

# Кременецька обласна гуманітарно-педагогічна академія імені Тараса Шевченка



Луцький національний технічний університет



Тернопільський національний педагогічний університет імені Володимира Гнатюка

Матеріали X Всеукраїнської науково-практичної конференції

### МЕДИКО-БІОЛОГІЧНІ ПРОБЛЕМИ ФІЗИЧНОГО ВИХОВАННЯ РІЗНИХ ГРУП НАСЕЛЕННЯ

14-15 листопада 2024 року

Кременець - 2024

УДК 376:57.02:796:615.825.1(477) M42

Медико-біологічні проблеми фізичного виховання різних груп населення: матеріали X наук. практ. конф. (14-15 листопада 2024 року) / ред. В. В. Чижик, В. А. Голуб. Кременець, 2024. 129 с.

Збірник розкриває актуальні фізіологічні, медичні та психологопедагогічні проблеми фізичного виховання та спорту у різних типах навчальних закладів.. Розглянуто окремі аспекти фізичної терапії, ерготерапії, фізичної реабілітації різних груп населення.

Матеріали публікуються в авторській редакції.

#### Рецензенти:

**Козачук Н. О.** доктор біологічних наук, доцент, професор кафедри фізіології людини і тварин Волинського національного університету імені Лесі Українки

**Коробейніков Г. В.** доктор біологічних наук, професор, завідувач кафедри спортивних єдиноборств та силових видів спорту Національного університету фізичного виховання і спорту України

Видається за рішенням кафедри теорії та методики фізичного виховання Кременецької обласної гуманітарно-педагогічної академії ім. Тараса Шевченка (протокол № 7 від 25 листопада 2024 року)

СИСТЕМА ОРГАНІЗАЦІЇ ПЕДАГОГІЧНО-КОРЕКЦІЙНОЇ РОБОТИ
ІЗ ЗДОБУВАЧАМИ ОСВІТИ ПІД ЧАС ПРОВЕДЕННЯ ЗАНЯТЬ ІЗ
СЕРЦЕВО-СУДИННИМИ ЗАХВОРЮВАННЯМИ В. В. Файдевич,
В.Й. Тарасюк116
ФОРМУВАННЯ МОТИВАЦІЇ У СТУДЕНТІВ ДО САМОСТІЙНИХ
ЗАНЯТЬ АТЛЕТИЗМОМ А. А. Чумакевич118
ТЕХНОЛОГІЯ ФОРМУВАННЯ ТВОРЧОЇ ОСОБИСТОСТІ ВЧИТЕЛЯ
ФІЗИЧНОЇ КУЛЬТУРИ Ольга Шинкаренко119
BIOLOGICAL AGE V. V. CHYZHYK124
ON THE ISSUE OF THE IMPORTANCE OF ARM WRESTLING IN THE
SYSTEM OF PHYSICAL EDUCATION OF YOUTH V. I. SHANDRYHOS,
H. A. Shandryhos, S. S. Pushkar, A. M. Bagriy

Biological age is understood as the individual achieved level of morphofunctional maturity of individual tissues, organs, systems and the whole organism. Therefore, the criteria of biological age can be morphological, functional and biochemical indicators, the diagnostic value of which varies depending on the stages of postnatal ontogenesis. Of the morphological criteria in childhood and adolescence, skeletal maturity (ossification periods of individual parts of the skeleton), dental maturity (teething and change of teeth), maturity of body shapes (proportions, body structure), development of primary and secondary sexual characteristics are more often used. Functional criteria are indicators that reflect the maturity of the nervous and vegetative systems, musculoskeletal system. Biochemical criteria include enzymatic, hormonal and cytochemical indicators. It should be borne in mind that with age the degree of informativeness of the listed factors changes. From 6 to 12 years, the key ones are the number of permanent teeth (dental age) and body length. Between 11 and 12 years, the indicators of annual increase in body length, as well as the degree of development of primary and secondary sexual characteristics, and the time of onset of menstruation in girls, acquire the greatest informative value. At 15 years and later, the development of secondary sexual characteristics becomes the leading sign, body length and development of teeth lose their informativeness. The level of ossification of the skeleton is determined during X-ray examinations only in the presence of special medical indicators; with sharply expressed disorders for the purpose of diagnosing endocrine diseases. When determining the biological age of aging people, morphological and functional indicators provide the most information.

## ON THE ISSUE OF THE IMPORTANCE OF ARM WRESTLING IN THE SYSTEM OF PHYSICAL EDUCATION OF YOUTH

V. I. Shandryhos, H. A. Shandryhos, S. S. Pushkar, A. M. Bagriy

 $orcid.org/0000-0002-1511-4559, orcid.org/0000-0002-8796-6507\\ shandrygos.v@gmail.com$ 

Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil Ternopil Comprehensive Secondary School 28, Ternopil

Introduction. Arm wrestling has always been a popular method of determining the strongest in a fight among different nations. There are various myths and legends about where and how this beautiful sport appeared. Americans are considered to be its founders, and armwrestling acquired its current form about thirty years ago [4]. Since then, armwrestling has been considered not only a popular entertainment, but also a full-fledged sport. All this contributes to the active growth of the popularity

of armwrestling around the world, and also leads to an increase in the number of its fans [3, 5].

Analysis of recent research and publications. Currently, there is a tendency to increase the interest of young people in various non-traditional and modern sports. This also applies to armwrestling. The interest in arm wrestling is increasing not only among athletes, but also among people who are not related to sports [7]. After all, it is known that many people, regardless of age and gender, want to take part in a fight and try their hand at arm wrestling.

Although armwrestling is not an Olympic sport, it is still very popular in many countries. Being the oldest sport, which began its modern development in the 1960s in the United States, in the fall of 1962, the first World Championship in wrist-restling was organized in Petaluma, California, as this wrestling was called [8].

In the 1990s, this sport was developed in Ukraine [2, 5].

The main components of success in armwrestling, as in other types of wrestling, are: strength, speed, flexibility, agility, and techniques. However, the leading component of success is rightfully strength. Without excellent strength indicators, even professional technique, speed and agility will not bring an athlete high sports results [1]. Achieving high sports results in armwrestling is possible only with daily training aimed at harmonious physical development, improvement of moral and volitional qualities of a personality, formation of a healthy lifestyle, and rejection of bad habits [6].

The aim of the research is to analyze and to define a place and value of armwrestling in the system of physical training of youth, to reveal features of technical and tactical preparation of armwrestlers.

The task of the research. On the basis of the analysis of psychological-pedagogical and educational-methodical literature on the problem of the research to characterize the main approaches to the formation and improvement of technical methods of armwrestling, education of moral qualities, force, will, purposefulness and self-improvement in youth.

Methods of the research. Theoretical: analysis, comparison and systematization of psychological, pedagogical and methodical literature for the identification of theoretical and methodological conditions and the main approaches to the definition of the role and value of arm wrestling in the system of physical education of youth; empirical: observation (direct, indirect, included), conversation.

Results. In armwrestling classes, first of all, the main emphasis should be placed on the technical side of training, trying to teach athletes to use the learned techniques, tactics, as well as their various combinations in the fight. Armwrestlers should make efforts to apply the learned technical actions at each training session and be able to

combine them. In the process of improvement and development of the learned techniques, each armwrestler, performing a particular technique, introduces into its performance a characteristic feature inherent in it, which determines personal differences during the development of techniques. The athlete should take into account the different location of the armrests, support posts, and restrictive rollers, and take into account the physiological indicators of the opponent and his/her own. Armwrestlers, performing a grip, independently choose the most comfortable positions for themselves, improving them in subsequent fights.

A grip is a complex technical technique on which the outcome of a fight depends entirely. There are several types of grips, four of them are basic: open - closed (difference in the position of the fingers) and high - low (by the level of grip).

When performing a grip, the athlete should take into account the individual data of his/her hand, the expected tactical actions of the opponent and at the same time plan his/her further actions in the fight. Also, one should not forget such important conditions as: the largest area of coverage of the back of the opponent's hand with his/her fingers and tight compression of the fingers.

However, the arrangement of fingers here can be closed, open in pairs and separately, etc. In grips, an athlete should try to avoid monotony so that opponents cannot guess your future technical action in a fight.

During training, armwrestlers learn not only attack techniques, but also practice counter techniques, which are a component of technical actions in armwrestling.

In a fight, athletes use the most studied wrestling techniques, and also try to use positions of grabs and other tactical techniques that are inconvenient for the opponent.

In the process of training, the teacher studies the individual characteristics of each student, his or her personal abilities to master certain techniques, while highlighting the most successful techniques that he or she needs to improve in the future, depending on the level of physical fitness. However, the teacher needs to control this process so that each of the athletes mastered and practiced as many different technical actions and techniques as possible.

During the training, practicing any technical action, the teacher should take into account not only the level of complexity of the technique, but also the age of the athlete who is engaged and possible injuries during the training.

Conclusions. Sports activities will be successful if those involved develop moral qualities, a sense of teamwork, discipline and hard work. The formation of discipline and order should be carried out from the very first armwrestling classes.

Compliance with safety precautions, adherence to a healthy lifestyle, giving up bad habits, following the correct daily routine, strictly following the coach's

recommendations, behavior during training and at home - all this plays an important role in the training of an armwrestler.

Prospects for further research in this area. It is necessary to form sports diligence in pupils from the first armwrestling classes, because a person's ability to overcome obstacles that arise is achieved, first of all, by systematic training [20].

First of all, the teacher needs to give examples, through conversations to convey to the athletes that success and high results in any business depend primarily on personal determination and hard work. In addition, it is necessary to increase the volume and intensity of the load in the process of armwrestling training consistently and in stages.

#### References

- 1. Безкоровайний Д. О., Звягінцева І. М. (2019). Армспорт: техніка, тактика і методика навчання: навчальний посібник. Х.: ХНУМГ, 106 с.
- 2. Павлюк І., Долиніна М. (2023). Організаційні основи розвитку студентського армспорту в Україні. Науковий часопис Українського державного університету імені Михайла Драгоманова, (4(163), 146-150. https://doi.org/10.31392/NPU-nc.series15.2023.04(163).28
- 3. Шандригось В.І., Іваницький Н.Б., Ковальчук Н.В. (2024). Організація та проведення змагань з армрестлінгу за допомогою програмного забезпечення «ArmRec». Єдиноборства, №2 (32), С. 110-121. https://DOI:10.15391/ed.2024-2.10
- 4. Bezkorovainyi D., Kamayev O., Vlasko S., Plotnytskyi L., Kravchuk, Y., Kulakov D., Mashchenko O., Kliuka A. (2023). Comparative Analysis of the Efforts of Highly Qualified Elite Armwrestlers with Different Strength Abilities. Physical Education Theory and Methodology, 23(6), 850–859. https://doi.org/10.17309/tmfv.2023.6.06
- 5. Bezkorovainyi D., Mazurenko I., Zvyagintseva I. (2019). Analysis of the methodology for preparing the 13-time world champion in arm wrestling. Martial arts, 4(14), 15-25. https://doi.org/10.15391/ed.2019-4.02
- 6. Hirai H., Miyahara S., Otuka A. (2021). Physical factors affecting the strength of arm wrestling. International Journal of Medical Science and Clinical Invention, 8(11), 5816–5821. https://doi.org/10.18535/ijmsci/v8i11.010
  - $7.\ https://en.wikipedia.org/wiki/Arm\_wrestling$
  - 8. https://www.waf-armwrestling.com/

### Наукове видання

### МЕДИКО-БІОЛОГІЧНІ ПРОБЛЕМИ ФІЗИЧНОГО ВИХОВАННЯ РІЗНИХ ГРУП НАСЕЛЕННЯ

Матеріали X науково-практичної конференції

**Редактори** – Віктор Чижик, Віктор Голуб **Комп'ютерна верстка** – Віктор Чижик

Здано до набору 10.11.2024. Підписано до друку 15.11.2024. Формат 60х84 1/16. Папір офсетний. Гарнітура Times. Ум. друк. арк. 6,14. Обл. вид. арк. 6,24. Наклад 300 прим.

Друк. ПП Іванюк В. П. вул. Винниченка, 63, м. Луцьк Свідоцтво Держкомінформтелерадіо України ВЛн № 31 від 04.02.2004 р.

УДК 376:57.02:796:615.825.1(477) M42

Медико-біологічні проблеми фізичного виховання різних груп населення: матеріали X наук. практ. конф. (14-15 листопада 2024 року) / ред. В. В. Чижик, В. А. Голуб. Кременець, 2024. 129 с.

Збірник розкриває актуальні фізіологічні, медичні та психологопедагогічні проблеми фізичного виховання та спорту у різних типах навчальних закладів.. Розглянуто окремі аспекти фізичної терапії, ерготерапії, фізичної реабілітації різних груп населення.

УДК 376:57.02:796:615.825.1(477)