Assessing the compliance of educational curricula of selected disciplines with the content standards of cancer-related palliative care

Zahra Ebadinejad¹, Maryam Rassouli², Ali Fakhr-Movahedi³

Abstract:

BACKGROUND: Management of cancer complications requires the provision of palliative care as a comprehensive care by the main and trained members of this method of care. The aim of the present study was to assess the compliance of educational curricula of selected disciplines with the content standards of cancer-related palliative care.

MATERIALS AND METHODS: In this descriptive–comparative study, the content standards of palliative care for nurses, physicians, and social workers were identified based on the World Health Organization guideline and Oxford Textbook of Palliative Nursing. For this purpose, a separate checklist was prepared for the disciplines with different dimensions. Then the face and content validity of the checklists were checked. Finally, we examined the coordination between selected curricula available on the website of Education Deputy of the Ministry of Health, Treatment and Medical Education with the dimensions of the checklists.

RESULTS: All three curricula in most domains were relevant with the content standards, but there was the biggest education need in the areas related to the dimensions of “planning and educational,” “educating physician in palliative care,” and “considering patient preferences” in these disciplines.

CONCLUSIONS: To meet the educational needs, it is suggested to change some course topics, hold training courses, or joint workshops.

Keywords: Content standards, curriculum, medical, neoplasms, nursing, palliative care, social work

Introduction

Today, cancer is a major problem in the world and is associated with effects such as depression and anxiety. Cancer is the third leading cause of death in Iran and its prevalence is different in affluent and poor areas. The Iranian population is at high cancer susceptibility following industrial developments and modernization.

The complexity of cancer treatment and its complications indicates the need for holistic care. One of the holistic care methods is palliative care. As defined by the World Health Organization (WHO), palliative care improves the quality of life of the patient and his/her family by controlling physical, psychological, social, and spiritual manifestations, especially pain control.

Considering that PC involves dimensions – physical, psychological, spiritual, and social as a part of the health dimension, it requires a team and interprofessional approach. Palliative care team members included physicians, nurses, and social workers. Implementing
palliative care services for cancer patients requires training of the members of the PC team.[14]

Education plays an important role in the effectiveness, stability, and development of PC services.[15] Providers of this method of care need to receive training regarding issues such as psychosocial interventions, communication with patients and their families, end-of-life care, loss, and pain management.[16,17]

Palliative care is a new concept in Iran,[18] and there is no coherent and clear plan to provide PC services for patients nearing the end of life and their families. However, it is thought that patients do not have full access to PC services, despite urgent needs in such a system.[19]

According to the results of a study, despite the importance of palliative care, little attention has been paid in the Iranian nursing undergraduate curriculum.[20] In this regard, Hadian et al. and other studies have shown that inappropriate educational content for students’ nursing and a moderate level of PC knowledge for physicians are one of the major challenges about this method of care.[21‑25]

However, in Finland, the student curriculum is well compliance with the standards of the European Palliative Care Association.[26] In Japan, too, undergraduate education in palliative care has a prominent place in the curriculum, and students are given the necessary training.[27]

Considering that cancer patients need to receive holistic care and the members of healthcare team need to be familiarized with PC and receive the necessary training, as well as considering the major gaps in the curriculum of these people, it is necessary to determine the educational needs of care providers based on their job description and to identify their knowledge gaps accordingly. For this purpose, in the present study, first, the standard job description of the main members of the PC team was determined based on the “WHO guide” and “Oxford Textbook of Palliative Nursing.”[13,28]

WHO’s guide, entitled “Planning and Implementing Palliative Care Services – A Guide for Program Managers,” defines the required workforce, job descriptions, and steps for setting up PC centers at home, community, hospice, and hospital. This guide also outlines the main tasks and skills needed by individuals. With regard to the Oxford Textbook of Palliative Nursing, one chapter is devoted to interdisciplinary PC teams and fully defines PC and job descriptions of its team members, including physicians, nurses, and social workers. Considering that the job description of the members of the palliative care team in the WHO’s guide is regarded as an appropriate reference for all managers of health programs at the national, state, and regional levels in both developed and developing countries, on the one hand, and “Oxford Textbook of Palliative Nursing” has been developed and used as one of the valuable resources to in the educate students and health workers regarding palliative care, with the aim of expanding and integrating palliative care, on the other hand, the present study was carried out based on these two resources.[13,28]

Then, the current status of formal education was compared with the standard status based on this job description so that necessary suggestions are given to not only identify similarities and shortcomings and thus to improve the training of palliative care providers and providing optimal PC care to cancer patients. The purpose of this study was to compare the curriculum of selected disciplines of nursing, medicine, and social work with the content standards of palliative care related to cancer and to determine the educational needs of selected curricula and provide suggestions to meet these needs.

**Materials and Methods**

**Type of study and research population**

The present study is a descriptive–comparative study. The research population includes all health disciplines, and samples were the nursing, medical, and social work disciplines. Inclusion criteria included: disciplines should be among the main disciplines of palliative care and the curriculum should be in Persian. Researchers’ lack of full access to curricula was considered as exclusion criterion.

**Data collection tool**

Data collection was performed using the WHO guide and the Oxford Textbook of Palliative Nursing.[13,28] We used these resources as a criterion to assess coordination between the desired curricula with the content standards. Further, the duties of the members of the palliative care team are presented in each of the guides.[13,28]

**Implementation of the study**

After selecting the research instrument, the researchers prepared separate checklists based on the job descriptions of the nurse, physician, and social worker in the palliative care team and then categorized the tasks into different dimensions based on their similarity.

The checklist prepared for nurses’ job description includes the following dimensions: management (seven domains: supervision, coordination, home care management, control-monitoring of other procedures taken by nurses, evaluating and reporting other procedures taken by team members, leadership, management of challenges in palliative.
care team and discussion of solutions), educational (three domains: provide training to other nurses, family members, and other members of the health team regarding palliative care), care (nine domains: having communication skills, evaluation-controlling pain and other symptoms, focusing on holistic needs, providing care for specialized procedures such as ostomy, supporting the individual/family, paying attention to patient/family talks-preferences, recording-reporting, ordering diagnostic tests-drug interventions, informing patient about the care plan), planning (three domains: cooperating in planning for advanced care, cooperating in designing, and cooperating in evaluating interventions to treat pain and other symptoms), and communication (one domain: establishing a relationship between the community care system and secondary and tertiary care centers).

Checklist for physicians' job description consists of the following dimensions – providing counseling and information about the disease (two domains: giving information about the disease, providing telephone counseling), treatment (seven domains: symptom management in hospitals, referral to advanced treatment centers, prescribing painkillers, determining diagnosis-prognosis-treatment-drug management, paying attention to patient goals and aspirations, radiotherapy, and emergency care), educational (one domain: educating patients/families and other community caregivers to prevent and manage symptoms), receiving training (one domain: attending palliative care and organized service training classes), community and home services (three domains: community referrals, staff training about home-based care, treatment-patient care-supervision-supporting the community-based team), monitoring and facilitating access to facilities for the patient and caregivers (four domains: preparing medicines for the patient or his/her caregiver under acute conditions, monitoring-supporting-maintaining the supplies needed for home care providers, helping to resolve concerns and challenges of the team, investigating the suitability of the location of nursing home-hospice-rehabilitation facilities-transitional care), and recording procedures and discharge (two domains: recording procedures and accompanying the team during patient discharge).

Social workers’ job description checklist includes the following dimensions: care (five dimensions: attention to family dynamics-cultural considerations, communication with the patient/family, support for patient preferences, assessment of needs-strengths-patient/family resources, and meeting emotional, financial, and legal needs), interdisciplinary cooperation (one dimension: the relationship between the social worker and the nurse to report procedures), and patient follow-up (one dimension: patient and family follow-up during the disease course).

After the checklists were designed, their content and face validity was evaluated and approved by the professors. Then, the curricula of the related disciplines available on the website of the Ministry of Health and Medical Education[29] were carefully and separately reviewed based on the items of the checklists.

Data analysis

After checking the coordination between the courses in the curricula with the dimensions and areas of the checklists, the number of units of those courses was converted to minutes, and then, the share of educational topics of courses that were relevant to the content standards was determined in minutes.

Results

First, we present a brief description of nursing, medical, and social work curricula and then discuss the coordination between the curricula of these disciplines with the content standards of cancer-related palliative care in Tables 1-3.

Brief description of curricula

Bachelor of Nursing in Iran consists of 8 semesters with 130 units (91 units for theoretical courses and 39 units for apprenticeship). The general medicine includes 24 units for general courses, 69.5 units for mandatory basic courses, 175.5 units for mandatory specialized courses, 16 units for specialized optional courses, and 6 units for dissertations. This discipline consists of a total of 293 units. Further, the social work is taught during 8 semesters with 135 units (111 units for theoretical courses and 24 units for field apprenticeship).[29]

Tables 1-3 show the compliance between curricula with the content standards.

According to Table 1, the highest compliance between the nursing curriculum with the content standards of palliative care is observed in the subset of dimensions “communication, care, and management,” respectively, while the lowest compliance was equally observed in the subset of dimensions “planning and educational.”

According to Table 2, the minimum compliance between the medical curriculum with the standard resources was observed in the subset of dimensions “educating physicians about palliative care, facilitating access to facilities for patients and caregivers, discharge and community and home services,” respectively. In other
### Table 1: Compliance between the undergraduate nursing curriculum with the content standards of cancer-related palliative care in terms of units related to the standard job description

| Standard nursing duties in the palliative care team | Name of the course                                                                 | Coordination status of units in the nursing curriculum | Theoretical (T)-practical (P) units and apprenticeship (A) | Allocated time in minutes | Related content                                                                                                                                                                                                 |
|----------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Management Supervision                            | Basic nursing concepts                                                             | 2 (T)                                                  | 25                                                       | Cancer prevention and the role of the nurse                                                                                                         |
| Coordination                                       | Basic nursing concepts                                                             | 2 (T)                                                  | 25                                                       | Cancer rehabilitation and the role of the nurse                                                                                                    |
| Home care management                               | Home nursing care                                                                  | 1.5 (T) and 0.5 (P)                                    | 300 (T) and 240 (P)                                     | Cancer knowledge, palliative care nursing, training self-care principles to the individual and family                                             |
|                                                    | Individual and family health nursing                                               | 1.5 (T)                                                | 210                                                      | Principles of home visits, application of the nursing process in assessing the health status of the family, practice providing services at home. |
|                                                    | Nursing apprenticeship in individual, family, and community, nursing in common problems and adult nursing (the elderly 1-3) | 7 (A)                                                  | 2100                                                     | Follow-up home care                                                                                                                                |
| Controlling and monitoring the procedures of other nurses | Principles of nursing services management                                         | 2 (T)                                                  | 70                                                       | Monitoring and evaluating the nursing performance                                                                                                  |
| Evaluating the procedures of other team members and reporting (recording) them | Principles of nursing services management                                         | 2 (T)                                                  | 70                                                       | Reporting and recording in the patient case                                                                                                          |
|                                                    | Nursing principles and skills                                                      | 2.5 (T) and 1.5 (P)                                    | 145 (T) and 140 (P)                                     | Principles of reporting and documenting based on nursing process and diagnosis                                                                      |
| Leadership                                         | Principles of nursing services management                                         | 2 (T)                                                  | 70                                                       | Leadership                                                                                                                                              |
| Managing the challenges in palliative care and discussing the procedures taken to solve them | -                                                                                  | -                                                      | -                                                        | -                                                                                                                                                       |
| Educational                                        | Educating other nurses                                                            | -                                                      | -                                                        | -                                                                                                                                                       |
|                                                    | Educating the individual and the family                                            | 2.5 (T) and 1.5 (P)                                    | 145 (T) and 600 (A)                                     | Educating the client, patient, and family                                                                                                           |
|                                                    | Patient education                                                                  | 0.5 (T) and 0.5 (P)                                    | 540 (T) and 1020 (P)                                    | Concepts, education design, determining the educational needs of clients, the role of communication in education, educational methods (Sixth semester) |
|                                                    | Training workshop for the client and the family                                    | -                                                      | 240                                                      | Self-care training for the client and family                                                                                                         |
|                                                    | Home nursing care                                                                  | 0.5 (P)                                                | 240                                                      | Self-care training for the client and family                                                                                                         |
|                                                    | Nursing apprenticeship in individual, family, and community, nursing in common problems and adult nursing (the elderly 1-3) | 8 (A)                                                  | 2700                                                     | Educating the client and the family                                                                                                                  |
|                                                    | -                                                                                  | -                                                      | -                                                        | -                                                                                                                                                       |
| Care                                               | Communication skills                                                               | 2 (T)                                                  | 130                                                      | Interpersonal, group, and social communication                                                                                                     |
|                                                    | Nursing ethics and professional communication                                      | 1 (T) and 0.5 (P)                                      | 60 (T) and 120 (P)                                      | Physician-nurse and patient communication models                                                                                                  |
|                                                    | Health status assessment                                                           | 0.5 (T) and 0.5 (P)                                    | 90 (T) and 120 (P)                                      | How to communicate and conduct an interview with the client/patient                                                                          |

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| Standard nursing duties in the palliative care team | Coordination status of units in the nursing curriculum |
|-------------------------------------------------|------------------------------------------------------|
| **Name of the course** | **Theoretical (T)-practical (P) units and apprenticeship (A) | **Allocated time in minutes** | **Related content** |
| Mental health | 2 (T) | 170 | Communications |
| Nursing of healthy children | 1.5 (T) and 0.5 (P) | 10 (T) and 100 (P and A) | Therapeutic communication |
| Communication skills workshop with client and family | - | 240 | (First semester) |
| Emergency nursing apprenticeship in crises and unexpected events | 2 (A) | 240 | Establishing proper communication with the client and the physician |
| Pharmacology | 2 (T) | 195 | Anticancer drugs, narcotic and nonnarcotic painkillers |
| Pharmacology | 1 (A) | 300 | Familiarity with drugs and their side effects |
| Nursing principles and skills | 2.5 (T) and 1.5 (P) | 145 (T) and 70 (P) | Pain and pain relief concept |
| Health status assessment | 0.5 (T) and 0.5 (P) | 180 (T) and 240 (P) | Methods of physical, psychological, social, and spiritual evaluation of the client/patient |
| Basic nursing concepts | 2 (T) | 15 | Application of the nursing process in caring for cancer patients |
| Emergency nursing in crises and unexpected events | 1 (T) and 0.5 (P) | 75 (T) and 60 (P) | Pain management |
| Nursing of pediatric diseases | 3 (T) | 130 | Pain, its cause, its control, preparedness for diagnosis, treatments, and pain relief methods |
| Mental health nursing | 2 (T) | 85 | Physical, psychological, social, spiritual, and family evaluation |
| Adult nursing (the elderly 1) | 3 (T) | 15 | Nutrition in intestinal and gastric tumors |
| Adult nursing (the elderly 2) | 3 (T) | 50 | Nursing care for pancreatic, gallbladder cancer and liver transplantation |
| Adult nursing (the elderly 3) | 4 (T) | 10 | Bladder cancer care |
| | | 25 | Reproductive and breast cancer care |
| | | 50 | Respiratory system cancer care |
| | | 10 | Thyroid cancer care |
| | | 25 | Skin cancer care |
| | | 110 | Blood cancer care |
| | | 10 | Eye cancer care |
| Basic nursing concepts | 2 (T) | 25 | Brain and spinal cord cancer care |
| | | | Applying the nursing process in caring for cancer patients |
| | | | | |
| Providing care for specialized procedures such as ostomy and lymphedema | | | |
| Nursing principles and skills | 2.5 (T) and 1.5 (P) | 145 (T) and 280 (P) | Basic needs |
| Adult nursing (the elderly 1) | 1 (T) | 15 | Care related to surgery for intestinal disorders (colostomy, etc.) |
| Nursing principles and skills | 2.5 (T) and 1.5 (P) | 70 (P) | Addressing the patient’s needs through the colostomy bag |
| Adult nursing apprenticeship (the elderly 1-3) | 8 (A) | 1500 | Meeting different needs |
| Mental health nursing apprenticeship | 1 (A) | 300 | Familiarity of patient and his/her family with support resources |

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cases, there was compliance between the curricula with the standard resources.

According to Table 3, the palliative care-related educational status of social work students is in line with the content standards in all areas, except “supporting patient preferences” dimension.

**Discussion**

Considering the interdisciplinary approach to palliative care, the presence of nurse, physician, and social worker in this team is mandatory; therefore, these people need to know the basics of palliative care. In this regard, the aim of the present study was to compare the educational curriculum of these disciplines in terms of the content of cancer-related palliative care with the existing standards. The results showed that there was a coordination between the curricula of these disciplines with the content standards in most of the studied dimensions, which indicates the appropriate status of palliative care education based on standard resources.\(^{[13,28]}\)

According to the national agreement on clinical guidelines for palliative care quality, “communication” has been introduced as the foundation of palliative care and the essence of science and art.\(^{[30]}\) The patient’s needs can be identified\(^{[31]}\) and appropriate care can be
| Standard physician duties in the palliative care team | Status of related units in the medical curriculum | Name of the course | Theoretical (T)-practical (P) units and apprenticeship (A) | Allocated time in minutes | Related content |
|------------------------------------------------------|--------------------------------------------------|-------------------|----------------------------------------------------------|---------------------------|----------------|
| Giving advice and information to the patient about the disease | | Medical ethics | 2 (T) | 30 | Truth telling |
| Giving information about the disease | | | | 65 | Telling bad news |
| Remote monitoring and telephone counseling | | Medical etiquette (4) | 0.5 (P) | 220 | Counseling |
| Treatment | | Preliminaries of blood diseases | 2 (T) | 135 | Oncology emergencies |
| Management of severe symptoms in the hospital | | Apprenticeship social and family medicine | 3 (A) | 600 | Applying standard principles to refer to higher levels |
| Referring and transferring patients to advanced medical centers under acute conditions | | Pharmacology of psychiatric drugs | 0.7 (T) | 90 | Opioids |
| Prescribing painkillers such as oral morphine to treat the symptoms | | Anesthesia | 1.5 (P) | 320 | Pharmacology of opioids |
| Determining the diagnosis result, prognosis, course of treatment, care goals, and medication management for pain and other symptoms | | Blood pharmacology | 0.6 (T) | 125 | General rules about chemotherapy, nonopioid analgesics |
| Paying attention to and supporting the patient’s goals and aspirations | | Apprenticeship social and family medicine | 3 (A) | 1200 | Use of early detection, screening and prescription methods |
| Radiotherapy and other required treatments | | Pharmacology of blood drugs | 0.6 (T) | 100 | Applying methods and practices of gaining support |
| Performing outpatient emergency care | | Apprenticeship emergency medicine | 4 (A) | 660 | Performing lumbar puncture |
| Giving education | | Medical etiquette (4) | 0.3 (P) | 360 | Patient counseling and education |
| Counseling and educating patients, families, community caregivers to prevent and manage symptoms | | Apprenticeship social and family medicine | 3 (A) | 900 | Measures related to prevention and education of individual, family, and community health |
| Receive education | | | | | |
| Attending palliative care training and organized services classes | | Apprenticeship social and family medicine | 3 (A) | 900 | Applying methods of communication with the community and social participation |
| Community and home services | | Referring to the community | | 900 | |
| Educating staff about home care | | Apprenticeship social and family medicine | 3 (A) | 600 | Evaluation of social factors affecting the patient, family, and community, screening of patient, family, and social problems |
| Treatment, patient care, monitoring and community-based team support | | | | | |
| Monitoring and facilitating access to facilities for patients and care | | | | | |
| Preparing medicine for the patient or his/her caregivers under acute conditions | | | | | |

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provided through proper communication. According to the existing standards,[13,28] communication in palliative care is one of the main tasks of team members, which based on the results, topics related to communication and its skills were included in the selected curricula. To explain this appropriate content coverage, it can be said that providing effective care and treatment services requires the medical team not only to assess the patient conditions but also to gain his/her trust to cooperate in the implementation of care and treatment orders. One of the most important methods to gain patient trust is proper communication; for this reason, we witnessed the presentation of the topic of communication and its skills in selected disciplines. Among the studied curricula, patient–family relationship has been addressed more frequently in social work, as compared to the other two disciplines, which may be attributed to the fact that because communication is the most important tool for the social worker to protect the rights of the client;[32] therefore, there were many units on “communication” in this discipline. Among the studied curricula, patient–family relationship has been addressed more frequently in social work, as compared to the other two disciplines, which may be attributed to the fact that because communication is the most important tool for the social worker to protect the rights of the client;[32] therefore, there were many units on “communication” in this discipline. It is predicted that one of the goals of social work is to promote social capital, and because one of the dimensions of social capital is communication, for this reason the subject of communication in this field is prominent.[33] In this regard, Zangeneh et al. showed that nurses’ knowledge about communication skills was moderate and they need more training in this field.[34]

Palliative care services are offered to cancer patients using a variety of models, one of which is home care. Home care advantages include reducing the admission frequency,[35,36] patient communication with other specialists and caregivers of the health team, and providing maximum support to the patient and his/her caregivers.[37]

The curriculum of all three disciplines fully covered home care. According to the researchers, the presentation of “home care” course units in all three disciplines is considering the fact that nonacute patients should not be admitted to hospitals and receive the care services at home due to insufficient workforce. Among the members of the palliative care team, nurses play a major role in home care because they are able to provide quality care and manage consequences of diseases as much as possible without the supervision of a physician.[38] According to the results, there were more units on “home care” in nursing curriculum than curriculum of other disciplines.

Pain and other symptoms are common in cancer patients,[39] therefore, their quality of life can be promoted by treating and caring for them using pharmacological and nonpharmacological methods.[37,40] The results also revealed that nursing, medical, and social work students can promote well-being of patients by passing units such as familiarity with the mechanism of pain, pain management and other symptoms, pharmacology of psychiatric drugs, and meeting emotional needs; therefore, there was coordination between three curricula with the content standards in terms of “care, management, and treatment of pain and other symptoms” dimensions. Considering that palliative care is based on pain control and other symptoms of the patient and the most effective method to eliminate these symptoms is to have a team approach, thus, we observed an appropriate content coverage in this dimension in all three disciplines.

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**Table 2: Contd...**

| Standard physician duties in the palliative care team | Name of the course | Status of related units in the medical curriculum | Related content |
|-------------------------------------------------------|--------------------|-----------------------------------------------|-----------------|
| Prescribing, providing, monitoring, supporting, and maintaining the supplies needed for home care providers | - | - | - |
| Help addressing team concerns and challenges | Medical etiquette (4) | 0.5 (P) | 400 | Principles of interprofessional cooperation and empathy |
| Assessing the suitability of the nursing home, hospice, rehabilitation facilities, and transitional care | - | - | - |
| Recording procedures and discharge | Apprenticeship on forensic medicine and poisonings | 2 (A) | 135 | Legal principles and case report writing |
| Recording procedures | - | - | - |
| Accompanying the team during patient discharge | - | - | - |
regard to this content in the curricula, we expect to see the role of palliative care team members in “controlling pain and other symptoms” dimension in cancer patients in the future. The above dimension was addressed more frequently in medical curriculum as compared to other disciplines, which could be due to the specialized task of physicians, namely prescribing specific drugs to control pain and other symptoms.\[41\]

One of the methods to improve the quality of life of patients in palliative care is to pay attention to their values and beliefs.\[30\] Therefore, one of the content standards of palliative care is “attention to patient preferences.” In this regard, there was the topic of “supporting patient goals and preferences” in medical and nursing curricula, which seems to be due to the attention to the “evidence-based medicine and nursing”

### Table 3: Compliance status of the undergraduate social work curriculum in terms of units related to the standard job description of the social workers in the palliative care team

| Standard tasks of the social worker in the palliative care team | Coordination status of units in the undergraduate curriculum |
| --- | --- |
| | Name of the course | Theoretical (T)-practical (P) units and apprenticeship (A) | Allocated time in minutes | Related content |
| Care | Application of anthropology in social work | 2 (T) | 255 | The concept of culture, the relationship between the effect of cultural factors in providing social work services |
|  | Social work with family | 2 (T) | 180 | Rights of family and its role in health |
| Communication with the patient and his/her family | Clinical psychology | 2 (T) | 255 | Clinical interview |
|  | Principles and techniques of counseling and interviewing in social work | 2 (T) | 1320 | Definition, interview techniques, desired skills, counseling process, and techniques |
|  | Individual social work methods (1) | 2 (T) | 220 | Professional social work skills (communication, interview, etc.) |
|  | Social psychology | 2 (T) | 160 | Communications |
|  | Principles and foundations of sociology | 2 (T) | 160 | Social communications |
|  | Apprenticehip in the field of individual social work | 8 (A) | 3720 | Professional communication and meeting with family members |
|  | Apprenticehip in the field of group social work | 7 (A) | 4200 | Interviews and counseling |
| Supporting patient's preferences | - | - | - | Relationship between interview and group counseling |
| Assessing needs, strengths, patient and family resources | Social work with family | 2 (T) | 180 | Needs of the family |
|  | Apprenticehip in the field of individual social work | 8 (A) | 1860 | Evaluation and diagnosis |
| Meeting emotional, financial, and legal needs | Social work with family | 2 (T) | 180 | Family support and care |
|  | Empowerment methods and techniques | 2 (T) | 45 | Empowerment |
|  | Familiarity with needs, programs, and social resources | 1 (T) and 1 (P) | 220 (T) and 300 (P) | Utilizing resources to meet needs |
| Interdisciplinary cooperation | Psychology of group social work (1) | 2 (T) | 220 | Communications |
| Communication between the social worker and the nurse to report the procedures | Principles and foundations of sociology | 2 (T) | 160 | Social relations |
|  | Individual social work methods (1) | 2 (T) | 220 | Report writing |
|  | Apprenticehip in the field of individual social work | 8 (A) | 1860 | Report writing |
|  | Apprenticehip in the field of group social work | 7 (A) | 1800 | Group communication |
| Patient follow-up | Individual social work methods (1) | 2 (T) | 55 | Follow-up and monitoring |
curricula. In evidence-based nursing and medicine, nurses and physicians pay attention to patients’ values and beliefs.\cite{42,43} Further, paying attention to patient independence can be another reason for to pay attention to patient preferences by physicians and nurses. Unlike the other two disciplines, the above dimension was not observed in the social work curriculum. Therefore, educational planners are advised to address this issue while revising the social work curriculum.

The implementation of palliative care for chronic diseases such as cancer\cite{44} requires patient follow-up, so “control, monitoring, and follow-up of conditions and facilities” is one of the duties of members of the palliative care team. In this regard, “control, evaluation, follow-up, and monitoring topic was included in the Iranian nursing and social work curricula to realize one of the 13 strategies of the palliative care system strategies, namely eliminating and providing the necessary equipment and facilities. In the medical curriculum, despite the importance of the issue of “supervision, monitoring, and control,” this topic was not addressed, which considering the existing units; it can be due to the fact that the Iranian physician of the palliative care team plays a major role in the patient treatment and evaluation and there is still no place for management subjects, as supervision and control.\cite{45}

The palliative care implementation is associated with challenges, including the lack of care and medication-education guidelines, the lack of qualified care providers, and problems with patient referrals\cite{21,46} hence, “assessing the challenges in the palliative care team and managing them” was included in the medical etiquette course of the medical curriculum, but this topic was not observed in the nursing curriculum. Considering a possible rapid change in patients’ conditions, the need to immediate services, and critical and challenging conditions for the palliative care team, on the one hand, and given that nurses as a core member of the palliative care team have more contacts with patients, on the other hand, they are expected to face such conflicts at all times while performing these tasks; therefore, they should receive the necessary training in this regard.

“Recording and reporting” is an important tool because it records the patient’s condition, length of hospital stay, diagnostic methods, treatment, course of the disease, and communication with the patient in a specific period.\cite{47} Moreover, it is an important task of members of the palliative care team based on the checklists obtained from standard resources. According to the present results, the topic of “recording and reporting” was observed in all three curricula, and this coordination could be attributed to the fact that palliative care will be difficult to implement without a regular process of communication between the main members; hence, when providing palliative care, it is important to record information provided to managers and clinical staff based on their information needs. In this regard, we expect to see proper information management among members and different units of the palliative care team considering this proper coordination in this area.

Advanced care planning for patients nearing end of life is one of the main components of care.\cite{48} This type of planning allows the patients to talk to the treatment team about their values and preferences regarding the decisions that are to be made for them.\cite{49} Despite the fact that nurses are responsible to perform this planning, Iranian nursing students do not receive any training in this regard, which, according to the existing curriculum, nurses are mainly engaged in providing services and their intellectual capacity is not used in the field of care planning. Therefore, educational planners should not look at nurses only as a tool carrying out physician orders and use all their abilities and intellectual capacities to provide better services in the future.

Patient education is one of the duties of nurses and physicians.\cite{13,28} Patient education promotes such things as awareness, emotional intelligence, self-efficacy, self-care, reducing dependence on others, and quality of life as one of the indicators of health.\cite{50-52} According to the results, medical and nursing students have been given the necessary training regarding “educating patients and their families” dimension. Since nurses have more interactions with patients and their families, they have more opportunities to provide training.\cite{56} Therefore, the topic of “educating patients and families” has been addressed in the nursing curriculum for almost 70 h longer than medical curriculum.

There is a significant relationship between education and quality of life of students, and quality of work life in nurses. In this regard, the results of a study showed that nurses who participated in training courses in their field performed better than their colleagues who did not receive training.\cite{57,59}

One of the palliative care goals is to improve the quality of life of the patient’s family by meeting the physical, social, psychological, and spiritual needs\cite{50} by physicians, nurses, and social workers.\cite{28} Considering that we see the emergence of various symptoms and needs with different intensities at different levels of palliative care services (primary to tertiary), so it is important to address these needs by the main members of the team.

Since palliative care has an interdisciplinary approach,\cite{11} therefore, there is a need for cooperation between the members of this care team, which is a task for social
Another task of members of the palliative care team is to assist in patient discharge process. When a patient is discharged from the hospital, it means that he/she is ready to continue living outside the hospital with or without an accompany, so it is important to have skilled and trained people during patient discharge. Although it was not addressed directly in the relevant curricula, it is expected that the total courses offered during the study periods in all three disciplines will promote the necessary knowledge in the team members to support the patient discharge process.

**Conclusions**

Although palliative care in Iran has not yet found its true place, the present study demonstrated that the nursing, medical, and social work curricula complied with the content standards in most cases, which indicates the appropriate education status for students in selected palliative care fields. Also in addition, considering this governing educational policy, Iranian students who want to join the palliative care team after graduation are well prepared to perform their duties and patients will benefit from quality and standard care and services; however, there were also some shortcomings that can be regarded as educational needs.

After adapting the curricula to the content standards of cancer-related palliative care, educational needs were divided into five dimensions (educational, care, management, discharge, and follow-up). Required topics include providing training to health team members on palliative care and home care (education dimension), informing the patients of their care plan, cooperating in planning and designing interventions for advanced care, evaluating interventions, and paying attention to the patient’s preferences during care (care dimension), managing the challenges in the palliative care team and meeting the patient’s needs under acute conditions (management dimension), assessing the appropriateness of rehabilitation facilities, transitional care facilities, supervision, and support of care providers at home and discharge (follow-up, supervision, and discharge dimensions).

Although it is not necessary to change the curricula in general to meet these needs, it is possible to revise the curricula according to the educational needs in some chapters of the course. For example, it reduced the units of topics, communication, teaching, pain control and other symptoms, and replaced them with other educational topics that were needed. For example, the “managing the challenges in facing the palliative care team” dimension can be covered by adding the topic of “conflict management” to the nursing management course.

Educational needs can also be met in the form of training workshops during the course of study or joint short-term and in-service training courses. It is also suggested that, as in some countries where “palliative care” is offered as an optional unit in their curricula, revision should be made in our health education system so that we can educate anyone who interested in this type of care and helps him/her start working in the same field while becoming a professional.

Considering multiple palliative care guidelines, it is also suggested to compare curricula with other guidelines in future studies to identify similarities and educational shortcomings, thereby paving the way for improvements, appropriate changes, and development of a coherent training program tailored to the needs of learners and the society. In addition to the foregoing, to benefit from the content in the curricula and to meet the educational needs identified, it is important to provide continuous training to professors and provide an opportunity for them to use the experiences of professors in leading countries to teach students about palliative care.

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**Conflicts of interest**

There are no conflicts of interest.

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