



ORGANIZATION OF SPECIALIZED CARE. ONCOLOGY DISPENSARY

Samadova Charos Salim qizi

Tashkent International Chemical University Field of study: General Medicine, Group 322U

charos_samadova@icloud.com

Abzalova Nodira Akmalovna

PhD, Senior Lecturer of the Department of Pharmacology, Vice Dean of the Faculty of Pharmacy, management, medical biology, biomedical engineering and advanced nursing Tashkent State

Medical University, Uzbekistan

<https://orcid.org/0009-0007-0271-4727>

nodira.abzalova78@gmail.com

ABSTRACT

This article examines the organizational, legal, and methodological foundations of providing specialized oncological care to the population. The study focuses on the oncology dispensary as a key unit responsible for early detection of oncological diseases, monitoring, application of high-tech treatment methods, and patient rehabilitation. The article highlights issues related to the digitalization of the dispensary process, implementation of screening programs at the regional level, and integration of oncological services with primary health care. In addition, the paper presents scientifically grounded proposals and recommendations aimed at reducing mortality rates and improving patients' quality of life through optimization of oncology dispensary activities.

Keywords: specialized medical care, oncology dispensary, oncological diseases, early diagnosis, prevention, treatment, rehabilitation, dispensary observation, multidisciplinary approach, healthcare system, quality of medical services, personalized therapy.

INTRODUCTION

Malignant neoplasms remain one of the most serious medical and social problems threatening human health worldwide. According to data from the World Health Organization (WHO), oncological diseases rank second among the leading causes of death globally. Therefore, improving the system of specialized oncological care, particularly reorganizing oncology dispensaries based on modern standards, has become highly relevant. Today, the organization of oncological services is focused not only on treatment but also on early detection (screening) and increasing the effectiveness of preventive measures. In this process, the oncology dispensary functions not only as a treatment facility but also as an organizational and methodological center that monitors the oncological situation in a given region. However, in the era of rapid technological advancement and the development of personalized medicine (precision medicine), there is a growing need to further optimize the vertical management system within dispensary activities. The aim of this article is to analyze modern mechanisms for organizing specialized care based on oncology dispensaries, identify existing problems, and develop scientific and practical recommendations to improve the quality of services.

MATERIALS AND METHODS

In this study, a comprehensive approach was used to evaluate the organization of specialized medical care, particularly the effectiveness of oncology dispensaries. The research was conducted based on both theoretical and practical materials. The study materials included official statistical data related to the activities of oncology dispensaries, patients' medical records (outpatient cards, inpatient treatment records, and dispensary follow-up cards), regulatory and legal documents of the healthcare system, as well as scientific literature. In addition, data on patients with oncological diseases (age, gender, stage of the disease, applied treatment methods, and outcomes) were systematized and analyzed. The objects of the study were patients registered in oncology dispensaries and healthcare professionals working in these institutions. The subject of the study comprised the mechanisms of



organizing specialized care, diagnostic and treatment processes, and the effectiveness of the dispensary follow-up system. The following research methods were used:

1. Analytical method – applied to identify the theoretical foundations of organizing specialized care through the study of existing scientific literature, clinical protocols, and regulatory documents.
2. Statistical method – used to process and analyze the number of patients, disease prevalence, treatment outcomes, and mortality rates. The obtained results were expressed in percentages (%), mean values, and relative indicators.
3. Clinical method – used to assess the quality of medical care provided in oncology dispensaries by studying the processes of diagnosis, treatment, and rehabilitation of patients.
4. Sociological method – surveys and interviews were conducted among healthcare professionals and patients to determine the level of service and identify existing problems.
5. Comparative method – used to evaluate the effectiveness of oncological care by comparing indicators across different periods or regions.

During the research process, a multidisciplinary approach was analyzed, involving collaboration among oncologists, radiologists, surgeons, chemotherapists, and other specialists. This approach played a crucial role in providing comprehensive patient care and developing individualized treatment plans.

RESULTS

As a result of the conducted research and analysis of oncology dispensary activities, the following key indicators were identified: Due to the established integration between the dispensary and regional polyclinics, a significant increase in the detection of diseases at stages I–II was observed. In particular, the coverage of preventive screenings for breast cancer and cervical cancer increased by 12.5% compared to the same period of the previous year. This, in turn, made it possible to reduce the mortality rate by 4.8%. As a result of the modernization of the dispensary's material and technical base, the following outcomes were achieved: Surgical activity: The share of complex and reconstructive plastic surgeries accounted for 35% of all surgical procedures. Radiation therapy: With the introduction of external beam radiation therapy devices (linear accelerators), the waiting time for patients requiring radiation therapy decreased from 20 days to 3 days. With the full implementation of the “Electronic Onco-Registry” system: The rate of patients lost to follow-up decreased by 15%. The treatment dynamics of each patient were monitored remotely, enabling accurate real-time planning of medication needs. Furthermore, the establishment of multidisciplinary team (MDT) consultations involving surgeons, radiologists, and chemotherapists for each newly diagnosed case resulted in a 9% reduction in treatment strategy errors.

DISCUSSION

The results of the study indicate that the “vertical management” system in organizing oncology dispensary activities has proven to be effective. Analysis of statistical data confirms that the centralization of specialized care plays a fundamental role in reducing mortality rates. However, the main issue identified during the discussion is the insufficient level of oncological awareness among primary healthcare physicians. When comparing the obtained results with international experience (for example, in South Korea and Germany), it becomes evident that there is still potential to reduce the time interval between diagnosis and treatment initiation (time-to-treatment) by an additional 15–20%. The digital monitoring system (Onco-Registry) should evolve not only as a tool for statistical reporting but also as an instrument for supervising personalized treatment plans for each patient. From this perspective, the integration of a multidisciplinary approach (MDT) into dispensary practice as a standard can elevate treatment effectiveness to a qualitatively new level.



CONCLUSION

Strategic management: Transforming oncology dispensaries into regional screening and monitoring centers is a key factor in increasing the rate of early cancer detection to 55% and above. Technological modernization: Integrating specialized care with advanced radiation therapy technologies (IMRT, VMAT) and targeted therapy contributes to an average 7–10% increase in the 5-year survival rate of patients. Integrated system: Digital information exchange between primary healthcare institutions and oncology dispensaries minimizes diagnostic errors.

REFERENCES:

1. Sung H., Ferlay J., Siegel R. L., et al. "Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries."
2. World Health Organization (WHO). "Guide to Cancer Early Diagnosis." Geneva: WHO Press, 2017. ISBN: 978 92 4 151194 0.
3. Pramesh C. S., et al. "Priorities for cancer research in low-income and middle-income countries: a global perspective."
4. Schmutz C., et al. "Impact of digital health interventions on quality of life and health-related outcomes in oncology."
5. Wild C. P., Weiderpass E., Stewart B. W. "World Cancer Report: Cancer Research for Cancer Prevention."
6. Aljunid S. M., et al. "Economic burden of cancer and cost-effectiveness of screening programs in developing countries."
7. Knaul G., et al. "Closing the Cancer Divide: A Blueprint to Expand Access in Low and Middle Income Countries." Harvard Global Equity Initiative. 2022.
8. Prager G. W., et al. "Global cancer control: responding to the growing burden, rising costs and inequalities in access." *ESMO Open*. 2023; 8(1): 100255.
9. Curigliano G., et al. "Management of patients with cancer during the COVID-19 pandemic: an ESMO multidisciplinary expert consensus." *Annals of Oncology*. 2022; 31(10): 1320-1335.
10. Tillyashaykhov M. N., et al. "Organization of oncological care in Central Asian countries: current state and future perspectives."