#### ANNOTATION

of the dissertation work of Alexandra Vladimirovna Masharipova on the topic "Improvement of palliative nursing care in the Republic of Kazakhstan."

for the academic degree of Doctor of
Philosophy (PhD) in the specialty

8D10101 "Nursing Science"

### Relevance of the study.

According to the definition of the World Health Organization (WHO), palliative care is an approach aimed at improving the quality of life for patients and their families who are facing a life-threatening serious illness. This type of care focuses on alleviating symptoms and stress caused by the illness, thus providing palliative care is the responsibility of a multidisciplinary team, where each specialist plays an important role, including the nurse. Palliative care should not be provided only at the end of a patient's life; it should begin at the time of diagnosis and continue throughout the course of the illness. Each year, the number of patients suffering from severe and chronic illnesses increases. According to WHO estimates, approximately 40 million people worldwide need palliative care annually, but only 14% of those in need receive it.

Nursing activity represents care provided by nurses and advanced practice nurses, which can be performed both independently and as part of multidisciplinary teams. Nursing and palliative care share common roots, goals, and values. According to the Order of the Minister of Health of the Republic of Kazakhstan dated November 23, 2020, No. ҚР ДСМ-199/2020 "On Approving the Rules for Providing Nursing Care," nursing care is a comprehensive range of medical services provided by nurses and advanced practice nurses to individuals of all ages, groups, and communities, whether sick or healthy, including health promotion, disease prevention, and care for the sick, disabled, and dying. Alleviating suffering through proper pain assessment and changing an individual's perception of the severity of their illness is an important function of nursing, as defined by the American Nurses Association. The skill set of specialists providing palliative care includes pain and symptom management, prognostication, communication, psychosocial support, and assistance in the final days of a person's life.

The state program for healthcare development for 2020-2025, as part of increasing geographical and financial accessibility of palliative care services, provides for the introduction of mobile teams in 100% of primary healthcare organizations by 2025. All members of mobile care teams must be trained to meet the primary palliative care needs of their patients. Nurses spend more time with patients and their families than any other healthcare workers. Qualified care reduces the suffering and burden of seriously ill patients.

The availability of palliative care should be in all medical institutions and, importantly, at the level of primary healthcare close to the patient's home. The overwhelming majority of people in need of palliative care prefer to stay at home, so from a medical and ethical standpoint, it is necessary for palliative care to be provided at the place of residence within the framework of primary healthcare. It is especially important for specialists actively involved in the process of providing palliative care to have a deep understanding of the philosophy of palliative care. However, more and more research indicates a low level of knowledge and skills among nurses in the field of palliative care.

For Kazakhstan, palliative care is a relatively new branch of medicine that is just beginning to take shape in order to operate on a systemic basis. Thus, it is relevant to study

the level of preparedness of nurses to provide palliative care, their attitude towards caring for seriously ill patients, as well as their ability to provide nursing care from the perspective of evidence-based medicine.

### The purpose of the study:

The aim of the research: to improve the quality of nursing care in palliative care at the level of primary health care through the development and implementation of scientifically grounded nursing technologies.

#### Object and subject of the research:

An observational descriptive cross-sectional study was conducted to assess knowledge/skills regarding palliative care, knowledge/skills and application of evidence-based nursing practice, and attitudes towards providing palliative care to severely ill patients among nurses from primary health care organizations that provide palliative care.

# **Research objectives:**

- 1. Conduct a comprehensive assessment of the knowledge/skills of nurses working in primary health care organizations regarding palliative care and their attitudes towards caring for patients with severe incurable diseases;
- 2. Assess the level of knowledge/skills, application, and attitude towards evidence-based practice among nurses working in primary health care organizations;
- 3. Determine the factors influencing the formation of nurses' competency in providing palliative care;
- 4. Study the relationship between the level of knowledge/skills and the attitude towards providing palliative care and preparedness in evidence-based nursing practice;
- 5. Develop and implement scientifically based methodological support for palliative care in the organization of primary medical and social care to ensure quality nursing care for patients.

### **Scientific novelty:**

In the framework of the research:

A comprehensive assessment of the level of competencies in palliative care among nurses providing palliative care in primary health care organizations in Astana has been conducted.

An assessment of the knowledge and skills, as well as the attitude and application of evidence-based nursing practice by nurses providing palliative care in the Republic of Kazakhstan in primary health care organizations, has been conducted.

For the first time, a set of scientifically-based methodological tools has been developed for undergraduate students majoring in "Nursing," as well as for practicing nurses in primary health care organizations.

# **Practical significance:**

A map for nursing assessment of palliative patients at home has been developed and pilot implemented in the primary healthcare organizations of Astana.

A textbook on palliative care has been developed, which has been approved and recommended for publication by the Academic Council of the NAO "Medical University of Astana" as additional educational literature for undergraduate students in the specialty "Nursing".

For the first time, informational cards for nurses in palliative care have been translated from English to Russian and adapted, and a certificate of state registration of rights to the copyright object has been obtained.

# Main provisions submitted for defense

- 1. The assessment of knowledge and skills, as well as attitudes towards palliative care among primary health care nurses, showed an insufficient level of knowledge, as well as their neutral or negative attitude towards palliative care for seriously ill patients.
- 2. The assessment of knowledge/skills, application and attitude of nurses towards evidence-based nursing practice showed a low level of application of evidence-based medicine principles by primary health care nurses.
- 3. The presence of knowledge/skills of nurses in evidence-based medicine has a positive effect on the level of knowledge in providing palliative care and the formation of a positive attitude towards palliative care.
- 4. The length of service of nurses and their application of evidence-based medicine principles are significant factors that increase the chances of a high level of knowledge in the field of palliative care.

The following **conclusions** were obtained as a result of the conducted work:

- 1. Assessment of knowledge/skills of nurses in palliative care showed that nurses have a limited level of knowledge/skills in the field of palliative care (overall mean PCQN score:  $9.06 \pm 2.93$ ). Level of education (H=10,87; p=0,012), extensive work experience (H=233,92; p<0,001), age (H=248,16; p<0,001) and completion of training in palliative care (U=30463; p<0,001) contributed to a deeper understanding of the basic principles of palliative care (p<0.05 for all parameters); The assessment of nurses' attitudes showed that the majority of nurses had a neutral (n=335; 59.3%) or negative (n=192; 34%) attitude towards palliative care for seriously ill patients. Demographic and professional factors such as age (H=15,72; p=0,001), work experience (H=10,07; p=0,018), level of education (H=32,72; p<0,001), attendance of palliative care training (U=17282; p<0,001) had a positive effect on the formation of a positive attitude towards palliative care (p<0.05).
- 2. Nurses demonstrated an average level of knowledge/skills (subscale "Knowledge/skills in evidence-based practice"  $4.45 \pm 1.28$ ) and a neutral attitude towards evidence-based practice (subscale "Attitude towards evidence-based practice"  $4.55 \pm 1.41$ ). Limited application of the principles of evidence-based nursing practice (subscale "Application of evidence-based practice"  $3.90 \pm 1.31$ ) indicates their insufficient implementation in practical activities.
- 3. The level of knowledge/skills in evidence-based nursing practice positively correlates with the level of knowledge of palliative care ( $\tau$ =0.073; p=0.013) and attitude towards it ( $\tau$ =0.227; p<0,001); Binary logistic regression analysis revealed a positive influence on the level of knowledge of palliative care nurses of such parameters as work experience (OR=1.110; p<0.001) and application of principles of evidence-based medicine (OR=1.038; p=0.038);
- 4. The implementation of the developed evidence-based tools in the practical activities of nurses can contribute to improving the quality of palliative care. The teaching aid, approved and recommended for implementation in the educational process for bachelor's students majoring in Nursing, will improve theoretical training and contribute to a deeper understanding of the basic principles of palliative care. However, the effectiveness of these tools requires further research and confirmation in larger studies.

#### **Practical recommendations:**

- 1. It is recommended to conduct continuous training of mid-level medical personnel in the principles of palliative care (advanced training courses). When developing training programs, special attention should be paid to modern trends and approaches in palliative care.
- 2. When making a planned home visit to a patient attached to a primary health care organization and in need of palliative care, the developed chart of nursing examination of

palliative patients at home should be used for timely transfer of information and continuity of medical care.

- 3. It is necessary to instill in nurses the skills of continuous training in the principles of evidence-based medicine, including understanding and applying them in their professional activities, a critical attitude to their work and scientific information.
- 4. It is recommended to develop and implement in practical healthcare a clinical nursing guide to providing palliative care.

#### Implementation of research results

The map of nursing assessment for palliative patients has been piloted in the City clinic No. 2, City clinic No. 7, City clinic No. 11, Hospital of the Medical Center of the Administration of the President of the Republic of Kazakhstan. The educational publication on palliative care for nurses will be incorporated into the syllabus of medical universities for the disciplines of palliative care. This educational publication has been published on the official website of the Kazakhstan Association of Palliative Care —www.palliative.kz.

### Publications on the topic of the dissertation

On the topic of the dissertation research, 23 scientific works have been published, including 5 publications in journals indexed by Scopus and Web of Science (Clarivate Analytics), among which 2 publications are in editions recommended by the Committee for Quality Assurance in Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan, and 11 theses in the proceedings of international conferences. 3 certificates of state registration of rights to an object of copyright of the Republic of Kazakhstan have been obtained, 4 act of introducing developments into the activities of practical healthcare organizations.

### Approbation of the dissertation

### The main provisions of the dissertation were presented at:

The results of the research and the main provisions of the dissertation were presented and discussed at the following international scientific and practical conferences:

II International Scientific and Practical Conference "Residency in Family Medicine: Achievements, Problems, and Prospects," dedicated to the 65th anniversary of the West Kazakhstan Marat Ospanov Medical University;

VII Republican Conference with the participation of international experts "Palliative Care: Healing Hearts and Communities"

The final conference of the international nursing project AccelEd "The Trinity of Nursing: Clinical Practice, Research, and Education";

VIII Republican Conference with the participation of international experts "Community of Mercy: 10 years of the Kazakhstan Association of Palliative Care";

III Interuniversity Scientific and Practical Conference of Students and Young Scientists "Chronic Inflammatory Skin Processes. Interdisciplinary Issues"

Republican scientific-practical conference with international participation, dedicated to the 60th anniversary of the NAO "Medical University of Astana" "Current issues of primary healthcare: modern trends, problems, and ways to solve them";

IX Republican Conference with International Participation "Palliative Care in the Republic of Kazakhstan: Achievements, Problems, Prospects."

International Congress "Innovations in Primary Health Care" dedicated to the 44th anniversary of the Alma-Ata Declaration and the 4th anniversary of the Astana Declaration on PHC.

## Scope and structure of the dissertation:

DissertationThe presentation is provided on 88 pages of print. The text includes an introduction, five chapters, a conclusion with findings and practical recommendations, as

well as a list appendices.	of	used	domestic	and	foreign	literature,	containing	152	sources,	and	7