

Critical Care Nurses' Knowledge Regarding Palliative Care in Saudi Arabia 2024

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Abstract

Background: In the Critical Care Unit (ICU), patients have a high death rate because of their complexity. One important factor that can enhance patient care is palliative care (PC)..

Therefore, the aim of this study was to assess Critical Care nurses' knowledge regarding Palliative Care. An exploratory descriptive research design was adopted.

Setting and sample: During the study period, a convenience sample of all the critical care nurses working in the Saudi hospital's critical care units (a total of 74 nurses) was included.

Two tools were used: Tool (1): Background information about nurses,

Tool (2): questionnaire about critical care nurses' knowledge regarding palliative care.

Results: The mean age of the nurses in the study was 29.167.27 years, and more than half of them were female and had less than five years of experience. The majority of nurses had adequate understanding of psychological and spiritual care, pain and symptom management, and the philosophy and principles of palliative care, while only had insufficient knowledge of these topics. **Conclusion:** Based on the results it concluded that Nurses' overall mean knowledge scores regarding palliative care were poor

Recommendations: Develop in service training programs to raise the nurses' standards about palliative care.

Key words: Critical care Nurses , Knowledge, Palliative care.

Introduction

Palliative care in the intensive care unit (ICU) was first intended to supplement hospice care. It is currently a necessary component of intensive care unit care. ICU palliative care should be guided by the ethical principles of autonomy, beneficence, non-maleficence, justice, and faithfulness. (Pan et al., 2023). The nurse is regarded as the cornerstone of palliative care in the critical care unit. Their position is crucial because they are the primary caretakers responsible for carrying out the patient's final wishes and frequently sharing them with their family. Critical care nurses are in a good position to provide enough room and chances for palliative care (Mendaza., et al., 2023).

According to the World Health Organization, palliative care aims to enhance the quality of life for patients and their families who are coping with a life-threatening illness by addressing the

associated problems through a variety of physical, psychological, and spiritual therapies. This suggests that palliative care ought to be introduced at an early age and should not be limited to patients with severe illnesses that are nearing the end of their lives. As a best practice for the alleviation of symptoms associated with the condition, early access to palliative care is currently recommended, either as a stand-alone therapy or in combination with standard therapy (**Garani, et al., 2022**).

In order to ensure that all front-line service providers feel comfortable treating symptoms, communicating empathetically, and facilitating important care discussions during a period of high stress and uncertainty, palliative care should be integrated into standard health care delivery and further upstream in the illness process (**Rosa et al, 2020**).

Intensive care units are specialized medical facilities used to give patients with life-threatening illnesses treatment that will keep them alive. Palliative care is a multidisciplinary form of treatment utilized in the ICU that blends symptom management, psychosocial support, elicitation of preferences, and assistance with decision-making to enhance the patients' quality of life (**Ali et al., 2022**).

Patients with serious and terminal illnesses can benefit from palliative care, which is proactive, highly advanced, multimodal, and patient- and care that is family-focused. . That aims to enhance quality of life by reducing the pain of the patients on a physical, mental, emotional, and spiritual level (**Radbruch et** provided in critical care units, which is also provided in ICUs, includes palliative care and intensive care as essential, overlapping Components (**Prokopova et al., 2022**). In critical care facilities, nurses play a critical role in helping patients and their families deal with the challenges associated with life-threatening illnesses. Early detection and treatment of pain and other physical and psychological problems, as well as prevention and reduction of suffering, increase the patient's spiritual and social well-being. (**Dehghani et al 2020**).

Significance of the study

In intensive care units, palliative care delivery has been shown to shorten hospital stays and enhance family-healthcare team contact. Death rates for people who need mechanical ventilation vary greatly, from 25% to 97% (**Sheehan et al 2020**). Nurses spend a lot of time caring for critically-ill patients, so they are expected to have sufficient knowledge to provide the best care for their patients. Nurses had poor knowledge of palliative care and its subscales that is one of the main obstacles in providing optimal palliative care. So, increasing their quality of palliative care services by improving their knowledge through in-service education and on the job retraining could promote the quality of palliative care services for the patients. (**Paknejadi et al 2019**)

Aim of the study

This study aimed to assess the Critical Care Nurses' Knowledge Regarding Palliative Care in Saudi Arabia 2024.

Research question]

-What is the Critical Care Nurses' Knowledge Regarding Palliative Care?

Subjects and methods1- Technical design

comprises the study's research, setting, subjects and tools of data collection that used in this study.

Research design

Descriptive exploratory research design was used to conduct this study.

Setting

This study was carried out at Saudi University Hospital's in critical care units.

Sample

Convenience sample of all critical care nurses who were available at the time of the study, they were approximately 74 nurses who worked in intensive care units.

Tools

After reviewing of relevant and recent literature. Two major's tools were used to carry out the study they were developed by the researcher

Tool (1): Background information about nurses; this part used to evaluate the Socio-demographic traits of nurses which include (Age, Sex, Marital status, qualifications, Job description, Years of experience & prior palliative care training courses).

Scoring system:

- Yes = 2 grades
- No = 1 grades
- Don't know = zero

Scores of 80% or higher indicated a (satisfactory level of knowledge), while those below 80 % did not (unsatisfactory level of knowledge). (Mohamed & Ibrahim, 2021)

Tool (2): Questionnaire of Nurses' Knowledge about Palliative Care: The researcher developed this tool following a study of relevant literature (Al-Dossary et al., 2020, Singhai et al., 2020 and Feder et al., 2020) to assess the critical care nurses understanding of palliative care. It consists of (20) questions as the following:

- Knowledge about Philosophy and principles of palliative care (7 questions). (Palliative care is prevention and alleviation of suffering by identifying pain, physical, psychological or spiritual problems, Palliative care is only appropriate in situations of a downhill trajectory or deterioration in conditions, The provisions of palliative care require emotional detachment, palliative care is given only for dying patient). Knowledge about pain symptoms and management (5 questions). (The extent of the disease determines the method of pain treatment, Manifestations of chronic pain are different from those of acute pain, Adjuvant therapies are important in managing pain).
- Psychological and spiritual care. (8 questions) (I would be uncomfortable if I entered the room of a terminally ill person and found her/his crying

I am afraid to become friends with chronically sick and dying patients. Palliative care should extend to the family of the dying person. It is difficult to form a close relationship with the family of a dying member. It is difficult to form a close relationship with the family of a dying member.)

The official Permission to conduct the study was obtained

Permission from responsible authorities of ICU unit after explanation of the aim and nature of the study. Development of the tools after reviewing the related literature. The tools were reviewed by a jury of 5 experts in field to assess the clarity, feasibility, applicability, and the content validity of the tools and all the necessary modifications were done.

Pilot study

It was carried out on 10% of the sample's nurses prior to data collection in order to evaluate the tools' applicability, clarity, and ability to spot issues. This pilot research indicates that the required adjustments were implemented. It also included a timeline for when the tools would have to be finished.

Reliability

Reliability of the questionnaire was tested using Cronbach's Alpha test and turned out to be for nurses' knowledge was 0.77 and for the second tools' Cronbach's coefficient alpha test (0.78) that indicate high reliability of the used tool.

Ethical considerations

- Research proposal was approved from Ethical Committee. The study was followed common ethical principles in clinical research. There is no risk for study subject during application of research. Study subject assured that the data of this research will not be reused without second permission. Confidentiality and anonymity was assured. Study subject were assured that they have the right to refuse to participate and/ or withdraw from the study without any rational at any time. Study subject privacy was considered during collection of data. Oral consent was obtained from included nurses.

The researcher designed the survey questionnaire for this study based on a review of the relevant literature. (Al-Dossary., et al 2020), (Singhai et al., 2020) , (Feder et al., 2020), (Ragab et al., 2017), (CDC 2020), (Alshehri et al., 2020) and (Noome et al., 2017) .

Data collection start in January 2024 and ends in June 2024 (lasting for six months)

Statistical Design

The statistical package for the social sciences, SPSS version 26, was used to enter, tabulate, and analyze the data. Standard deviations (SD), numbers, percentages, and frequency tables were all used. Descriptive statistics were computed to summarize the nurses' knowledge of palliative care

Statistical significant differences were considered when P-value used as follows:-

P>0.05 non-significant

*P<0.05 significant

**P<0.01 moderate significant

***P<0.001 highly significant

Results

Table (1) : showed that more over half of the study'snurses (62.2%) were women, and 51.5% of them weremarried. The majority of the nurses (41.9%) held atechnical nursing degree. In addition, the majority ofthe nurses who took part in the study (70.3%) had notreceived palliative care training, and 51.4% of thestudy's nurses had fewer than five years of experience.

personal characteristics	No	%
Gender		
• Male	28	37.8
• Female	46	62.2
Marital status		
• Single	31	41.9
• Married	38	51.4
• Widow	2	2.7
• Divorced	3	4.1
Qualifications:		
• Diploma	9	12.2
• Nursing technical institute	31	41.9
• Bachelor	30	40.5
• Postgraduate	4	5.4
Years of experience		
• < 5 years	38	51.4
• 5-10 years	27	36.5
• > 10 years	9	12.2
Have you attended training courses related to palliative care?		
• Yes	22	29.7
• No	52	70.3

Figures (1 – 2) represents personal distribution of demographic data of nurses. It was found that morethan half of studied nurses aged (25-35) years and morethan half also were staff nurses.

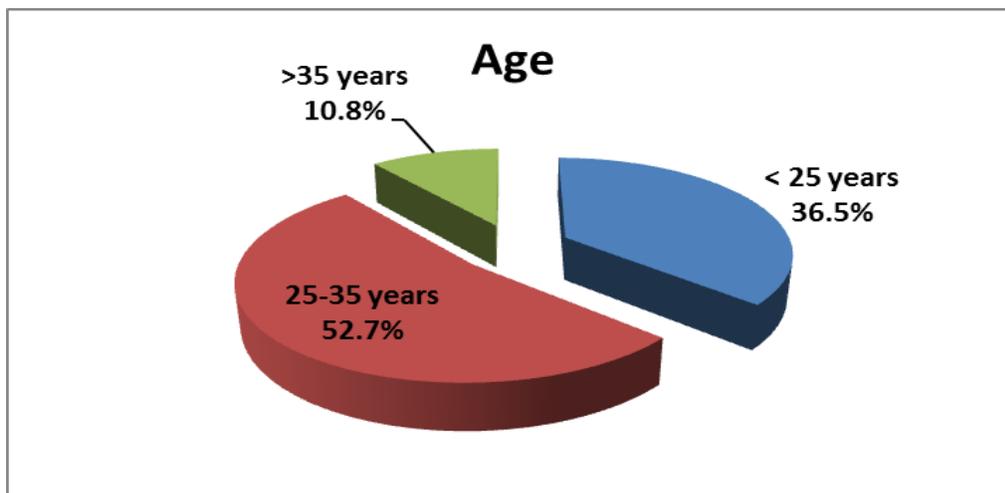


Figure 2

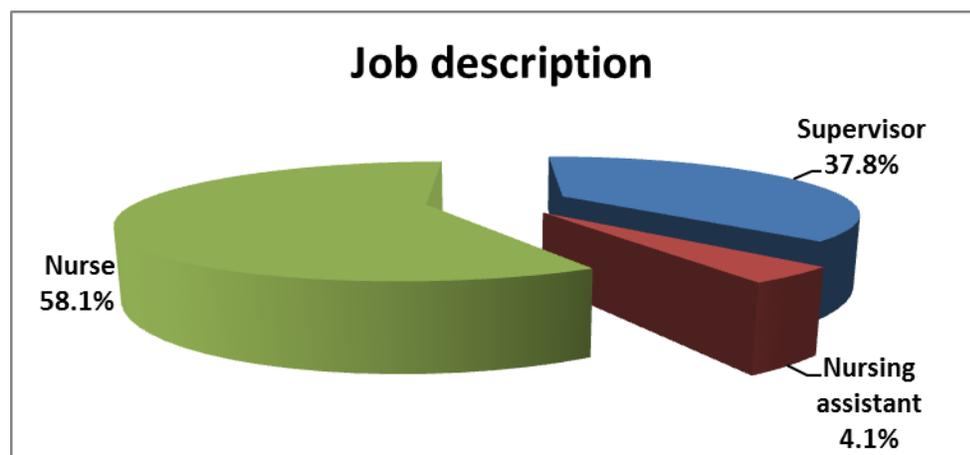


Table (2) :- demonstrates that the majority of nurses answered questions on controlling pain and symptoms and provide psychosocial and spiritual care in an accurate manner. Additionally, more of them misrepresent the philosophy and tenets of palliative care when asked about them.

Nurses' knowledge	Correct answer		Incorrect answer	
	No	%	No	%
A-Philosophy and principles of palliative care				
1. palliative care is prevention and alleviation of suffering by identifying pain, physical, psychological or spiritual problems	45	60.8	29	39.2
2. Palliative care is only appropriate in situations of a downhill trajectory or deterioration in conditions	13	17.3	61	82.4
3. The provisions of palliative care require emotional detachment	29	39.2	45	60.8
4. The philosophy of palliative care is compatible with that of aggressive treatment.	41	55.4	33	44.6
5. palliative care is given only for dying patient	10	13.5	64	86.5
6. It is beneficial for the chronically sick person to verbalize his\her feelings	60	81.1	14	18.9
7. The accumulation of losses renders burnout inevitable for those who seek work in palliative care.	51	68.9	23	31.1
B- Psychosocial and spiritual care				
1. I would be uncomfortable if I entered the room of a terminally ill person and found her\his crying	65	87.8	7	12.2
2. I am afraid to become friends with chronically sick and dying patients.	42	56.8	26	43.2

3. When a patient asks, Nurse are I dying ? I think it is best to change the subject to something cheerful.	48	64.9	26	35.1
4. Palliative care should extent to the family of the dying person.	54	73.0	20	27.0
5. It is difficult to form a close relationship with the family of a dying member.	22	29.7	47	70.2
6. Family should maintain as normal an environment as possible for their dying member.	64	86.5	10	13.5
7. The length of time required to give nursing care for a dying person would frustrate me.	26	35.1	48	64.9
8. It is not very crucial for family members to remain at bedside until death occurs	61	82.4	13	17.3
C- Management of pain and symptoms				
1. The extent of the disease determines the method of pain treatment	66	89.2	8	10.8
2. Manifestations of chronic pain are different from those of acute pain.	63	85.1	11	14.9
3. Adjuvant therapies are important in managing pain.	64	86.5	10	13.5
4. Pain threshold is lowered by anxiety or fatigue	65	87.8	9	12.2
5. The use of placebos is appropriate in the treatment of some types of pain	43	58.1	31	41.9

Table (3) :- This table demonstrates that the majority of nurses studied had satisfactory levels of knowledge regarding psychosocial and spiritual care (74.3%) and the management of pain and symptoms (74.3% and 81.1%, respectively). However, it also demonstrates that more than half of the nurses studied had unsatisfactory levels of knowledge regarding the philosophy and guiding principles of palliative care (64.9%).

Nurses' knowledge	Satisfactor y		Unsatisfactory	
	No	%	No	%
A. Philosophy and principles of palliative care	26	35.1	48	64.9
B. Psychosocial and spiritual care	55	74.3	19	25.7
C. Management of pain and symptoms	60	81.1	14	18.9
Total knowledge	34	45.9	40	54.1

Figures (3):- represent Distribution of the studied nurses according to total knowledge regarding palliative care dimensions. It was found that the majority had satisfactory level of management of pain and symptoms.

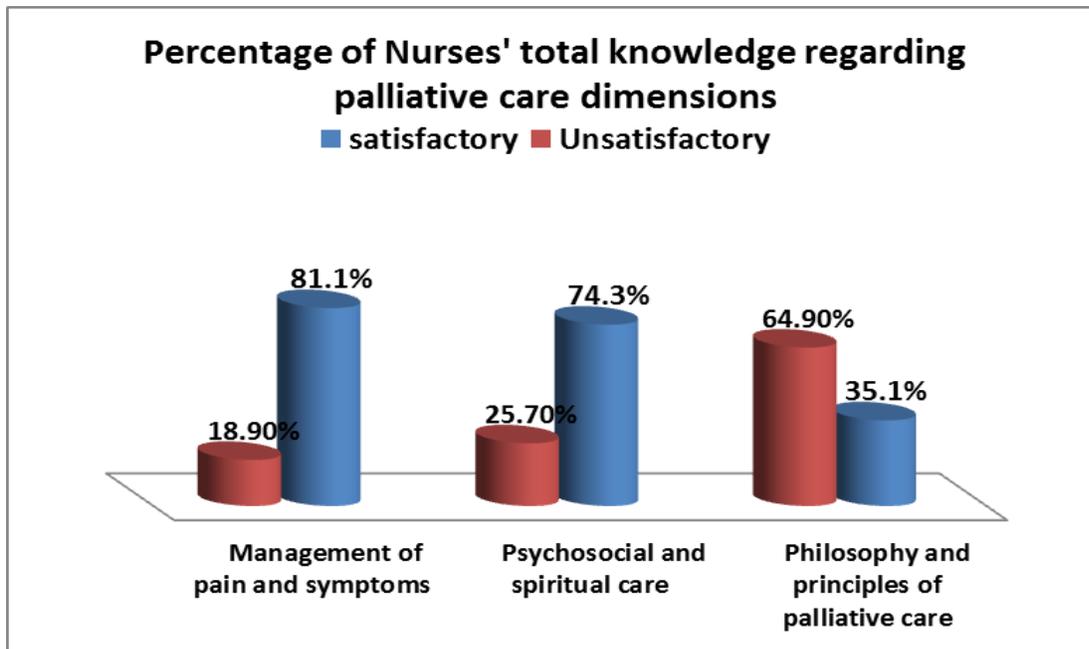


Table (4): Demonstrate presence of significant relation between studied nurses' job description ,attendance of training course related to palliative care and studiednurses knowledge related to Psychosocial and spiritual care with p value (0.003&0.000***respectively) .Also show significant relation between marital status, jobdescription, years of experience and attendance of training course related to palliative care and nurses knowledge level regard management of pain and symptoms with p value(0.041,0.000***,0.077 and 0.063 respectively) .

personal data	Philosophy and principles of palliative care		Psychosocial and spiritual care		Management of pain and symptoms		Relation between personal data and level of nurses Total knowledge	
	M±SD	P value	M±SD	P value	M±SD	P Value	M±SD	P Value
Age: < 25 years 25-35 years > 35 years	1.68± 0.29 1.61± 0.28 1.66±0.36	0.613 ns	1.48± 0.28 1.38± 0.23 1.40± 0.28	0.299 ns	1.32±0.40 1.19±0.23 1.32±0.33	0.216ns	1.51±0.221 .41±0.18 1.47±0.15	0.147ns
Gender: Male Female	1.62± 0.25 1.66± 0.31	0.438ns	1.42±0.29 1.42±0.24	0.344ns	1.30±0.37 1.22±0.28	0.151ns	1.46±0.23 1.45±0.18	0.119ns
Marital status Single Married Widow Divorced	1.58 ± 0.22 1.68 ± 0.34 1.71± 0.20 1.76 ± 0.16	0.531ns	1.43± 0.24 1.40±0.26 1.56± 0.61 1.41± 0.19	0.863ns	1.32±0.38 1.16±0.21 1.40±0.56 1.60±0.40	0.041*	1.46±0.19 1.44±0.20 1.57±0.31 1.58±0.10	0.578ns
Qualifications: Diploma Technical institute Bachelor Postgraduate	1.65 ± 0.34 1.70± 0.32 1.61± 0.24 1.46±0.17	0.403ns	1.47±0.27 1.42±0.28 1.42±0.25 1.31± 0.12	0.798ns	1.42±0.47 1.29±0.33 1.18±0.25 1.10±0.11	0.151ns	1.52±0.18 1.49±0.22 1.43±0.18 1.31±0.06	0.230ns
Job description: Supervisor Nursing assistant Nurse	1.61 ± 0.26 1.47± 0.16 1.68± 0.31	.3730ns	1.41 ±0.26 1.91 ±0.14 1.39±0.23	.003**	1.20±0.27 2.00±0.52 1.24±0.27	0.000***	1.43±0.20 1.78±0.12 1.45±0.18	.015*
Years of experience < 5 years 5-10 years > 10 years	1.65±0.30 1.62± 0.28 1.68± 0.31	0.857ns	1.39±0.23 1.47±0.30 1.40±0.19	0.423ns	1.20±0.28 1.26±0.27 1.46±0.50	0.077*	1.43±0.20 1.47±0.20 1.51±0.18	0.496ns
Have you attended training courses related to palliative care? Yes No	1.5± 0 .20 1.67± 0 .31	.0740*	1.40±0.37 1.40±0.19	0.000***	1.37±0.35	0.063*	1.48±0.25 1.45±0.17	0.028*

Discussion

Palliative care is essential because it allows patients to continue seeking curative treatments while managing their pain and symptoms. Their quality of life is enhanced as a result. When a patient is in critical condition, they value each day. Even if the patient still has to cope with their condition, palliative care can help them manage their pain and other symptoms, which can improve their quality of life and allow them to spend as much time as possible with their loved ones. (Fauziningtya, et al., 2020)

Regarding the personal and demographic traits of nurses: More than half of the nurses in the study were between the ages of 25 and 35, with a mean age of (29.16). This finding may be connected to the fact that nurses working in vital areas are frequently recent graduates. The findings were in line with those of (Ragab et al., 2017), who did a study titled "Assessment of Performance Obstacles as Perceived by Nurses in Intensive Care Units" and discovered that the majority of nurses were between the ages of 25 and 35. This result also agrees with (Kassa et al., 2014), who discovered that nearly two thirds of the study's nurses were between the ages of 25 and 30. The study's findings differ from those of (Elrefaey, et al., 2022) reported that the nurses' ages ranged from 45 to 55 .

Regarding to gender, The present analysis found that nurses made up more than half of the workforce. Metwaly and Hamad (Metwaly and Hamad, 2021), reported that the majority of nurses were females, supports this conclusion. Additionally i concurred with(Kassa et al., 2014) and(Elrefaey et al., 2022) who discovered that women made up two thirds of study nurses. In contrast to (Ayed et al., 2015), whose revealed that more than two thirds of the nurses were female, contrary to the assertion that more than two thirds of the investigated nurses were men Regarding to qualifications (educational attainment) and years of experience:

In the current study, three-quarters of the nurses had less than five years of experience and nearly half were graduates of a technical nursing institute. Mohammed and Ibrahim, 2021) supported this finding. According to the results of their study, roughly half of the nurses who were being investigated went to a technical nursing institute, and three-quarters had experience of one to two years or less. From the researcher's perspective, this result could be explained by the fact that our hospitals frequently assign highly qualified nurses to administrative jobs rather than clinical ones .This finding is consistent with that of) (Zoheir et al., 2022) who found that more than one third of participants had attended a technical nursing institute and roughly one third had attended a secondary nursing school. Farmani et al. (2019), who found that half of the study participants had less than five years of experience, corroborated this finding.

The results were in contrast to those of (Metwaly, and Hamad, 2021), who discovered that more than two thirds of the nurses in the study had more than five years of experience and that less than half of them had a secondary school diploma in nursing. Abusyriah (2020), who found that more over half of nurses had experience ranging from three to one year, was also in disagreement. In addition, it was found that around three-quarters of the study's nurses had more than ten years of experience (Zoheir, et al., 2022).

Regarding the participation in palliative care training courses, the current study found that the majority of the studied nurses (70.3%) had never taken part in any palliative care training courses and this finding may be related to the fact that there aren't enough nurses working in intensive care units and that their workload prevents them from attending training courses. This result was in the same line with (Mohamed, RF & Ibrahim, RA 2021) & (Menealy, and Hamad, 2021) who discovered that majority of nurses hadn't attended any training courses about palliative care. But this result contradicted with (Ayed, et al. 2015) & (Karadag Arli S, 2022) who

discovered that more over half of the sample they looked at had completed a course in palliative care.

(**Ibrahim, et al., 2017**) provided evidence in support of this conclusion. which discovered that the majority of the sample under study had not participated in a palliative care training classes. Due to work demands or a lack of knowledge about the benefits of training programs and how they enhance nurses' performance, which in turn affects healthcare quality, Additionally, there isn't enough time to attend classes.

Regarding to level of nurses` knowledge about philosophy and principles of palliative care, The results of the current study showed that (64 .9%) of the nurses who participated in it had unsatisfactory knowledge ratings about the philosophy and principles of palliative care. This could be due to, these nurses have not been trained on palliative care, limited attention to nurses' continuing education, and nurses' staff was not familiar with the concept of

-palliative care. Our results reinforce the findings of these works ;(**Farmani, et al., 2019**), (**Kassa, et al., 2014**), and (**Hassan, et al., 2016**), All of them also reported that, the majority of studied nurses had limited total score of knowledge toward philosophy and principles of palliative care.

And the current findings against (**Sorifa & Mosph., 2015**) who found that, more than half of studied nurses had satisfactory level toward knowledge regarding the definition, philosophy and potential beneficiaries of palliative care.

Regarding nurses' Knowledge about Psychosocial and spiritual care, In line with (**Kassa, et al., 2014**), who reported that roughly three quarters of studied nurses had good knowledge toward psychological aspect of palliative care, the current study found that the majority of study nurses had a satisfactory level of knowledge regarding the psychosocial and spiritual care (74.3%).

On other hand the findings disagree with (**Zoheir, et al, 2022**) who reported the majority of studied nurses had insufficient knowledge regarding palliative care for psychological symptoms, Also, reveals that the majority of the study's nurses had an inadequate degree of understanding on the spiritual and social care of patients with cancer. He explains that this finding may be attributable to poor communication between nurses and cancer patients.

Also According to the (**Hassan et al. 2016**) study, over three-quarters of the nurses who participated had unsatisfactory knowledge scores regarding spiritual problems.

Regarding to nurses' knowledge toward management of pain and symptoms: The current study found that the majority of the nurses were adequately knowledgeable in managing pain and symptoms (81.1%). According to researchers, this might be the result of the everyday care that critical care nurses provide to patients who are chronically unwell and in need of painkillers. Higher mean scores on pain management and other symptoms may also be explained by ongoing therapeutic practices and continued professional development initiatives.

This result is consistent with that of (**Farmani, et al., 2019**), who discovered that more than two thirds of the participants under investigation had satisfactory levels of practice in pain evaluation and management. The results, however, are at odds with those of (**Zoheir, et al., 2022**), who claimed that the majority of the nurses in the study had adequate expertise of how to treat cancer patients' physical complaints. Additionally, the majority of nurses exhibited insufficient knowledge of palliative care with regard to managing pain and other physical symptoms, according to a (2019) study by (**Paknejadi et al**). Additionally, a study by (**Pasaol (2019)**) revealed

that more than half of oncology nurses lacked adequate knowledge of physical symptoms in palliative care for oncology patients .

Concerning knowledge about palliative care the results of the current study indicate that nurses' overall mean knowledge ratings about palliative care were low. This may be because palliative care is poorly integrated into the healthcare system and depends more on human efforts than on health care policy .Also, Nurses were overworked in critical care units and palliative care instruction was not included in nursing courses therefore they have a finite amount of time to learn more about palliative care.(**Kassa et al.2014**) corroborated this finding by stating that the majority of nurses had little to no expertise about palliative care. The fact that relatively few nurses have received palliative care training could be the cause of this. (**Mohamed RF&Ibrahim RA 2021**) **Regarding Relation between personal data and level of nurse's knowledge:** On investigating the correlation between personal data and level of nurse's knowledge it was found that there were significant relation between job description and knowledge about Psychosocial and spiritual care, pain management and total knowledge with p value (0.003&0.000&0.015 respectively).

This agree with (**Mohamed, & Tawfik., 2016**) who noted the difference is a statistically significant, and between that ($p = 0.036$) Furthermore, the current study is comparable to that of (**Bilal, M., 2018**) who established a strong link between knowledge and socio-demographic information including age, level of experience, and education. It implies that the nurses' positive knowledge grows as their experience and qualifications do. Contrarily, (**Salameh., 2018**) who did not find any statistically significant correlations between the number of years of experience and the nurses' knowledge.

Conclusion

Based on the results of the current investigation, it can be said that: Because palliative care is not well integrated into the healthcare system and depends more on human effort than on health care policy, nurses' overall mean knowledge scores on this topic were low. Also, Nurses were overworked in critical care units and palliative care instruction was not included in nursing courses they therefore have a finite amount of time to learn more about palliative care.

Recommendations

The following suggestions are made in light of the current study's findings:

- Educational programs regarding palliative care should be conducted by the nursing personnel in both hospital and intensive care settings.
- Develop in service training programs to raise the nurses' standards about palliative care
- Choosing a palliative care team based on competence and giving them intensive training courses to be ready to provide care to patients and support the other nurses.
- Availability and accessibility of written palliative care guidelines in intensive care units.
- Duplicate this research on a massive sample size selected from different hospitals setting

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