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PROBLEMS OF TEENAGE PREGNANCY: OBSTETRIC AND PERINATAL OUTCOMES

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ПРОБЛЕМЫ ПОДРОСТКОВОЙ БЕРЕМЕННОСТИ: АКУШЕРСКИЕ И ПЕРИНАТАЛЬНЫЕ ИСХОДЫ

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The review describes the problems of teenage pregnancy. A characteristic feature of the course of gestation in adolescents is a significant number of complications accompanying it. The problem of teenage pregnancy should be prevented not only by medical professionals, but also regulated by means of appropriate legal, social and economic measures.

Management of young first-time mothers' pregnancy should be based on earlier consultative follow-up and planned hospitalization for targeted treatment of complications, as well as a thorough risk assessment during gestation and childbirth.

Keywords. Teenage pregnancy, pregnancy in adolescents, pregnancy in young people.

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В обзоре описаны проблемы подростковой беременности. Характерной особенностью течения гестации у подростков является значительное число осложнений, сопровождавших ее. Проблема подростковой беременности должна предотвращаться не только силами медицинских работников, но и регулироваться при помощи надлежащих мер правового, социального и экономического характера.

Оптимизация тактики ведения беременности у юных первородящих должна основываться на более раннем консультативном наблюдении и плановой госпитализации для целенаправленной терапии осложнений, а также тщательной переоценки риска в течение гестации и родов.

Ключевые слова. Подростковая беременность, беременность у подростков, беременность у юных.

The outcome of pregnancy is determined by the reproductive, gynecological and somatic health of the woman. In turn, reproductive and gynecological health depends on reproductive behavior. Today, young people often engage in premarital sexual relations, change sexual partners, which can negatively affect the state of the woman's reproductive system and lead to premature termination of pregnancy, unfavorable outcomes and secondary infertility [1].

Acceleration is accompanied by a tendency towards early onset of menarche [2–4].

Early onset of menarche in the absence of sexual education is accompanied by early onset of sexual activity and undesirable consequences: the onset of pregnancy at a young age, which has unfavorable outcomes – from premature birth to perinatal and maternal mortality [5; 6]. At the same time, there is a high risk of contracting sexually transmitted infections [7]. An important problem in the organization of obstetric and gynecological care in the Russian Federation is pregnancy and childbirth in first-time mothers under the age of 18 [8].

PREVALENCE OF TEENAGE PREGNANCY

Young first-time mothers account for up to 11 % of births worldwide [8; 9]. Early

pregnancy affects countries with different income levels. However, its probability is higher in developing countries, where 21 million gestations are registered annually in girls under 18, half of which are unwanted, and about 800 thousand births occur in girls under 16 [10–12]. In poor countries, 13 % of girls are married before the age of 16, and 39 % before the age of 18 [13], which increases the birth rate in this category. The proportion of these girls decreases with increasing education level – from 34 % among the uneducated to 19 % among those with primary education and 8 % with secondary education [14]. It is worth noting that young mothers are at high risk of repeated pregnancy with short intervals between each child [15–17].

The medical and social portrait of young first-time mothers can be described as follows: early menarche, premature onset of sexual activity, sexual violence, low standard of living in the family, lack/low level of education and desire to obtain it, unwillingness to assess the consequences of their actions, neglect of contraception methods, as well as insufficient quality of medical care in the family planning system [9].

According to some data, of those who gave birth in adolescence, only 30 % were university students, about 70 % had a secon-

dary school education, of which 44.2 % were housewives [15]. According to other studies, the contingent of young first-time mothers consisted of 59 % schoolgirls, 42 % lyceum and college students, with bad habits in 6–17 % of respondents. The occurrence of repeated pregnancy at the age of under 19 indicates the ineffectiveness of contraception and family planning measures [15]. Low levels of contraceptive use are due to a lack of knowledge among young girls about where they can get contraception and how to use it correctly [18].

RISK FACTORS FOR PREGNANCY IN ADOLESCENTS

A number of factors contribute to teenage pregnancy: lack of information, lack of sex education, early marriage, sexual violence, low levels of knowledge and access to contraception, and lack of necessary legislative measures [19]. Sexual violence accounts for 30 % of the causes of unwanted pregnancy [20; 21]. As a result, this leads to a decrease in the number of women of reproductive age, a decrease in their reproductive potential, complicated pregnancy, infertility, and a decrease in the birth rate, the onset of which begins in adolescence [20].

Childbirth at a young age increases the risks for mothers and babies. There is an opinion that young age helps to overcome the physiological and medical difficulties of childbirth [22]. At the same time, obstetricians-gynecologists and neonatologists believe that teenage pregnancy carries a risk of disruption of fetal development, and

childbirth often proceeds pathologically due to the immaturity of physiological processes and requires instrumental or surgical intervention during childbirth [23–26].

Although young first-time mothers are somatically healthier than older women, they often have a body mass deficit [9]. Sexually transmitted infections are more often registered in the group of girls aged 13–18 years, which is probably associated with frequent changes of sexual partners and the absence of contraception. Therefore, the age of pregnant women under 18 years should be considered as a perinatal risk factor [15].

In some cases, inadequate behavior of the young woman during pregnancy, a negative attitude towards examination and prenatal care, poor nutrition, alcohol and drug use are observed [27]. Girls who have been subjected to violence have mental deviations, behavioral and emotional disorders, which negatively affect the upbringing of children in such teenage mothers [28; 29].

CONSEQUENCES OF TEENAGE PREGNANCY

Pregnancy in young women is associated with a higher risk of socioeconomic and health consequences. Pregnancy complications in young women are almost 2.5 times higher than in adult women, and the number of complications during childbirth is 1.7 times higher [30; 31]. Complications such as threatened miscarriage, vomiting during pregnancy, severe hypertensive conditions, premature rupture of mem-

branes and premature birth, respiratory distress syndrome, fetal growth retardation, and neonatal pathology are recorded. Such girls have an increased risk of developing eclampsia, postpartum endometritis, and other infectious complications [21; 33–36]. Only 30 % of births in adolescents are physiological, while in other cases instrumental intervention is required [15]. Obstetric complications are the leading cause of maternal mortality in young first-time mothers worldwide [21]. The risk of maternal mortality in adolescents correlates with socio-demographic factors: low socio-economic status of the family, low level of education, insufficient prenatal care [32].

One of the main causes of adverse obstetric outcomes in young women is gestational hypertension, the incidence of which in adolescents is up to 18 % [37–42]. Complications associated with gestational hypertension lead to hypoxic-ischemic damage to the fetal brain [43; 44]. During pregnancy, the intensity of biochemical and metabolic reactions increases, the result of their side effects can be an increase in primary free radicals and activation of the lipid peroxidation process, which has a damaging effect on the cell [45]. The Apgar scores of newborns from young mothers are lower than those from mothers of reproductive age, and children with low birth weight are more often born [40; 41].

According to some data, the most common pathologies in newborns from young mothers with preeclampsia are chronic hypoxia, fetal growth retardation,

prematurity, respiratory distress syndrome, asphyxia, and cerebral disorders. The risk of infant death in children from young mothers is 1.5 %. At the same time, the increased frequency of perinatal complications is largely associated not with the young age of first-time mother, but with such social risk factors as bad habits, complicated somatic and obstetric-gynecological history [46]. The high level of infant mortality is also largely associated with a significant level of premature births in adolescents [28; 44]. Serious complications are facilitated by rapid and precipitous labor, polyhydramnios, and a contracted pelvis. Biological immaturity of the body of teenage mothers leads to unfavorable obstetric and perinatal outcomes, accompanied by the birth of low-weight newborns and lower scores on the Apgar scale [47; 48].

PREVENTION OF TEENAGE PREGNANCY

The problem of teenage pregnancy should be regulated and prevented using social, economic and legal measures [13; 49]. The World Health Organization, in close cooperation with international organizations, has identified measures to reduce the number of marriages concluded before the age of 18, which should be aimed at girls receiving a full school education, raising the culture of behavior and prohibiting early marriage [50]. In order to reduce the number of pregnancies in girls under the age of 19, it is necessary to increase knowledge about fertility, create

public support for young women, conduct sex education for adolescents, work with local communities, and intensify communication between parents and children on the topic of sexual development [51; 52]. Other measures to prevent teenage pregnancy include the adoption of legislation ensuring free access to contraception and the fight against sexual violence. Preventive action, counteracting unplanned and teenage pregnancies can be effective if work is strengthened in schools. Optimization of pregnancy management tactics in young first-time mothers should be based on earlier consultative follow-up, risk assessment of the gestation period and planned hospitalization to prevent the development of complications during childbirth [28].

CONCLUSIONS

Thus, pregnancy in adolescent girls is a serious medical and social problem. The reasons for the onset of pregnancy in adolescents are early onset of sexual activity, lack of sufficient knowledge about the reproductive system and low level of contraceptive use. Pregnancy that occurs at a young age is often terminated, increasing the risk of secondary infertility and adverse outcomes of subsequent pregnancies. The problem of teenage pregnancy should be prevented not only by medical professionals, but also regulated by means of appropriate legal, social and economic measures. Optimization of pregnancy management tactics in young first-time mothers should be based on earlier

consultative follow-up, risk assessment of the gestation period and planned hospitalization to prevent the development of complications during childbirth.

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