Prostate Cancer Morbidity And Mortality Among Men In High-Risk Areas

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ABSTRACT

Prostate cancer is the second most common cancer among cancers in men worldwide and the fifth leading cause of death. Prostate cancer can be asymptomatic at an early stage and therefore often requires only active surveillance. According to GLOBOCAN 2018, there were 1,276,106 new cases of prostate cancer worldwide in 2018, with awareness rates among these figures being higher in developed countries. Differences in incidence rates worldwide reflect differences in the use of diagnostic tests

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Relevance. The worldwide incidence and mortality rate of prostate cancer is correlated with an increase in age, with the median age diagnosed being 66 years. It is noteworthy that African American men were more ill than white men, with 158.3 new cases per 100,000 men, and their mortality rates recorded twice as high as those of white men. It is assumed that the causes of this discrepancy are due to differences in social, environmental and genetic factors. While 2,293,818 new cases are expected by 2040, there is no high rate of mortality (1.05% increase). The incidence of prostate cancer varies by region and population.Figure 1 [2]. In 2018, there were 1,276,106 new cases of prostate cancer worldwide, accounting for 7.1 percent of all cancers in Men [1]. The incidence rate of prostate cancer varies widely around the world. The standardized rate for age (asr) was the highest in Oceania (79.1 per 100,000) and North America (73.7), followed by Europe (62.1). In contrast, the incidence rates in Africa and Asia were lower than in developed countries (26.6 and 11.5, respectively) [2]. Differences in disease rates were 190-fold between the highest-incidence populations (France, Guadeloupe, 189.1) and the lowest-incidence populations (Bhutan, 1.0). In 2018, a map showing standardized age-based rates of prostate cancer among men worldwide, including all ages mapchart.net created with. Data is from Globocan 2018 [4]. The incidence of prostate cancer increases by age [2]. Although only one out of 350 men under the age of 50 were diagnosed with prostate cancer[3], the incidence increases to 1 in every 52 men between the ages of 50 and 59. In men over 65 years of age, the incidence is almost 60% [4]. The reason for these differences between countries is not entirely clear. Differences in prostate cancer worldwide may be associated with the PSA test[2,4].For example, in Europe, prostate cancer was the most diagnosed cancer among men, accounting for 24% of all new cancer cases in 2018, with about 450,000 new prostate cancer cases identified in 2018. [5].

Prostate cancer was the second most common cancer in the United States, accounting for 9.5 percent (164,690 new prostate cancer cases) of all recent cancer cases identified in 2018. [7]. According to recent research, approximately 20-40 percent of prostate cancer

in the United States and Europe may be associated with hyperdiagnostics as a result of a comprehensive PSA test. [6.].

In Russia, prostate cancer in 2017 in the composition of cancer ranked 2nd (14.5%) after lung cancer (17.4%). the absolute number of cases doubled compared to 2007 (from 20.2 thousand to 40.8 thousand). The share of prostate cancer in the countries of the former USSR recorded low rates in Tajikistan (3.2%), Kyrgyzstan (4.3%) and Uzbekistan (5.0%), and the highest rates in Russia, Moldova, Kazakhstan, Belarus, Ukraine and Armenia (8.0–17.5%). The average age of patients in the republics of the former USSR was from 67 to 73 years old. In 2018, a high standardized incidence rate was reported in Australia (86.4 per 100,000 male population, world standard), Northern Europe (85.7), Western Europe (75.8), and North America (73.7); the worldwide incidence rate was 29.3. Significant variability in incidence rates has been recorded among the countries of the former USSR: the lowest is in Kyrgyzstan (7.1), Azerbaijan (6.9), Uzbekistan (4.9) and Tajikistan (1.8; significantly higher - Moldova (18,3) [4], Ukraine (26,2), Kazakhstan (20,8) and Armenia (16,6) [5], the highest-Belarus (67,4) and Russia (40,5). The growth of standardized rates over the past 5 years has ranged from 2-6% (in Armenia and Tajikistan) to 21-43% (in Russia, Belarus, Ukraine, Azerbaijan and Kyrgyzstan). In Uzbekistan and Moldova, the rate was 63-66%. The ratio of maximum and minimum standardized rates of prostate cancer among Russian regions reached 4 times, and mortality reached 10 times.

In many regions of Uzbekistan, modern possibilities for the prevention and diagnosis of safe tumors of the prostate gland are not in full demand until recently, which is the basis for doubts about the quality of work of some oncological medical institutions in the regions attached to them. Improving the main indicators of infection and death with prostate cancer (as well as all oncopatologies) is manifested by providing qualified personnel of primary medical and sanitary care institutions, strengthening the material and technical base, working with axoli groups at risk of cancer and monitoring sanitary and educational activities among the population. As a result of these measures, the possibility of determining the development of malignant tumors at very early stages is achieved.

The purpose of the study: diagnosis and pathology of the risk of prostate cancer without gallbladder cancer and medical violence.

Material and methods:data from the official reports of the regional oncology dispensaries of the Republic of Uzbekistan for 2015-2020 – "report on malignant tumor diseases" (registration form №7-SSV) and data of the State Statistical Committee of the Republic of Uzbekistan on the cross-section of regions on population, gender and age composition in 2015-2020. a retrospective study using descriptive and analytical methods of modern oncoepidemiology was used as the main method in the study of prostate cancer. Ep and GP of disease and death are determined in accordance with the generally accepted methodology used in modern sanitary statistics. The studies were carried out in three stages: in the first stage, the filling and installation of materials in the Rio and RIATM cancer register was carried out; in the second stage – according to the regional branches of Rio and RIATM; and in the third – according to the Cancer Registry of the Samarkand region.

From the report and accounting documents of the Ministry of health of the Republic of Uzbekistan in the form of 7-SSV, data was collected on patients with primary detected prostate cancer in the Republic - an absolute number (by code MKB-10 S61), their age distribution, death from prostate cancer - an absolute number (by code MKB-10 S61).

In the second stage, data was collected on patients with primary detected prostate cancer by regions (regions) - absolute number (by code MKB-10 S61), their age, death from prostate cancer - absolute number (by code - MKB-10 S61).

In the third stage, data was collected on newly identified patients with prostate cancer in the Samarkand region-an absolute number (by code MKB - 10 S61), their distribution by

age, cases of death from prostate cancer-an absolute number (by code MKB-10 S61).

The received database is grouped into tables in electronic form - with the creation of tables (Exsel).

In order to obtain reliable data on the calculation of death rates, incidence and mortality from prostate cancer, a request was sent to the State Statistical Committee of the Republic of Uzbekistan to provide information on the annual population of the Republic by Republic and on the age distribution in the cross section of regions for the period of study. Based on the obtained statistics, indicators specific to the rough age of prostate cancer patients and standardized (world standard) incidence and mortality rates by population were analyzed in graphical and spatial analysis methods, calculated on the mapping of prostate cancer rates in each region.

Results of the study. Our study found that the number of first diagnosed prostate cancer patients in the Republic of Uzbekistan for the period from 2016 to 2021 was 10713, and during this time all malignant tumors (xo) amounted to 159112, of which 19979 constituted oncourological pathology.For the 2016-2019 study period, 5,569 deaths from prostate cancer were reported in Uzbekistan. The number of people who died from prostate cancer was distributed according to age as follows: up to 15 years old - not recorded, in those between 15 and 44 years old – 1156; 3,346 at age 45-64; 1,167 at age 65 and over . Analysis of the dynamics of disease and death was carried out on the basis of rough and standardized indicators. The calculation of disease and death rates, their standardization shows clear differences, according to which a comparative assessment of differences can be carried out in all regions of the Republic. Thus, according to the average annual standardized indicator of the incidence, the highest in the Republic of Karakalpakstan was 16.2 (gross figure – 12.4), and the lowest– in Surkhandarya region – 6.9 (gross figure – 5.2). The calculation of the average annual standardized mortality rate showed that the highest was 11.8 (gross figure – 8.5) in the Republic of Karakalpakstan, and the lowest was 3.1 (gross figure – 2.6) in the Navoi region.

Thus, in the period of observation in the Republic of Uzbekistan from 2009 to 2016, the "rough" and "standardized" indicators of the incidence and mortality rate of cancer of the prostate gland were analyzed.The scientific study examined the epidemiological and regional features of prostate cancer for the first time in the Republic of Uzbekistan.

Conclusions. Thus, for 2021, the incidence and mortality rates of prostate cancer were studied, their standardization in accordance with the world standard, the determination of the average annual average age, trends in the Republic of Uzbekistan and regions, the calculation of growth/decrease rates, predictive indicators were studied. Expected rates of prostate cancer in the Republic of Uzbekistan in 2020 9,8+0,050/0000, while the death rate was. 6,6+0,040/0000 makes up the. In addition, according to the statistics obtained for the assessment of the incidence and mortality rate of prostate cancer, the Republic of Uzbekistan is divided by its mapping into 5-high, medium and lowest risk zones, depending on the risk levels and administrative – territorial units. In the future, in order to assess the features of the spread of prostate cancer in Uzbekistan, it is necessary to develop a set of targeted programs that provide for the study of the functional state of male reproductive systems depending on the region.

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