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ASSESSMENT OF THE PREVALENCE OF VISUAL ORGAN MORBIDITY IN THE REPUBLIC OF MORDOVIA FOR THE PERIOD 2018–2020

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Abstract. The article assesses the prevalence of visual organ morbidity in the Republic of Mordovia for the period 2018–2020, based on industry statistics. The data obtained make it possible to more objectively assess the state of morbidity of the population for timely adoption of the necessary management decisions.

Keywords: general ophthalmological morbidity; primary ophthalmological morbidity; Republic of Mordovia.

According to the World Health Organization, there are about 2.2 billion cases of visual impairment or blindness in the world, and more than 1 billion of them are the result of a lack of prevention or treatment. In its work, WHO is guided by the recommendations contained in the World Vision Report (2019) and the resolution "Comprehensive human-centered ophthalmic care, including the fight against preventable blindness and preventable visual impairment", adopted at the 73rd session of the World Health Assembly in 2020 [1, p. 8] The main idea of the report and the resolution is the need to consider comprehensive and people-oriented ophthalmic care as the preferred model in the field of eye health and ensure its widespread implementation in countries.

Russia also takes an active part in the implementation of these measures, since almost half of the population of our country has some kind of visual impairment. The most significant of them are glaucoma, cataracts, myopia, injuries of the visual organ, as well as diseases associated with retinal pathology. The overall incidence of all eye diseases, in-

cluding refractive errors and injuries, is on average 55.5 % in the Russian Federation [2, p. 185]. Due to the increase in the number and aging of the population, the risk that visual impairments will affect more people is increasing. The annual increase in ophthalmic patients is up to 7 %. The rejuvenation of diseases such as cataracts and glaucoma draws attention.

Pathology of the organ of vision is a special medical and social problem. Diseases of the visual organ, especially in the absence of early diagnosis, timely, high-quality treatment, lead to a significant pronounced decrease in the indicators of the functional state of the visual organ. A significant part of patients receive the status of visually impaired. As a result, eye diseases and vision loss cause significant social and economic damage to both the patient and society, significantly reducing the quality of life of patients. Despite the obvious significant progress in improving access to ophthalmic care, problems remain with the planning and provision of quality medical services in accordance with the needs of the population.

The study and accounting of ocular morbidity play an important role, since statistical data represent the basis on which the general strategy for the development of the ophthalmological service is developed [3, p. 184; 4, p. 183]. Indicators of clinical epidemiology characterize the health status of the population, the organization of medical care, including its availability, quality, timeliness of delivery and form strategic and tactical directions of health care activities. Considering the above, it is relevant to assess the prevalence of visual organ morbidity in the Republic of Mordovia for the period 2018–2020.

Materials and methods. To assess the prevalence of visual organ morbidity in the Republic of Mordovia for the period 2018–2020, statistical materials "The health of the population of the Republic of Mordovia and the activities of healthcare institutions in 2018–2010" were used.

Methods of analysis: statistical, analytical, historical.

Results. The effectiveness of ophthalmological care to the population of the Republic of Mordovia is directly related to the local epidemiological situation in ophthalmopathology. The level of general morbidity of diseases of the eye and appendage apparatus according to the data of the circulation of the population of the Republic of Mordovia for the analyzed period decreased by 12.6 % from 108.9 per 1000 population in 2018 to 95.2 in 2020.

Cataract and glaucoma have been leading in the structure of the overall incidence of eye diseases and appendage for a number of years. So, in 2020, the level of the general incidence of cataract in the population is 13.6 per 1000 population, there is a downward trend. The total incidence of glaucoma in the population is 6.6 per 1000 population, during the study period there was a decrease of 9.6 % from 7.3 per 1000 population. In the Republic of Mordovia, the level of primary morbidity of eye and appendage diseases in 2020 amounted to 18.2 per 1000 population, over a three-year period there was a decrease of 38.1 %.

In the structure of primary morbidity, there is a decrease in the incidence of cataract by 18.2 % from 2.2 per 1000 population in 2018 to 1.8 in 2020. The primary incidence of glaucoma increased by 33.3 % from 0.6 per 1000 population in 2018 to 0.8 in 2020. The morbidity of the adult population with eye and appendage diseases according to the data of the circulation decreased by 10.9 % from 98.3 per 1000 population in 2018 to 87.6 in 2020. In 2020, the general incidence of cataract in the population was 16.1 per 1000 population, there is a downward trend. The total incidence of glaucoma in the population was 7.9 per 1000 population, there is a decrease of 10.2 % from 8.8 per 1000 population.

The incidence of adult eye and appendage diseases with a diagnosis established for the first time in life decreased by 35.4 % from 24.5 per 1000 population in 2018 to 18.1 in 2020. In 2020, the primary incidence of adult cataract was 2.1 per 1000 population, there is a downward trend. The primary incidence of adult glaucoma in 2020 was 1.0 per 1000 population, during the study period there was an increase of 42.8 % from 0.7 per 1000 population. The dynamics of the eye morbidity of adolescents according to the data of the appeal tends to decrease. Thus, there is a decrease in the eye morbidity of adolescents according to the appeal data by 23.9 % from 274.6 per 1000 adolescents in 2018 to 221.7 in 2020.

Eye muscle diseases, disorders of friendly eye movement, accommodation and refraction, myopia and astigmatism have been leading in the structure of the general morbidity according to the data of adolescent circulation for a number of years. During the analyzed period, the level of general morbidity according to the data on the treatment of adolescents with diseases of the eye muscles, disorders of friendly eye movement, accommodation and refraction decreased by 18.4 % and amounted to 191.8 per 1000 adolescents in 2020. The incidence rate according to the data on the treatment of adolescents with myopia decreased by 21.4 % and amounted

to 150.2 per 1000 adolescents in 2020, astigmatism decreased by 6.3 % and amounted to 21.3 per 1000 adolescents in 2020. The incidence of adolescent diseases of the eye and appendage with a diagnosis established for the first time in life decreased by 40.7 % from 50.8 per 1,000 adolescents in 2018 to 20.7 in 2020.

A similar situation is observed when analyzing the dynamics of ocular morbidity in children. There is a decrease in the incidence of ophthalmopathy among the children's population by 24.3 % from 141.0 per 1000 children's population in 2018 to 106.7 in 2020. Thus, there is a decrease in the level of ocular morbidity of children according to the data of the incidence of eye muscle diseases, disorders of friendly eye movement, accommodation and refraction by 10.7 % and amounted to 79.84 per 1000 children in 2020, myopia by 12.4 % and amounted to 7.6 per 1000 children in 2020, astigmatism by 17.6% and amounted to 13.1 per 1000 children in 2020. The results of the assessment showed that the incidence of children diagnosed for the first time in life decreased by 31.1 % from 53.7 per 1000 population in 2018 to 16.7 in 2020.

Conclusion. As a result of the study, it was found that the incidence of diseases of the eye and appendage tends to decrease, but remains at a fairly high level, which requires improving the organization of ophthalmological care and the development of measures aimed at preventing the development of ophthalmopathy among the population of the Republic of Mordovia.

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