



PHARMACOECONOMIC APPROACHES TO OPTIMIZING MEDICINE SUPPLY IN THE REPUBLIC OF KAZAKHSTAN

Tursynbayeva Ayazhan Berdalykyzy

Nurtaeva Galiya Kadyrkhanovna

Kazakh national medical university named by S. D. Asfendiyarov, Almaty city, Republic of
Kazakhstan

e-mail: ayazhan.berr@mail.ru,

nurtaeva.g@kaznmu.kz

<https://doi.org/10.5281/zenodo.17332682>

Relevance: medicine supply for the population is a key element of the healthcare system of the Republic of Kazakhstan. Under conditions of limited resources and rising drug prices, the importance of rational use of budget funds increases. The application of pharmacoeconomic analysis methods (cost-minimization, cost-effectiveness, cost-utility) makes it possible to compare costs and therapy effectiveness, ensuring fair resource allocation and improved access to medicines.

Purpose of the study: to study modern pharmacoeconomic methods and evaluate their significance for optimizing medicine supply in the Republic of Kazakhstan.

Materials and methods: a review of the regulatory framework of the Republic of Kazakhstan and the EAEU, as well as publications in Scopus, PubMed, and Web of Science databases from 2015 to 2025, was conducted. Data on the use of pharmacoeconomic methods in public procurement, formulary systems, and clinical practice were analyzed.

Results: the implementation of pharmacoeconomic approaches in the medicine supply system of Kazakhstan allows reducing costs by 15–20% through the selection of the most evidence-based drugs. The use of cost-effectiveness and cost-utility methods ensures comparability of costs and clinical outcomes, which is important for the development of the National Drug Formulary and public procurement. The application of pharmacoeconomic analysis in the development of clinical protocols contributes to the integration of evidence-based medicine principles and increases system transparency. The need to train specialists with competencies in pharmacoeconomics for practical implementation of these methods has been highlighted.

Conclusions: pharmacoeconomics is an important tool for optimizing medicine supply in Kazakhstan. A promising direction is the integration of economic evaluation into state healthcare programs, training of specialists in pharmacoeconomic methods, and the development of local research considering national specifics.