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Guest Editorial

Early Care for Children and their Families in the Russian Federation: Preventive Aspects

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The demographic situation in the Russian Federation is characterized by a decrease in the birth rate, which leads to a reduction in the number of children. The total birth rate has remained low over the past few decades (1.42 in 2022), while one and a half times more is required for simple reproduction of the population (2,15) [1,2].

The analysis of available domestic and foreign literature has shown that the models of early care for children and their families in the leading countries of the world (the Russian Federation, the United States of America and the Federal Republic of Germany) have similar goals, objectives and activities [3,4]. At the same time, there are a number of significant differences in the methods, forms and structures of early intervention, especially the general concept of prevention.

In 2021, the Action Plan for Implementation in 2021-2025 was approved. The concept of demographic policy of the Russian Federation for the period up to 2025 [5], in which a separate block highlights measures to reduce maternal and infant mortality, improve reproductive health, and improve the well-being of families with children.

To strengthen the health of citizens, the Government of the Russian Federation is developing preventive areas in healthcare: the introduction of modern methods of diagnosis, treatment and rehabilitation for the early detection of diseases in children, screening programs, including before the birth of a child, neonatal and prenatal screening for hereditary and congenital diseases.

When forming measures, the physiology of children is taken into account: the plasticity of the child's brain during the first three years of life, therefore, rehabilitation measures give a significant positive effect in the development of the child. It should be noted that the developing negative medical and demographic situation in the Russian Federation leads to negative trends in the dynamics of indicators of somatic, physical and mental health of young children.

Consequently, in the Russian Federation it is necessary to strengthen the preventive aspect of early care for children and their families, which, in turn, will have a beneficial effect on the prevention of disability of young children. Important attention in this area should be paid to health-saving technologies for women of fertile age and children.

114 families with infants who needed early care services were studied. Among mothers who had babies due to perinatal damage to the nervous system, primiparous prevailed - 60.5%, in women who gave birth again - 29.8%, for the third time - 6.2%, for the fourth time

- 3.5%. According to the results of the study, large families with three or more children with developmental disabilities accounted for the smallest share (9.7%). Thus, the results of the study showed that first-time mothers have the highest risk of developing pathological processes in the fetus.

Demographic characteristics of mothers: from 15 to 20 years - 11 people (9.7%), from 21 to 25 years - 28 people (24.5%), from 26 to 30 years - 35 people (30.7%), from 31 to 35 years - 24 people (21.1%), from 36 up to 40 years - 13 people (11.4%), from 41 years and older - 3 people (2.6%). These indicators of the study are consistent with the indicators of Rosstat: according to 2021, mothers aged 30-34 years - 30.5%, 25-29 years - 27.3%, 35-39 - 17.8% and 20-24 years - 16.8%.

A more revealing characteristic is the average age of the first-born. According to S.V. Zakharov, the average age of a mother at the birth of her first child decreased from 25.1 to 22.3 years in 1956-1992 [6]. Subsequently, by 2018, the age of primiparous increased to 25.9 years. This is consistent with the official statistics of Rosstat: 2018-2020 - 25.9 years, and in 2021 - 26 years [2].

The study of the peculiarities of the course of pregnancy in mothers with children with disabilities (hereinafter referred to as HIA) due to perinatal damage to the nervous system indicates that 40% of women had a history of more than two medical abortions or a scar on the uterus, 56% had premature birth. Premature termination of pregnancy is noted in 12.3% of women, in 7% of women - "frozen" pregnancy. Infertility treatment was carried out in 3.5% of women in labor. One infant (0.9%) was born due to *in vitro* fertilization.

During pregnancy, 40% of women had somatic diseases: 18.4% suffered from arterial hypertension, 13% - various endocrinopathies, 3.5% - congenital heart disease, 4.4% - chronic respiratory failure, one woman suffered from epilepsy. 79% of women suffered from urogenital infections, exacerbation of chronic pyelonephritis - 28%, mycoplasmosis - 21%, candylomatosis - 9.6%, uroplasmosis - 8.7%, *Chlamydia* - 9.6%, genital herpes - 1.7%.

Infectious diseases during pregnancy were suffered by 30% of women: ARVI - 19% (with hyperthermia), hepatitis - 6.1%, herpes infection -3.5%, tuberculosis - 0.9%, HIV infection - 0.9%. In addition, the women of the study group indicated that various medications were used in the first trimester of pregnancy: antipyretics, antibiotics, antiviral drugs, vitamins, often without a doctor's appointment.

Among the unfavorable indicators of pregnancy in 56% of cases, late toxicosis was observed, the threat of termination of pregnancy in 78% of women, polyhydramnios in 17%, low water in 1.7% of the study group. The presence of bad habits: smoking - 40%; alcohol abuse - 5.3%; drug use - 1.7% of women.

When assessing neurological pathology in the neonatal period of newborns, an analysis of the structure and severity of hypoxic-ischemic and hemorrhagic brain lesions in children was carried out. According to neurosonography, intraventricular hemorrhages were observed in 42% of cases: I degree -17.5%, II degree - 11.4%, III degree - 7.9%, IV degree - 5.3%. Intraventricular hemorrhages were often combined with signs of immaturity of the brain (9.7%) and were recorded in premature and full-term, but immature children. Ischemic brain damage in the form of a cystic form of periventricular leukomalacia was detected in 35.1% of cases.

In most cases, the treatment of children was carried out in state medical organizations. Consequently, most children with disabilities due to perinatal damage to the nervous system were in a serious condition from birth or from the first day of life, with a predominance of depression syndrome and muscle hypotension, signs of periventricular brain lesions according to neurosonography.

The analysis of medical supervision of the examined children showed the unreasonableness of establishing the etiology of the disease, the rare use of modern neuroimaging methods to determine the degree of impaired functions and prognosis of the disease (magnetic

resonance imaging and axial computed tomography), to verify the morphological substrate of the disease. Therapy of the underlying disease was carried out using a wide arsenal of medicines, as well as the use of physical methods of influence (massage, osteopathy, manual therapy, physiotherapy).

Timely identification of families with children in need of early care services, the rapid start of rehabilitation or habilitation measures for children with disabilities will prevent the formation of a pathological process or the aggravation of children's disability even at its initial stage. When providing early care services to children and their families, it is necessary to take into account the possibility of an interdisciplinary, integrated approach to their implementation in healthcare, education and social assistance organizations.

It should be noted that recipients of early care services do not necessarily need to be diagnosed. According to Barlow [2], the child has the right to receive additional qualified assistance in order to catch up and prepare for attending a preschool. Early care services for children and their families should be provided free of charge, guaranteed. It is necessary to take into account the individual development of children for their fullest social integration.

Bibliography

1. Demographic Yearbook of Russia. 2021/Statistical collection. M (2021): 66.
2. Natural movement of the population of the Russian Federation for 2021/comp. Bulletin. M., Rosstat, 2022; Population of the Russian Federation by gender and age as of January 1, 2022 /stat. bulletin. M., Rosstat (2022).
3. Alia Wong. Worried your child is delayed from the pandemic? Here's what experts say to do.
4. K Underwood., *et al*. "Is the right to early intervention being honoured? A study of family experiences with early childhood services".
5. The concept of Demographic policy in the Russian Federation until 2025.
6. Population of Russia 2018: Twenty-sixth annual demographic report/ed. S. V. Zakharov. M.: Publishing House of the Higher School of Economics (2020): 130.

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