



BRITISH **MEDICAL JOURNAL**



British Medical Journal

Volume 2, No.5, September 2022

Internet address: <http://ejournals.id/index.php/bmj>

E-mail: info@ejournals.id

Published by British Medical Journal

Issued Bimonthly

3 knoll drive. London. N14 5LU United Kingdom

+44 7542 987055

Chief editor

Dr. Fiona Egea

Requirements for the authors.

The manuscript authors must provide reliable results of the work done, as well as an objective judgment on the significance of the study. The data underlying the work should be presented accurately, without errors. The work should contain enough details and bibliographic references for possible reproduction. False or knowingly erroneous statements are perceived as unethical behavior and unacceptable.

Authors should make sure that the original work is submitted and, if other authors' works or claims are used, provide appropriate bibliographic references or citations. Plagiarism can exist in many forms - from representing someone else's work as copyright to copying or paraphrasing significant parts of another's work without attribution, as well as claiming one's rights to the results of another's research. Plagiarism in all forms constitutes unethical acts and is unacceptable. Responsibility for plagiarism is entirely on the shoulders of the authors.

Significant errors in published works. If the author detects significant errors or inaccuracies in the publication, the author must inform the editor of the journal or the publisher about this and interact with them in order to remove the publication as soon as possible or correct errors. If the editor or publisher has received information from a third party that the publication contains significant errors, the author must withdraw the work or correct the errors as soon as possible.

OPEN ACCESS

Copyright © 2022 by British Medical Journal

CHIEF EDITOR

Dr. Fiona Egea

EDITORIAL BOARD

J. Shapiro, MD

M.D. Siegel, MD, MPH, FCCP

S. Shea, MD

S.Sipila, PhD

**M. Sherman, MB BCh PhD,
FRCP(C)**

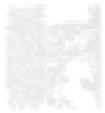
P.Slocum, DO

H. Shortliffe, MD, PhD, FACMI

A. Soll, MD

D.S. Siegel, MD, MPH

ELSEVIER



SSRN
STANDARD
STANDARD
STANDARD

Universal
Impact Factor



RESULTS OF PREVENTIVE EXAMINATIONS AND EARLY DETECTION OF MALIGNANT NEOPLASMS IN KHOREZM REGION

Palvanov T. M., Khadjiev D. Sh., Saparbayev A. I.

Khorezm regional branch of the Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology of the Ministry of Health of the Republic of Uzbekistan.

Abstract: In the presented article, the indicators of preventive examinations and early detection of malignant neoplasms in the Khorezm region were studied in dynamics (2015-2020). Preventive examinations were carried out among the population of children and adults separately in different regions and locations of tumors. The results of preventive examinations and early detection of malignant neoplasms among the population of various age groups are presented. Special attention is paid to the population group with precancerous diseases during preventive examinations, since early detection of malignant neoplasms was most often high among the population of this group.

Keywords: preventive examinations, early detection of malignant neoplasms, precancerous diseases.

Malignant neoplasms (CNS) are considered the second leading cause of death in the world, after heart disease (WHO). Every sixth death in the world is caused by malignant tumors. In 2018 alone, 9.6 million people died from cancer [16].

A third of cancer deaths are linked to behavioral and nutritional risk factors. These include a high BMI, a sedentary lifestyle, a low presence of fruits and vegetables in the diet, smoking, and alcohol consumption [16].

The wide prevalence of malignant tumors, high mortality and, as a result, large economic losses make this group of pathologies socially significant. Economic losses are associated with the high cost and duration of treatment and rehabilitation, loss of working capacity, often irreversible, and serious costs of social support [1].

In relation to cancer patients, there is a whole complex of psychological, moral and deontological problems that need to be solved, and which are caused by the severity of the course of tumor pathologies and a frequent unfavorable prognosis [3].

In Uzbekistan, according to Tillyashaykhov M. N. et al., in 2019, 24,648 cases of ZKNO were detected, of which the gender distribution was 10,511 cases in men and 14,137 cases in women. The incidence rate of VCD per 100,000 population is 74.1, which is 5.4% higher than in 2018 and 29.7% higher than in 2009 [8].

According to Russian authors, less than half of patients with stage I-II diseases are detected in the Russian Federation (in 2009 - 46.6%) and more than half - with advanced and advanced processes [1, 2]. In Uzbekistan, the rate of neglect has decreased by 1.8% over the past 5 years (8).

According to the WHO, about half of cancer cases are caused by such factors that can be influenced. For example, the National Cancer Program of the United States notes that as a result of preventive work, cancer mortality can be reduced by 20-25% in 10 years [17].

In general, Europe and the United States have long had a tendency to slow down and reduce cancer mortality due to early detection, high-quality treatment, and effective prevention programs [18].

In Uzbekistan, in particular, in the regions, at the moment there are practically no preventive measures to detect malignant neoplasms. While a large number of publications by foreign authors describe the long-term experience of preventive and diagnostic campaigns for early detection of tumors, while the programs are simple to implement and effective in medical and economic terms [5, 6, 11, 12, 13] Comprehensive cancer prevention should proceed from the fact that the processes of formation and development of a carcinogenic situation are associated with general socio-economic and environmental problems [4, 9].

States with a developed health care system pay great attention to secondary cancer prevention. An interesting fact is that screening as a program event in these countries has lost its significance, but it has become an integral part of citizens' insurance. And it is for this reason that early stages of malignant neoplasms in Europe are usually detected in more than 60% of cases [7, 14, 15].

Secondary prevention falls entirely on primary care facilities. The task of secondary prevention of tumors is early diagnosis of neoplasms and their timely treatment. Ways of implementation - improving medical literacy and responsibility of everyone for their health.

The prevention program should include high-quality oncological examinations of the population. The effectiveness of medical examinations depends on the quality of the preventive examination, that is, the main role in solving the problems of prevention and early diagnosis is played by the competence of primary health care workers. It is fairly assumed that the greatest value in diagnosis is the experience and qualifications of a doctor - a doctor of any specialty should be able to suspect the patient [10].

The aim of the study was to analyze the dynamics of detection of malignant neoplasms depending on the age and stage of the disease during preventive examinations in various districts of the Khorezm region.

Material and methods of research. To analyze the results of preventive examinations and early detection of malignant neoplasms in various districts of the Khorezm region, the data of the annual statistical report on the SSV form No. 7 of the Ministry of Health of the Republic of Uzbekistan were studied. At the same time, the main attention is paid to morbidity indicators, preventive examinations and early detection of malignant neoplasms in patients in various regions of the Khorezm region. In addition, the indicators of preventive examinations and early detection of malignant neoplasms were studied depending on the age and localization of the tumor process during the follow-up period from 2015 to 2020.

In recent years, there has been a trend towards an increase in malignant neoplasms in the Khorezm region. If in 2015 the incidence rate per 100,000 population was 66.5, then in 2020 it is already 68.2. High incidence rates in 2020 were registered in Urgench - 98.7 and in Khiva-78.2. In other regions, the incidence rates ranged from 56.8 (in Yangibazar district) to 72.2 (in Shavat district).

In the structure of cancer incidence in 2020, breast cancer ranked first (11.5%), stomach cancer ranked second (10.2%), cervical cancer ranked third (6.9%), brain tumors ranked fourth (6.1%), and lung cancer ranked fifth (4.3%).

The conducted statistical analysis showed that in 2015 in the Khorezm region, during preventive examinations, malignant neoplasms were detected in 21.5% of patients. At the same time, high rates were registered in Khiva district (31.7%) and Urgench (29.2%), while low rates were recorded in Yangiaryk (15.2%), Bogota (10.5%) and Yangibozor (16.7%) districts. Among patients under 18 years of age, during preventive examinations, only 2.1% of patients were found to have malignant neoplasms, and among the population over 18 years of age, this figure was 22.4%.

In addition, we have studied the dynamics of detection of malignant neoplasms during preventive examinations, depending on the age of the population. It was found that in 2020, malignant neoplasms were detected in patients under the age of 18 in 40% of cases, and in people over the age of 18 - 49.3%.

The statistical analysis of the effectiveness of preventive examinations has shown that there is an improvement in the dynamics of this indicator. If in 2015 the detection of patients with malignant neoplasms in the Khorezm region during preventive examinations was 21.5%, then in subsequent years this indicator corresponded to 24,0%, 21,3%, 22,7%, 23,9% and 21.1%, respectively.

Among patients under 18 years of age, the detection rate during preventive examinations in 2015 was low, and in subsequent years the indicator tended to increase- 2,1%, 5,5%, 6,2%,15,4% and 5.4%, respectively. In the group of patients over 18 years of age, identification of patients during preventive examinations, if in 2015 If it was 22.4%, then in subsequent years- 24,9%, 22,0%, 23,5%, 24,3%, 22,3%, accordingly.

The results of the study showed that in 2020, 21.1% of patients were identified during preventive examinations. High rates were recorded in the city of Urgench, Kushkupir (28.9%), Khankinsky (27.4%) districts. Among patients under 18 years of age, preventive examinations revealed 5.4% of patients, and in the group over 18 years of age - 22.3%. Among patients over 18 years of age, high rates were recorded in Urgench (29.9%), Khiva (26.5%), Kushkupir (31.4%) and Khankinsky (28.1%) districts, while low rates were recorded in Khiva (14.9%), Yangiariq (12.0%) districts and Pitnak (15.6%).

Detection of patients with malignant neoplasms in the early stages (I-II) in 2015 in the Khorezm region amounted to 48.9%. At the same time, high rates were registered in Urgench (54.0%), Pitnak (59.4%), Khazarasp (51.5%) and Khiva districts (54.5%). Yangiariq (42.4%) and Gurlan (44.0%) districts had low rates.

Identification of patients in the early stages depending on age in different regions of the region showed that among patients under 18 years of age in Yangiariq district, in Khiva district - 100% and Bogota district-75%, and in other regions the detection rate was low - in Kushkupir-25%, Gurlan-33.3% Khazar - 25%, Shavot-33.3% districts, as well as in Urgench 33.3% and Pitnak 33.3%. In 2015, early detection rates in stages I-II in the region amounted to 48.9. High rates of detection of patients in stage I-II among people over 18 years of age were noted in Pitnak (62.1%), Urgench (54.5%), Khazar (52.7%) and Khiva (54.1%) districts.

In recent years, in the Khorezm region, the detection of patients in the early stages in dynamics tends to stabilize. If in 2015 Stages I-II in the Khorezm region were detected in 48.9%, then in 2016-2020 the indicators were 47.9%, 41.7%, 49.8%, 46.7% and 50.2%, respectively.

Among patients under the age of 18, the indicator in dynamics was 40.0%, 31.9%, 43.6%, 47.7%, 44.2% and 47.3%, and in the group of patients over 18 years of age, the detection rate was stabilized and corresponded to 49.3%, 48.4%, 41.7%, 49.9%, 46.2% and 50.4%.

In 2020, the detection of patients in the region in stages I-II was 50.2%. Pitnak city had high rates - 58.8%, Kushkupir (54.4%). Khiva (54.1%) and Yangibazar (54.0%) districts, while Bogota (43.9%) and Honka (43%) districts are low indicators. Among patients under 18 years of age, detection at stages I-II was 47.3%, Yangiarik (66.7%), Shovot (60.0%) districts and Khiva (60.0%) had high rates, and among patients over 18 years of age, the detection rate at stages I-II was 54%. At the same time, high rates were registered in Yangibazar (43.0%) and Bogota (43.5%) districts. Due to the large-scale implementation of preventive examinations among the population, the detection of patients with malignant neoplasms has improved somewhat in recent years. This has particularly affected the detection of patients with breast, cervical, and uterine body cancer. If in 2015 the early detection of breast cancer (grade I-II) was 69.1%, then in 2020-65.8%. During these years of follow-up, the rate of cervical cancer was 90.8% and 78.7%, and uterine body cancer was 88.6% and 84.1%, respectively. Low rates of early detection of malignant neoplasms in the Khorezm region were noted in lung cancer-26% and 32.7%, and stomach cancer-13% and 34.1%, respectively. Although there is a tendency to increase in dynamics.

Dynamics of early detection of malignant tumors in the Khorezm region (2015-2020).

The conducted statistical analysis showed that during preventive examinations in the Khorezm region, among patients with tumors of various localizations, breast cancer (in 2015, 54.6% and in 2020, 55.7%) and cervical cancer (in 2015, 56.6% and in 2020, 49.7%) had high rates. Relatively high rates in dynamics were observed in uterine body cancer - 25% and 50%, respectively. In other nosological forms, especially in gastric cancer, the indicators of preventive examinations were the lowest. In 2015 and 2020, 5.6% and 10.6%, respectively. Lung cancer rates have improved slightly over the years to 10% and 18.2%, respectively. In kidney cancer, the indicators remained virtually unchanged - 10% and 10.6%, respectively.

Thus, the results of the statistical analysis show that in the Khorezm region over the past 5 years, preventive examinations are carried out on a large scale, but the results tend to stabilize. But in some localizations of malignant tumors (breast cancer, cervical cancer, uterine body), there is a tendency to grow. Low rates have been reported for stomach, lung, kidney, and malignant lymphoma cancers. The indicators of preventive examinations among the children's population have slightly improved, and there is an upward trend.

Detection of patients with tumors in the early stages (stage I-II) in dynamics improved among the children under 18 years of age, compared with adults. Among patients with various localizations of malignant neoplasms, high rates were recorded in breast, cervical and uterine body cancers, and malignant lymphomas. Low rates of early detection were observed in gastric and lung cancers, although there was a slight increase in rates.

Used literature:

1. Aa Maaïke, A. Does lowering the screening age for cervical cancer in The Netherlands make sense? / A. Aa Maaïke, M.C.M. De Kok Inge, M. Van Ballegooijen // *Int. J. Cancer*. - 2008. - Vol. 123, № 6. - P. 1403-1406.
2. Aleksandrova L. M., Starinsky V. V., Kaprin A.D., Samsonov Yu. V. Cancer prevention as a basis for interaction between cancer services and primary health care. *Research and practice in medicine*. 2017; 4(1):74-80.
3. Aslonov S. G. et al. Modern Approaches to Oropharyngeal Cancer Therapy // *International Journal of Discoveries and Innovations in Applied Sciences*. – 2021. – T. 1. – №. 3. – C. 38-39.
4. Babaeva D. B., Saryev N. S., Nummaev B. G. Prichiny zapuschenosti raka ovarnikov [Reasons for the neglect of ovarian cancer]. Baku, 2006, p. 8.
5. Barton, M.B. Breast cancer screening. Benefits, risks, and current controversies / M.B. Barton // *Postgrad. Med*. - 2005. - Vol. 118. - P. 27-28.
6. Bitterlich, N. Lungenkrebscreening mit Tumormarkern? Eine Betrachtung unter Berücksichtigung sozioökonomischer Aspekte / N. Bitterlich, J. Schneider // *Laboratoriumsmedizin*. - 2007. - Vol. 31, № 2. - P. 61-69.
7. Bykova N. A. Problemy rannoi diagnostiki onkologicheskikh zabolevaniy [Problems of early diagnosis of oncological diseases]. *Tyum. med. zhurnal*, 2003, no. 3-4, pp. 49-51.
8. Friedenberg, R.M. The 21st century: the age of screening / R.M. Friedenberg // *Radiology*. - 2002. - Vol. 223. - P. 1.
8. Henschke, C.I. CT Screening for lung cancer: suspiciousness of nodules according to size on baseline scans / C.I. Henschke, D.F. Yankelevitz, D.P. Naidich // *Radiology*. - 2004. - Vol. 231. - P. 164.
9. Ilkhomovna K. D. MANIFESTATIONS OF POST-MASTECTOMY SYNDROME, PATHOLOGY OF THE BRACHIAL NEUROVASCULAR BUNDLE IN CLINICAL MANIFESTATIONS // *Innovative Society: Problems, Analysis and Development Prospects*. – 2022. – C. 225-229.
10. Ilkhomovna K. D. Modern Look of Facial Skin Cancer // *Барқарорлик ва Етакчи Тадқиқотлар онлайн илмий журналі*. – 2021. – Т. 1. – №. 1. – С. 85-89.
11. Ilkhomovna K. D. Morphological Features of Tumor in Different Treatment Options for Patients with Locally Advanced Breast Cancer // *International Journal of Innovative Analyses and Emerging Technology*. – 2021. – Т. 1. – №. 2. – С. 4-5.
12. Khasanov R. Sh., Shakirov K. T., Gilyazutdinov I. A. Organizational technologies of early detection of malignant neoplasms // *Materials of the IV Congress of Oncologists and Radiologists of the CIS*. Baku, 2006, p. 27.
13. Khodjaeva D. I. MAGNETIC-RESONANCE IMAGING IN THE DIAGNOSIS OF BREAST CANCER AND ITS METASTASIS TO THE SPINAL COLUMN // *Scientific progress*. – 2021. – Т. 2. – №. 6. – С. 540-547.
14. Khodjaeva D. I. MORPHOLOGY OF IDIOPATHIC SCOLIOSIS BASED ON SEGMENT BY SEGMENT ASSESSMENT OF SPINAL COLUMN DEFORMITY // *Scientific progress*. – 2022. – Т. 3. – №. 1. – С. 208-215.
15. Khodzhaeva D. I. Changes in the Vertebral Column and Thoracic Spine cells after Postponement of Mastectomy // *International Journal of Innovative Analyses and Emerging Technology*. – 2021. – Т. 1. – №. 4. – С. 109-113.
16. Lyon, France: International Agency for Research on Cancer; 2019
17. MacInnis, R.J. Body size and composition and colon, cancer risk in women / R.J. MacInnis, D.S. English, J.L. Hopper // *Int. J. Cancer*. - 2006. - Vol. 118, №6. - P. 1496-1500.
18. Magomedov O. M. Detectability of breast cancer in the Republic of Dagestan / O. M. Magomedov // *Sib. oncol. Zhurnal*, 2010, no. 2, pp. 59-62.
19. Novichenko E. L. Method of immunodetection for early detection and monitoring of tumors // *Proceedings of the IV Congress of Oncologists and Radiologists of the CIS*. Baku, 2006, p. 22.

20. Optimization of diagnostics and treatment of patients with breast cancer in the conditions of a new medical and organizational form of specialized care / D. Y. Melnikov // *Vopr. onkologii.* - 2010. - Vol. 56, No. 5. - pp. 603-609.
21. Tillyashaykhov M. N., Ibragimov Sh. N., Dzhanklich S. M. et al. To reduce the incidence of cancer in the country: measures taken // Tillyashaykhov M. N., Ibragimov Sh. N., Dzhanklich S. M. et al., *Organization and management of healthcare*— 2020, №10, 2021, №1.
22. Turina, L. I., Pisareva, L. F., and Odintsovo, I. N., Risk factors for prostate cancer in the Primorsky Territory, *Russ. onkol. Zhurnal*, 2005, no. 6, pp. 44-46.
23. Vazhenin A. B. Osnova razvitiya onkologicheskoy sluzhby – vysokye tekhnologii lecheniya i rannaya diagnostika [The basis for the development of oncological services-high technologies of treatment and early diagnosis]. - 2004. - № 2-3. - p. 6-8.
24. Yates, J.W. Clinicians in community practice are major contributors to clinical trials in cancer prevention, early detection, and treatment / J.W. Yates // *Cancer J. Clin.* - 2003. - Vol. 2. - P. 69-72.
25. Ходжаева Д. И. АНАЛИЗ СРАВНЕНИЯ МОРФОТОПОМЕТРИЧЕСКИХ ПАРАМЕТРОВ СТРУКТУР ПОЯСНИЧНОГО ОТДЕЛА ПОЗВОНОЧНОГО СТОЛБА В НОРМЕ И ПРИ ДЕГЕНЕРАТИВНО-ДИСТРОФИЧЕСКИХ ИЗМЕНЕНИЯХ // *Uzbek Scholar Journal.* – 2022. – Т. 5. – С. 192-196.
26. Ходжаева Д. И. СОВРЕМЕННЫЕ ВОЗМОЖНОСТИ УЛЬТРАЗВУКОВОЙ ДИАГНОСТИКИ ПРИ РАКЕ КОЖИ ЛИЦА // *Жизнеобеспечение при критических состояниях.* – 2019. – С. 111-112.