providers at Kibagabaga Hospital, 10 factors evaluated to check whether they have statistical significant with practices of health care providers towards palliative care with  $<0.05$  P-value calculated to 95% CI, as presented in the table below.

**Table5 Predictors of practices toward palliative care consultation service among health care providers at Kibagabaga Hospital (Bivariate analysis).**

Variables	Level of practices				P-Value
	Poor practice		Good practice		
	n	%	n	%	
<b>Level of Attitude</b>					<b>0.009</b>
Negative Attitude	48	51.1	46	48.9	
Positive Attitude	18	30.5	41	69.5	
<b>Level of Knowledge</b>					0.228
Poor knowledge	36	46.8	41	53.20	
Good knowledge	30	39.5	46	60.50	
<b>Professional cadre</b>					0.659
Nurse	35	44.30	44	55.70	
Midwife	19	46.30	22	53.70	
Doctor	12	36.4	21	63.6	

<b>Age group</b>					0.121
23-35 Years old	25	44.6	31	44.6	
36Years old and above	41	42.3	56	57.7	
<b>Sex</b>					0.448
Male	24	36.9	41	36.9	
Female	42	47.7	46	52.3	
<b>Marital Status</b>					0.204
Single	8	33.3	16	66.7	
Married	58	45	71	55	
<b>Educational Level</b>					0.516
Diploma	12	38.7	19	61.3	
Bachelor's Degree	41	47.1	46	52.9	
Medical Doctor	13	37.1	22	62.9	
<b>Working Experience</b>					
< 5 Years	15	46.9	17	53.1	0.876
5-9 Years	22	43.1	29	56.9	
10 Years and Above	29	41.40	41	58.60	
<b>Month Salary</b>					0.285
100000-200000 RWF	21	53.80	18	46.20	
201000-300000 RWF	25	38.50	40	61.50	
Above 300000 RWF	20	40.80	29	59.20	
<b>Religion</b>					0.085
Catholic	43	48.30	46	51.70	
Protestant	23	35.90	41	64.10	
<b>Working Department</b>					0.081
Inpatient	13	38.20	21	61.80	
Surgery and Emergence care	21	58.30	15	41.70	
Critical care and support services	8	27.60%	21	72.40%	

Source: Primary data

The table above shown that there was statistically significant between level of Attitude and level practices of health care providers towards palliative care with <0.05 P-value calculated to 95% CI. As indicated in the table of bivariate analysis, only single variable was statistically significant, so then the researcher could not undergo the further analysis to check the strengths of association between factors contributing to palliative care.

### Discussion of the study findings

Providing palliative care should be a key component of the healthcare system that all healthcare organizations should strive to improve. Despite the understanding of the benefits of palliative care, many people living with chronic life-threatening illnesses do not receive palliative care.

The primary challenges to apply palliative care are an overestimation of patient progress by health professionals and a low level of knowledge about palliative care.

The main purpose of this study to assess health care provider's knowledge, attitude and practices towards palliative care services provision and the present study showed that a half of respondents 50.3% had low knowledge towards palliative care services provision, while the remaining portion has high knowledge towards palliative care services provision.

The previous study conducted by Alemnesh was not in the same line with present study where revealed that the low number of health care providers had high knowledge towards palliative care services delivery. This study found out that only 30.5% of respondents had good knowledge towards palliative care services delivery, so then in the comparison with the present study, more health care providers of Kibagabaga Hospital had good knowledge compared to that of Ethiopia. Although, the nurses had poor knowledge and knowledge aspect of practice, but their attitude towards PC was favorable. The researchers suggest that nurses can have a prominent role in end-of-life care. Hence, it is important to assess nurses' knowledge, attitude and practice to help them handle such cases. The result of the study conducted in Ethiopia suggested that the majority of respondents that have had favorable attitude but low knowledge and practice towards palliative care. Similarly, ward and training on palliative care were significantly associated with knowledge, working institution, level of education, ward and training, on the other hand, were found to be statistically significant with the attitude of nurses towards palliative care [19].

The study conducted by Getie, which was about knowledge on palliative care and associated factors among nurses revealed that more than half of the nurses (55.43%) had poor knowledge about palliative care. In this regard, the educational status of nurses and palliative care training were significantly associated factors with the nurses' level of knowledge about palliative care. The researcher suggested that there should be incorporation of palliative care in the nursing curriculum. Furthermore, palliative care training and continuous education should be given regularly for nurses to improve their knowledge about palliative care [20].

The present study revealed that revealed that 43.1% of respondents had poor practices towards palliative care and 56.9% of respondents had good practices towards palliative care and there was statistically significant between level of Attitude and level practices of health care providers towards palliative care.

The previous study conducted from Palestine was almost in the same line with the present study where it showed that the majority of nurses had high practices about palliative care.

This study also revealed that 30.5% of nurses had as high knowledge. The low level of nurses' knowledge about palliative care in this study could also be associated with the lack of specific palliative care units in Palestine. The difference may be due to lack of updating information regarding palliative care, and this might be due to the fact that PC education was not incorporated into either diploma or degree curricula [7].

## References

1. World Health Organisation (2015) WHO definition of palliative care.
2. Sepulveda, Marlin A, Yoshida T, Ullrich A. Palliative care: The WHO's global perspective. *J Pain Symptom Manage*. 2014; 24(2):91-96.
3. Aslakson R, Cheng J, Vollen D, Galusca D and Galusca P. (2014). Evidence-Based Palliative Care in the Intensive Care Unit: A Systematic Review of Interventions, *J Palliat Med*. 2014; 17 (2): 219-35.
4. Puntillo K, Arai S, Cohen N, Gropper M, Nauhaus J, Paul S and Miaskowski C. (2016). Symptoms experienced by intensive care unit patients at high risk of dying. *Crit Care Med*. 2012; 38: 2155-60.
5. Nelson J, Puntillo K, Pronovost P, Walker A, McAdam J, Ilaoa D and Penrod J. (2015). In their own words: Patients and families define high-quality palliative care in the intensive care unit. *Crit Care Med* 2015; 38: 808-18.
6. Sharon L and Docherty. (2017). Searching for the Dying Point Providers Experiences with Palliative Care in Pediatric Acute Care, *Ped*. Ng. 2017; 33 (4): 335-41.
7. Ayed A, Saye j, Harazneh L, Fashafsheh I and Eqtait F. (2015). The Nurses' Knowledge and Attitudes towards the Palliative Care, *Journal of Education and Practice*. 2015; 6 (4): 91-99.
8. Connor M. (2016). Understanding the Influence of Palliative Nursing: A Global Perspective *Int J Palliate Nursing*, 2016; 15 (7): 316-7.
9. Reink L, Shannon S and Engelberg R. (2017). Nurses Identification of Important Yet Under Utilized End of Life Care Skills for Patients with Life Limiting or Terminal Illness, *J Palliate Med*. (2012); 13 (6): 753-59.
10. Harris M, Gaudet J, O' Reardon C. (2014). Nursing care for patients at end of life in the adult intensive care unit, *Journal of Nursing Education and Practice*, 2014; 4 (6).
11. Clarke E, Curtis J, Luce J. (2018). Quality indicators for end-of-life care in the intensive care unit, *Crit Care Med*. 2013; 31 (9): 2255-62.

12. Ddungu H. (2014). Palliative care: what approaches are suitable in developing countries? British journal of haematology. 2014; 154(6): 728-735. DOI: 10.1111/j.1365-2141.2011.08764.x
13. Harding R, Powell RA, Downing J, Connor SR, Mwangi-Powell F, Defilippi K, et al. (2016). Generating an African palliative care evidence base: the context, need, challenges, and strategies. J Pain Symptom Manage. 2012; 36(3):304-309. DOI: 10.1016/j.jpainsymman
14. Huang L-C, Tung H-J, Lin P-C (2019) Associations among knowledge, attitudes, and practices toward palliative care consultation service in healthcare staffs: A cross-sectional study. PLoS ONE 14(10): e0223754. <https://doi.org/10.1371/journal.pone.0223754>
15. Mwangi-Powell FN, Powell RA, Harding R. Models of delivering palliative and end-of-life care in sub-Saharan Africa: a narrative review of the evidence. Curr Opin Support Palliat Care. 2013; 7(2):223-228. DOI: 10.1097/SPC.0b013e328360f835
16. Lynch T, Connor S, Clark D. (2015). Mapping levels of palliative care development: a global update. J Pain Symptom Manage. 2013; 45(6):1094-1106. DOI:10.1016/j.jpainsymman.2012.05.011
17. 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(1):6. DOI: 10.1186/1472-684X-13-6
18. 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. Advances in Life Science and Technology. 2014; 24(2014):100–114.
19. Christina, S. Shantibala, B. S. Akoijam, and J. Pulu, Knowledge of Palliative Care Among Nurses in a Tertiary Hospital in Manipur.
20. Maria K., V. Evanthia, K. A. Petros, and N. Dimitris (2016). Assessment of knowledge and associated factors towards palliative care among Greek nurses," *Assessment*, vol. 3, no. 3, 2016.