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A.A. Kalininskaya, A.V. Alekhovich, A.V. Lazarev, M.V. Kizeev MEDICAL AND DEMOGRAPHIC SITUATION AND INCIDENCE OF THE POPULATION OF THE AMUR REGION

Summary. The situation with the COVID-19 pandemic has to some extent changed the structure of morbidity and mortality in the Russian Federation and its regions.

Aim of the study. Based on an analysis of the medical and demographic situation in the Amur Region, the Far Eastern Federal District and the Russian Federation in the context of the COVID-19 pandemic, recommendations are given for making managerial decisions at the municipal, regional and federal levels.

Materials and methods of research: statistical, analytical. The materials of official state statistics of the Ministry of Health of the Russian Federation and Rosstat were used.

Results and discussion. The mortality rates of the population of the Amur Region, the Far Eastern Federal District and the Russian Federation for the years of analysis (2016-2020) have been studied. It was revealed that in the Amur region. the indicators are higher for all the years of analysis, in 2020 they amounted to 16.2%, in the Far Eastern Federal District - 13.9%, in the Russian Federation - 14.6%. The difference in mortality rates in the administrative entities of the Amur Region (2020) is 2.3 times. The mortality rate of the population of the Amur Region from COVID-19 (in 2020) was 0.84‰, for the urban population it is higher - 0.93‰, than for the rural population - 0.67‰. The first detected incidence of the population in the Amur Region, the Far Eastern Federal District and in the Russian Federation (2020) was studied. It has been established that in the Amur Region the figures are higher - 80294.8 per 100 thousand of the population than in the Far Eastern Federal District (74596.5), in the

Russian Federation (75840.1). In the Amur Region, there are higher rates of primary morbidity with diseases of the digestive system. Very high rates were noted in Tynda and Zeya, which determines the need for an in-depth study of the causes of this incidence in the region. The frequency of detected COVID-19 in the Amur Region was 3141.3 per 100 thousand of the population (3.9% of the total number of primary incidence), in the Far Eastern Federal District - 3394.9‰ (4.55%), in the Russian Federation - 3384.5‰ (4.46%). The primary incidence of the entire population of the Amur Region has decreased over the years of analysis (2016-2020). Higher rates of newly diagnosed morbidity were noted in children (0-14 years old) and adolescents (15-17 years old) than in the general population, which requires strengthening preventive work with this age group of the population.

Conclusion. The identified features of the medical and demographic situation in the Amur Region should be taken into account by the heads of governments at the municipal regional and federal levels in order to develop management decisions. Taking into account the COVID-19 pandemic and with a focus on the health of the future.

Keywords: medical and demographic situation, mortality, newly diagnosed morbidity, age groups, administrative units.

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Improvement of the medical and demographic situation in the country and public health indicators ultimately leads to economic growth in any territory [8, 4]. Decreasing the mortality of the population, increasing the birth rate and healthy life expectancy are among the key goals of the national project "Demography" [3].

Achieving the goals and strategic objectives outlined by the National Healthcare Project is possible only with the use of all available reserves - both at the level of managing the health care system as a whole and at the level of the region [7]. The territorial and climatic and geographical features of the Russian Federation

determine the inequality in the availability of medical care to the population [5, 11]. The high mortality rate in the Amur Region [9] is a cause for concern.

In March 2020, the World Health Organization declared a pandemic of a new coronavirus infection COVID-19 [9]. In the Russian Federation, COVID-19 began to be registered from January 2020 [12, 13]. The situation with the COVID-19 pandemic has imposed changes in the structure of morbidity and mortality in the Russian Federation and its regions, which has determined the need to develop management decisions at the regional level [1,6].

Purpose of the study. Based on an analysis of the medical and demographic situation in the Amur Region, the Far Eastern Federal District and the Russian Federation in the context of the COVID-19 pandemic, recommendations are given for making managerial decisions at the municipal, regional and federal levels.

Materials and methods of research: statistical, analytical. The materials of the official state statistics of the Ministry of Health of the Russian Federation and Rosstat "The natural movement of the population of the Russian Federation for 2020 (statistical bulletin)", Amurstat https://amurstat.gks.ru/storage/media-bank/tfUgKfcx/07_1_64.htm, the collection "Morbidity of the entire population" were used Russia, FGBI "TsNII OIZ" of the Ministry of Health of Russia, 2021.

Results and discussion. The population of the Amur Region in 2020 amounted to 790 thousand people, including urban - 67.8% and rural 32.2%. Over the years of analysis (2016-2020), the total population of the Amur Region decreased by 1.9%. The urban population of the Amur Region during the analysis period decreased by 1.7%, the rural population decreased by 2.8%.

Over the years of analysis (2016-2020), the birth rate in the Amur Region decreased from 13.2 to 9.4 per 1000 population. The highest birth rates in administrative entities in the Amur Region (2020) were noted in Konstantinovskiy, Tambovskiy, Ivanovskiy districts, in the city. Raychikhinsk, in Blagoveshchensk, etc.

It should be noted that the higher mortality rates of the population of the Amur Region than in the Far Eastern Federal District and in the Russian Federation for all years of analysis (2016-2020). In 2016, the indicator was 13.7 per 1000 population, in 2020 it increased to 16.2‰. In the Far Eastern Federal District in 2020, the indicator was 13.9‰, in the Russian Federation - 14.6‰. The

The incidence of the population of the Amur region with a diagnosis established for the first time, in dynamics for 2016-2020 [2]

age group	Year				
	2016	2017	2018	2019	2020
0-14 years old	199399.0	203693.0	199013.3	201424.4	166656.9
15-17 years old	155805.6	147957.0	165467.1	161662.3	147023.4
Over working age	50625.1	49642.6	51523.2	50391.3	58377.5
Adult	52408.2	52791.1	53270.0	51989.2	55952.2
Total	83919.0	84699.1	85011.3	84510.2	80294.8

difference in mortality rates by administrative units in the Amur Region (2020) is 2.3 times. The highest rate was noted in the Shimanovskiy district - 26.8 per 1000 population, the lowest in the Blagoveshchensk district - 11.8‰ [10]. The death rate of the population of the Amur Region from COVID-19 in 2020 amounted to 84.3 per 100 thousand population, for the urban population the figure is higher - 92.7 000 than for the rural population - 66.8 000.

In the course of the study, an analysis of the incidence with a diagnosis established for the first time was carried out by disease classes in the Amur Region, the Far Eastern Federal District and in the Russian Federation (2020) [1,5]. In the Amur Region, the figure is higher - 80294.8 per 100 thousand of the population, in the Far Eastern Federal District - 74596.5‰00, in the Russian Federation - 75840.1‰00. In the first place in the structure of primary morbidity in the Amur Region is the class of respiratory diseases (47.2%); in second place are injuries, poisonings and some other consequences of external causes (10.2%); subsequent places were occupied by the following classes: diseases of the digestive system (10.2%); diseases of the skin and subcutaneous tissue (4.4%), etc.

In the Amur Region, the primary incidence rates of diseases of the digestive system are significantly higher - 8172.1‰00 than in the Far Eastern Federal District - 3496.8‰00 and in the Russian Federation - 2627.0‰00, which requires an in-depth analysis of the causes of this pathology in the region. The frequency of detected COVID-19 (in 2020) in the Amur Region was 3141.3 per 100 thousand population (3.9% of the total number of primary incidence), in the Far Eastern Federal District - 3394.9‰00 (4.55%), RF - 3384.5‰00 (4.46%).

In the Amur Region, the primary incidence of respiratory diseases was (2020) 37,935.4 per 100,000 population. The highest rates were noted in the city of Zeya - 58318.8‰00, the city of Raychikhinsk (56358.6), the city of Bla-

goveshchensk (54275.4) and others. In the class of diseases, injuries, poisoning and some other consequences of external causes in general in the region, the indicator was 8180.1 per 100 thousand of the population, the highest values were in the city of Zeya (11090.3), in Skovorodinsk (10410.1), in Shimanovskiy districts (9792.8), etc. In the class of organ diseases digestion in the region as a whole, the indicator was 8172.1 per 100 thousand of the population, very high rates were noted in the city of Tynda (50465.7), the city of Zeya (42573.1), in other administrative districts the indicators are lower, in the city of Blagoveshchensk (6193.1), in the Seryshevskiy district (2628.5), etc. This determines the need for a special study of the causes of this incidence in the city. Tynda and Zeya.

The table shows the indicators of primary morbidity of the entire population of the Amur Region in dynamics for 2016-2020. by age groups of the population. The primary incidence of the entire population of the Amur Region has decreased over the years of analysis, a decrease was noted in the age groups of 0-14 and 15-17 years, while the rates increased in the adult population and people older than working age.

We noted higher rates of newly diagnosed morbidity (2020) in children (0-14 years old) - 166656.9 per 100 thousand of the corresponding population and adolescents (15-17 years old) - 147023.4‰00, than the total population - 80294.8‰00, which requires strengthening preventive work with this contingent.

Discussion. Conclusion. A high mortality rate was noted in the Amur Region and an increase in the indicator from 13.7‰ (2016) to 16.2‰ (2020), (RF - 14.6‰), which indicates the need for an in-depth analysis of the medical and demographic situation in the region.

An analysis of the primary morbidity of the population of the Amur Region revealed administrative districts with extremely high incidence rates of diseases of the digestive system, which determines the need for an in-depth analysis

of the causes of this pathology. High rates of morbidity in children and adolescents have been determined. It is necessary to strengthen federal, regional, republican programs of preventive work with the population, primarily with children and adolescents, the introduction of new organizational technologies and forms of work.

Conclusions. The identified features of the medical and demographic situation in the Amur Region should be taken into account by the heads of governments at the municipal regional and federal levels in order to develop management decisions. taking into account the COVID-19 pandemic and with a focus on the health of the future generation.

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