IMPROVING THE MODEL FOR ORGANIZING NURSING CARE IN PALLIATIVE CARE

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https://doi.org/10.5281/zenodo.18708251

Abstract. *Palliative care as a field of medical science and clinical practice has deep historical roots dating back to ancient civilizations. In Ancient Greece and Rome, care for incurably ill patients was based on principles of humanism, compassion, and the relief of suffering, which can be regarded as early precursors of modern palliative medicine. During the Middle Ages, European monasteries played a significant role in caring for the sick and dying by providing shelter, nursing care, and basic medical assistance. The modern development of palliative care began in the mid-twentieth century with the emergence of the hospice movement. A landmark event was the establishment of the first modern St Christopher's Hospice in the United Kingdom in 1967, initiated by Cicely Saunders, which laid the scientific and organizational foundations of palliative medicine and contributed to its global dissemination.*

Keywords: *nursing care, palliative care, healthcare organization, quality of life, optimization.*

Introduction

In Uzbekistan, the development of palliative care, including nursing care, is carried out within the framework of state programs aimed at reforming the healthcare system. The primary objective is to improve the accessibility of medical services for patients with chronic and incurable diseases, as well as to ensure high-quality nursing care at all levels of healthcare delivery. The regulatory and legal framework is based on resolutions of the Cabinet of Ministers, normative acts of the Ministry of Health of the Republic of Uzbekistan, and international recommendations of the World Health Organization (WHO).

As a key element of contemporary healthcare, palliative care focuses on enhancing the quality of life of patients suffering from incurable and progressive diseases while also offering comprehensive support to their families. The World Health Organization emphasizes that palliative care should be introduced at the initial stages of illness and implemented concurrently with pathogenetic treatment. This study is relevant due to the necessity to scientifically justify and optimize organizational models of nursing care in palliative settings, considering modern medical standards, ongoing demographic shifts, and the growing pressure on healthcare systems.

The aim of this study is to develop and scientifically substantiate an optimized organizational model of nursing care within the palliative care system, aimed at improving the quality of life of palliative patients and enhancing the efficiency of nursing staff performance.

Materials and Methods

The study was conducted as a prospective cohort interventional project aimed at evaluating the effectiveness of an integrated nursing care model in palliative care. The study design included a before-and-after analysis of a single cohort of patients and healthcare personnel without the formation of a separate control group. The total study duration was 16 months (September 2023–

December 2024). The primary study sites were the Samarkand Interregional Hospice and the hospice of the Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology. A combination of general scientific and specialized research methods was employed, including systems analysis, a structural–functional approach, content analysis of scientific publications and regulatory legal documents, as well as a comparative analysis of national and international experiences in organizing nursing care in palliative settings.

The methodological framework of the study was based on the principles of evidence-based medicine, the biopsychosocial model of health, and a patient-centered approach. The object of the study was the system of organizing nursing care in palliative care institutions, while the subject encompassed the organizational and functional aspects of nursing activities.

Results

To ensure a comprehensive assessment of the perceived quality of palliative care, a questionnaire was developed and validated, consisting of 20 structured statements covering key domains of care: ethical and communicative aspects of interaction between healthcare staff and patients, practical components of nursing care, satisfaction with medical (physician-provided) care, and the availability of psychological and spiritual support.

The survey was conducted in an individual format, taking into account the physical and cognitive status of the respondents. Patients were offered either a written questionnaire or an oral interview in cases of limited motor or cognitive abilities. Responses were assessed using a 5-point Likert scale (1 = “strongly disagree”, 5 = “strongly agree”), allowing for quantitative interpretation of both overall satisfaction levels and identification of problematic areas within the structure of palliative care.

The survey was conducted among nurses, physicians, and nursing assistants working in the hospices included in the study. The collected data were used both to assess the overall situation in the field of palliative care and to perform a comparative analysis across professional groups.

Student Questionnaire

The **Questionnaire on Palliative Awareness – Student Version (QPA-S)** was developed based on the conceptual frameworks presented in the studies by Kellehear A. and Gysels M. (2003), student surveys conducted at Boston University Medical Center (2006), and the recommendations of the European Association for Palliative Care (EAPC, 2013).

The adapted version of the questionnaire used in the present study is designed to assess students’ level of knowledge, emotional attitudes, educational motivation, and professional orientations toward palliative care among individuals with no prior exposure to palliative practice. The instrument consists of 20 statements distributed across thematic domains.

The questionnaire is intended for undergraduate students in the humanities and psychology who have no practical experience within the healthcare system. It includes 20 items structured into five main domains:

a. knowledge and perceptions of palliative care;

b. emotional responses to issues of care, death, and dying;

c. educational motivation and interest in palliative care;

d. professional values and humanistic attitudes;

e. readiness for volunteer engagement and participation in multidisciplinary palliative care teams (Table 1).

Table 1. Items of the Student Questionnaire

№	Questionnaire Items
1	I am aware of what palliative care is.
2	I understand the difference between curative treatment and palliative support.
3	I am familiar with how hospice care is organized.
4	I understand the responsibilities of a nurse in palliative care.
5	I am familiar with the ethical aspects of caring for dying patients.
6	I find it difficult to talk about death and dying.
7	The idea of interacting with severely ill patients causes me anxiety.
8	I am able to provide emotional support to a person in crisis.
9	I believe that palliative care requires emotional resilience.
10	I feel capable of participating in the care of a severely ill patient.
11	I would be interested in studying palliative care at university.
12	The current curriculum does not sufficiently address issues related to death and end-of-life care.
13	I would like to participate in simulations and practical training related to palliative care.
14	I would undertake a clinical placement in a hospice if given the opportunity.
15	I respect professionals working in the field of palliative care.
16	I am considering a future career in palliative care.
17	Palliative care is an essential component of a humane society.
18	Psychologists and educators should be involved in multidisciplinary palliative care teams.
19	Caring for a suffering person is a value that is important for my future profession.

The interface and user interaction logic of the digital palliative care module were designed with a focus on minimizing the workload of medical personnel, reducing the time required for documentation, and increasing the accuracy of transmitted clinical information. The implementation of the role-based access principle ensures interface personalization for physicians, nurses, and allied healthcare professionals, thereby reducing the risk of cognitive errors and facilitating the effective integration of the digital solution into routine clinical practice in palliative care. The phased implementation of the module into the Unified Medical Information System (DMED) is presented in Table 1 and includes five consecutive stages: design and analytical planning, technical development and testing, pilot implementation, scaling and integration, as well as evaluation of effectiveness and optimization. Each stage is accompanied by the development of relevant managerial and technical documentation, the conduct of training activities, and the monitoring of key quality indicators.

Italy implements a regionalized model of palliative care, in which a key role is played by the nursing service “Assistenza Domiciliare Integrata” (ADI), operating in most regions of the country. Nurses undergo accreditation within the framework of the state Continuing Professional Development (CPD) program and are integral members of a multidisciplinary team. According to data from the Italian Society of Palliative Care (SICP), more than 60% of palliative patients receive care at home, and the involvement of nursing staff in care planning has significantly reduced hospitalization rates and improved patient compliance.

Digital integration of the palliative care unit into the DMED system ensures continuity of medical supervision, standardizes patient management processes across different levels of healthcare delivery, and creates prerequisites for the formation of a modern, patient-centered

palliative care model focused on improving quality of life and the rational use of healthcare resources.

Conclusion

Integration of the digital module into the DMED system reduced staff workload by 18%, increased data accuracy by 22%, and ensured continuity of palliative care. Patient satisfaction increased by 15–40%, staff burnout decreased by 21%, and distress levels decreased by 19%. The pilot project confirmed technical compatibility and readiness for large-scale implementation. The developed solution is recommended for inclusion in the national healthcare digitalization strategy as a standard of palliative care oriented toward the patient and a multidisciplinary team. Improving the organizational model of nursing care in palliative services represents a strategically important task for healthcare systems. A scientifically grounded, comprehensive approach to optimizing nursing practice enhances the effectiveness of palliative care, improves patients' quality of life, and ensures the sustainable development of the healthcare system as a whole.

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