

Role Of Screening Tests In Prevention (Example Breast Cancer)

Lusine S. Polonskaya

candidate of Medical Sciences, National research Institute of public health named after N. A. Semashko.

Annotation. The country has a high incidence of malignant tumors. The number of contingents of cancer patients registered in specialized institutions amounted to more than 2 million 164 thousand at the end of 2019. In recent years, specialists have achieved certain success in the treatment of malignant neoplasms and, thus, the prognosis of diseases is generally improving. At the same time, the increasing life expectancy of a significant number of patients cannot remain the only criterion for the level of cancer care. In the organization of medical and social care, the most important indicator is the cure rate from malignant neoplasms, which means not only the clinical recovery of patients, but also their return to their previous social status.

Cancer pathology is one of the most complex medical and social problems of civilization. This is due to the rapid growth rates, the severity of complications, the specific effect on the body, which is why the role of screening studies is increasing. Lack of oncological alertness among general practitioners, insignificant personal clinical experience of oncological pathology aggravate the difficulties of diagnosis. Therefore, issues of timely diagnosis are the main ones in the treatment, rehabilitation and prevention of cancer.

Key words: oncology, morbidity, prevention, screening, breast cancer.

Introduction. An oncological patient should be considered as a person in a stressful situation. Prolonged severe physical illness, hospitalization, separation from the usual environment, loss of social status, surgical intervention leading to disability, the threat of death and other factors destroy habitual behavioral stereotypes, change the value system, rebuild the patient's personality and put him before the problem of adaptation to new living conditions [1,2,3]. The peculiarity of the clinical course of malignant tumors, the peculiarities of their treatment, anatomical and functional disorders that inevitably arise after treatment and require correction together with severe psychological stress determine the problem of rehabilitation of cancer patients as the most important [4,5].

Results. According to data for 2019, the intensive morbidity rates of the entire population for all classes of malignant neoplasms in the Russian Federation amounted to 317.44 per 100 thousand population, and in Moscow, respectively, 321.78 per 100 thousand population. The standardized indicator for the Russian Federation is 211.35 per 100 thousand population, for Moscow 196.68 per 100 thousand population, respectively. If we compare the incidence rates of malignant neoplasms for the same year, then Moscow is characterized by a slightly higher level of both intensive and standardized indicators (Table 1). Thus, in Moscow, the intensive incidence rate of the female population with malignant neoplasms of the breast in 2019 amounted to 349.27 per 100 thousand female population, whereas in the Russian Federation as a whole the same indicator was 311.62 per 100 thousand female population. For standardized indicators - 187.92 per 100 thousand female population in.

For a more detailed understanding of the situation, we conducted a comprehensive retrospective analysis of

a number of indicators. A detailed analysis over 16 years of observation (from 2004 to 2019 inclusive) allows us to compare the growth rate of intensive and standardized indicators. Thus, the increase in the intensive morbidity rate of the female population with malignant neoplasms of the breast in the Russian Federation from 2007 to 2019 amounted to 46.58%. In Moscow, the increase in the same indicator is 66.73%. The average annual growth rate of the intensive morbidity rate of the female population with malignant neoplasms of the breast during the analyzed period in the entire territory of the Russian Federation was 2.58%, and in Moscow 3.47%, respectively. This increase in indicators is due to a combination of two factors: a significant "aging" of both the entire population and the female population, and a true increase in morbidity.

Discussion. Based on general principles, social work in oncology, it also has its own characteristics. It is known that the diagnosis of oncological diseases in the early stages gives patients a great chance for a full recovery. In this regard, social work with cancer risk groups is of particular importance. Here, the forms of preventive work aimed at people suffering from precancerous diseases from "cancer" families working in hazardous industries living in territories contaminated with radionuclides are specific. A social work specialist participates in the development and implementation of targeted preventive programs, conducting social and hygienic monitoring, determining risk factors, informing the population about the state of the habitat, etc. Secondary cancer prevention by screening a healthy population involves the detection of a malignant tumor before the onset of symptoms. It is believed that the value of diagnosis at the preclinical stage is that the tumor is diagnosed at a localized stage.

An analysis of the sensitivity and specificity of these methods showed that the use of low-dose mammography is optimal for women over 50 years of age. This method makes it possible to detect tumors at the preclinical stage. Many authors consider mammography to be the only effective method of early detection of malignant neoplasms of the breast, leading to a decrease in mortality. It is known that the average size of the tumor detected in a clinical study is 3.0-3.5 cm, with regular monthly self-examination - 1.5-2.0 cm, mammography - 0.5-1.0 cm. Among younger women (especially those younger than 40), the importance of mammography decreases, but the role of physical examination increases [3,4].

The introduction of mass screening makes it possible to identify earlier ("curable") stages of breast cancer only in the case of highly qualified physical examination, methodically correct and regular self-examination and highly technical mammography. Unfortunately, in practical work, most often there is a failure to fulfill one or even all of these conditions, which causes a high frequency of detection of common forms of cancer. Among the most important reasons for delayed diagnosis are the following: poor equipment of medical institutions with diagnostic equipment, low level of oncological knowledge of doctors of the general medical network, imperfection of anti-cancer propaganda among the population. Unfortunately, to date, up to 80% of breast cancer patients are found in the tumor itself during random self-examination. The advantage of mammography over other diagnostic tests for the early detection of breast neoplasms is beyond anyone's doubt. The experience of screening based on a combination of mammography and physical examination in the All-Union Mammological Center on the

basis of the medical service of the Oktyabrskaya Railway (in St. Petersburg) from 2008 to 2018 with an annual examination of about 5,000 women is interesting, which allowed to reduce mortality rates from malignant neoplasms of the breast by 29% after 5 years from the introduction of screening, and by 21% after 10 years[2].

Conclusions. These data strongly suggest that regular mammography (alone or in combination with physical examination) can reduce mortality rates from malignant neoplasms of the breast in women over 50 years of age. The introduction of "ideal" screening (V.M. Moiseenko, 1994), with an X-ray examination of the mammary glands every 6 months, is associated with a complex of new problems that make such recommendations unrealistic, among them: - increase in the cost of programs by 2-4 times; - the possibility of inducing cancer due to frequent irradiation of breast tissue; - psychological compliance problems associated with the difficulties of motivating women to such a survey with a short time interval.

Bibliography:

1. Arbitaylo I.Ya. 2014. The effectiveness of the regional health care system. - Modern problems of science and education: electronic scientific journal. No. 5. Access: <https://science-education.ru/ru/article/view?id=15169> (checked 13.03.2019).
2. Bobkov V.N., Elizarov V.V., Dzhanaeva N.G., Danilova N.A., Malikov N.S., Sinitsa A.L. 2013. Methodological foundations for the development of regional programs of demographic development, taking into account regional characteristics (on the example of the Far Eastern Federal District). - The standard of living of the population of the regions of Russia. No. 1. S. 10-17.
3. Kurchenkov V.V., Korobkina T.V., Kalmykova T.N. 2016. Evaluation of effectiveness - 2019'04 Power of 25 implementation of regional and municipal target programs. - Bulletin of the Volgograd State University. Ser. 3. Economy, Ecology. No. 3 (36). S. 39-45.
4. Semiglazov V.F., Moiseenko V.M., Bavli Ya.L. Self-examination for early detection of breast cancer: conclusions and recommendations of the WHO // 4th All-Union Congress of Oncologists: abstracts. - L., 1986. - S. 21-31.
5. Trufanov G.E. Serebryakova S.V., Yukhno E.A. MRI in mammology - SPb.: ELBI - SPb, 2009. - 201p.