

EPIDEMIOLOGICAL FEATURES OF MALIGNANT TUMORS OF FEMALE REPRODUCTIVE ORGANS IN THE REPUBLIC OF KARAKALPAKSTAN

Atakhodjiev A.M.

Department of Epidemiology

Tashkent Medical Academy, Tashkent, Uzbekistan

Scientific adviser- **Matnazarova G.S.** - Candidate of Medical Sciences, Professor of the
Department of Epidemiology, TMA

Relevance. Breast cancer is the most common malignancy among women worldwide. It holds the leading position among all malignant tumors globally and ranks fifth in cancer-related mortality. According to the Global Cancer Observatory, in 2020, more than 2.26 million cases of breast cancer were registered worldwide, accounting for 11.7% of all malignant neoplasms in both sexes. Each year, over 370,000 new cases are diagnosed in Europe, with approximately 130,000 women dying from the disease. The highest incidence and mortality rates are observed in Denmark, France, and the United Kingdom. In contrast, countries such as India, China, Ethiopia, and Mongolia report significantly lower incidence and mortality rates.

Purpose of the Research. To study the epidemiological characteristics of malignant neoplasms of the female reproductive organs, including breast cancer, in the Republic of Karakalpakstan and to develop preventive measures.

Materials and Methods. The study of epidemiological indicators of malignant neoplasms of the female reproductive organs was conducted in the Republic of Karakalpakstan. The analysis was based on data obtained from official statistical sources, including the Ministry of Health of Uzbekistan and RKK, as well as the Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology of Karakalpakstan.

Results and Discussion. We analyzed the trends in malignant neoplasms (MN) of the female reproductive organs in the Republic of Karakalpakstan (RKK) from 2011 to 2023. Cases of MN in RKK were identified across seven localizations, with breast cancer and cervical cancer being the most prevalent.

A retrospective epidemiological analysis of breast cancer incidence (primary morbidity) indicates an increasing trend since 2015, reaching a peak of 23.28 cases per 100,000 population before declining to 13.41 in 2018 and 15.45 in 2020.

During the study period (2011–2023), a total of 1,871 new cases of breast cancer (BC) were recorded in RKK. In 2011, 127 cases were reported, decreasing slightly to 122 cases in 2016, before rising significantly to 229 cases in 2023. Mortality rates increased from 5.23 per 100,000 in 2011 to 9.45 in 2023, marking a 44.7% rise over the study period. These figures illustrate the dynamics of both morbidity and mortality.

The highest incidence of breast cancer was observed in individuals aged 45–64 years and older, accounting for 57.31% of all cases.

An analysis of patient medical records revealed changes in the stage distribution of newly diagnosed breast cancer cases. In 2011, 51.18% of cases were detected at stages I–II, 37% at stage III, and 11.81% at stage IV. By 2016, early detection improved, with

66.13% of cases diagnosed at stages I–II, while stage III and IV cases accounted for 20.96% and 12.91%, respectively. However, by 2023, early detection had declined, with 55.22% of cases diagnosed at stages I–II, 33.91% at stage III, and 10.87% at stage IV.

The detection rate of early-stage (I–II) cases was particularly low in 2014 (36.47%), peaked in 2016 (66.13%), and remained relatively high in 2020 (60%), 2021 (57.45%), and 2022 (63.94%), before declining again in 2023 (55.22%). A relatively high proportion of patients were diagnosed at stage III in 2011 (37%), 2012 (45.84%), 2014 (40%), 2019 (34.16%), and 2023 (33.91%).

Conclusions. Breast cancer and cervical cancer remain the most prevalent malignancies. Over the past thirteen years (2011–2023), the highest number of breast cancer cases was recorded in 2023. The majority of diagnosed patients belonged to the 45–64 age group. Similarly, the highest number of breast cancer-related deaths during this period was also reported in 2023.