

The Importance of Anthropometric Indices for Assessing the Physical Development and Physical Fitness of Young Athletes

Authors : Akbarova Gulnozakhon

Abstract : Relevance. Physical exercises can prolong the function of the growth zones of long tubular bones, delay the fusion of the epiphyses and diaphyses of bones and, thus, increase the growth of the body. At the same time, intensive strength exercises can accelerate the process of ossification of bone growth zones and slow down their growth in length. The influence of physical exercises on the process of biological maturation is noted. Gymnastics, which requires intense speed and strength loads, delays puberty. On the other hand, it is indicated that the relatively slow puberty of gymnasts is associated with the selection of girls with a special somatotype in this sport. It was found that the later onset of menstruation in female athletes does not have a negative effect on the maturation process and fertility (the ability to procreate). Observations are made about the normalizing influence of sports on the puberty of girls. The purpose of the study. Our goal is to study physical activity of varying intensity on the formation of secondary sexual characteristics and hormonal status of girls in adolescence. Each biological process peculiar to a given organism is not in a stationary state, but fluctuates with a certain frequency. According to the duration, there are, for example, circadian cycles, and infradian cycles, a typical example of which is the menstrual cycle. Materials and methods, results. Violations of menstrual function in athletes were detected by applying a questionnaire survey that contains several paragraphs and sub-paragraphs where passport data, anthropometric indicators, taking into account anthropometric indices, information about the menstrual cycle are indicated. Of 135 female athletes aged 1-3 to 16 years engaged in various sports - gymnasts, menstrual function disorders were noted in 86.7% (primary or secondary amenorrhea, irregular MC), in swimming-in 57.1%. The general condition also changes during the menstrual cycle. In a large percentage of cases, athletes indicate an increase in irritability in the premenstrual (45%) and menstrual (36%) phases. During these phases, girls note an increase in fatigue of 46.5% and 58% (respectively). In girls, secondary sexual characteristics continue to form during puberty and the clearest indicator of the onset of puberty is the age of the onset of the first menstruation - menarche. Conclusions. 1. Physical exercise has a positive effect on all major systems of the body and thus promotes health. 2. Along with a beneficial effect on human health, physical exercise, if the requirements of sports are not observed, can be harmful.

Keywords : girls health, anthropometric, physical development, reproductive health

Conference Title : ICBIPRD 2023 : International Conference on Bronchology, Interventional Pulmonology and Respiratory Diseases

Conference Location : Tokyo, Japan

Conference Dates : February 20-21, 2023