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EVIDENCE-BASED PRACTICE IN PALLIATIVE CARE NURSING

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Abstract

***Background**: Palliative care is required for a wide range of diseases. In order to promote the wider use of research results, clinical protocols, guidelines on best practices in palliative care, we need more scientific data. However, there are difficulties in applying an evidence-based approach to palliative care. The low level of adoption of evidence-based practice among palliative care nurses is a global problem, since nurses are the most numerous providers of medical services. The inability of nurses to follow new scientific data can negatively affect the quality of life of patients.*

***Material and methods:** The authors searched for scientific articles in English and Russian published till 2013 in the PubMed, Scopus, EBSCOhost, and Wiley databases. The study was conducted from June to September 2023. Forty-three publications were selected for the literature review.*

***Results**: The goal of evidence-based palliative care practice is to provide effective care to patients using available resources. Analysis of the level of knowledge and skills of nurses in evidence-based practice showed that nurses have low competence in evidence-based medicine. Although the level of education and work experience have a positive correlation. Administrators of medical organizations are not ready for changes in practice. Often nurses themselves do not have a sufficient level of competence in evidence-based practice. Funding and low human resources also significantly complicate scientific activities in the field of palliative care. However, existing studies demonstrate the positive impact of scientific data to improve the quality of life of seriously ill patients.*

***Conclusion**: At this stage of development of palliative care in many countries there is an urgent need for scientific research in the field of palliative care. Unwillingness to change, insufficient funding, low human resources, lack of knowledge entail difficulties in implementing a scientific approach. Solving the identified problems will improve the quality of palliative nursing care.*

Further research is needed to determine the best method for the successful implementation of evidence-based practice in nursing practice

***Keywords:** evidence-based medicine, palliative care, nursing, knowledge, skills, barriers.*

Introduction

It is obvious from previous studies that there are a number of factors that either hinder or contribute to the use of scientific data in nursing practice. Identifying these factors is vital for the successful implementation of evidence-based practice in nursing [*Duncombe D, 2018*].

Endpoints such as the quality of care, quality of life indicators, including the quality of death,

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and the best resolution of bereavement are difficult to measure, especially when patients are weak and ill. Palliative care presents special problems for the researcher. Although a randomized controlled trial remains the gold standard for determining the effectiveness of treatment, some types of palliative care cannot be studied using traditional studies. Problems are often associated with the recruitment of the study population, the dropout of patients and the inability of patients to participate in the study before its completion. In some studies, the problems are so serious that the results have not been reported [*Higginson I, 1999*].

Nurses are among the most significant members of this approach, and they are the health personnel who communicate the most with patients and their families. Nurses need additional training in research and evidence-based practice concepts. Many nurses note that they lack the necessary resources. The successful implementation of evidence-based practice involves the joint efforts of nurses, medical professionals and politicians [*Duncombe D, 2018*].

The purpose of the review is to study the role of evidence-based practice in palliative nursing, to identify obstacles and prospects.

MATERIAL AND METHODS

This literature review presents data on the evidence-based approach in palliative nursing, including information on the obstacles to the introduction of a scientific approach in this area of medicine. In addition, data on the level of knowledge and skills of nurses in evidence-based medicine, advantages and obstacles to improving the quality of nursing care for seriously ill patients were analyzed. The study was conducted from June to September 2023. For this purpose, evidence-based medicine databases such as Scopus, EBSCOhost, Wiley, and PubMed were searched for scientific publications published no later than 2013, using the following keywords: evidence-based medicine, palliative care, nursing, knowledge, skills, barriers. In addition, information was searched in electronic scientific libraries, in the national scientific portal of the Republic of Kazakhstan (nauka.kz). At the initial stage of the search, 1003 English-language and 86 Russian-language publications were found.

After excluding repetitive publications and articles that do not meet the inclusion criteria, 43 publications were selected as analytical material. The exclusion criteria were: publications before 2013, abstracts, abstracts, articles with a weak evidence base.

RESULTS

Evidence-Based Practice in Palliative Medicine: Today, the number of people with chronic or incurable diseases is rapidly growing, as a result of which qualified care of these patients is required from medical professionals [*Fitch M et al., 2015*]. It is known that improving the quality of medical services in all areas of medicine is directly related to the widespread and introduction of evidence-based practice and scientific research. Evidence-based practice is considered an integral part of modern clinical practice. The goal of evidence-based palliative care practice is to provide effective care to patients using available resources [*McCusker M et al., 2013*]. New clinical studies have irrevocably changed the practice. In modern medicine, health workers should carefully study the available evidence, evaluate their quality, applicability to a particular patient before starting treatment. Nurses should identify personal values and beliefs, the spiritual needs of patients and their families, use the right communication methods, provide treatment for symptoms and pain, as well as learn about their ideas about death and the period after death [*Uslu Sahan F, Terzioglu F, 2017*]. While caring for their patients using evidence-based palliative care methods, nurses should use the information confirmed by research results carefully, clearly and logically, and also take into account the preferences of patients [*Fitch M et al., 2015; Masharipova A et al., 2022*].

The most promising areas of research related to palliative care include palliative care at home, interdisciplinary team care and telemedicine interventions. It is necessary to pay special attention to the expansion of the workforce, the assessment of the quality of these services and innovative payment models. The existing evidence base for assessing social needs and culturally sensitive care remains very limited [*van Gaans D et al., 2022*].

Assessment of nurses' knowledge and skills in evidence-based practice: According to studies that examined the level of knowledge, attitude and

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application of evidence-based medicine among nurses, showed a significant positive correlation with the level of education and work experience of nurses. Thus, nurses with higher education and higher work experience score higher according to these indicators [*Pérez-Campos M et al., 2014; Maessen K et al., 2019; Al-Busaidi I et al., 2019; Yoder L et al., 2022*].

An analysis conducted among nurses in Korea revealed a positive attitude towards evidence-based medicine, but the level of knowledge in the field of evidence-based medicine, as well as the percentage of implementation of evidence-based measures by nurses in the workplace were insufficient [*Yoo J et al., 2019*].

Most of the district nurses interviewed in Norway did not know or knew little about evidence-based medicine. They made decisions in accordance with their personal experience and the advice of colleagues [*Berland A et al., 2012*].

Emergency nurses in Iceland, as a rule, rarely perform evidence-based nursing interventions, despite the fact that they are well acquainted with evidence-based medicine and have a positive attitude towards it. That is, a positive attitude to evidence-based medicine does not guarantee its use by nurses in practice [*Thorsteinsson H, Sveinsdóttir H, 2014; Saunders H, Vehviläinen-Julkunen K, 2016*].

Challenges to delivering evidence-based palliative medicine: When studying barriers to research in palliative care, the main ones were identified: funding, institutional capacity, research workforce, problems related to the topic and the population (for example, attrition) and public and professional misunderstanding palliative care and aversion to study topics [*Chen E et al., 2014*]. The results of several clinical studies that could change the established clinical practice were met with sluggishness in this specialty. The prevailing opinion is that such new scientific data should not cancel out the long-term generally positive experience of using traditional treatment [*Barry C et al., 2023*]. Other authors describe the problem of resistance of health workers to changes associated with insufficient readiness to implement an evidence-based approach due to lack of competence in the field of evidence-based medicine [*Nilsen P et al., 2018*].

Another obstacle to the introduction of an evidence-based approach to palliative medicine is the quality of scientific research. Most of the initial studies were methodologically flawed. Cochrane reviews of palliative care are well executed, but cannot provide convincing evidence to guide clinical practice, since primary studies are few, small, clinically heterogeneous, of poor quality and external validity. Patients' disagreement to take part in the research makes it much more difficult to adequately recruit participants for the study. Randomized trials are generally viewed with suspicion. The authors suggested that the recruitment of participants is likely to be successful in simple, non-invasive, low-load studies in which the experiment plan is well explained. In addition, high-quality studies should have a follow-up period of appropriate duration and completeness. This criterion is especially important for assessing the reliability of randomized trials, in which the intention to process the results of the analysis depends on the completeness of the data set. A high dropout rate before the completion of the study also contributes to a decrease in the quality of the study. The vast majority of this outflow was due to patient rejection, with an increase in the burden of symptoms being cited as the most common cause of rejection [*Visser C et al., 2015*]. Indeed, some reports suggest that palliative care patients may have an average of 11 different symptoms [*Daveson B et al., 2011*].

Traditional endpoints used in experimental studies, such as death and disability, are largely unsuitable for the palliative population. The goal of palliative care research should be to improve the quality of life. The psychological and spiritual aspects of palliative care are the most difficult to study using quantitative methods; in contrast, research groups in other fields, such as pain research, have reported reasonable success with proven evaluation scales [*Mularski R et al., 2007; Nekolaichuk C et al., 2013*].

Nurses Barriers to Evidence-Based Practice in Palliative Care: Nurses, compared to other members of palliative care team, spend more time with patients and their families from the moment of diagnosis until death and with families during grief process after death, and take part in all aspects of palliative care [*Terzioglu F et al., 2015*]. Evidence-based practice in nursing refers to no gap between what nurses know and do [*Duncombe*

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D, 2018]. Palliative care is very difficult, because patients at the end of life have many physiological, psychological, spiritual and social needs that need to be met simultaneously [*Visser C et al., 2015*]. Previous studies on the attitude, knowledge and skills of nurses in the field of evidence-based medicine have shown that nurses face various obstacles to the introduction of an evidence-based approach, which leads to their lack of involvement in the process. Frequently mentioned obstacles include lack of time, staff, heavy workload, family obligations, limited knowledge of evidence-based medicine and negative attitudes towards it, as well as limited academic skills [*Mathieson A et al., 2019*].

Previous studies examining the barriers preventing nurses from applying evidence-based practice in a variety of clinical settings, including palliative care, have identified several major barriers: lack of readiness for change, limitations of organizational culture, limited knowledge and skills, lack of access to databases, resistance from nurses and colleagues, uncertainty in critical assessment of evidence and lack of critical resources to support evidence-based practice [*Dalberg T et al., 2013; Melnyk B et al., 2014; Kernohan W et al., 2018; Coffey A et al., 2021*].

For nurses to have knowledge, skills and a positive attitude towards the application of evidence-based practice, partnership between academic and clinical institutions is important [*Balakas K, Smith J, 2016*].

Advantages for the use of evidence-based practice in palliative medicine: Evidence-based medicine has rapidly developed over the past 20 years. However, it would be wrong to claim that evidence-based medicine has equally penetrated all medical specialties, including palliative care [*Visser C et al., 2015*].

Systematic implementation of evidence-based nursing practice can improve the efficiency of healthcare and improve patient treatment outcomes [*Im E, Kong E, 2017*]. In conditions of high workload, when doctors do not work with patients or their families, nurses have to think critically, analyze difficult situations, assess the state of health and make decisions [*Li S et al., 2019*].

Evidence-based nursing practice is the foundation of nursing education and is a key competence that undergraduate nursing students should master. The use of evidence-based practice in nursing has become necessary to ensure effective, safe and individual nursing care for patients [*Park J, Hwang J, 2021; Longo D et al., 2021*]. According to the US Medical Institute, the use of an evidence-based approach improves medical care, reduces its cost, increases staff productivity, and also contributes to the development of nursing discipline [*Pérez-Campos M et al., 2014*].

Despite the lack of observational studies of good quality, a recent large-scale, multicenter study of registers was conducted in Italy. Researchers have been collecting individual cases all year, collecting a total of 1,801 cases from more than 100 medical centers. It has become a very important resource on epidemiology and treatment of breakthrough cancer pain. This study demonstrated that with a joint research approach, it is possible to obtain sufficiently large sample sizes to meet the criteria of high-quality observational studies [*Greco M et al., 2011*].

Multicenter studies with a large sample size have become widespread in the USA and Europe by combining respondents in several centers at once. Three such studies have recently evaluated the efficacy of modafinil, which is a selective central nervous system stimulant, for the treatment of cancer-related fatigue, and have demonstrated the valuable contribution to the palliative care literature that well-controlled scientific research can make [*Payne S et al., 2007; Spathis A et al., 2014; Hovey E et al., 2014*].

Many other factors contribute to success in developing a solid evidence base for palliative care. However, these factors include, but are not limited to, ethical complexity, underdeveloped research infrastructure, funding, and difficulties accessing existing research data. These issues are especially relevant for palliative care [*Gelfman L, Morrison R, 2008; Abernethy A et al., 2014; Masharipova A et al., 2022*].

CONCLUSION

Nurses, as the most numerous healthcare professionals, are required to provide competent, safe and effective care based on scientific evidence, and evidence-based practice is recognized as the gold standard of medical care. It is very important to improve the quality of life of patients, eliminate pain and other symptoms, and support patients and their relatives in accordance with scientifically proven effective interventions.

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A review of the world literature has demonstrated positive changes in the provision of palliative care, since the use of interventions, the effectiveness of which has been proven during experimental studies, excludes the use of ineffective and unreasonable measures in practice.

The most common obstacles to research and the introduction of evidence-based changes in practice are: funding, institutional capacity, research personnel, lack of understanding of palliative care, unwillingness to change, low level of knowledge on evidence-based practice. Solving these problems is a top priority for researchers to change traditional approaches to palliative care and improve the quality of life of seriously ill patients. The study draws attention to the need to prioritize evidence-based practice both at the institutional and state level.

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