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STUDYING THE EFFECT OF SPORTS ON THE MENSTRUAL FUNCTION OF GIRLS

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Abstract. *Relevance of the chosen topic in recent years, the number of teenage girls who regularly participate in professional sports has been increasing, and the impact of this activity on the reproductive health of girls, especially: the reproductive system of teenage girls It can be seen that the normal course of the menstrual cycle or the frequency of disruption depends on the type of physical exercise and the nature. Among girls engaged in long-term professional sports, the menstrual cycle shows a late onset or disturbances in duration.*

Keywords*: physical education, professional sports, rhythmic gymnastics, reproductive health, menstrual cycle, menarche, dysmenorhea.*

Topic of the study: Preserving the reproductive health of adolescent girls is one of the most crucial medical and social issues, ensuring the normal menstrual function of girls is essential. Practical information on the impact of selected sports on the health of girls, especially on the formation of their menstrual function, is of practical importance. Information on the influence of physical education and sports on reproductive health, including the formation of menstrual function, is important primarily from a practical point of view, as it allows answering the question of which type of sport is preferable during physical education classes. In recent years, the number of girls and women engaged in sports requiring professional athleticism and maximum endurance has sharply increased, which exacerbates our long-standing problem of learning about it. In recent years, both in our country and abroad, sports traditionally considered for strong men, such as boxing, wrestling, heavy athletics, football, gymnastics, and hockey, are being practiced by girls and women, confirming this trend. However, despite some existing experiences [7, 55, 79, 173], there is insufficient information today about the influence of "masculine" sports on the female body. Literature data on the impact of regular special sports activities on menstrual activity in girls is very scarce and contradictory. Some authors emphasize that in girls engaged in certain types of sports, menstrual onset occurs later and menstrual cycle disruption occurs. Many researchers attribute the delayed onset of menarche and disruption of menstruation to intense physical activity affecting the age of menarche. According to various authors, the increase in menstrual cycle disruption among female athletes is 50%, which confirms the predominance of oligomenorrhea and amenorrhea during the sports season and the correlation of oligomenorrhea and amenorrhea with the disruption of the menstrual cycle. In 1983, K. Karlberg et al. Furthermore, the high frequency of menstrual cycle disruption in athletes may partly be due to the specific requirements of a particular sport, but it is also due to the inability of many athletes to obtain enough energy from food as a compensation for their busy schedules. Unfortunately, in professional sports, adolescent girls and women often overload their bodies with excessive weights. The reproductive system is one of the most sensitive systems to the physical strain of the body, and significant changes occur, primarily in the regulation of the menstrual cycle (its regularity, duration, rhythm change), followed by the occurrence of amenorrhea and other disruptions. Intensive loads specific

to modern sports negatively affect women's health and their reproductive system. Doctors and researchers consider the preservation of women's reproductive function and the prevention of reproductive system pathologies to be the most important issue in women's sports, in the context of constant stress factors. They identify three main forms of reproductive system pathology in female athletes and sportswomen:

Delayed sexual development.

According to the general opinion of pediatricians and gynecologists, delayed sexual development is understood as the absence of secondary sexual characteristics by the age of 15 and older, which is perceived as delayed menarche.

2. In female athletes and sportswomen, the most common form of reproductive pathology, which is the most widely spread, is menstrual cycle disruption, and among them, the following types of pathology can be distinguished: Amenorrhea - absence of menstruation, Dysmenorrhea - disruption of the amount and rhythm of menstruation: a) oligo or opsomenorrhea - scanty, rare, less frequent menstruation; b) polypromenorrhea - prolonged, heavy menstruation. 3. The third form of reproductive dysfunction in athletes is masculinization, which is characterized by a range of clinical symptoms: Athletic (male or intersex) morphotype, high growth, muscular and broad shoulders; Hypoplasia of the mammary glands and uterus; Deep voice - external appearance of a male voice. However, in most professional athletes, menstrual cycle disruption begins with stress and complex adaptive changes. The reproductive system is one of the most sensitive to hormonal and physical stress systems. Research shows that intensive physical activity leads to the release of a large amount of hormones and disrupts regular physical activity, leading to disruption of endocrine homeostasis. In addition, the combination of physical exercises and dietary restrictions leads to energy deficiency, which also leads to disruption of the menstrual cycle. Estrogen synthesis disruption is observed in athletes who limit physical strain and calorie intake. The "Female Athlete Triad" is common in ballerinas and female athletes, encompassing three components:

1. Disordered eating or inadequate energy intake,
2. Menstrual cycle disruption, and
3. Decreased bone mineral density [34].

The Triad was first described in 1997 by the American College of Sports Medicine [37]. According to various researchers, the prevalence of menstrual cycle disruption in female athletes varies depending on the sport and ranges from 12% to 66% [46]. According to the opinions of Ye Vian Quah et al., the cases of menstrual cycle disruption in sports where low body weight plays an important role can reach nearly 50%. Despite the growing number of girls engaged in professional sports, the issue of the prolonged impact of intensive long-term physical activity, which is an integral attribute of professional sports, on the female body, especially on reproductive function, remains unresolved. Athletes and ballerinas often suffer from various forms of damage, not only due to increased physical stress but also due to irregular eating habits, strict diets, which also lead to menstrual cycle-related issues in girls.

Conclusion:

Thus, recent data indicate that regular professional sports activities, as well as heavy physical loads and constant stress conditions, affect the menstrual activity of girls, showing their direct impact on the menstrual cycle and reproductive health of girls. Scientific sources and literature on the impact of sports on girls' menstrual cycles are very scarce and contradictory.

Despite the growing number of girls engaged in professional sports, the impact of physical exercises on girls' menstrual function is still largely underestimated. On the one hand, physical sports further toughen the human body, but considering them as healthy, on the other hand, adversely affects the reproductive health of adolescent girls.

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