

REVIEW BY THE FOREIGN RESEARCH ADVISOR
of the dissertation by doctoral candidate Bekzat Turmakhanbetov entitled:
"Methodology of the fundamentals for ensuring the quality of medical care for
patients with malignant neoplasms",
submitted for the degree of Doctor of Philosophy (PhD) in the specialty
6D110200 – Public Health.

The dissertation submitted by Bekzat Turmakhanbetov represents a substantial scientific contribution to the development of methodological approaches for improving the quality of medical care provided to patients with malignant neoplasms. The topic is highly relevant, as cancer remains one of the leading causes of morbidity and mortality worldwide and poses significant challenges to healthcare systems. The study addresses the urgent need to strengthen healthcare management, optimize resource utilization, and improve the quality and effectiveness of oncology services in the Republic of Kazakhstan.

The doctoral candidate has independently defined the research objectives and tasks, formulated the scientific hypotheses, developed the methodological framework of the study, and selected appropriate research methods to achieve the stated objectives. The dissertation demonstrates a logical research design and a high level of scientific independence throughout all stages of the investigation.

The study provides a comprehensive analysis of the theoretical, methodological, organizational, epidemiological, and socio-economic aspects of quality management in oncology. It presents a systematic assessment of the current state of oncology care in Kazakhstan, including trends in cancer incidence and mortality, healthcare infrastructure, human resources, diagnostic and treatment capacities, and the efficiency of healthcare delivery.

Bekzat Turmakhanbetov independently conducted an in-depth evaluation of the organizational structure of oncology services, assessed medical, technical, and human resource capacities, and performed a retrospective analysis of healthcare quality indicators. The comparative assessment of healthcare performance before and after the implementation of an enhanced monitoring mechanism clearly demonstrates measurable improvements in the organization and quality of oncology services. The incorporation of patients' quality-of-life indicators as an additional measure of healthcare effectiveness further strengthens the scientific and practical value of the research.

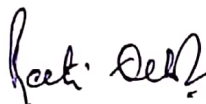
A notable strength of the dissertation is the doctoral candidate's ability to critically analyze the obtained findings, provide their scientific interpretation, and formulate evidence-based conclusions. The interpretation of the research results is well substantiated and demonstrates a deep understanding of the challenges facing oncology care and quality management in healthcare. Based on the obtained evidence, the doctoral candidate has developed practical recommendations aimed at improving monitoring systems, strengthening healthcare management, enhancing the professional competence of oncology personnel, and increasing the overall effectiveness of oncology services in Kazakhstan.

Based on the results of the dissertation research, a total of 7 scientific publications have been published, including: 1 article in the journal *Clinical Epidemiology and Global Health*, indexed in the Scopus international database; 3 articles in journals 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 (*Journal of Health Development, Science and Healthcare, and Oncology and Radiology of Kazakhstan*); as well as 3 conference abstracts published in the proceedings of scientific conferences.

The dissertation is characterized by methodological rigor, comprehensive empirical analysis, and a clear practical orientation. The proposed approaches are scientifically justified and have considerable potential for implementation within the national healthcare system. The findings may serve as an important methodological basis for improving healthcare policy, quality assurance mechanisms, and management practices in oncology.

Overall, the dissertation demonstrates a high level of scientific originality, methodological soundness, and practical significance. The research fully meets the requirements for doctoral (PhD) dissertations in Public Health. Bekzat Turmakhanbetov has demonstrated the ability to conduct independent scientific research, critically evaluate scientific evidence, interpret research findings, and formulate theoretically grounded and practically applicable recommendations.

In conclusion, I highly recommend that Bekzat Turmakhanbetov be admitted to the dissertation defense before the Dissertation Council for the award of the degree of Doctor of Philosophy (PhD) in the specialty 6D110200 – Public Health.



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