

Awareness and Attitude of Undergraduate Nursing Students at King Saud bin Abdul-Aziz University Regarding Palliative Care

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ABSTRACT

Context: Palliative care (PC) is a form of care that aims to enhance the life quality of patients and their families who are dealing with the effects of the life-threatening disease by preventing and alleviating distress by early detection, accurate evaluation, and management of pain and other physical, psychosocial, and spiritual issues.

Aim: This study aimed to assess the awareness and attitude of undergraduate nursing students at King Saud bin Abdul-Aziz University regarding palliative care.

Methods: A descriptive cross-sectional design was utilized to achieve the aim of this study. The study was conducted at the College of Nursing - Riyadh, affiliated to King Saud bin Abdul-Aziz University. A convenience sample of 273 nursing students from level five to level eight voluntarily participated in this study. Data were collected by using two tools. A self-reported questionnaire was designed to assess the students' awareness of palliative care. Frommelt Attitude Towards Care of the Dying (FATCOD) Scale adopted to measure participants' attitudes toward providing care to dying patients.

Results: The results show that about 36.3% of nursing students were in the age group of 21 years old, and 73% were in the sixth academic level. 75.5% of the nursing students were not aware of palliative care, 30.30% knew about PC from the elective course. 96.33% of students had no experience caring for terminally ill patients and their family members previously. The students' response analysis of PC definition revealed that 89.74% of them could not define it correctly, 41% could not know the aim from PC, 43% of students identified the need of terminally ill to reduce the physical suffering. The students' attitudes toward palliative care showed a swing between positive and negative attitudes. As 81% of students believe that giving nursing care to the dying person is a worthwhile learning experience, 65.5% agreed about nursing care for the patient's family should continue throughout grief and bereavement. In comparison, 77.3% would hope the person they cared for dies when they are not present, and 41.5% of the students believe that they would be uncomfortable talking about impending death with the dying person, and 40.9% were uncertain about this.

Conclusion: Knowledge about palliative care among undergraduate nursing students remained relatively poor overall. Attitude toward end-of-life care shows a swing between positive and negative attitudes yet still reflected an evident lack of comfort in dealing with death and dying. Structured courses in palliative care are recommended as a core part of undergraduate nursing education. The suggested course should encompass basic professional skills, symptom control, patient-centered communication, ethical issues, decision-making at the end of life, whole-person care, and interdisciplinary work.

Keywords: Awareness, attitude, palliative care, nursing student

1. Introduction

World Health Organization define palliative care (PC) as a form of care that aims to enhance the life quality of patients and their families who are dealing with the effects of the life-threatening disease by preventing and alleviating distress by early detection, accurate evaluation, and management of pain and other physical, psychosocial, and spiritual issues (WHO, 2021). Palliative care is becoming a global public health concern as the population ages, the number of the elderly continues to rise, and cancer survival rates rise (Jiang et al., 2019).

Worldwide, WHO estimates that more than 20 million people require end-of-life PC every year, primarily because

of non-communicable diseases (Connor & Sepulveda, 2014), the highest proportion of these people live in low- and middle-income countries (Ghally et al., 2018).

Nurses play an essential role in providing palliative care to terminally ill patients and their family members because they spend the longest time with patients and their proximity to patients' bedsides (Smith et al., 2018; Khraisat et al., 2017; Sopcheck, 2016; Sarabia-Cobo et al., 2016). However, many studies show that nurses and nursing students lack enough knowledge about palliative care and feel ill-prepared to care for dying patients (Farmani et al., 2019; Sujatha & Jayagowri, 2017; Khraisat et al., 2017; Gilliland, 2015; Gillan et al., 2014; Al Qadire, 2014). Today's students are future nurses, and their knowledge

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about and attitude toward palliative care will directly affect the quality of care they will provide for dying patients in the future. Therefore, improving students' knowledge about palliative care and changing attitudes through palliative education is important (Jiang *et al.*, 2019).

Glover *et al.* (2017) study at a university in the southern United States found that nearly 85% of senior nursing students reported that they received inadequate training in palliative and end-of-life care in their baccalaureate programs, and with similar research about nurses in Iran (Jabbari *et al.*, 2019; Dehnavieh *et al.*, 2015).

Furthermore, previous researches have demonstrated that education on palliative care and death was excluded in the undergraduate nursing curricula in Argentina, Cameroon, and Korea (Mutto *et al.*, 2007; Bassah *et al.*, 2016; Choi *et al.*, 2012). In Iran, 80% of nurses and nursing students declared that the demand for palliative care increases, and they need further knowledge and education (Park *et al.*, 2019; Azami-Aghdash *et al.*, 2015).

2. Significance of the study

As part of the health care reforms and transformation project of Vision 2030, a group of expert healthcare professionals was tasked with developing a model of care for patients with life-shortening illnesses in Saudi Arabia. Palliative care in Saudi Arabia is still in its nascent stages. Even after two decades, palliative care is not widely available across Saudi Arabia. Meanwhile, the Ministry of Health (MOH) launched the last phase initiative to transform healthcare-Vision 2030 (Alshammaray *et al.*, 2019).

In King Saud bin Abdul-Aziz University for health sciences, there is one elective course of palliative care, so not all nursing students take this course. Because of this issue, there is no enough research to assess undergraduate nursing students' awareness and attitude, so this study aims to assess the awareness and attitude of undergraduate nursing students regarding palliative care.

3. Aim of the study

This study aimed to assess the awareness and attitude of undergraduate nursing students at King Saud bin Abdul-Aziz University regarding palliative care.

4. Subjects & Methods

4.1. Research design

A descriptive cross-sectional study design was used to achieve the study's aim. A cross-sectional analysis examines evidence from a group of people at a certain point in time. Participants are chosen for this type of analysis based on variables of interest. Cross-sectional research is qualitative and is referred to as descriptive research rather than causal or relational research. Researchers take notes on the data in a population, but they do not manipulate the variables. This analysis method can explain population features, but it cannot be used to assess cause-and-effect relationships between variables (Cherry 2019).

4.2. Research setting

The College of Nursing-Riyadh, originally "College of Nursing and Allied Medical Sciences," was established by the Royal Decree No. 18226, dated 11-9-1424 H. corresponding to 26-11-2001 G, issued by His Royal Highness, the Custodian of the Two Holy Mosques, King Abdullah bin Abdulaziz Al Saud, at that time HRH Crown Prince, Deputy Prime Minister and Commander of the National Guard.

The college was merged into the recently established King Saud bin Abdulaziz University for Health Sciences in 2005. (KSAU-HS). HE, Dr. Abdullah Al-Rabeeah, the Chief Executive Officer of National Guard Health Affairs (NGHA) and the President of the University and the College of Nursing, gave it its current name, "College of Nursing, Riyadh" in May 2007.

The need for the college emerged as a result of the severe shortage of Saudi nurses. One of the key goals was to increase the number of nurses to satisfy the demands of the profession. The college began by granting two educational streams a Bachelor of Science in Nursing (BSN). The conventional program is followed by one stream (Stream I), which has high school graduates as its intake. Holders of Bachelor of Science degrees are admitted to the other stream (Stream II). These students follow the Graduate Entry Accelerated Program. This initiative was the first of its kind in the Kingdom of Saudi Arabia, and it was created to help students graduate faster and providing a platform to help expand the availability of nurses in a shorter amount of time. After the Fall of 2010/2011, this initiative has been on hold.

Currently, the college accepts postgraduate candidates for a Master of Science in Nurse-Midwifery, with the first intake beginning in the Spring Semester of the 2015-2016 academic year. Admissions for additional programs will be available soon to increase the number of trained and skilled Saudi nurses in the nursing profession. The College of Nursing is located in KSAU-HS within the premises of King Abdulaziz Medical City- Riyadh, Saudi Arabia.

4.3. Subjects

A convenient sample included all students enrolled in the college of nursing-Riyadh from levels 5 to 8. They were 273 nursing students. Starting from level 5 because it is the start of having clinical nursing courses by specialty wherein level 5 is taking health assessment and medical-surgical course part one, level 6 is taking medical-surgical course part two, level 7 taking maternity, pediatric, psychiatric courses and level 8 taking management and leadership, critical care, community health nursing courses to assess the awareness and attitude regarding palliative care. The nursing students who participated voluntarily agreed to participate and were enrolled in educational levels of from 5-8.

4.4. Tools of the study

4.4.1. A Self-Reported Questionnaire

The researchers designed the self-reported questionnaire to obtain information related to undergraduate nursing students' awareness regarding palliative care. It was developed in two parts as follows:

Part I was concerned with the demographic characteristics such as age (numeric) and academic level.

Part II of this questionnaire focused on the students' awareness of palliative care. It was a modified version of the designed questionnaire that has been made by staff from the Sociological Research Institute (Istituto di Ricerca Social GPF) in 2008 and include 17 items to collecting information related to awareness regarding palliative care. All questions were close-ended except question 1, which was open-ended.

The original questionnaire includes nine original items from question number 10 to 17, and 9 questions were added starting from questions number 1 to 9. The questions included the following PC dimensions.

- Questions 1 asking about the general awareness of palliative care with (Yes/No answer),
- Question 2 enquiring about the sources of the information about PC (nursing course, elective course, hospital, television, or radio),
- Question 3 inquiring about the willingness of students to help those people suffering during end life period with a (Yes/No answer),
- Question 4 investigating previous education on death and dying with (Yes, no, or no information answer),
- Question 5 querying about previous experience in dealing with dying patients with (Yes/No answer),
- Question 6 exploring if the students had experienced the death of someone close to them with (Yes/No answer), with the determination of the relationship and the length of time dealing,
- Question 7 exploring the students' experience with near-death (Yes/No answer) with the determination of the relationship and the length of time dealing,
- Question 8 asking about a present experience with terminally ill cases with (Yes/No answer),
- Question 9 asking about the necessity of learning about PC (Yes/No answer) from the students' perspectives.

Those questions from 10 to 17 discuss the level of awareness about PC (question 10). It measured on a 5-point scale ranging from "never heard of it" to "I have a clear idea." Question 11 asked the students to describe in their own words based on what they know or believe about PC, what they think that PC is (open-end question). The answers were analyzed based on the students' responses. Question 12 is concerned with the aim of the PC in the student opinion (The student has to select only one answer from 5 answers ranged from I do not know to it improve the quality of life of unwell people).

Question 13 is concerned with the most appropriate setting in caring for terminally ill patients (The student has to select one of four answers ranged from I do not know; at

home and care by a family member, at home, and cared for by a professional; or hospitals).

Question 14 encompassed the students' information regarding the principal concern of a person who has been diagnosed with an incurable illness (the student had to select the concerns from alternatives). The concerns included fear of pain, fear of death, fear of not being self-sufficient, fear of loneliness, fear of becoming invalid, fear of not having sufficient economic resources, fear of becoming displeasing, or I do not know.

Question 15, inquire the students about the needs of terminal patients (the student has to select the needs from alternatives). The needs included reducing physical suffering, special medical assistance around the clock, medical and nursing assistance at home, support for the family that assists the patient, support by a psychologist, religious support, or I do not know).

Question 16 asked about the main needs of the families caring for the terminally ill patient (the student has to select from alternatives). The responses include special medical assistance around the clock, nursing assistance at home, volunteers for shifts of assistance, special structure to admit the patients, support by a psychologist, religious support, support after the patient's death, or I do not know).

Question 17 is asked about the principal concerns of the terminally ill child (the students have to select from the responses). The responses included fear of being taken away from his\her family, fear of no longer having other children to play with, fear of being away from his\her family and toys, fear of pain and physical suffering, fear of being alone, fear of being abandoned, fear of death, fear of becoming disabled, and fear of not being able to walk anymore.

4.4.2. Frommelt Attitude Towards Care of the Dying (FATCOD) Scale

It was adopted from *Frommelt (1991)*. The Frommelt Attitudes Toward Care of the Dying (FATCOD) Scale is a thirty-item scale designed to assess student nurses' attitudes toward caring for dying patients. Two-thirds of the statements address nurses' attitudes toward the dying patient, while the other third addresses nurses' attitudes toward the patient's family. Fifteen of the items are worded positively, and fifteen are worded negatively. The scale includes statements such as giving nursing care to the dying person is a worthwhile learning experience, death is not the worst thing that can happen to a person, and I would be uncomfortable talking about impending death with the dying person. The tool was reduced to three points scale to facilitate data displaying that are presenting as frequencies and percentages. The Likert-type items ranged from (Strongly disagree), (Disagree), (Uncertain), (Agree), (Strongly agree).

4.5. Procedures

The study self-administered questionnaire and Frommelt Attitude Towards Care of the Dying (FATCOD) Scale were subjected to content validity by a jury of five experts in Medica-Surgical and Mental Health Nursing in

King Saud bin Abdul-Aziz University in Riyadh for Health Science. Self-administered questionnaire reliability was measured using the Cronbach alpha coefficient test. It was 0.75. Content Validity Index (CVI) for FACTOD was computed to be .98 (Frommelt, 1991). The reliability of the tool was also assessed. The correlation coefficient ranges between $r=90$ to 0.94. (Frommelt, 1991).

The Nursing Research Unit at nursing college and King Abdullah International medical research center regulation (KAIMARC) approved this study in compliance with Institutional Review Board (IRB) in September 2018. In order to support the findings of this study, an anonymous self-administered questionnaire has been used where raw data has been treated with strict confidentiality and is used for research purposes only.

The questionnaire was given to the students at King Saud bin Abdul-Aziz University for healthcare studies based in Riyadh. Students' names have been kept secret, and their formal consent was taken before getting the questionnaire filled them. A coding system has been used to keep the information confidential. Each questionnaire had an agreement question for each student to sign if they agree or not on the participation. It is viewed as written consent.

The pilot study was conducted on 10% (27 nursing students) of the study sample to assess the research process's feasibility and test the study tools' clarity and applicability. Tools were prepared and collected in the English language. The pilot sample was included in the primary sample. The study tools consumed 20 minutes to be completed for each participant. The data was collected from the nurse students at the beginning of their scheduled lecture after getting approval from their assigned instructor according to the lecturing schedule of each academic level. The data collection process was completed in three months, starting from February-April 2019. The researcher visited the study setting four days/week until the data completed.

4.6. Data analysis

The data are revised, entered into personal computer excel sheets, cleaned, organized, and tabulated, and presented using descriptive statistics of simple frequencies and percentages for the students' responses.

5. Results

Table 1 reveals that 19 years was 4 of students (1.5%), 20 years old was 42 of students (15.4%), 21 years old was 99 students (36.3%), 22 years old was 69 students (25.3%), 23 years old was 50 students (18.3%), 24 years old was six students (2.2%), and last age was 25 years old was three students (1.1%). The table shows the students' educational level from 5 to 8. They comprised; fourth-year start from; level fifth, 46 students (16.8%), level six 101 students (37%), and fifth-year from; level seven 36 students (13.27%), level eight, 90 students (33%).

Table 2 indicates the frequencies and percentages of student nurses' general awareness of palliative care. It reveals that 75.5% did not become aware of palliative care. Among those aware of palliative care (66 students), 37.88%

knew about it from nursing courses, 30.30% from the elective course, 15.15% from the hospital. One of the noticeable findings was that 90.5% of the students were willing to help people suffering during end-of-life. 75.82% of the nursing students had no information dealing with death and dying previously presented.

Furthermore, 96.33% of students had no experience caring for terminally ill patients and their family members previously, and 30.77% experience death of closed one, 78.57% were their second-degree relatives, and 33.33% died from less than one year. Besides, 31.13% of nursing students were experienced near death with one of their relatives, 9.41%, 31,76 were first- or second-degree relatives, respectively, 67.06% were near death for more than ten years.

Only 4.76% of the students had a present experience with terminally ill cases, and 90.5% find it necessary to learn palliative care.

Table 3 reveals the students' responses to their level of awareness of palliative care. 18.7% of students never heard of it, 27.1% only know it by name, an equal percentage of 21.6% either having a vague idea or having a clear idea.

Table 4 denotes the analysis of student responses regarding what they know or believe regarding palliative care. 89.74% of nursing students could not define PC, while 5.13% indicated the physical care dimension of PC. Besides, 3.66% reported that PC improves the terminally ill quality of life.

Figure 1 illustrates the students' opinion regarding the aim of PC. It clarifies that 41% of students did not know the aim of palliative care. 21% reported that PC permits terminally ill patients to conduct an active life, and 15% stated that it improves the quality of life of unwell people, while 11% believe that PC delays deaths.

Figure 2 illustrates the students' opinion for the most appropriate setting for caring the terminally ill patients. 42% of the student reported that home and cared for by family members is the most appropriate place, 31% believe the hospital is the most appropriate place, and 27% of students stated that the home is the most appropriate place to be cared for by professional care hospice staff.

Figure 3 illustrates the students' awareness to the principal concerns of the patient with an incurable illness. 42% of students stated that the fear of death is the main concern, 28% believe that the fear of pain is the principal concern, while 16% was the fear of loneliness, 8% mentioned that the fear of becoming invalid, and 6% reported fear of not having sufficient economic resources.

Figure 4 reveals the students' awareness regarding the main needs of terminally ill patients nearing the end of their lives. 43% of students denoting they need to reduce the physical suffering, 23% reported they need support for the family that assists him/her. An equal percentage of 17% of the students either report the need for medical and nursing assistance around the clock or religious support.

Figure 5 represents the students' awareness of the main needs of families caring for terminally ill patients. 46% of students reported that the families need special medical assistance around the clock, 31% states they need nursing

assistance at home, 19% reported that they need support from a psychologist, and 4% had not known the family needs.

Figure 6 represents the students' awareness regarding the principal concerns of a terminally ill child. 55.70% reported fear of being taken away from his/her family, 23.40% stated they fear no longer having other children to play with, 17.90% stated the fear of pain and physical suffering, and 16% reported fear of death.

Table 5 represents the positively worded attitudes of the nursing student toward PC. It reveals that 81% of students believe that giving nursing care to the dying person is a worthwhile learning experience, 65.5% agreed about nursing care for the patients' family should continue through grief and bereavement, 67.7% disagreed that families need emotional support to accept the behavior changes of the dying person, 72.4% disagreed that families should be concerned about helping their dying member make the best of his/her remaining life. Also, 74.3% of the students disagreed that families should maintain as normal an environment as possible for their dying member, and 74.4% disagreed that it is beneficial for the dying person to verbalize his/her feelings. Besides, 60.7% disagreed that the

family should be involved in the physical care of the dying person, while 85.3% believing that nurses should permit dying persons to have flexible visiting schedules.

Table 6 demonstrates the percentage of student nurses' negatively worded attitudes toward PC. The table reveals that 41.5% of the students believe that they would be uncomfortable talking about impending death with the dying person, while 40.9% were uncertain about this. Besides, 38.1% of them disagreed about want to be assigned to care for a dying person. Also, 55.6% of them would be upset when the dying person they were caring for gave up hope of getting better. Additionally, 80.3% believe that when a patient asks, "Nurse am I dying"? I think it is best to change the subject to something cheerful. 36% of nursing students want to stay and not withdraw from care involvement as a patient near death. Also, 77.3% would hope the person they are caring for dies when they were not present, while 74.4% disagreed that they were afraid to become a friend of a dying person. 48.7% would be uncomfortable if I entered the room of a terminally ill person and found him/her crying, while 60.7% agreed that educating families about death and dying is not a nursing responsibility.

Table (1): Frequency and percentage distribution of student nurses' characteristics (no=273).

Personal data	No.	%
Age		
19 years	4	1.5
20 years	42	15.4
21 years	99	36.3
22 years	69	25.3
23 years	50	18.3
24 years	6	2.2
25	3	1.1
Student level		
5	46	16.8
6	101	37
7	36	13.27
8	90	33

Table 2: Frequency and percentage distribution of students' awareness regarding palliative care (no=273).

Variables	No.	%
General awareness about palliative care		
Yes	66	24.5
No	207	75.5
Source of information about palliative care (66 students)		
Nursing course	25	37.88
Elective course	20	30.30
hospital	10	15.15
Television	7	10.61
Radio	4	6.06
Willing to help people suffering during the end-of-life period		
Yes	247	90.5
No	26	9.5
Having previous education on death and dying		
Previously took a course on death and dying	20	7.33
Have not specific course on death and dying	46	16.85
No information dealing with death and dying was previously presented	207	75.82
Having previous experience in dealing with dying patients		
I have cared for terminally ill patients and their family members previously	10	3.66
I had no experience caring for terminally ill patients and their family members previously	263	96.33
Having experienced the death of close one		
Yes	84	30.77
No	189	69.23
<i>The relationship with dead relative (84 students)</i>		
First degree relatives (Father, mother, and sister)	18	21.43
Second-degree relatives (Grandmother, grandfather, uncle, aunt, niece)	66	78.57
<i>Length of time since death</i>		
Less than one year	28	33.33
One to five years	25	29.76
Six to ten years	22	26.19
More than ten years	9	10.71
Have experienced near-death related to terminal illness		
Yes	85	31.13
No	188	68.87
<i>The relationship with near-death relative (85 students)</i>		
First degree relatives (Father, mother, and brother)	8	9.41
Second-degree relatives (Grandmother, grandfather, uncle, aunt, cousin)	27	31.76
Others	50	58.82
<i>Length of time since death</i>		
Less than one year	11	12.94
One to five years	11	12.94
Six to ten years	6	7.06
More than ten years	57	67.06
A present experience with terminally ill cases		
Yes	13	4.76
No	260	95.24
Finding it necessary to learn the palliative care		
Yes	247	90.5
No	26	9.5

Table (3): Frequency and percentage distribution of students' level of awareness regarding palliative care (no=273).

Students' responses	No	%
Never heard of it	51	18.7
Only know it by name	74	27.1
I have a vague idea	59	21.6
I have a reasonable idea	30	11
I have a clear idea	59	21.6

Table (4): Frequency and percentage distribution of students’ awareness of palliative care (no=273).

Students’ responses	No	%
Not able to define PC	245	89.74
Define with a tendency to indicate to physical care dimension	14	5.13
Definition concerning to PC can improve the terminally ill quality of life	10	3.66
Definition regarding PC reassure the terminally ill patients	4	1.47

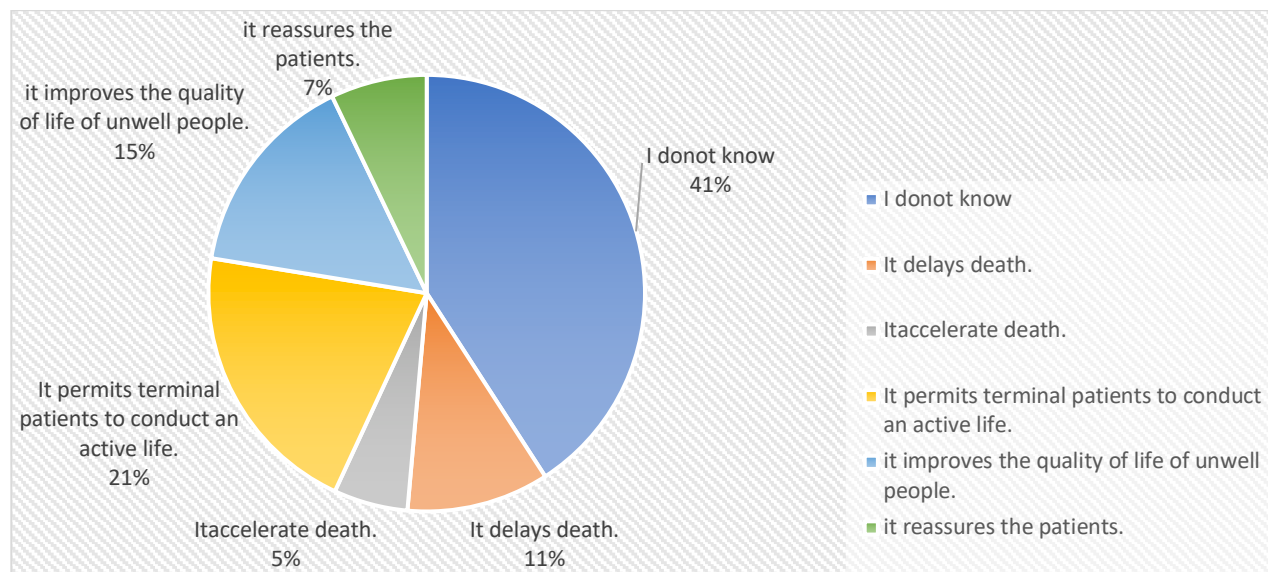


Figure (1): Percentage distribution of students’ opinion regarding the aim of PC (no=273).

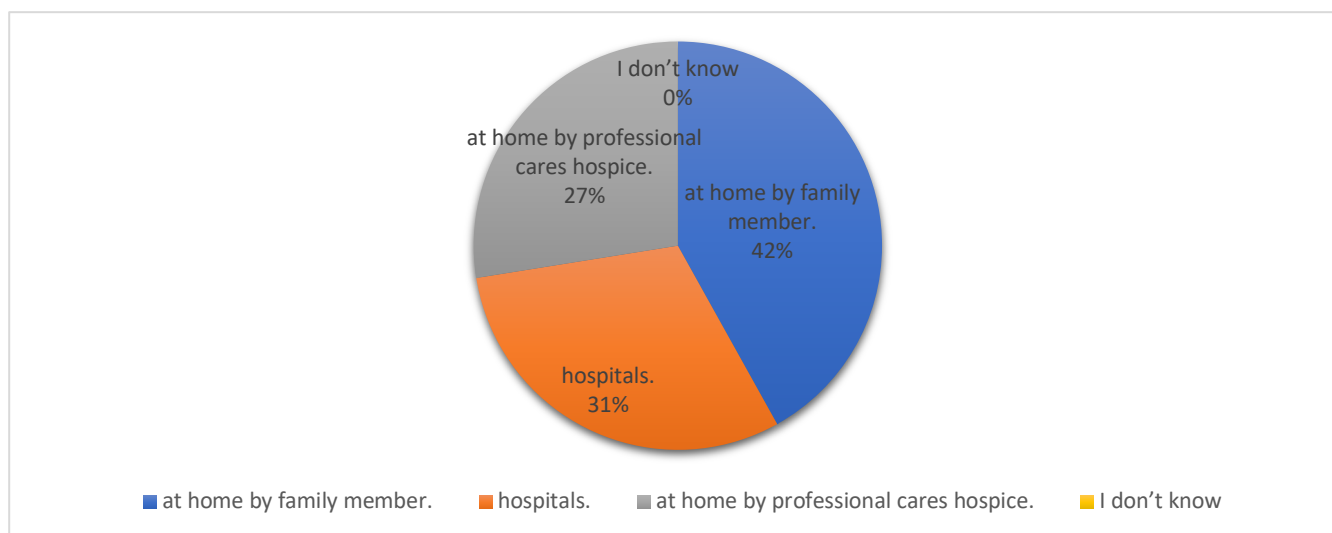


Figure (2): Percentage distribution of student awareness of the most appropriate setting for caring the terminally ill patients (no=273)

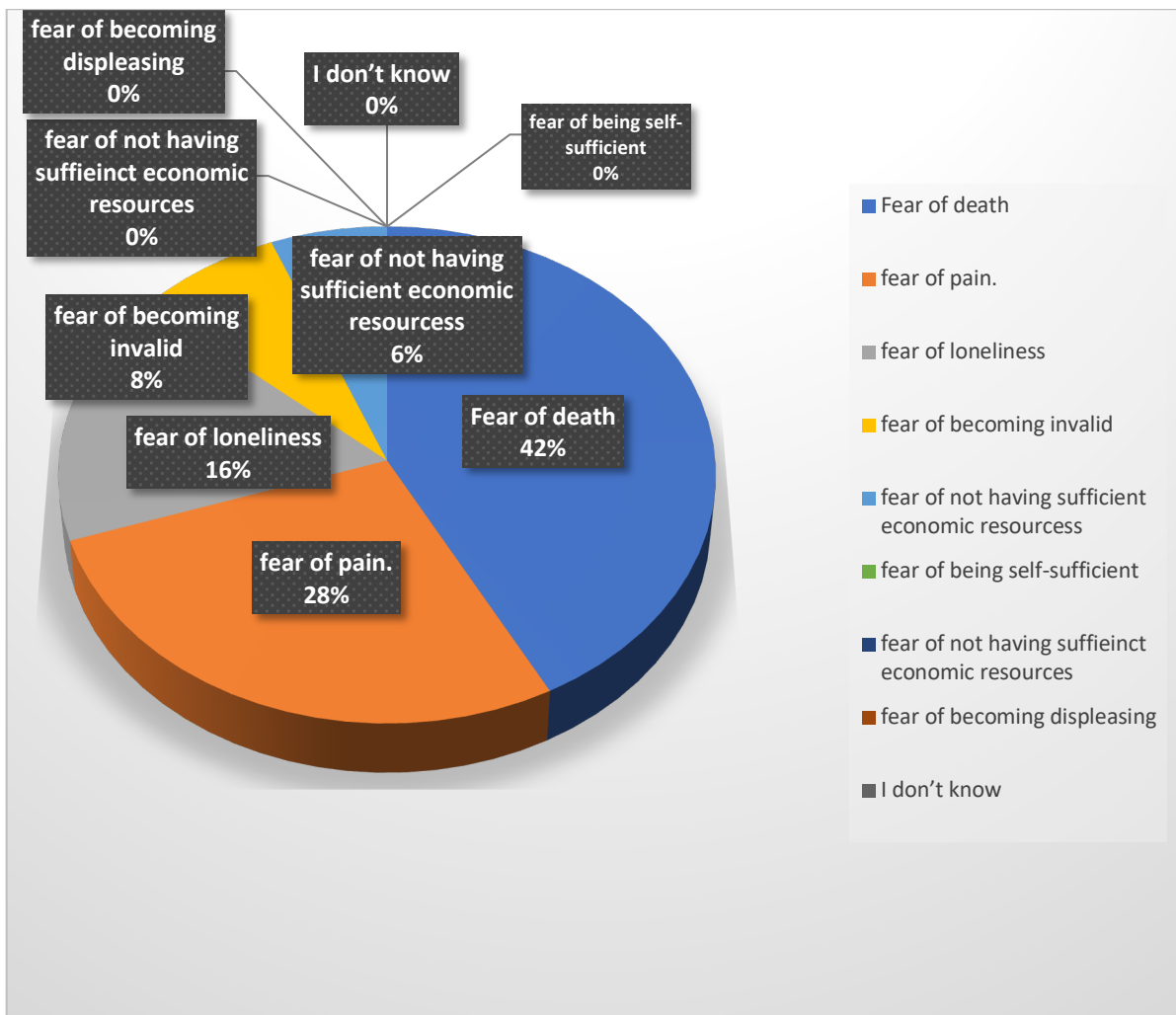


Figure (3): Percentage distribution of students' awareness regarding principal concerns of the patient with an incurable illness (no=273).

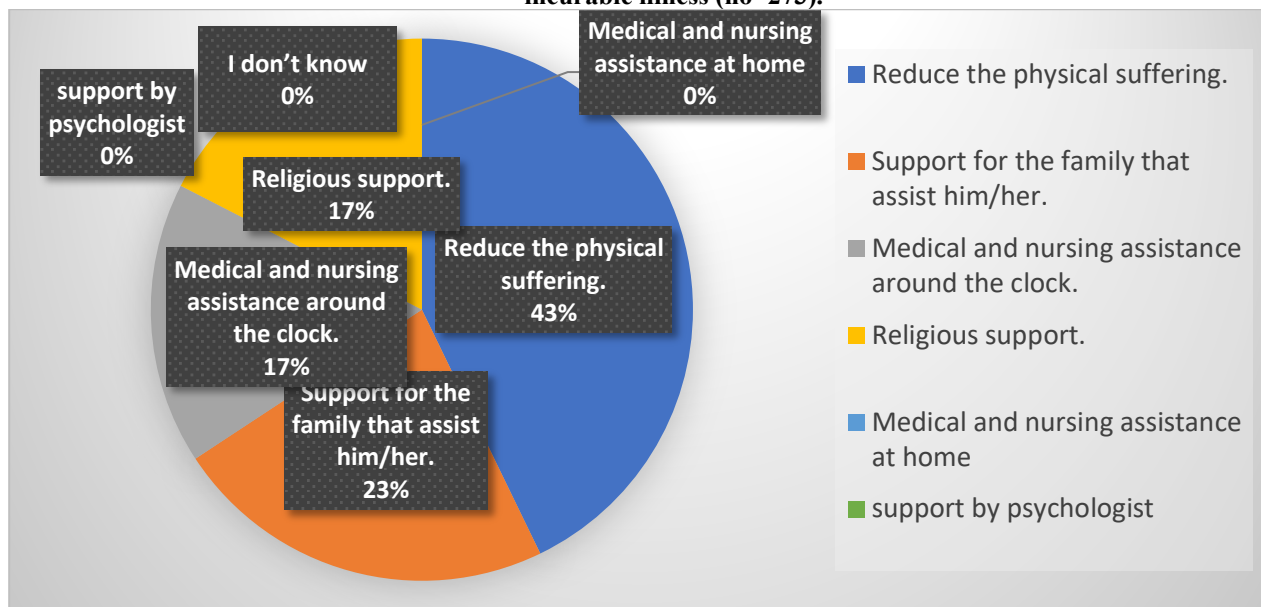


Figure (4): Percentage distribution of students' awareness regarding the main needs of terminally ill patients nearing the end of their lives (no=273).

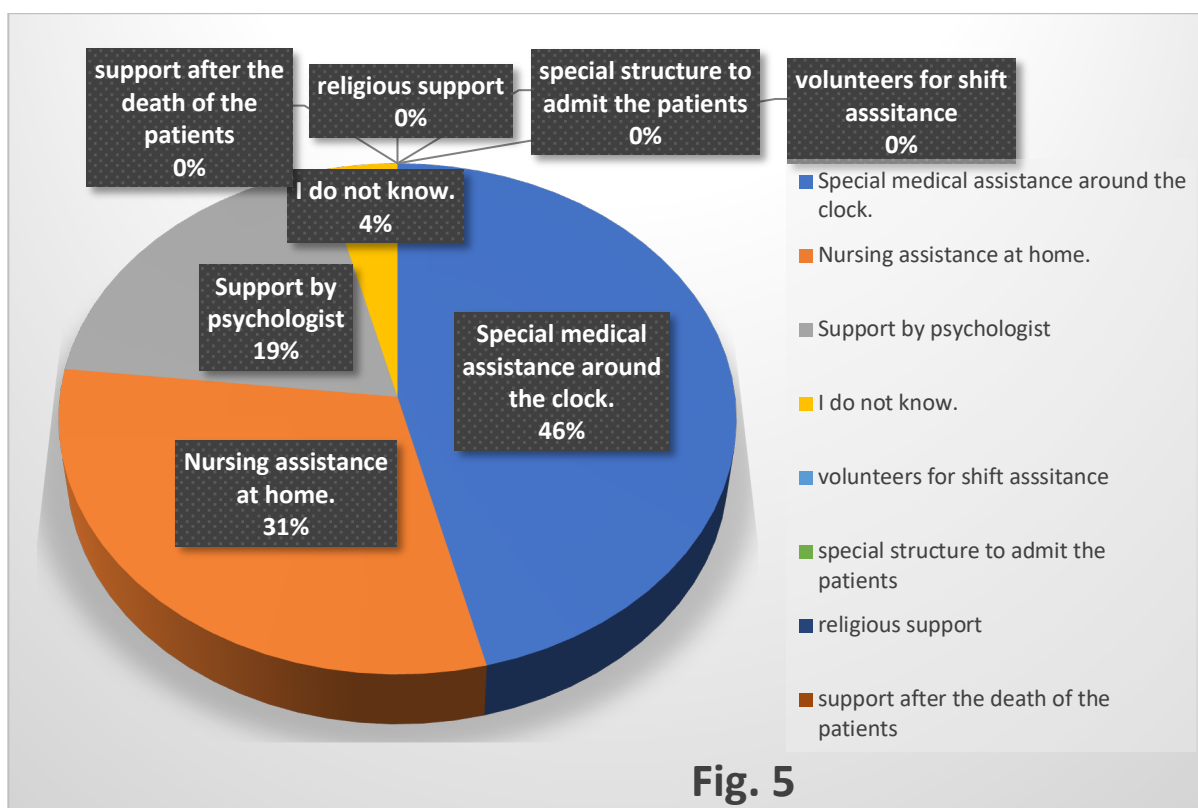


Fig. 5

Figure (5): Percentage distribution of the students' awareness regarding the main needs of families caring for a terminally ill family member (no=273).

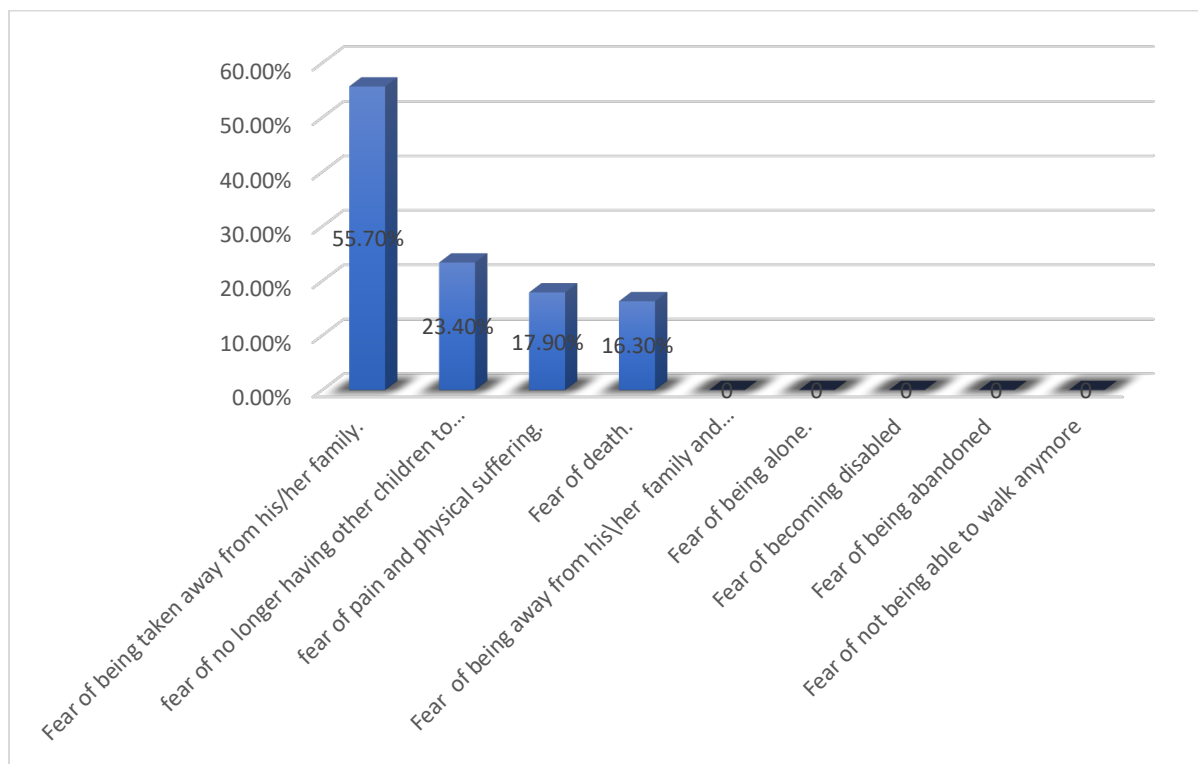


Figure (6): Percentage distribution of students' awareness regarding the principal concerns for a terminally ill child (no=273).

Table (5): Percentage distribution of students' positive worded attitudes toward palliative care (no=273).

Students' attitudes	Strongly agree/ Agree	Uncertain	Strongly disagree /Disagree
Giving nursing care to the dying person is a worthwhile learning experience	81	9	10
Death is not the worst thing that can happen to a person	4.5	5.5	90
Nursing care for the patient's family should continue throughout grief and bereavement	65.5	15.5	19
There are times when the dying person welcomes death	73.4	12.6	14
Families need emotional support to accept the behavior changes of the dying person	4.3	28	67.7
Families should be concerned about helping their dying member make the best of his/her remaining life	4.8	22.8	72.4
Families should maintain as normal an environment as possible for their dying member	2.6	23.1	74.3
It is beneficial for the dying person to verbalize his/her feelings	4.1	21.5	74.4
Nursing care should extend to the family of the dying person	33.6	35.7	30.7
Nurses should permit dying persons to have flexible visiting schedules	85.3	2	12.7
The dying person and his/her family should be the in-charge decision-makers	30.7	33.6	35.7
The family should be involved in the physical care of the dying person	4.3	35	60.7
Addiction to pain-relieving medication should not be a nursing concern when dealing with a dying person	50.4	19.4	30.2
Dying persons should be given honest answers about their condition	32.1	37.6	30.3
Nurses can help patients prepare for death	31.9	39.1	29

Table (6): Percentage distribution of students' negative worded attitudes toward palliative care (no=273).

Students' attitudes	Strongly agree/ Agree	Uncertain	Strongly disagree /Disagree
I would be uncomfortable talking about impending death with the dying person	41.5	40.9	17.6
I would not want to be assigned to care for a dying person	31.9	30	38.1
The nurse should not be the one to talk about death with the dying person	30.7	33.6	35.7
The length of time required to give nursing care to a dying person would frustrate me	40.5	12.5	53
I would be upset when the dying person I was caring for gave up hope of getting better	55.6	68	12.4
It is difficult to form a close relationship with the family of a dying person	30.7	33.6	35.7
When a patient asks, "Nurse am I dying "? I think it is best to change the subject to something cheerful	80.3	9.4	10.3
I would feel like running away when the person actually died	41.5	40.9	17.6
As a patient nears death, the nurse should withdraw from his/her involvement with the patient	26.8	35.2	36
The dying person should not be allowed to make decisions about his/her physical care	40.9	17.6	41.5
I would hope the person I am caring for dies when I am not present	77.3	12.4	10.3
I am afraid to become friends with a dying person	4.1	21.5	74.4
I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying	48.7	31.5	19.8
Educating families about death and dying is not a nursing responsibility	60.7	35	4.3
Family members who stay close to a dying person often interfere with the professionals' job with the patient	30.7	33.6	35.7

6. Discussion

Palliative care, also called comfort care, is primarily directed at providing relief to a terminally ill person through symptom management and pain management. Nurses are the most numerous healthcare providers in almost every country; they are often the primary caregivers (*Karkada et al., 2011*). So, this study aimed to assess the awareness and attitude of undergraduate nursing students at King Saud bin Abdul-Aziz University regarding palliative care.

The current study reveals that the highest percentage of student was in the age group of 21 years old, and about a quarter of students were in the age group of 22 years old, which was matched with their educational level as more than a third of them were in level 6, and another third of them were in level eight. This finding agrees with *Karkada et al. (2011)*, who reported that 51% of the nursing students were in the age group of 21 years old.

Regarding the awareness of student nurses about PC, the current study reveals that more than three-fourths of students were not generally aware of the PC. A third of the remaining fourth knew about from nursing courses, less than one-third knew from elective courses, and more than fifteen percent from the hospital. This finding might be revealed due to the special situation of King Saud bin Abdulaziz University situation that the course of palliative care is an elective one. Consequently, not all students are enrolled in this course. This finding matched that of *Karkada et al. (2011)*, who reported that only 43.4% of student nurses were aware of palliative care and learned about cancer management.

Despite more than three-fourths of students had not previously been exposed to education about PC, most of them were willing to help people suffering during end-of-life. This finding might be referred to the Islamic culture that favors the care and mercy with the elder and those who need assistance at the end of life. This finding match that of *Babgi*

(2009); *Alshammaray (2019)*, who reported that Islamic culture adopts the end-of-life care that legally governs Saudi Arabia based on the Holy Qur'an.

Furthermore, most of the student nurses had no experience caring for terminally ill patients and their family members previously, although less than a third of them experience the death of a close one, mostly were their second-degree relatives, who died from less than one year. Besides, nearly one-third of nursing students were experienced near death with their first/second-degree relatives. This lack of experience might be referred to as the inadequate highlight of the PC concept in the nursing curricula and, consequently, adequate clinical training. It also explained that the scarce life experience of those young students, as evident in the current study, that only four percent of them had a present experience with terminally ill cases, so most of them find it necessary to learn about PC. This finding agrees with *Karkada et al. (2011)*, who reported that 79.5% of the students had poor knowledge about palliative care. Likewise, nearly all (90.1% Chinese nursing students deemed that additional learning on palliative care is necessary) in *Jiang et al., 2019 study*.

The analysis of student responses to their level of awareness of PC reveals that near one-fifth did not hear of it, and more than one-fourth only knew it by name, and an equal percentage of them either had a vague or clear idea. This finding is further emphasized in the current study as most of the student nurses could not define PC with very few numbers indicating the physical care dimension, and only around three percent stated that PC improves the terminally ill quality of life. This poor and low level of knowledge regarding PC might be referred to inadequate focus on this concept in nursing curricula and the recency of the concept as a public health issue worldwide, particularly in Saudi Arabia. *Dimoula et al. (2019)* reported a similar finding in a study on 529 nursing students investigating undergraduate nursing students' knowledge about PC and attitude towards death and end-of-life care. *Dimoula et al.* reported low levels of knowledge regarding PC.

Regarding the students' opinion of PC aim, the current study clarifies that near half of students did not know the aim of palliative care. The other half was providing a wrong answer as more than a fifth reported that PC permits the terminally ill patients to conduct an active life, and more than tenth stated that it improves the quality of life of unwell people, while around tenth believe that PC delay deaths. This misconception about PC would reflect the importance of incorporating PC into the nurses' curriculum clearly and comprehensively if the Kingdom was about to spread this service across the Kingdom as the KSA started health care transformation project of the Vision 2030 with the development of a model of care for patients with life-shortening illnesses in Saudi Arabia (*Alshammaray et al., 2019*).

The student nurses in the current study reported different opinions for the appropriate setting for caring the terminally ill patients (more than two-fifths of them believe that the home under the care of a family member is the appropriate place, less than third believe that the hospital is the

appropriate place and more than fourth stated that home under the care of professionals is the appropriate place). This finding might be due to a lack of formal education about PC and the scattered informal sources of getting information about PC. The existing evidence in undergraduate nursing education suggests only low-to-moderate student knowledge about palliative care (*Carroll et al., 2005; Brajtman et al., 2007; Al Qadire, 2014; Khraisat et al., 2017*). *Arber (2001), Kwekkeboom & Eland (2006), Brajtman et al. (2007)* reported that undergraduate nursing curricula provide limited or inconsistent content about palliative and end-of-life care.

Regarding the students' awareness to the principal concerns of the patient with incurable illness, more than two-fifths of them stated that the fear of death is the main concern, then fear of pain, followed by the fear of loneliness, and becoming invalid, or of not having sufficient economic resources. Concerning the students' awareness regarding the main needs of terminally ill patients nearing the end of their lives, near half of the students denoting they need to reduce the physical suffering, then need support for the family that assists him/her, followed by the need for medical and nursing assistance around the clock, or religious support. Considering the students' awareness of the main needs of families caring for terminally ill patients, around half of the students realizing that the families need special medical assistance around the clock, near one-third states they need nursing assistance at home, near one-fifth reported they need support by psychologists. The studied students also identified the principal concerns of a terminally ill child. More than half reported fear of being taken away from his/her family, fear of no longer having other children to play with, fear of pain and physical suffering, and fear of death as the main concerns of terminally ill children.

This correct expectation of the concerns and needs of the terminally ill patients were related to what the students already studied in different nursing courses as they were in the academic level from five to eight whom study medical-surgical, critical care, pediatric, maternity, and community health. These courses give them a good idea about the general patients' needs, particularly the terminally ill. *Jiang et al. (2019)* mentioned that junior students got higher knowledge scores because they learned additional specialized courses compared with junior and sophomore students.

The positive attitude of the nursing students reveals that most of them believe that giving nursing care to the dying person is a worthwhile learning experience, about two-thirds of them agree that nursing care for the patient's family should continue throughout grief and bereavement. Besides, most of them agree that Nurses should permit dying persons to have flexible visiting schedules. This reflecting a positive attitude the students had towards PC. The positive attitude may be because they felt and shared the pain of a loved one's death and thus understood the meaning of palliative care (*Jiang et al., 2019*). On the same line, *Dimoula et al. (2019)* used the FATCOD scale to measure undergraduate students' attitudes toward death and end-of-life care and revealed positive, liberal, and supportive attitudes towards end-of-life care,

with 60% of respondents keen to care for a dying person and their family. *Dimoula et al.* noted fewer positive attitudes, mainly concerning student comfort with the care of a dying person and his/her imminent death.

In contrast, around three-fourths of them disagree about families should be concerned about helping their dying member make the best of his/her remaining life; families should maintain as normal an environment as possible for their dying member, and it is beneficial for the dying person to verbalize his/her feelings. Besides, around two-thirds disagree that families need emotional support to accept the behavior changes of the dying person, and the family should be involved in the physical care of the dying person. These negative beliefs might be referred to their poor knowledge about the PC as they did not adequately comprehend the multiple aspects of this type of care. These findings were matched with *Jiang et al. (2019)*, who reported a nursing students' knowledge and attitude toward palliative care among a group of Chinese nursing students. The survey results reflected that knowledge about palliative care among Chinese nursing students was insufficient, and a negative attitude was held toward palliative care. The similarities between the current study and Jiang's might be referred to for the same reason: palliative care content was only embedded in one unit of other nursing specialized courses.

On the other hand, the negative attitude reveals many negative attitudes the student nurses have regarding PC. More than three-quarters believing they must change the subject into a cheerful one if the patient speaks about his death. Also, they would hope the person cared for dies when they are not present. Near two-thirds agreeing that educating families about death and dying is not a nursing responsibility. More than half of them will be upset when the dying person they were caring for gave up hope of getting better. Additionally, near half of them believe that they would be uncomfortable if they entered the room of a terminally ill person and found him/her crying and would be uncomfortable talking about impending death with the dying person or want to be assigned to care for a dying person (around third).

Additionally, more than three-quarters disagree that they afraid to be a friend of a dying person, and more than third want to stay and not withdraw from care involvement as a patient near death. These different attitudes might be referred to the inadequate knowledge, lack of training, and inadequate experience with PC. These findings were similar to *Jiang et al. (2019)*, who reported that only <20% of students (19.8%) wanted to be engaged in a palliative care career in the future. The main reasons why these students were unwilling to work in palliative care were the sad working environment and anxiety about death. However, practices have proven that close contact with dying patients positively reduces fear of and death anxiety and improves students' attitudes toward palliative care (*Carmack & Kemery, 2018; Wang et al., 2017; Gilliland, 2015; Davis-Berman, 2014*).

7. Conclusion

This study has generated a rich dataset to form the first pool of evidence to help us identify training gaps and areas for improvement in educating undergraduate nursing students about palliative and end-of-life care in the current setting. Knowledge about palliative care among undergraduate nursing students remained relatively poor overall. Attitude toward end-of-life care shows a swing between positive and negative attitudes yet still reflected an evident lack of comfort in dealing with death and dying.

8. Recommendations

- Structured courses in palliative care should be a core part of undergraduate nursing education.
- The suggested course should encompass basic professional skills, symptom control, Patient-centered communication, ethical issues, decision-making at the end of life, whole-person care, and interdisciplinary work.
- Further research on the effect of simulated experiences on reducing death anxiety and students' knowledge, attitudes, self-confidence, and communication skills during palliative care education is recommended.
- Extend a similar study on graduate nursing students.
- Further study on the influencing factors should be taken into account when developing palliative care and end-of-life care education, especially religious belief, anxiety about death, and the experience of caring for dying people.

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