

CONSTRUCTION OF THE TRAINING PROCESS OF HIGHLY QUALIFIED HANDBALL PLAYERS BASED ON THE USE OF SPECIAL STRENGTH TRAINING

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Annotation

The paper discusses the issues of building a training process based on the methodology of special strength training for the development of speed and strength abilities of highly qualified handball players. A method of using the means of special strength training of handball players with a purposeful focus on the development of explosive force and reactive ability of the extensor muscles of the upper and lower extremities has been developed. The data obtained in the work can be used in the preparation of both handball players and athletes of other game types at the stage of sports improvement in the preparatory period of the training process.

Keywords: strength, speed-strength training, handball players, training process, explosive power, reactive abilities, long-term training, training.

INTRODUCTION

Long-term training and education of high-class athletes is a complex process, the quality of which is determined by a number of factors [8, 9]. The progress of domestic sports on the world stage is due to the improvement of scientific and methodological support for the preparation of the country's sports teams and its sports reserve, in connection with which a number of regulatory legal acts have been adopted in our republic: laws, decrees, government resolutions, which provide for: creating favorable conditions for conducting fundamental research in the field of physical culture and sports, development of recommendations for the wide application of innovative technologies, providing scientific and

methodological assistance and methodological assistance to coaches of national teams [1, 2, 3].

The modern composition of national teams in sports games, in particular in handball, apparently should be made up of players representing a potentially high level of training, namely speed-power, since they have to play at high speeds for as long as possible at an accelerated pace, therefore the problem of specialized speed-power training of athletes acquires significant significance and paramount importance in sports training of a long-term educational and training process. At the same time, it should be noted that at present it is the issues of speed and strength training of athletes of various sports, including handball players, that are a flaw in the methodological plan of the training process [4,5,6,7,8,9].

The relevance of the work. To date, scientifically-based recommendations related to the use of tools, methods, methodological techniques and approaches for the development and improvement of special strength qualities, as well as control, assessment of their level in the integral system of speed and strength training of athletes in the relationship of their improvement with the technical parameters of the skill of athletes have not been sufficiently developed [8,9]. A huge number of judgments and the lack of consensus among scientific experts on the construction of the training process, taking into account the monitoring of both the entire training process and competitive activity, as well as its individual aspects of preparedness, is one of the priorities that fully affect the effectiveness of managing the process of training highly qualified athletes in general, and highly qualified handball players, in particular, indicates the relevance of the problem being studied.

METHODS AND RESULTS OF RESEARCH

Based on the results of pedagogical observations, pedagogical testing, analysis of competitive activity and monitoring of training sessions, we have developed a methodology for the development and improvement of special strength qualities, and increasing the level of speed and strength training in general, of highly qualified handball players. We conducted pedagogical

observations of the training and competitive activities of handball players of the teams "GC AGMK" (Almalyk) and "Tashkent" (Tashkent). 28 highly qualified handball players took part in the study.

In the course of working on the research topic, we developed a methodology for using special strength training tools, one of the tasks of which was the development of explosive strength and reactive ability of the extensor muscles of the arms and legs, realized in specific conditions of fatigue developing during the game of handball. The program is designed for 72 days, it uses several types of basic exercises such as: squats with a barbell, jumping out with a barbell, a deep jump, jumping on an elevation, lifting a barbell on the chest, a barbell press.

As a result of the conducted pedagogical experiment, the methodology developed by us, designed for handball players with good preliminary training and having a solid foundation for the development of physical abilities, showed superiority over the traditional system of conducting handball training sessions among high-class athletes. The developed methodology contributed to an increase in the level of speed and strength training of highly qualified handball players in general by 14.6%, an improvement in special strength qualities by 19.7%, an improvement in the level of OFP and SFP by 12.8% and 14.6%, respectively.

Analyzing the results obtained during the pedagogical experiment, it can be noted that statistically significant differences were obtained between the experimental and control groups ($n=28$). The analysis of the results indicates an improvement in the results at the level of significance ($p<0.05$) in the standards: running for 30 m; triple jump from a place; throwing a stuffed ball weighing 1 kg (right hand); throwing a stuffed ball weighing 1 kg (left hand); throwing a stuffed ball weighing 1 kg with two hands from behind the head; throwing a stuffed ball weighing 1 kg with two hands behind the head; tracing chips 30 meters right hand; tracing chips 30 meters with the left hand; throwing a handball ball at a distance.

The developed method of using the means of special strength training with the purposeful development of explosive force and reactivity of the extensor muscles of the arms and legs, is based on the principle of gradually increasing specificity

and intensity of the load. As a result of the conducted studies, it was revealed that during training, the maximum leg strength in squats increased by 13.7%, this allowed to increase the weight in jumping with a barbell on the shoulders of athletes, as well as in lifting on the chest, which was about 40% of the maximum in squats with a barbell. The developed and tested methodology was successfully used in the training process of highly qualified handball players in the preparatory period at the turn of the special training stage.

Conclusions: The development of a methodology for the use of special strength training tools with the purposeful development of explosive strength and the reactive ability of the extensor muscles of the arms and legs, actively complements the program for the selection of special strength training tools for highly qualified handball players, which significantly improves the overall level of speed and strength training of highly qualified handball players, which in turn allows you to widely vary the individual arsenal of technical and tactical actions of an athlete and thus, it will increase the effectiveness of competitive activities. The results obtained confirm the effectiveness of the developed methodology and will contribute to increasing the reliability and effectiveness of the participation of highly qualified handball players in responsible competitions by improving the development of explosive power and the reactive ability of the extensor muscles of the upper and lower extremities. This technique can be successfully used in other game sports to improve the effectiveness of the construction of the training process.

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