#### UDC 618-053.6-06:618.174-084

### REPRODUCTIVE HEALTH OF ADOLESCENT GIRLS

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# ✓ Resume

The study assessed the significance of risk factors in the formation of reproductive function in girls, which was carried out by determining the relative risk indicator and the boundaries of its possible fluctuations.

Keywords: girls, reproductive health, somatic disease, viral infection.

# РЕПРОДУКТИВНОЕ ЗДОРОВЬЕ ДЕВОЧЕК ПОДРОСТКОВОГО ВОЗРАСТА

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#### ✓ Резюме

В исследовании проведена оценка значимости факторов риска в формировании репродуктивной функции у девочек, которая осуществлялась с помощью определения показателя относительного риска и границ его возможных колебаний.

Ключевые слова: девочек, репродуктивное здоровье, соматические заболевание, вирусная инфекция.

# ЎСМИР ҚИЗЛАРНИНГ РЕПРОДУКТИВ САЛОМАТЛИГИ

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## ✓ Резюме

Тадқиқотда қиз болаларда репродуктив функцияни шакллантиришда хавф омилларининг аҳамияти баҳоланиб, у нисбий хавф кўрсаткичи ва унинг мумкин бўлган чегараларини аниқлаш орқали амалга оширилган.

Калит сўзлар: қизлар, репродуктив саломатлик, соматик касаллик, вирусли инфекция.

## Relevance

The issues of protecting the somatic and reproductive health of girls and girls are an urgent problem of modern medicine all over the world. Currently, there is no doubt that the state of women's reproductive function is largely determine

d by its development in childhood and adolescence. The formation of the sexual system of girls is very closely interrelated with their physical development, while it is established that unfavorable factors, regardless of their nature, cause violations of the formation of reproductive function. Early detection of these disorders and timely correction is a manageable factor in

maintaining reproductive health during puberty [1,2,3,5].

According to many scientists of the world, ante-and perinatal factors, the quality of housing, bad habits of parents (smoking, drug and alcohol use), their education, and currently socioeconomic instability ( low material level, the nature of nutrition), somatic diseases, along with environmental and climatogeographic factors of our Republic of Uzbekistan affect the health of girls and girls [8,9].

It is known that women's health care needs change throughout their lives. The approach to the protection of women's health, throughout her



life, declares that it is important not only the reproductive period, the period of motherhood - it is also important to equally take care of the health of girls and girls by predicting pathological conditions in their overall reproductive health and negative prognostic signs when they realize their reproductive function [5,6].

Unfortunately, the analysis of literary sources shows that in recent decades, around the world, as well as in our region, the reproductive potential of modern adolescent girls has stable and mainly unfavorable characteristics, among which it is necessary to highlight: a high prevalence of reproductively significant bad habits, a large percentage of deviations in physical, sexual and psychosexual development, a high percentage of somatic, gynecological and venereal morbidity. In addition, the formation of inadequate reproductive and family attitudes, a low level of sex education and contraceptive activity [4,5].

In recent years, many publications have appeared in the literature reflecting the negative trends in the physical development of adolescent girls. All the authors agree that since the beginning of the 21st century, there has been a tendency for its retardation and dishormonicity in the CIS countries, especially in territories with extreme and sub-extreme social and geographical living conditions, a high level of man-made pollution [1,2,3].

The results of monitoring of physical development in the last ten years reveal a clear trend towards stagnation and gracilization of the adolescent population, which, according to researchers, is associated both with the negative influence of prenatal, social, ecological and geographical factors mediated by the development of nutritional imbalance, and with the realization of genetic determinism of a decrease in the functional reserves of the reproductive system [1,10].

Currently, there is no doubt about the negative impact of chronic somatic pathologies on the formation of the reproductive potential of adolescent girls, which attracts the attention of clinicians and specialists of preventive medicine to their state of health [2,3].

EGZ has a significant effect on the course of the puberty period, forming foci of latent infection in the body, as well as diseases involving neuroendocrine and immune mechanisms in the pathological process [1,2,3].

Untimely treatment of infections, including sexually transmitted infections, can cause congenital infections and, as a result, frequent disability of children who have suffered from congenital infections (cytomegalovirus, herpes simplex virus, chlamydia, mycoplasmosis, viral hepatitis B and C, HIV infection).

Most researchers state that among modern girls there is a high prevalence of diseases of the respiratory, digestive, urinary, endocrine and cardiovascular systems, these classes of diseases pose a real threat not only to the violation of the formation of the reproductive system, but also to the possibility of adequate realization of the reproductive function in the future [8,9].

Currently, obesity is a serious health problem in all countries of the world. According to the WHO, about 1.5 billion adults in the modern world are overweight. An increase in the proportion of overweight people is observed everywhere and affects, among other things, girls of early reproductive age. About 30% of girls are obese. According to WHO, by 2025. an increase in the frequency of obesity among the female population is expected to reach 50%. With obesity, various forms of menstrual cycle disorders, such as oligomenorrhea and amenorrhea, occur 2-5 times more often. The frequency of infertility in obese women is 33.6% compared to 18.6% of women with normal body weight [6,8].

Obesity affects ovulation, oocyte maturation, endometrial rearrangement, endometrial receptivity, the implantation process, as well as the frequency of non-gestation [5,6].

Obesity disrupts the reproductive function not only through the mechanisms of ovulation disorders, a decrease in fertility is also noted in patients with ovulatory regular cycles. It should be noted that in any form of obesity, there is a pathology of the hypothalamic-pituitary system, which leads to ovarian insufficiency [3,5,7].

Obesity also often causes difficulties with performing ART, affecting the outcomes of ART programs. Based on the above, it should be noted once again that obese girls should be included in the group of high risk of reproductive health disorders and also with low reproductive potential.

Today, the reproductive potential of adolescent girls suffering from diseases of the kidneys and urinary system is of particular concern. Considering the process of embryogenesis, the urinary system and the genitals are closely connected by the common innervation, blood and lymph circulation [5,6,10].

Epithelial cells of the vagina, urethra, bladder and ureters are the target cells of endogenous estrogens. At the same time, steroids affect not only epithelial cells and microbiocenosis, but also the structures that determine the functions of the bladder [1,2,10].

According to the results of a scientific study by Chebotareva Yu. Yu. in 2011, when studying the state of reproductive health of girls with various pathologies of the kidneys and urinary tract, the syndrome of developing polycystic ovaries was detected in 30% of the subjects, as well as in 15% of patients with primary oligomenorrhea.

In adolescent girls who suffer from chronic pyelonephritis, significant violations of sexual development and menstrual function are detected. In the conditions of a chronic microbial inflammatory process in the urinary system, frequent inflammatory diseases of the vagina are detected with a predominance of conditionally pathogenic flora in the etiology, a manifestation of a violation of local protection factors - the vaginal microbiota, with chronic kidney pathology, accompanied by a dysfunction of the production of sex hormones with a predominance estrogens against the background of hypoprogesteronemia, a significant increase in cortisol levels is noted [].

The study of the state of the reproductive potential of girls and girls with chronic kidney pathology is of urgent importance, as it will allow developing comprehensive methods for correcting combined urogenital pathology, as well as preserving their reproductive health. In the course of numerous studies conducted in recent decades, a high pathological involvement of adolescent girls with gynecological diseases has been established [2,3,5].

Their structure is dominated by menstrual disorders, inflammatory diseases of the genital organs and impaired sexual development. It is worth noting the growth of publications on breast diseases and ovarian neoplasms in adolescent girls [1,3]. It is known that menstrual function is a sensitive indicator of the state of general and reproductive health of girls and girls. The optimal time of the onset of the first menstruation is the main sign of puberty of the female body, indicating the readiness of the body for childbirth. Risk factors for ovarian disorders include- the menstrual cycle includes a high level of stress, strict regulation of vital activity, educational overload and a high level of social claims, obesity, violation of biological rhythms, restriction of physical activity with a tendency to overeating, frequent acute respiratory viral infections, vegetative-vascular dystonia, as well as anamnesis data on the development of preeclampsia in the mother, burdened heredity for obesity and pathology of the reproductive

sphere, thyroid pathology, liver function disorders, as well as vitamin and vitamin deficiency.trace elements in the diet [5,6,9].

At a young age, girls have a widespread deficiency of vitamins, magnesium, zinc, iodine, selenium, calcium and a number of other macroand microelements, which is associated not only with insufficient intake of these micronutrients from food, but also with increased neuropsychiatric loads during study, problems in communicating with parents and peers, becoming a profession, etc [5,10].

The estrogen-like effect of vitamins B2 and B6, which synergistically with estradiol increase the mass of the uterus (with its deficiency), has been experimentally proven. Vitamin B1 enhances the effect of estradiol, without showing an independent estrogen-like effect. The lack of vitamin E in the body of adolescent girls negatively affects the function hypothalamus, leads to a change in the processes of prostaglandin biosynthesis, with a violation of the synthesis or exchange of which dysmenorrhea occurs [3,8,9].

The peculiarities of the hormonal status of adolescent girls born prematurely were studied at the Ivanovo State Medical Academy of the Ministry of Health of the Russian Federation. Researchers M. M. Fomina and co-authors of 2016 According to their data, adolescent girls born prematurely, regardless of the gestation period, were characterized by: higher serum testosterone levels, more often there was a reduced level of FSH, an AMH concentration of more than 2.5 ng / ml and hyperandrogenism. They were characterized by a high ovarian reserve, which was formed due to polycystic ovary syndrome, and for adolescents born prematurely with intrauterine growth retardation, a reduced ovarian reserve (AMH less than 1 ng / ml) and a lower serum testosterone level than in patients born without growth retardation. All of the above once again states that the intranatal development of the fetus, the timing of the onset of labor and the nature of their course has a direct correlation with the subsequent periods of the development of the body and the formation of the reproductive system and their activities [2,8,9].

One of the significant factors that reduce the level of health of the population is iodine deficiency, which causes the development of a number of pathological conditions, and has adverse consequences at the early stages of the formation of the body, but also causes a violation of the growth rate and sexual development. In addition, the iodine deficiency state has a huge impact on the features of the hormonal status of

girls and adolescent girls and have a significant role in the development of disorders of neuroendocrine regulation and menarche [3,5,7].

Features of the menstrual cycle at puberty are a clinical criterion of puberty associated with the formation of adequate interactions in the pituitary - hypothalamic and ovarian systems and the interaction of the central nervous system. Scientists from all over the world have proved the influence of psychological conflicts and stress on the coordinated function of the hypothalamic-pituitary-ovarian system [2,4,6].

Currently, it is known that psychological factors belong to a number of the most powerful and widespread natural stimuli that affect the regulation of endocrine functions, especially the function of the reproductive system [1,10].

It is quite difficult to identify the psychogenic nature of menstrual cycle disorders and indirectly reproductive function. In such a situation, it becomes absolutely necessary to connect a psychotherapist to the diagnosis and treatment.

Thus, the identification of risk factors and the prediction of violations of the reproductive health of adolescent girls, the development of a modern strategy for the formation of reproductive potential by strengthening the preventive orientation is an actual practical direction of domestic healthcare.

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Entered 09.07.2021