## ANALYSIS OF INDICATORS OF PHYSICAL DEVELOPMENT AND MORPHOFUNCTIONAL PREPAREDNESS OF YOUNG SPORTSMEN OF WATER SPORTS DEPENDING ON GENDER

## Busuioc Serghei<sup>1</sup>, Poburnii Pavel<sup>2</sup>,

<sup>1,2</sup>State University of Physical Education and Sport, Chisinau

**Keywords**: physical development, indices of physical development, general motor, psychomotor preparedness, sexual dimorphism.

**Actuality**. Modern youth sport of high qualification requires athletes a high level of development of basic physical, technical-tactical and mental qualities and the ability to effectively integrate them under the tough conditions of sports competitions.

The aim of the study is to perform a comparative analysis of the parameters of the morphofunctional, general motor and psychomotor preparedness of young sportsmen of water sports.

Results of the study and their discussion. It was determined that boys and girls in the study area are above the average height, in the range 175.4 - 178.1 cm and 159.0 - 165.0 cm, respectively, the differences in the former are 1.5%, in the latter 3.6 %. Body weight is slightly smaller than the standard due to high motor activity in selected sports. In particular, the body weight of boys on the average reaches 62.5 - 65.8 kg - a difference of 5%, girls 53.1 - 62.3, a difference of 14.8%. Attention should be paid to the height and weight of swimmers: the largest height and the lowest weight determine a lighter skeleton, which predisposes to swimming - better buoyancy, less sediment. In oarsmen, the skeleton is more massive and heavy, providing better conditions for the development and transfer of work efforts. Water polo players occupy an intermediate position, in the height-weight parameters of physical development, which provides for their jointly interrelated actions under aggressive physical variational contact with the rival.

The greatest body weight in rowers determines the athletic advantage of 375 g / cm and 391 g / cm in boys and girls, respectively, according to the due sports standards of athletes of high qualification, reflecting the athletic focus of training sessions. In the opinion of V.P. Guba (2009), N.I. Dvorkina and co-authors (2017), indicators of athleticism in combination with BMI and IMM characterize the morphofunctional preparedness, efficiency and morphological maturity of the organism, providing the opportunity to improve technical and tactical skills and the growth of sporting achievements.

Analysis of the parameters characterizing the statodynamic water balance in combination with high flexibility is an integral indicator of the coordination of the interaction of sensory systems in evaluation of the functional state as a whole and the share participation of individual analyzers (E.P. Ilyin, 2003), which determine the possibility of performing complex co-ordinated cyclic strokes in swimming, rowing and mixed ones in water polo showed the obvious advantage of girls-water polo players in Romberg's test and flexibility in comparison with swimmers and oarsmen

**Conclusions.** The similarity of physical development, its functional readiness in athleticism, BMI, IMM, which have a similar specific biological effect on the organism of young athletes due to the aquatic environment, is determined.