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# SOCIO-HYGIENIC STUDY OF THE HEALTH OF CHILDREN BORN WITH HIGH WEIGHT

Abstract: In the article have been e examined the issues of social and hygienic aspects of the health of children born with high weights, identifies risk factors for the birth of a baby with high weights. On the basis of conducting sociological studies using a questionnaire among pregnant women registered at a family clinic, the authors identified the main territorial features of anthropometric indicators at birth, studied the degree and nature of the conditionality of individual values of anthropometric indicators at birth by social, biological factors and characteristics of the prenatal developmental period and seasonality.

Key words: Ontogenesis, body weight, newborn health, fetal macrosomia, birth trauma, symptoms, metabolic disorders, antenatal period.

Language: English

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#### Relevance

The frequency of birth by a large fetus, according to literary sources, in recent years is 4.5–20%. Delivery by a fetus with a body weight of 4000–4500 g is observed in 7.6%, 4500–5000 g - in 1.2%, 5000 g and more - in 0.2% of cases. High rates of maternal trauma and adverse perinatal outcomes in fetal macrosomia are of great medical and, undoubtedly, social significance [4].

Objective criteria for the health of newborns are their anthropometric indicators. These indicators reflect the course of intrauterine periods of ontogenesis, depending on factors of different nature. Considering the high significance of the prenatal developmental period for the formation of both the body structure and its function, it can be assumed that the results of this developmental period, including weight and body length at birth, may be predictors of the state of the body and peculiarities of the body's response to environmental influences in subsequent periods of ontogenesis [1].

The urgency of studying this problem is dictated by higher rates of perinatal mortality and injuries of fetuses and newborns, a greater number of complications during pregnancy and childbirth compared with fruits with an average body weight with the current trend towards an annual increase in the number of births by a large fetus. Optimal management of pregnancy and childbirth in fetal macrosomia will reduce maternal and child injuries during childbirth and will contribute to the birth of healthy children and preserve the mother's health. [2].

#### Objective of research

Analysis of social and hygienic problems at birth of a large fetus. To study the prevalence of risk factors for the birth of a baby with a large weight.

#### Main tasks

Assess the relevance of the problem of fetal macrosomia at the present stage. Identification of the main territorial features of the formation of anthropometric indicators at birth. Determining the degree and nature of the conditionality of the individual values of anthropometric indices at birth by social, biological factors, the peculiarities of the development of the prenatal period of development and seasonality.



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#### Materials and methods

For the study, questionnaires were compiled, including 20 questions about the presence of risk factors for the birth of a child with high body mass. A sociological survey was conducted using a questionnaire survey among 30 pregnant women who were registered at a family clinic. The mathstatistical method was used to process the data. Theoretical analysis and synthesis of scientific literature, periodicals about a large fetus and its effects on the mother's body.

#### Literature review

Scientists Martinchik A.N., Baturin A.K. were engaged in the study of the issues of healthy growth and body mass of children in Russia. [10]

By scientists as R.G.Sadykova [12], G.I.Gusarova N.V.Nechaeva [13], M.V.Kuligina, O.E.Konovalov, O.N.Puchnina and others deal with the influence of the family on the formation of the health of children of early and preschool age, the role of prevention and treatment of diseases, and also in the rehabilitation of children. They revealed that the family formed a lifestyle, attitude to health, standards of hygiene and medical recommendations. According to their research, single-parent families belong to the group of increased medical and social risk, they should become a priority object of medical observation.

#### Analysis and results

Almost a third of the women surveyed (30.0%) had an excess of body mass index at the time of the beginning of pregnancy;

In (16, 6%) of the respondents, husbands had an excess of BMI:

In (6, 6%), that is, 2 women were diagnosed with diabetes;

From (13, 3%) of the respondents, previous pregnancies had signs of prolongation; Thus, for 100 respondents, almost 36% had a risk of developing a fetus with an increased weight. Another reason for the birth of a large baby can be obesity of the mother herself, her poor nutrition and following the principle "you need to eat for two" during pregnancy. During pregnancy, women take care of themselves and move even less, consuming even fewer calories, but now they feed more densely and more than usual. Therefore, there are problems with obesity in most mommy and excess weight in the baby.

As a result of our survey, it was established that 18 women held opinions on the need for two - 60%

Almost all respondents were familiar with the rules of rational nutrition during pregnancy, and only 53.3% adhered to the recommendations

Features of the course of pregnancy and childbirth large fruit

Today it is often described that most people consider a large fetus to be the result of heredity, but in fact the structure of the body and its development associated with the genotype begins to manifest itself much later. In the prenatal period, the growth and development of the fetus is directly related to environmental factors, the state of health of the parents, especially the mother. In the works carried out by Mylnikova Yu.V. and Protopopova NV, it is indicated that there are predispositions in the mother to a large fetus, namely, later menarche (over 15 years), the presence of cardiovascular and urinary diseases, obesity, diseases of the gastrointestinal tract and thyroid gland [ 3]. In groups that had pregnant women with these pathologies, the birth of a large fetus was observed. Pregnancy with a large fetus is often accompanied by such complications as gestosis, threatened miscarriage, anemia

#### Perinatal outcomes of labor large fruit.

The socio-hygienic urgency of the problem of fetal macrosomia is primarily due to the frequent perinatal morbidity and mortality in comparison with average statistical indicators [5]. A.L. Cherepnina found that the highest perinatal mortality is characteristic for fruits weighing 4000–4250 g, which is probably due to the absence of a "bright" clinic of a clinically narrow pelvis in the parturient women of this group. Perinatal morbidity in the group of newborns weighing 4,000–4,250 g is 2 times more than in the 4,251–4,500 g group, and is 50 times higher than this figure in the 4,401–4,750 g group. Therefore, many researchers recommend including women with an estimated fetal weight of 4,000–4,250. g to the category of increased risk [6].

A birth injury of the central nervous system can manifest as cerebral symptoms as well as symptoms of damage to the brain stem [3, 6]. Brain damage in fetal macrosomia is mainly caused by the management of vaginal delivery with a relative clinical inconsistency. The frequency of cefalohematoma and subaponeurotic hemorrhages during childbirth by a large fetus is 2-3 times higher than that of fruits with an average weight.

The frequency of birth injuries of the spine and spinal cord during fetal macrosomia also exceeds the number during fetal normosomy. According to S.L. Parilov birth injury in difficult passage of the fetal head through the birth canal is always combined, at least cervical-occipital. In this situation, the injury is constructive in the destruction of the spinal column and is caused by axial loading of the vertebrae in combination with excessive flexion and rotation. Because of the cartilaginous structure of the vertebral bodies, the vertebrae themselves are almost not damaged, destructive factors most often lead to tears and torn ligaments, dislocations of the vertebrae, ruptures of the radial branches of the vertebral



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arteries, spinal canal hematomas and spinal cord injuries [7].

In the early neonatal period, a symptom-complex of respiratory failure is observed, for example, rapid breathing, artimia of respiratory movements, increasing cyanosis, local and widespread bulging of the chest, resulting from damage to the phrenic nerve or roots of the spinal nerves CIII-SV. Also in newborns with macrosomia, the phenomenon of "imaginary well-being" arises, which manifests itself as a step-by-step and slow increase in neurological symptoms [8].

According to the authors [9], the forced position of a fetus with macrosomia in the uterus causes deformations of the limbs, hip dysplasia, clubfoot, etc.

Metabolic disorders in the antenatal period in fetal macrosomia are expressed not only in metabolic acidosis, but also in the hypoglycemic state of the newborn. In 16–20% of large newborns, low blood glucose is observed on the first day. Hypoglycemia in newborns weighing 4,000 g or more is clinically expressed as anxiety, cyanosis of the skin, tremor of the limbs, and muscular dystonia. The development of hypoglycemic conditions can be mediated not only by a lack of glucose in the general bloodstream, but

also by a large glucose consumption in large newborns against relative hyperinsulinemia [5].

#### Conclusion

The above-described data indicate the need for an individual approach in the delivery of pregnant women to large fetuses, suggesting further improvement of modern methods for diagnosing fetal macrosomia, as well as predicting the outcome of labor. Newborns with macrosomia, regardless of the general state at birth, should be considered a high risk group, as there is a high risk of the effects of birth trauma, various disorders in the early neonatal period, a decrease in the body's reactivity in the first months of life. Thus, the optimization of the tactics of administering pregnant women with macrosomia is associated with the timely detection and correction of extragenital pathologies, the use of contraception in the intergastal period, the rational intake of medications during pregnancy, and the prevention of pregnancy complications, such as preeclampsia and HCPF. One of the most important questions determining obstetrical tactics is the prediction of the fetal mass. The solution of all these tasks determines the relevance of this study.

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