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Original Article

Knowledge and attitude of nurses working in pediatric wards about pediatric palliative care in Tabriz 2021

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Abstract

Background: It is especially important to provide pediatric palliative care. As a result, the purpose of this study was to assess the knowledge and attitudes of nurses working in pediatric wards about this topic..

Methods: The current descriptive study took place in three hospitals in Tabriz, Iran. A convenience sampling method was used to select all nurses working in pediatric wards for the study. A checklist for demographic variables, the Palliative Care Quiz for Nursing, and the Frommelt Attitudes Toward Care of Dying Patients were used to collect data. SPSS was used to analyze the collected data.

Results: 220 of the 247 questionnaires distributed were completely returned. The majority of the participants (96.3%) were female. Their average age was 32, and they had 7.22 years of clinical ward experience. The mean total scores of nurses' knowledge and attitude toward pediatric palliative care were 10.702.83 and 97.9098.83, respectively.

Conclusion: According to the findings of this study, nurses have a positive attitude but limited knowledge of pediatric palliative care. Given the study's findings and the importance of pediatric palliative care, it is critical to improve nurses' knowledge of the subject. Further research in this area is also advised.

Keywords: Holistic care, Palliative care, Knowledge, Attitude, Nurse, Child

Introduction

Medical and technological advancements have reduced child mortality and, as a result, increased survival of children with potentially fatal or severe diseases. As a result, the number of children suffering from life-threatening diseases or treatment complications has increased (1). As a result, it can be concluded that, despite these significant advances, disease symptoms and treatment complications continue to cause suffering in pediatrics. In these circumstances, providing pediatric palliative care (PPC) is critical (2). According to statistics, 21 million pediatric patients worldwide require PPC each year, with more than 98% residing in low- and middle-income countries. Despite its importance, only 6% of PPC is provided in Asia and Africa, with the remainder in the United States and Europe (3). As a result, the need for effective PPC in developing countries such as Iran is unavoidable (4).

Caring is an essential component of nursing that reflects its distinct nature (5). Palliative care (PC) (6), which was first introduced by the World Health Organization in 1990, is currently one of the most common types of nursing care (4). The term "palliative" comes from the Latin word palliate, which means "to conceal or reduce symptoms without treatment" (4). In general, PC is primarily given to patients who have a specific disease that does not respond to treatment and has a direct outcome of death. The provision of such services to these patients aids in their relaxation as well as the reduction of their disease symptoms (7). Over the last five decades, PC has evolved from assisting patients in their final stages of

life to a highly dedicated service that provides support services to patients with life-limiting diseases (8). PC, as a patient-centered and family-centered approach, improves the quality of life of patients and their families dealing with the problem of life-threatening and limiting diseases by preventing suffering and reducing pain through early identification and correct treatment of physical, psychological, emotional, and social problems (9). Some examples of palliative care include: relieving the patient's pain and other distressing symptoms, affirming life and viewing death as a natural process, not wishing to hasten or postpone death, integrating psychological and spiritual aspects of patient care, offering a support system to help the patient live as actively as possible until death, offering a support system to help his/her family cope during the disease and in their own bereavement, and employing a team approach. The primary goal of this approach is to improve the patient's quality of life, which may have a positive impact on the course of his or her disease (10). According to the American Academy of Pediatrics, PC should start with the diagnosis and continue throughout the disease, and it should be available in all settings, including inpatient and outpatient settings (11).

Regarding what was previously discussed, it can be concluded that providing PC is one of the most important tasks of nursing, and nurses, as the main and largest part of the healthcare workforce, should be able to adequately provide such services (12). The knowledge and attitude of nurses influence the quality of care as well as their performance (12). As a result, nurses must have the necessary knowledge and information in this area. Having sufficient knowledge can assist nurses in better understanding a subject, either theoretically or practically, and it is also an important factor in predicting the quality of their care. Knowledge of PC has not been well explained in Iran, and it is not even seriously considered in the nursing curriculum (13). Furthermore, most previous studies in this area focused solely on adults and post-mortem care, with little attention paid to its primary concept, which is to control symptoms, improve quality of life, and make it available to children. As is obvious, providing PC to pediatric patients differs from providing PC to adults due to the uniqueness of symptoms based on the stage of child development, the wide range of childhood diseases, and the rarity of many genetic or congenital diseases not seen in adults. Furthermore, the provision of PPC is not limited to children but also includes their families, which complicates service delivery.

Given that nurses' lack of knowledge and attitude disrupts the delivery of PPC, it appears that the first step in improving such services is to assess their knowledge and attitude. Because of this, as well as the importance of the subject, the current study was designed to assess nurses' knowledge and attitudes toward PPC.

Methods

In 2021, the current descriptive cross-sectional study was carried out. The study was conducted in the pediatric and neonatal wards of three hospitals in Tabriz, Iran, which admitted all children and neonates in the city.

Inclusion criteria were as follows: 1. having at least 6 months of experience working in pediatric wards, 2. not having experienced the death of a close relative or friend in the previous 6 months, 3. being willing to take part in the study Exclusion criteria included failing to complete more than 20% of the questionnaire.

In descriptive studies, sample size was determined by estimating population means. The mean and standard deviation scores of nurses' knowledge and attitude were extracted for this purpose from studies that used the same questionnaires. Using the formula for determining sample size in descriptive studies and a 95% confidence level and 5% tolerable error, the maximum sample size was calculated 188 for knowledge in the Al-Qadir and colleagues' study and 70 for attitude in the Ghazanchaie and colleagues' study (14, 15).

Nurses were chosen for this study using a convenience sampling method. To that end, the researcher referred to the pediatric and neonatal wards of the three hospitals and chose nurses who met the inclusion criteria. The researcher referred to the study setting for sampling with the Vice-Chancellor for Research & Technology's introduction letter and collected data after coordinating with hospital officials after obtaining permission from the Vice-Chancellor for Research & Technology and the Ethics Committee of Tabriz University of Medical Sciences.

The researcher referred to the study setting in different shifts for data collection and selected nurses who met the inclusion criteria using a convenience sampling method and invited them to participate in the study. Initially, all nurses were given the necessary explanations about the study's objectives, methods, and duration, and after obtaining tacit consent, they signed a written informed consent. Nurses were given 48 hours to complete the data collection tool.

A checklist for demographic variables, the Palliative Care Quiz for Nursing, and the Frommelt Attitudes Toward Care of Dying Patients were used to collect data in this study.

1. A demographic variables checklist:

This checklist gathered demographic information from nurses, including age, gender, marital status, level of

education, overall work experience, clinical work experience, ward, having a history of participation in PC courses, studying PC, having experience caring for pediatric patients with life-threatening and limiting conditions in hospital or in own family, the number of dying pediatric patients cared for, and the age range of dying pediatric patients.

2. Palliative Care Nursing Quiz (PCQN):

The 20-item Palliative Care Quiz for Nursing, developed by Ross et al. in 1996, was used to assess nurses' knowledge of PC. This questionnaire assesses nurses' basic knowledge of PC in three subscales: philosophy and principles of PC (items 1, 9, 12, and 17), pain and symptom management (items 2, 3, 4, 6, 7, 8, 10, 13, 14, 15, 16, 18, and 20), and spiritual and psychosocial care (items 2, 3, 4, 6, 7, 8, 10, 13, 14, 15, 16, 18, and 20). (items 5, 11, and 19). Each item has three response options: True, False, and Don't know. Each correct response earns one point, while each incorrect or "Don't Know" response earns no points. The total score ranges between 0 and 20, with higher scores indicating greater PC knowledge (16). In a previous study, this questionnaire was translated into Persian. Iranmanesh and colleagues reported good validity and reliability for the Persian version in Kerman, Iran (17).

3. FATCOD (Frommelt Attitudes Toward Care of Dying Patients):

The 30-item Frommelt Attitudes Toward Care of Dying Patients, developed by Frommelt, was used to assess nurses' attitudes toward PC (1991). This questionnaire assesses nurses' attitudes toward caring for patients nearing the end of their lives at various ages. The first 15 items of this questionnaire (items 1, 2, 4, 10,12,16,18, 20, 21, 22, 23, 24, 25, 27, and 30) were positively worded and measured nurses' attitudes toward family roles in the caring process, while the remaining 15 items were negatively worded and measured nurses' fears and stresses when caring for the patient. Each item is graded on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The scoring for items with negative wording is reversed. The total score is between 30 and 150, with higher scores indicating a more positive attitude (18). In a previous study, this questionnaire was translated into Persian. Razban et al. reported good validity and reliability for the Persian version in Kerman, Iran (19).

Researchers in this study strictly adhered to the principles of ethical human research. Tabriz University of Medical Sciences also provided the study with an ethics code (IR.TBZMED.REC.1400.2851).

SPSS version 16 was used for data analysis. We used descriptive statistics such as frequency, percentage, mean, standard deviation, and minimum and maximum.

Results

220 of the 247 questionnaires distributed were completely returned. The majority of the participants (96.3%) were female. Their average age was 32 years, with the lowest and highest ages being 22 and 53 years, respectively. Their average clinical ward work experience was 7.22 years, with a range of 0 to 22 years. Table 1 provides more information on the demographics of nurses.

Knowledge

The results revealed that the mean total score of nurses' PC knowledge was 10.702.83. Their mean total scores for the PC philosophy and principles, pain and symptom management, and spiritual and psychosocial care subscales were 1.720.96, 2.036.90, and 2.080.84, respectively (Table 2).

77.3% of nurses did not believe the definition of palliative care was related to the item "Palliative care is appropriate only when there is evidence of a downward trajectory or deterioration." 91.4% of nurses thought the item "Adjuvant therapies are important in managing pain" was correct and had the most knowledge about it, while 68.2% thought the item "Palliative care is appropriate only when there is evidence of a downward trajectory or deterioration" was incorrect and had the least knowledge about it. When asked if high-dose codeine causes more nausea and vomiting than morphine, nearly half of the nurses (47.3%) said "Don't Know." Furthermore, a positive and statistically significant relationship was discovered between nurses' ward and their knowledge, with nurses working in general wards reporting more knowledge about PC than other nurses. It was also discovered that there is a positive and statistically significant relationship between nurses' work experience and their knowledge, with nurses with more clinical work experience reporting greater PC knowledge.

Table 1. Nurses' demographic information

variable		Freq.	%
sex (n=220)	male	14	4.6
	female	206	93.4
marital status (n=220)	married	146	73
	single	74	27
level of education (n=220)	BS	205	93.2
	MS and higher	15	6.8
ward (n=220)	intensive care units	94	42.7
	general wards	126	57.3
the number of dying pediatric patients cared for (n=218)	<10 children	94	43.1
	10-30 children	55	25.2
	>30 children	69	31.7
the age range of dying pediatric patients cared for	less than 1 year	97	44.1
	2-5 years	75	34.1
	6-12 years	28	12.7
	12-18 years	5	2.3
	less than 5 years	2	0.9
	less than 12 years	6	2.7
	less than 18 years	3	1.4
	not mentioned	5	2.3
having a history of participation in courses on PC (n=220)	Yes	64	29.1
	No	156	70.9
studying about PC (n=216)	Yes	63	29.2
	No	153	70.8

Table 2. Mean total scores of nurses' knowledge and its subscales about PC

variable		range	M	SD	Min	Max
total score	knowledge	0-20	10.70	2.83	0	18
subscales	philosophy and principles of PC	0-4	1.72	0.96	0	4
	pain and symptom management	0-13	6.9	2.03	0	11
	spiritual and psychosocial care	0-3	2.08	0.84	0	3

Attitude

According to the findings, the mean total score of nurses' attitudes toward PPC was 97.9098.83. Their mean total scores for the subscales of nurses' attitude toward family role in caring process and nurses' fears and stresses when caring for the patient were 58.906.45, respectively. The majority of nurses (84.1%) were uncomfortable discussing impending death with the family of a dying child or infant. The findings revealed a positive and statistically significant relationship between the number of dying pediatric patients cared for and nurses' attitude toward PPC (p=0.06), with the higher the number of dying pediatric patients cared for, indicating a more positive attitude.

Discussion

PPC is a critical component of holistic palliative nursing care. The purpose of this study is to assess nurses' knowledge and attitudes toward PPC. According to the study's findings, nurses have limited knowledge of PPC but a relatively positive attitude toward it.

The findings of the first part revealed that nurses have limited knowledge of PPC. This finding differs from the findings of the Iranmanesh and colleagues' study, in which nurses' knowledge of PC in adult patients was assessed using the PCQN (17). This distinction can be attributed to two factors: 1. the variations in the samples and 2. the time difference between the studies. The sample in Iranmanesh and colleagues' study was made up of nurses who worked in oncology wards and intensive care units, whereas the sample in the current study was made up of nurses who worked in pediatric wards. Iranmanesh and colleagues conducted their study in 2013, whereas this study was conducted in 2021. In recent years, more attention has been paid to PC in Iran, and it appears that this is one of the reasons for the better knowledge of nurses in this study compared to nurses in the Iranmanesh and colleagues study. In another study published in 2017, Aghaei and colleagues investigated Iranian clinical nurses' knowledge of end-of-life care. Their study found that nurses lacked knowledge about end-of-life care, which is similar to the current study's findings (20). The mean total scores of nursing students' knowledge were reported to be 16 and 8.2, respectively, in Qingjuan Jiang (2019) and Dimoula (2019) studies, in which the knowledge of undergraduate nursing students about PC was investigated in China and the United Kingdom, and it was concluded they have poor knowledge in this regard (21, 22), which is consistent with the findings of the current study. Due to nurses' lack of knowledge about PPC, it appears that pediatric nursing education programs in Iran should pay more attention to this issue. In addition to changes in nursing students' educational curricula, holding in-service training courses in this area can be beneficial. Previous research in this area found that educating pediatric nurses about PPC significantly improves their knowledge (23).

The findings of the second part revealed that nurses have a favorable attitude toward PPC. This finding contradicts the findings of the Razban and colleagues' study. In their study, Razban et al. discovered that Iranian nurses have a negative attitude toward palliative care. This difference can be attributed to differences in the samples of the two studies. The sample in Razban et alstudy .'s was made up of nurses who worked in oncology wards and intensive care units, whereas the sample in the current study was made up of nurses who worked in pediatric wards (19). This study's findings are consistent with the findings of Ghazanchaie and colleagues in 2012, who assessed the attitudes of nurses working in neonatal intensive care units, and Aghaei (2017), who assessed nurses' attitudes toward caring for end-of-life adult patients (15, 20). A study conducted in Iraq yielded similar

results. In that study, researchers used the Frommelt Attitude toward Care of the Dying scale to assess 111 nurses' attitudes toward pediatric end-of-life care. According to the findings, Iraqi nurses have a positive attitude toward PPC in general (24). Because of nurses' positive attitudes toward PPC, it appears that if educational programs in this area are well developed, it will be possible to provide PPC to pediatric patients and their families by increasing nurses' knowledge.

Conclusions

According to the findings of this study, nurses have a positive attitude but limited knowledge of pediatric palliative care. Nurses' lack of knowledge can have an impact on the quality of nursing care they provide. As a result of the importance of this issue and the growing number of patients in need of PC, systematic training courses in this area are required. Furthermore, given the existence of the MS curriculum in pediatric nursing in Iran, it is possible to create the necessary conditions to improve nurses' knowledge in this area by modifying educational programs at this level of education and focusing more on PC. The study's findings can also be used to design and implement a standard PPC program, such as designing and including a relevant course in nursing curriculum, as well as holding in-service training courses and scientific seminars for nurses. Similar studies are recommended due to a lack of studies in this area. It is also suggested that future studies evaluate nurses' performance in terms of PPC.

Limitation

This is a cross-sectional study in which information was gathered solely through a questionnaire. In addition, a study on pediatric nurses was conducted in one city.

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Founding
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