

Prioritizing Palliative Care: Assess Undergraduate Nursing Curriculum, knowledge and Attitude among Nurses Caring End-of-Life Patients

Youssef H. A. M.¹, Mansour M. A.M.², Al-Zahrani S. S. M.³, Ayasreh I. R. A.⁴ and Abd El- Karim R. A. K.⁵

¹Head of Nursing Department, Assistant Professor of Critical Care Nursing, College of Applied Medical Sciences, Taif University
dr_h_911@hotmail.com

² Associate Professor of Adult Nursing–College of Applied Medical Sciences-Taif University-Faculty of Nursing-Assiut University.
magda_albeah@hotmail.com

³Associate Professor of Family Medicine, College of Applied Medical Sciences, Taif University
ssmz2002@hotmail.com

⁴Lecturer of Critical Care Nursing, College of Applied Medical Sciences, Taif University
ibrahimayasreh@yahoo.com

⁵Lecturer of Community Health Nursing, College of Applied Medical Sciences, Taif University
rania12389@yahoo.com

Abstract: Palliative Care (PC) education and awareness is considered by Saudi Arabia health care system, as a matter of high priority and understanding the experiences of intensive care nurses in providing care at the end of life, is an important first step for improving terminal care in the intensive care unit **Objectives:** to identify nurses' attitude, knowledge and experiences on prioritizing palliative care and assess adequacy of the palliative care content in the undergraduate nursing curriculum from teaching members' perspectives. **Methods:** A cross sectional quantitative survey study was conducted on 100 nurses working in selected hospitals in Taif City and faculty members in Nursing Department, Taif University. **Results:** Above half of nurses had poor knowledge regarding palliative care, but most of them showed positive attitude regarding end-of-life care especially above diploma degree holders. While most of the content of End-Of-Life (EOL) care in nursing educational program was perceived by faculty members as inadequate 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" **Conclusions:** most of nurse participants' highly prioritizing need for PC training. Where reviewing for the undergraduate nursing programs regarding PC and bridging the inadequacy are mandatory **Recommendations:** Attention should be given towards PC by the national health policy and incorporated in the national curriculum of nurse education and training.

Key words: Quality of Nursing Interventions, Palliative care, End-of-Life Care.

1. Introduction

Palliative care (PC) is defined by the World Health Organization (WHO) as “an approach that improves the quality of life (QOL) of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual”. [1] In recent years, there is a tremendous growth in palliative care as an integral part of healthcare worldwide, but unfortunately not all countries have well-established palliative care services, or recognize the importance of palliative care. It is important for healthcare professionals to recognize the value of palliative care. [2] Many reasons could be considered as professional and cultural barriers that impede practitioners in specific contexts to be able to do so. Saudi Arabia is known to be culturally different from the west, where the concept of palliative care is originated. Two decades ago, palliative care services in Saudi Arabia was started at the King Faisal Specialist Hospital and Research Centre (KFSH&RC) in Riyadh by Dr. Isbister, from that time, the field has slowly developed, but the recent progress in palliative care is most evident [3]. The quality of care provided to persons near the end-of-life is of utmost concern

to nurses, individually and collectively. Care of the dying occurs across the life span and is rendered across all settings including hospitals, long term care facilities, hospices, and home settings. Attention to the specialized care of the dying needs to be integrated into all clinical and education settings, and permeate the practice of all health professionals. [4, 5]

Palliative care has become an area of special expertise within medicine, nursing, social work, pharmacy, chaplaincy and other disciplines. However, advances in palliative care have not yet been integrated effectively into standard clinical practice. [5] The convergence of significant trends in legislation, societal opinion, judicial decisions, research data and the media have highlighted concern about the quality of end-of-life care. [6,7] There is an increasing acknowledgment of the inadequacies in the care of dying persons and their families. The goal of improving the quality of end-of-life care is a challenge to the very integrity of health care professionals and the health care system. [8,9,10] It is estimated by the year 2030, 1 in every 8 of the earth's inhabitants will be 65-and-older. Significantly, the most rapid increases will be occurring in developing countries, which will see a jump of 140 percent by 2030, and the number of people over the age of 85 will double.

Corresponding Author: Youssef H. A. M

These statistics reveal that deficiencies are existing in palliative care education, skills and knowledge of nurses, and there is a need to implement an evidence-based palliative care educational program [11, 12].

Throughout the decades, nurses have been the mainstay of care for dying persons and their families and have played a vital role in promoting responsible, competent, compassionate, appropriate, and ethically sound care.^[6] Nurses in all practice settings and roles are faced with dilemmas about the provision of humane and dignified end-of-life care. [13, 14] Nurses have invaluable experience and insight that must be heard to inform efforts to improve end-of-life care. ^[3, 12, 18] The nursing community's commitment to care of the dying and critically ill has been evidenced through numerous and varied initiatives. There is a breadth of experience, knowledge, and skill among nurses and nursing organizations related to end-of-life care. Many nursing organizations have developed educational programs, position statements, policies, guidelines, research projects, and clinical resources with the goal of adequately preparing nurses to provide competent and compassionate care and improving the plight of dying patients and their families. [14, 16, 17].

As nurses are educated regarding end-of-life care in undergraduate nursing curriculums and through continuing education programs, the expectation is that quality care will be provided and the suffering of patients and families alleviated.[18] Advanced practice nurses (APNs) are crucial in the provision of quality end-of life care.[15] However, little attention is devoted to palliative care in most graduate nursing curricula, leaving advanced practice nurses poorly prepared to meet the needs of those approaching the end of their lives. [15] As a result of the inadequacies in the field of PC in the Middle East (ME), PC education and awareness is considered by some ME health care systems especially in Saudi Arabia, as a matter of high priority. [19] Nurses in critical care areas play a vital role in providing end-of-life care and recognize that an ideal death should be peaceful, dignified and comfortable. However, environmental restrictions in critical care units can make a peaceful death unachievable and can have a profoundly negative impact on end-of-life care.[20] Understanding the experiences of intensive care nurses in providing care at the end of life and promoting the learning experience which permits undergraduate nursing students to develop the attitude, knowledge and skills necessary to participate in effective and compassionate Palliative Care, is an important first step for improving terminal care in the intensive care unit (ICU)[4] and no previous study explore nurses' attitude, knowledge and experience about palliative care at Taif City.

The study aimed to:

- Identify nurses' attitude, knowledge and experience on prioritizing palliative care
- Assess adequacy of the palliative care content in the undergraduate nursing curriculum from teaching members' perspectives

Research Questions:

- What is the knowledge and attitude of nurses on prioritizing comfort measures (Palliative care) for dying patients in an acute and critical care units?
- Is there any difference between nurses working in acute and critical care units regarding their attitudes, knowledge and experience on palliative care?

- Does palliative care content in the undergraduate nursing education adequate to provide the staff caring for such cases the knowledge, improve nursing skills and enhance competency from teaching members' perspectives.

2. Subject & Methods

2.1. Research design:

A non-experimental cross sectional quantitative survey study for assessing the adequacy of palliative care content in the undergraduate nursing curriculum and knowledge, attitude and experience among nurses caring for end-of-life patients.

2.2. Settings:

The study was conducted between 1/4/2014, to 7/12/2014 in two different hospitals (King Faisal Specialized Hospital {KFSH} & King Abdul-Aziz Specialized Hospital {KASH}) and Nursing Department at College of Applied Medical Sciences- Taif University.

2.3. Subjects of the study:

A sample of 100 nurses worked at main hospitals at Taif City which represents about 77% of total nurses working in critical care units in these hospitals and all faculty members work in Nursing Department at College of Applied Medical Sciences- Taif University were included in the study.

Inclusion criteria:

- Staff nurse who is working in acute and critical care units and deal with dying or terminally ill patients.
- Willing to participate in the study.
- Faculty members in Nursing Department at College of Applied Medical Sciences- Taif University.

Exclusion criteria:

- Nurses who are working in outpatient or emergency room units.

2.4. Instrumentation

Two major self-report questionnaires (self-developed by researchers from relevant literatures and previous similar studies) were prepared to collect data for this study.

The first one was used to collect information on knowledge, attitudes and experiences of staff that working in acute and critical care units and deal with dying patients, the questionnaire have three parts. **Part A:** of the questionnaire was used to gather data on the demographic characteristics and experiences, while **Part B:** was used for assessing knowledge of nurses about palliative and end-of-life care respectively the total score was (50), the results of nurses were classified into two categories (<25) was poor knowledge and (≥25) was good knowledge . **Part C:** a Likert-type scale was used to assess the attitudes of nurses toward care of the dying. Scores assigned to each item are between 0 and 4 points as follows; (strong agree, agree, strong disagree, disagree, and I do not know). According to range of total scores lie between (0 – 40), nurses were classified as: positive or negative attitude & aware if their total score was ≥ 50%, and were classified as negative attitude & not aware if their total score was < 50%.

The second questionnaire was used to collect information about adequacy of palliative care content in the undergraduate nursing curriculum from faculty members.

2.5. Pilot Study: Pilot study was carried out using sample of 10 nurses from two different hospitals (King Faisal Specialized Hospital {KFSH} & King Abdul-Aziz Specialized Hospital {KASH}) and 4 faculty members (2 from female and male sectors) to evaluate the questionnaires and check, whether the length and structure of questions

were problematic. The study reflected that the questions were related and the length of time for filling all questionnaires was about 20 to 30 minutes which was enough. Finally, the filled instruments for each participant were coded and entered into the computer for data analysis [21].

2.6. Method of Data collection: Approval of institutional Review Board (IRB) at Al-Taif University, Dean of Applied Medical Sciences College and the selected hospitals were obtained. After that, once the subjects were asked to sign the designed consent form, then the researcher gave the questionnaire for filling it out, each participant was spent 20-30 minutes to complete the questionnaire. The researcher told the participants that all information that will be gathered will be used only for the purpose of research, and results of the study will be published in aggregates. All data had been installed into computer for data analysis by utilizing SPSS program.

2.7. Ethics and Human Rights: An informed consent was obtained from all the participants before collecting any data. Explanation of the study aim in a simple and clear manner was done to each participant. All data was considered confidential. Participants were informed about their rights to withdraw from the study at any time without giving any reason.

2.8. Statistical Analysis: The analysis was conducted using the statistical Package for (SPSS) version (19) was

3. Results

Part one: Nurses' Attitude, Knowledge and Experience on Prioritizing Palliative Care:

Table 1: Socio-Demographic Characteristics of Nurses Were Participated in the Study, N=100

Variables	Percent%
<u>Sex:</u>	
Male	47%
Female	53%
<u>Age</u>	
20 - 29 years	67%
30 - > 40 years	33%
Mean Age & SD	4.7%
<u>Level of education:</u>	
Diploma & Associate degree	65%
Bachelor's degree	24%
Post Graduate Nursing Degree	11%
<u>Years of experience:</u>	
1- 9 years	90%
10- >20 years	10%
<u>Type of ICU Primarily employed:</u>	
Intensive Care Unit	73%
Other ICU (Medical ICU, Neuro/Neurosurgical ICU, Coronary Care Unit, Surgical ICU, Combined ICU/CCU, Cardiovascular/Surgical ICU)	27%
<u>Caring for a dying patient during Nursing school:</u>	
Yes	62%
No	38%
<u>Caring for dying patient in your Current role:</u>	
Yes	86%
No	14%
<u>Sources of information about end of life care:</u>	
Textbooks	38%
Internet	27%
Other (Journals, Seminars\conference and Colleagues)	22%
more than one	13%
<u>Frequency For given immediate-End of life care to ICU patients:</u>	
1 - 4 times	80%
5 - 10 times	20%

used to analyze data. Descriptive statistics were used for the quantitative data in the questionnaires. Descriptive statistics included: Mean, standard deviation, frequencies, and percentages. The level of significance for this study was set at ($p \leq 0.05$) to detect any indication of differences found in the data available.

2.9. Limitations of the study: The project has been very successful and carefully prepared but there have been some limitations. **One:** The greatest challenge has been that there is no specialized center for PC. in Taif Governorate and no census for terminally ill patients who need such services. **Second:** The researchers were responsible about constructing the tools and that need timing for search on related previously conducted research studies and literatures which take more time beyond allotted time in the table after modification from the university board. **Third:** For experts' panel, 5 professors were selected 4 from inside the college who had experiences in the field of palliative care and one from outside the university and in the same field of nursing sciences and had experiences in the field of palliative care & scientific research. Only 2 (one from each side) were gave response from 5 and was positive, no changes were done in the self-constructed tools. **Fourth:** Repetitions of some questionnaire that the nurse not completed to be able to analyze the data completely, so data collection time took more than planned.

Table 2: Aspects of End-Of-Life (EOL) Care in Health Settings among Nurses N=100

<i>How Effective are the Following Aspects of EOL Care in your Setting?</i>	<i>Not at all Effective%</i>	<i>Somewhat Effective%</i>	<i>Very Effective %</i>
▪ Pain assessment	39%	48%	13%
▪ Pain management	41%	52%	7%
▪ Other symptom management	39%	54%	7%
▪ Psychological support for dying patients	41%	45%	14%
▪ Attention to spiritual needs	36%	48%	16%
▪ Grief/bereavement support	56%	37%	7%
<i>In your Setting, How often Do Dilemmas Occur in these Aspects of EOL Care?</i>	<i>Not Common %</i>	<i>Somewhat Common %</i>	<i>Very Common %</i>
▪ Preserving patient choice/self-determination	65 %	21%	14%
▪ Use of advance directives	61 %	23%	16%
▪ Withholding/withdrawing medically provided nutrition/hydration	50 %	41%	9%
▪ Discontinuing life sustaining therapies	35 %	56%	9%
▪ Legal issues at the end of life	12 %	31%	57%
▪ Fear of causing death by giving pain medication	15 %	33%	52%
▪ Uncertainty about the patient's prognosis	13 %	49%	38%
<i>How Adequate do you Think your Basic Nursing Education Program was in Preparing you in the Following Aspects of EOL Care?</i>	<i>Not Adequate %</i>	<i>Somewhat Adequate %</i>	<i>Very Adequate %</i>
▪ Understanding the goals of palliative care	37%	44%	19%
▪ Pain management at the end-of-life	19%	46%	35%
▪ Other symptom management (i.e. dyspnea, restlessness)	42%	51%	7%
▪ Communication with patients/families at end-of-life	56%	34%	10%
▪ Role/needs of family caregivers in end-of-life care	11%	58%	31%
▪ The care of patients at time of death	38%	47%	15%
▪ Ethical issues in end-of-life care	43%	47%	10%
▪ Grief/bereavement	44%	43%	13%
▪ Overall content on end-of-life care	59%	26%	15%
<i>Items for Effectiveness of Caring:</i>	<i>Not Effective%</i>	<i>Somewhat Effective%</i>	<i>Very Effective%</i>
▪ How effective are you in caring for a dying patient?	46%	42%	12%
▪ How effective are your nursing colleagues in caring for a dying patient?	32%	57%	11%
▪ How effective are the physicians in your setting in caring for a dying patient?	23%	49%	28%

Table 3: knowledge of nurses regarding palliative care n=100

Variable	%
Poor knowledge about palliative care	62%
Good knowledge about palliative care	38%
Means ± SD	1.38±0.48

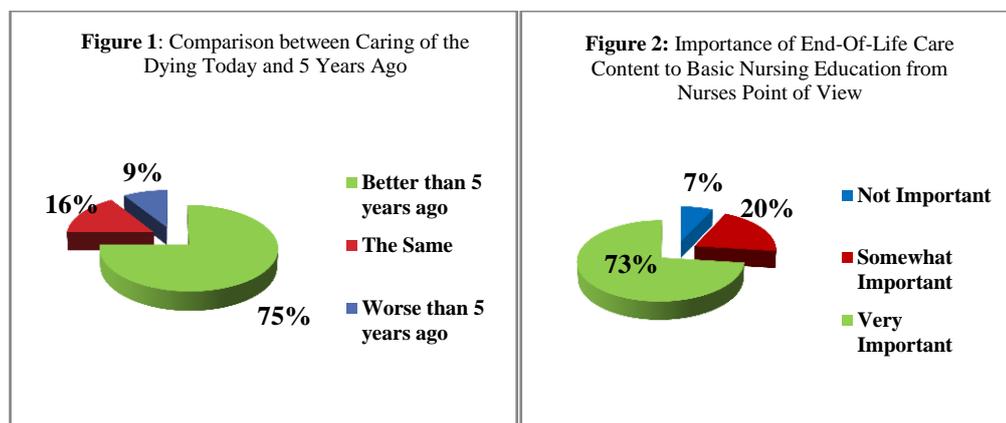


Table 4: The association of socio-demographic characteristics and knowledge of nurses towards palliative care at selected hospitals n=100

Variable	Poor knowledge N %	Good knowledge N %	Total N%	χ^2	P. Value
Sex:					
Male	18(38.3%)	29(61.7%)	47(100%)	21.14	0.00* S
Female	44(83.0%)	9(17.0%)	53(100%)		
Age					
20 - 29 years	36(53.7%)	31(46.3%)	67(100%)	5.8	0.01* S
30 - > 40 years	26(78.8%)	7(21.2%)	33(100%)		
Years of Experience:					
1- 9 years	53(58.9%)	37(41.1%)	90(100%)	3.69	0.05* S
10- >20 years	9(90.0%)	1(10.0%)	10(100%)		
Level of Education:					
Diploma & Associate degree in nursing	54(83%)	11(17%)	65(100%)	20.29	0.001* S
Bachelor's degree in nursing	4(16.7%)	20(83.3%)	24(100%)		
Post Graduate Degree in nursing	4(36.4%)	7(64.6%)	11(100%)		
Type of ICU Primarily Employed:					
Intensive Care Unit	41(56.2%)	32(43.8%)	73(100%)	17.72	0.01* S
Other ICU (Medical ICU, Neuro/Neurosurgical ICU, Coronary Care Unit, Surgical ICU, Combined ICU/CCU, Cardiovascular/Surgical ICU)	21(77.8%)	6(22.2%)	27(100%)		
Caring for a dying patient during Nursing school:					
Yes	40(64.5%)	22(35.5%)	62(100%)	0.43	0.50 NS
No	22(57.9%)	16(42.1%)	38(100%)		
Caring for Dying Patient in your Current Role:					
Yes	56(65.1%)	30(34.9%)	86(100%)	3.37	0.18 NS
No	6(46.2%)	8(57.8%)	14(100%)		
Frequency For given immediate- EOL care to ICU Patients:					
1 - 4 times	44(55.0%)	36(45.0%)	80(100%)	8.31	0.00* S
5 - 10 times	18(90.0%)	2(10.0%)	20(100%)		

χ^2 : Chi square test value

* Indicates significant association ($p \leq 0.05$) between the knowledge and demographic data

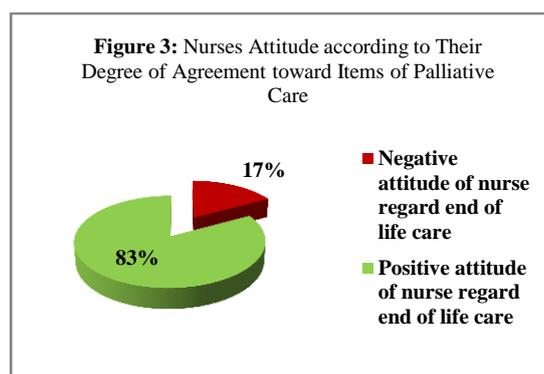


Table 5: The association of socio-demographic characteristics and attitude of nurses towards palliative care at selected hospitals in n=100

Variable	Negative Attitude N%	Positive Attitude N%	Total N%	χ^2	P. Value
Sex:					
Male	7(14.9%)	40(85.1%)	47(100%)	0.27	.59 NS
Female	10(18.9%)	43(81.1%)	53(100%)		
Age:					
20 - 29 years	14(20.9%)	53(79.1%)	67(100%)	2.18	0.13 NS
30 - > 40 years	3(9%)	30(91%)	33(100%)		
Years of experience:					
1- 9 years	17(18.9%)	73(81.1%)	90(100%)	2.27	0.13 NS
10- >20 years	0(0.0%)	10(100.0%)	10(100%)		
Level of Education:					
Diploma in nursing & Associate degree in nursing	13(20%)	52(80%)	65(100%)	14.90	0.01 S
Bachelor's degree in nursing	1(4.2%)	23(95.8%)	24(100%)		
Post Graduate Degree in Nursing	3(27.3%)	8(72.7%)	11(100%)		
Type of ICU Primarily Employed:					
Intensive Care Unit	11(15%)	62(85%)	73(100%)	6.34	.50 NS
Other ICU (Medical ICU, Neuro/Neurosurgical ICU, Coronary Care Unit, Surgical ICU, Combined ICU/CCU, Cardiovascular/Surgical ICU)	6(22.2%)	21(77.8%)	27(100%)		
Caring for a Dying Patient during Nursing School:					
Yes	10(16.1%)	52(83.9%)	62(100%)	0.08	0.76 NS
No	7(18.4%)	31(81.6%)	38(100%)		
Caring for Dying Patient in your Current Role:					
Yes	15(17.4%)	72(82.6%)	87(100%)	0.24	0.88 NS
No	2(15.4%)	11(84.6%)	13(100%)		
Frequency For Given Immediate- EOL Care to ICU Patients:					
1 - 4 times	17(21.2%)	63(78.8%)	80(100%)	5.12	0.02* S
5 - 10 times	0(0.0%)	20(100%)	20(100%)		
TOTAL	17	83			

 χ^2 : Chi square test value* Indicates significant association ($p \leq 0.05$) between the knowledge and demographic data**Part two: Adequacy of the Palliative Care Content in the Undergraduate Nursing Curriculum from Teaching Members' Perspectives:****Table 6: Demographic Characteristic among Faculty Members Teach Basic Nursing Education N=22**

Variables	Number	Percent%
Years of experience		
1-10 years	12	54.5
11-20 years	5	22.7
21-30 years	5	22.7
Nationality & Country of Graduation		
Saudi	6	27.3
Non-Saudi	16	72.7
Specialty		
Medical surgical nursing	13	59.3
Critical care nursing	3	13.6
Pediatrics nursing	1	4.5
Maternity nursing	1	4.5
Administration	1	4.5
Community nursing	3	13.6

Table 7: Assess the adequacy of current content in your educational program in the following aspects of end of life (EOL) care

Items	Adequate N %	Inadequate N %	I don't know N %
Goals of palliative care	5(22.7%)	16(72.7%)	1(4.5%)
Quality of life at EOL	4(18.2%)	17(77.3%)	1(4.5%)

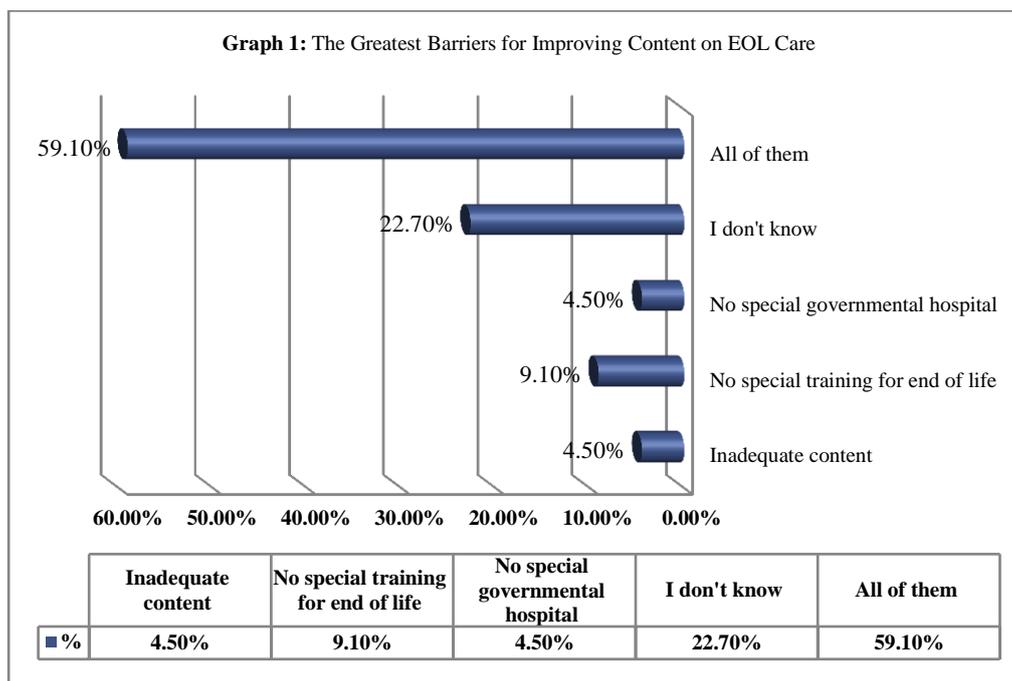
Pain management	6(27.3%)	14(63.6%)	2(9.1%)
Other symptom management	3(13.6%)	17(77.3%)	2(9.1%)
Communication with patients/families at EOL	4(18.2%)	17(77.3%)	1(4.5%)
Role/needs of family caregivers in EOL care	4(18.2%)	17(77.3%)	1(4.5%)
Death and dying	3(13.6%)	18(81.8%)	1(4.5%)
Ethical issues in EOL care	5(22.7%)	16(72.7%)	1(4.5%)

Table 8: What resources would be most helpful to assist faculty in improving EOL content in nursing education?

Items	Helpful N %	Not – Helpful N %	I don't know N %
Textbooks	22(100%)	0	0
Computer assisted instruction/ Audiovisuals/ Internet Resources	20(90.9%)	2(9.1%)	0
Access to speakers, experts	18(81.8%)	3(13.6%)	1(4.5%)
Access to clinical sites (i.e., hospices)	15(68.2%)	5(22.7%)	2(9.1%)
Lecture guides/outlines on EOL topics	21(95.5%)	1(4.5%)	0
Case studies	20(90.9%)	2(9.1%)	0
Standardized curriculum	18(81.8%)	3(13.6%)	1(4.5%)

Table 9: Importance of EOL Care Content to Basic Nursing Education

a. Overall, how important do you believe EOL care content is to basic nursing education?	Important N %	Not Important N %	I don't know N %
	20 (90.9%)	2 (9.1%)	0
b. How effective do you believe a new graduate of your program would be in caring for a dying patient?	Effective N %	Not Effective N %	I don't know N %
	7 (31.8)	14 (63.6%)	1 (4.5%)
c. How receptive do you believe your faculty would be to increased EOL care education?	Receptive N %	Not Receptive N %	I don't know N %
	11 (50%)	2(9.1%)	9 (40.9%)



Part one: Nurses' Attitude, Knowledge and Experience on Prioritizing Palliative Care:

Table (1): Socio-Demographic Profile of the Nurse participants: The response rate of the participants was (100%). Above half of participants were female (53%), had diploma and associate degree in nursing education (65%), primarily employed in ICU (73%) and (62%) provide care for a dying patient during nursing school. Above half of nurses' age was below 30 years old and the majority had an experiences for less than 10 years in which they cared for dying patient in their Current role and less than 5 times they

gave an immediate end-of-life care (67%, 90%, 86% and 80% respectively), while (62%) had the chance for caring of dying patients during nursing school and (38%) of them the Textbooks were their Sources of information about end of life care.

First part of Table (2) showed that, an average of about (56%) of participants who perceived "Grief and bereavement support" aspect as not at all effective in their settings. Also, it was obvious from this study that the participants who perceived aspects of EOL care as very effective, with highest percentage of (16 %) for aspect of

"Attention to spiritual needs. The findings also revealed that above half of participants perceived "pain management"(52%), "Other symptom management"(54%), and "Grief/bereavement support" aspects of EOL were moderately effective.

The Second part of table (2) illustrated the nurses' perceived prevalence of legal/ethical dilemmas, and showed that the "Legal issues at the end of life" and "Fear of causing death by giving pain medication" were perceived as the most common dilemma in their settings with percentage of (57% & 52% respectively). The findings also revealed that dilemmas of "Preserving patient choice/self-determination", "Use of advance directives", and "Withholding/withdrawing medically provided nutrition/hydration" were perceived by above half of participants as less common dilemmas in their settings. While discontinuing life sustaining therapies and uncertainty about the patient's prognosis (56% & 49% respectively) of participants perceived as somewhat common dilemmas.

Third part of table (2) elucidated how adequate was the basic nursing education preparing the participants for in EOL care. The results showed that more than half of participants (59%) perceived the overall content of end-of-life care was not adequate in their basic nursing education. On the other hand, above half of participants (58%) showed that the aspect of "Role/needs of family caregivers in end-of-life care" was somewhat adequate in their basic nursing education. Among the aspects of EOL care, "Pain management at the end-of-life" aspect was covered in very adequate manner as (35%) of participants perceived. When asking participants about how they are effective in caring of dying patients, only (12%) of them said that they are very effective, while (28%) of them showed those physicians were very effective in providing care for dying patients.

Table (3): It reflected that above half of nurses participated in the study have poor knowledge regarding palliative care (62%) and only 38% who had good knowledge.

Figure (1): It illustrated that caring for dying patients today is better than 5 years ago.

Figure (2): It showed that (75%) of the nurse participants prioritizing the importance of EOL care content in basic nursing education.

Table (4): It revealed that there is a statistical significance association between level of knowledge about palliative care and most of socio-demographic characteristics of nurse participants. Regarding the gender, the results showed a significant difference as those female participants were more knowledgeable than male regarding palliative care. Additionally, the results showed that less experienced nurse participants (1 – 10 years of experience) are more knowledgeable than those who were more experienced (10 > 20 years of experience). Furthermore, level of education was significantly associated with knowledge about palliative care in diploma & associate degree holders who represents (65%) of total nurse participants, the majority of them have poor knowledge (83%) while the rest who represents (35%), majority of them, bachelor (83.3% of them), and post graduate degree in nursing (64.6% of them) holders had good knowledge. On the other hand, the results revealed that there was significant association between nurse participants' knowledge and type of ICU Primarily employed, the one who was employed in ICU (43.8%) had good knowledge, while the majority of them were exposed

for caring of dying patient in their current role, only (34.9%) of them had good knowledge. Regarding the frequency of care (80%) of nurse participants gave immediate EOL less than 5 times, (55%) of them had poor knowledge while (20%) of them who gave immediate care more than 5 times, (90%) had poor knowledge.

Figure (3): It showed that (83%) of the nurse participants had positive attitude regarding end of life care.

Table (5): It elucidated the association between socio-demographic characteristics and attitude of nurses toward palliative care. The results revealed that there was significant relationship between level education and nurses' attitude. Bachelor holders had more positive attitude (95% of total bachelor holders) than any other educational degrees. Regarding frequency of immediate care (20%) of participate had more than 5 times, (100%) of them had positive attitude.

Part two: Adequacy of the Palliative Care Content in the Undergraduate Nursing Curriculum from Teaching Members' Perspectives:

Table (6), Socio-Demographic Profile of the Faculty Participants: 22 faculty members and clinical instructors who were teaching basic nursing education were participated in this study. More than half of them (54.5%) were newly experienced in teaching (1 – 10 years). The (59.3%) of faculty is specialized in medical –surgical nursing, and only (13.6%) of them are specialized in critical care nursing.

Table (7): It revealed how adequate do the faculty perceive the current content in educational program. Most of the content of aspects of EOL care in nursing educational programs was perceived as inadequate with a percentage of (77.3%). Death and Dying was the aspect which its content in the nursing educational program was perceived as the most inadequate one (81.8%). On the other hand, Pain management was the aspect which its content in the nursing educational program was perceived as the most adequate one (27.3%) among all aspects of EOL.

Table (8): It shows that (100%) of faculty members were perceived "textbooks" as the most helpful resources in improving EOL in content of the nursing education, while (95.5% & 90.9% respectively) perceived "Lecture guides/outlines on EOL topics", "Computer assisted instruction/ Audiovisuals/ Internet Resources", and " Case studies" were also the most helpful resources to improve EOL content in nursing curriculum. On the other hand "Access to clinical sites (i.e., hospices)" was the least helpful one with a percentage of (31.8%).

Table (9): It elucidated how important do faculty perceive EOL is to be a part of nursing education. The results showed that there was consensus (90.9%) on the importance of EOL as a part of nursing curriculum. Only (31.8%) of faculty perceived that new graduate of their program would be effective in caring for a dying patient.

Graph (1): showed the greatest barriers to improving content on EOL care as perceived by faculty members and revealed that "Inadequate content", "No special training for end of life", and "No special governmental hospital" were perceived as the greatest barriers with a percentage of (59.1%).

4. Discussion

Palliative nursing care is a relatively new specialty in Saudi Arabia, but it has shown remarkable growth in the last two decades. In 2010, there were more than 15 comprehensive cancer centers in Saudi Arabia and well-established PC units with integrated home-based care. These units serve more than 500 patients/year combined.^[19] Nevertheless there are challenges to this development. This study aimed to identify nurses' attitude, knowledge and experience on prioritizing palliative care and assess adequacy of the palliative care content in the undergraduate nursing curriculum from teaching members' perspectives. So it considered as two research works, one survey the clinical care introduced to the end-of-life patients by exploring the nurses' attitude, knowledge and experience and what is the priorities of that care from their perspectives, on the other hand how adequately the nursing curriculum are preparing the nursing students for this area of care.

Part one: Nurses' Attitude, Knowledge and Experience on Prioritizing Palliative Care:

Understanding the existing level of palliative care knowledge and attitudes toward end of life care would be an important benchmark for analysis of future educational effort [22]. The findings of this study revealed that psycho-spiritual and pain assessment aspects of end-of-life were the most effective as identified by nurse participants, and this is congruent (Luxardo, et al, 2014) study in which staff participants perceived spiritual comfort, peace, and acceptance as most frequent and effective interventions for patients experiencing end-of-life case. Psycho-spiritual domain is so important in providing nursing care for end-of-life patients as it assists them to adapt and accept the death, so patients become more relaxed and less anxious about death.^[23] above half of nurse participants' perceived grief and bereavement support as the least effective aspect in their settings, and this may be related to lack of communication of nurses with patients' families, and inactivation of families' role in end-of-life care of dying patients. Family meetings with nurses must be held with 72 hours after the patient is being admitted to critical care unit[6]. It is highly recommended to include the family in therapeutic management of palliative care patients as it improves the quality of care toward those patients [24].

More than 60% of participants perceived dilemmas of "Preserving patient choice/self-determination" and "Use of advance directives as less common in their settings. This result may be explained as that most of patients in Saudi Arabia are not aware of their rights as clients receiving health care. Advance directives and self-determination are based on patient' right of autonomy which is one of ethical principles of nursing^[25], On the other hand, results showed that nurse participants perceived that legal issues among end-of-life care were widespread, but Islam- religion in Saudi Arabia- forms the umbrella under which all solutions are involved so that other dilemmas such as "Withholding/withdrawing medically provided nutrition/hydration", and "Discontinuing life sustaining therapies" were not perceived by more than 90% of participants as very common. More than half of participants said that the overall content of end-of-life care aspects were not adequately covered in their basic nursing education and this result was congruent with several previous studies

which revealed that there were inefficient educations on end-of-life care especially on symptom management.

Congruently with previous studies were conducted on palliative care [26, 27, 28]. the results of this study showed that 62% of nurse participants had poor knowledge about palliative care. This may be related to insufficient coverage of palliative care either as a separate course or as reference chapters in nursing educational curricula. There was consensus in many previous studies on that training courses on palliative care and annexation of palliative care in nursing educational programs have a significant role in enforcement of awareness about palliative care among nurses and nurses' students[26, 29, 30]. However, Level of education had a significant effect on knowledge level of nurses about palliative care, as this study revealed that nurses holding diploma and associate degrees had poorer knowledge than nurses who had higher educational degrees (Bachelor, Master, and Doctorate), and this may be related to lack of experience of diploma and associate degree holding nurses in critical care units and palliative care wards and insufficiency of educational content about palliative care in the curricular plan of diploma and associate degrees. Contrary to many previous studies^[26,31], analysis of the results of this study showed a significant differences in knowledge level between less experienced (1 – 9 years) and more experienced (10- 20 years) nurses and this may be related to improve of caring the dying patients in these days than 5 years ago. Findings of this study showed that nurses who provided more end-of-life care for their patients were more knowledgeable than who did not, and this ensures the role of experience in maximizing knowledge and enforcement of awareness about palliative care among nurses. This result is congruent with traditional approach of nursing administrators in assigning more experienced nurses (who exposed more to the critical ill cases) to critical care units and palliative care areas regardless to the year of employment. Despite of the poor knowledge among nurse participants in this study, most of the participants (83%) showed more positive attitude regarding end-of-life care, and this was evident with most of previous studies[26, 27, 32, 33, 34].

In contrary with the findings of (Kassaet al, 2014) study^[26], the present study revealed that most of nurses who are holding diploma degree had favorable attitude toward palliative care (80%), and this result ensures the readiness of these nurses to understand and acquire all aspects of end-of-life care (they recognize their needs to overcome the knowledge deficit they have) and to participate in training courses and educational programs focusing on palliative care.

Part two: Adequacy of the Palliative Care Content in the Undergraduate Nursing Curriculum from Teaching Members' Perspectives:

The results showed that more than 90% faculty participants perceived introduction of end-of-life content in nursing education as so important, while they recognized that the overall adequate coverage of end-of-life aspects in nursing education were very poor (13.6% - 27.3%), and this may be related to lack of organized plan and content about palliative care in educational curricula. According to the European Association for Palliative Care (EAPC) palliative care education for nurses needs to be well structured, focused and efficient, rather than delivered by isolated courses without links to available resources.^[35]Death and

dying aspect was the least adequately covered in curricula (13.6%). Previous studies revealed that nursing students usually feel fearful and discomfort in dealing with dying patients [23, 36, 37]. and with may be as one of difficulties may faculty face during training of their students in caring of dying people. On the other hand, pain management which was the most adequate as perceived by faculty staff , since that it is included in many courses in curricula such as medical surgical nursing, critical care nursing, pharmacology, fundamentals of nursing...etc.

The results of present study showed that access to clinical sites such as hospice areas were the least helpful in assisting faculty in improving end-of-life content, and this is contrary to many previous studies like Gallagher et al (2014) study which revealed that about more than 90% of student participants recognized skills and information that acquired from clinical education in hospice and end-of-life care areas.[37]Although palliative care units as a separate, well-equipped specialized areas are instituted since 1992 in Riyadh and 1998 in Jeddah in addition to National Guard Health Affairs hospitals since 2004, Taif governorate still now lacking a specialized palliative care areas or centers and this is considered as barrier to improving end-of-life care content in educational program in addition to inadequate content, also lacking of special training as perceived by faculty participants [19] the majority of faculty members agreed on the importance of EOL content to be in the basic nursing education and the current nursing curriculum is not adequate for the graduate to be effective in caring for a dying patient with good news that there is a welling from faculty to increase EOL care education and that is similar to work of Cavaye and Watts (2012)who emerged an evidence clarified that, global efforts to integrate and increase the amount and content of death education in undergraduate curriculum were underway and in countries where death education is not integrated into the undergraduate pre-registration curricula, students were ill equipped with the necessary skills and knowledge to care for dying patients, and this has implications for the quality of future care provision [36].

Palliative care provision in critical care units is acknowledged to be a priority in the development of comprehensive health care services, particularly where there are high rates of mortality from complex conditions and cancer with increasing the demand for skilled supportive care, pain management, and symptom control at the end of life [38].

5. Conclusion

This Study has documented that nurses working in critical care units highly prioritizing the palliative care and they are inadequately prepared to care for patients in EOL and need for PC training. Faculty members who are teaching undergraduate nursing also reported that reviewing for the undergraduate nursing programs regarding PC and bridging the inadequacy are mandatory. Several reasons have been identified including No special governmental hospital, inadequacies in nursing education, absence of curriculum content related to pain management, and other aspects of palliative care. The need for effective palliative care throughout developing countries and Saudi Arabia especially Taif Governorate is great.

6. Recommendations

Attention should be given towards PC by the national health policy and incorporated in the national curriculum of nurse education and training. Nurse practitioners can also take the lead in collaborating with other health care providers to expand the focus of care for patients with advanced chronic disease or at the end-of life to include palliative, as well as curative, efforts. As Ferrell (2006) noted, "We need role models who can show how the dying process can be transformed." [12].

Other recommendations could be concluded as follow:

- 1- In the professional & organizational level;
 - Revising the curriculum plan by expert in PC and EOL nursing from neighboring countries and applying the needed reform.
 - PC & EOL related courses in nursing curriculum should reflect cultural sensitivity and recognize that certain aspects of the Muslim religion.
 - Develop an organizational culture of EOL, in ICU.
 - Developing and implementing educational program for training the nurses working in ICU about EOL care.
 - Follow up and supervision of the nurses after training.
 - Developing strategies for improving nurses, patient and family communications.
- 2- Future research;
 - Developing consultative & integrative model to be tailored for the need of the patients and their families at EOL that guide the nurses in provision of professional palliative care.
 - integrating and embedding palliative care content into the undergraduate nursing degree,
 - Explore inter-professional palliative care education opportunities.
 - Evaluating the palliative care capabilities of our nursing graduates is also an important consideration.

Acknowledgements

This research was supported by a grant from the Deanship for Graduate Studies and Scientific Research - Taif University. We want to thank the deanship for their generous support of this project. In addition, the authors wish to express appreciation for all staff working in the selected Hospitals for their acceptance to participate in this study, also grateful thanks for our colleague, Mrs. Ruba W. A. Yassin for her valuable and meticulous review.

References

- [1] World Health Organization. Definition of palliative care.[http:// www.who.int/cancer/palliative/definition/en/](http://www.who.int/cancer/palliative/definition/en/). Accessed September 2011.
- [2] Almobarak F.K. (2014). Exploring the perspectives of nurses, physicians, and healthcare administrators in Saudi Arabian hospitals on palliative care and palliative care nursing, *Journal of Health Specialties / April 2014 / Vol 2 | Issue 2:54-58*.
- [3] Al-Shahri M.Z. (2009). Cancer pain: Progress and ongoing issues in Saudi Arabia. *Pain Res Manag*; 14:359-60.
- [4] Espinosa L., Young A., Symes L., Haile B. & Walsh T. (2010) ICU nurses' experiences in providing terminal care. *Critical Care Nursing Quarterly* 33 (3), 273 - 281

- [5] Walker R. & Reid S. (2010) The Liverpool Care Pathway in intensive care: an exploratory study of doctors and nurses perceptions. *International Journal of Palliative Nursing* 16 (6), 267 – 272.
- [6] Ferrell B., Virani, R., & Grant, M. (1998). Home care outreach for palliative care education. *Cancer Practice*, Vol. 6, 79-85.
- [7] Scanlon C. (1998). Unraveling ethical issues in palliative care. *Seminars in Oncology Nursing*, Vol. 14, No. 2, 1-9.
- [8] Ferrell B. R., Grant, M., & Virani, R. (1999). Strengthening nursing education to improve end-of-life care. *Nursing Outlook*, in press.
- [9] Matzo M. L., & Emanuel, E. J. (1997). Oncology nurses' practices of assisted suicide and patient-requested euthanasia. *Oncology Nursing Forum*, Vol 24, No. 10, 1725-1732.
- [10] Ferrell B., Virani, R., & Grant, M., Evaluation of the end-of-life nursing education consortium, *International Journal of Palliative Nursing*, 2006, Vol 12. No .
- [11] Jones M. & Rattray J. (2010) Questionnaire design. In *The Research Process in Nursing*, 6th ed. (Gerrish K. & Lacey A., eds), Wiley-Blackwell, Oxford.
- [12] Dobriansky P.J., Suzman R.M. and Hodes R.J.(2007). *Why Populations Aging Matters, A Global Perspectives*, National Institute on Aging, National Institutions of Health, Publication's No., 0-7-6134.
- [13] American Association of Colleges of Nursing. (1997, November). *A Peaceful Death*. Report from the Robert Wood Johnson End-of-Life Care Roundtable. Washington, DC.
- [14] Scanlon C. & Rushton C. (1998). A road map for navigating end-of-life care. *MEDSURG Nursing*, Vol. 7, No. 1, 57-59
- [15] Paicc J.A., Ferrell B.R., Virani R, Grant M, Malloy P, Rhome A (2006). Appraisal of the Graduate End-of-Life Nursing Education Consortium Training Program. *JPalliat Med., Palliat Med* 9(2):353-60.
- [16] Corless I. B. (1994). Dying well: Symptom control within hospice care. *Annual Review of Nursing Research*, Vol. 12, 125-146.
- [17] Ferrell, B., Virani, R., & Grant, M. (1999). Analysis of end-of-life content in nursing textbooks. *Oncology Nursing Forum*, Vol. 26, No. 5, 869-876.
- [18] Sherman D.W., Matzo M.L., Pitorak E., Ferrell B.R., Malloy P (2005) Preparation and care at the time of death: Content of the ELNEC curriculum and teaching strategies. *Nurses Staff Dev* 21(3): 93-100.
- [19] Abu-Zeinah et al. Middle East Experience in Palliative Care. *American Journal of Hospice & Palliative Medicine*.2012; 30(1) 94-99.
- [20] McCallum, A. and McConigley, R. (2013). Nurses' perceptions of caring for dying patients in an open critical care unit: a descriptive exploratory study. *International Journal of Palliative Nursing*. 19 (1): pp. 25-30.
- [21] Hertzog, M.A. (2008). Considerations in determining sample size for pilot studies. *Research in Nursing & Health*, 31,180-191.
- [22] Sadhu S., Salins N.S., and Kamath A. Palliative Care Awareness among Indian Undergraduate Health Care Students: A Needs Assessment Study to Determine Incorporation of Palliative Care Education in Undergraduate Medical, Nursing and Allied Health Education, *Indian J Palliat Care*. 2010 SepDec; 16(3): 154–159.
- [23] Allchin L. Caring for the dying: nursing students' perspectives, *Journal of Hospice and Palliative Nursing*. 2006; 8(2): 112-117
- [24] Hudson P, Quinn K, O'Hanlon B, and Aranda S. Family meetings in palliative care: Multidisciplinary clinical practice guidelines, *BMC Palliative Care* 2008, 7:12
- [25] Urden L. D., Stacy K. M. & Laugh M. E. (2008): *Priorities in Critical care Nursing*, (5th ed.), Mosby, Elsevier, ISBN-13: 978-0-323-052559-7
- [26] Kassa et al. Assessment of knowledge, attitude and practice and associated factors towards palliative care among nurses working in selected hospitals, Addis Ababa, Ethiopia. *BMC Palliative Care* 2014, 13:6
- [27] Karkada S. et al. Awareness of Palliative Care Among Diploma Nursing Students. *Indian J Palliat Care*. 2011 Jan-Apr; 17(1): 20–23
- [28] Pope A. Palliative Care Knowledge among Bachelors of Science Nursing Students. Master thesis. Kennesaw State University.2013
- [29] Malloy P. Advancing Palliative Care in Kenya. *Cancer Nursing*, 2011; 34(1): 10-13
- [30] Shea J. Assessment of Advanced Practice Palliative Care Nursing Competencies in Nurse Practitioner Students: Implications for the Integration of ELNEC Curricular Modules. *Journal of Nursing Education* . 2009; 49(4):183-9
- [31] Prem V. et al . Study of Nurses' Knowledge about Palliative Care: A Quantitative Cross-sectional Survey. *Indian J Palliat Care*. 2012;18(2):122-7. doi: 10.4103/0973-1075.100832.
- [32] Luxardo N, Padros C, Tripodoro V . Palliative Care Staff Perspectives. *Journal of Hospice & Palliative Nursing* . 2014;16(3):165-172.
- [33] Redman S , White K, Ryan E, Hennrikus D. Professional needs of palliative care nurses in New South Wales. *Palliat Med*. 1995; 9(1):36-44
- [34] Mutto E.M. , Errázquin A, Rabhansl M.M., Villar M.J. Nursing education: the experience, attitudes, and impact of caring for dying patients by undergraduate Argentinian nursing students. *J Palliat Med*. 2010;13(12):1445-50. doi: 10.1089/jpm.2010.0301
- [35] European Association for Palliative Care (EAPC) website: <http://www.eapcnet.eu/>
- [36] Cavaye J, and Watts, J. (2012). End-of-life education in the pre-registration nursing curriculum: Patient, carer, nurse and student perspectives. *Journal of Research in Nursing*. 2012; 17(4) : 317–326
- [37] Gallagher O., Saunders R., Tambree K., Allix S., Monterosso L., and Naglazas Y., Nursing student experiences of death and dying during a palliative care clinical placement: Teaching and learning implications, 2014, Teaching and Learning Forum.
- [38] Bingley A. and Clark D. (2009). A Comparative Review of Palliative Care Development in Six Countries Represented by the Middle East Cancer Consortium (MECC), *Journal of Pain and Symptom Management*, Vol. 37 No.287-295.

Author Profile

Dr. Hanan A. M. Youssef received the B.N. Sc., M. N. Sc., and DNS degrees in nursing from Ain Shams University in 1989, 1997 and 2000, respectively. During 1990-2002, she stayed as a faculty members in Faculty of Nursing, Ain Shams University- Egypt, 2002 – 2010 in al-zaytoonah private University of Jordan as a head of Adult Nursing- Jordan, 2011 as a director for Nursing and Emergency Medical Services Programs in Al-Ghad Private Applied Medical College then from 2012 till now as a Head of Nursing Department in Taif University, KSA.

