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ORGANIZATION OF THE TRAINING PROCESS OF HIGHLY QUALIFIED ATHLETES IN ATHLETICS UNDER QUARANTINE RESTRICTIONS

In the conditions of quarantine restrictions related to the COVID-19 pandemic, there was a need to find new approaches to the organization of the training process of highly qualified track and field athletes, to develop new forms, methods of training in various types of track and field.

The purpose of this study: to determine the peculiarities of the organization of the training process of highly qualified track and field athletes, which will allow to maintain or increase the level of physical fitness of highly qualified track and field athletes, specializing in speed and strength types of track and field, in the conditions of the COVID-19 pandemic.

Methodology. To achieve the goal, a number of theoretical methods were used, namely: generalization and systematization of scientific sources to substantiate the relevance of the research problem; content analysis of Internet sources to study the practical state of development of the problem; pedagogical experiment, testing.

The scientific novelty consists in providing recommendations regarding the organization of the training process of highly qualified track and field athletes in the conditions of the COVID-19 pandemic based on the approved methodical recommendations of the FAU and the recommendations of leading coaches who work with highly qualified track and field athletes.

Conclusions: the obtained above-mentioned increase in the competitive result is a fairly significant indicator of the improvement of the results and indicates that the developed method of organizing the training process of highly qualified track and field athletes helped the experimental group to maintain the level of preparedness in quarantine conditions and to show decent results in the future.

Keywords: highly qualified track and field athletes, quarantine restrictions, training process.

Formulation of the problem. Relevance of work. As you know, in March 2020, a pandemic of COVID-19 was declared all over the world, which affected the life of mankind. State governments have announced the introduction of quarantine measures to reduce social interaction and contain the spread of the SARS-CoV-2 coronavirus. All sports schools and sports clubs stopped their work, a ban on visiting sports grounds and parks was introduced, which further limited opportunities for training. The pandemic has irreversibly changed the views, values, and behavior of people, including the movement regime associated with physical exercises and sports, which is why coaches, including athletics coaches, had to look for new ways of organizing the training process [5, p. 29].

During contact with a person sick with COVID-19, even if the athlete is not sick, he is forced to observe a regime of self-isolation for 14 days at his place of residence [5, p. 143], which definitely affects the level of his physical fitness. There was a need to find new approaches to the organization of the training process in conditions of restrictions due to quarantine and the need for self-isolation.

Since one of the main principles of sports training is the continuity of the training process, the primary task of coaches and athletes was to quickly adapt to new training conditions, and to develop new forms and methods of their organization and control.

Analysis of recent research and publications. The Athletics Council of Ukraine FAU, as the only national governing body of all athletics in Ukraine, and in compliance with the Resolution of the Cabinet of Ministers of Ukraine No. 211 dated March 11, 2020 «On preventing the spread of the acute respiratory disease COVID-19 caused by the SARS-coronavirus on the territory of Ukraine CoV-2» (with changes) provides methodological recommendations, which were developed in cooperation with the Ministry of Health of Ukraine, to counter the spread of the coronavirus disease COVID-19 during the competitive process in athletics and training meetings of the national athletics teams of Ukraine athletics to the main international competitions of 2020-2021 and the XXXII Summer Olympic Games under quarantine conditions.

The FAU also approved additional recommendations for the conditions of holding group training meetings and additional requirements for holding competitions [3].

S. Romanchuk, the head coach of the staff team of the national team of Ukraine in endurance athletics, draws attention to the specifics of the training of track and field athletes in conditions of a pandemic [3].

O. Kurbakov – master of sports of the international class of Ukraine in athletics, senior coach of the regular team of the national team of Ukraine in athletics, master of sports in athletics suggests that athletes and coaches pay special attention to the proposed recommendations of the main mechanisms of endurance (complex approach, orientation to external and internal load parameters, fatigue and recovery processes, energy supply, etc.), which will allow track and field athletes to show planned results regardless of pandemic-related changes in training conditions [6].

O. Velychko is the leading coach of the KNG, the full-time team of the national team of Ukraine in athletics, a master of sports of the international class in athletics offers recommendations for the training process to athletes who specialize in running. The specialist emphasizes that for the high-quality construction of the training process, it is necessary to use a systematic approach in managing the training process of runners, which takes into account many factors of all kinds, first of all, the activities of the attendants – cardiovascular and respiratory, as well as locomotor and neuromuscular systems of a runner's body [4].

Based on the relevance of the problem, a number of scientists emphasize that in the modern conditions in which athletes and coaches of the whole world in many sports (including athletics) find themselves today, it is necessary to find an optimal model of training in all competitive disciplines [1] [0], [7], etc.

The essence of the implementation of methodological provisions, namely the functional and strength and speed potential in training sessions and preparation for competitions are subject to significant changes in almost all sports, including the programs of athletes who specialize in various types of athletics [4].

In general, it is worth planning to build a training cycle in a pandemic situation, the opinion of well-known trainers who work with professional athletes is important.

K. Lebedev is an honored track and field coach of Ukraine, master of sports, European record holder among young men in the 10,000-meter race. Bronze medalist of the European Championship among veterans in the 5,000-meter race, 7-time winner of the USSR championships among young men and youth in long-distance running. USSR record holder at the distance of 10,000 m. Prize winner of the USSR-USA match among juniors. Winner of the 1978 Athens Classic Marathon. The co-founder and coach of the Lebedev Running Academy gives the following advice: «... it is necessary to continue training, up to 5-6 times a week, but with 2/3 of the effort, for the sake of strengthening immunity. After all, reaching the peak of the form leads to an extremely changeable state of immunity – like walking on the edge of a knife...» [6].

The purpose of the study is to determine the peculiarities of the organization of the training process of highly qualified track and field athletes, which will allow to maintain or increase the level of physical fitness of highly qualified track and field athletes specializing in speed and power athletics, in the conditions of the COVID-19 pandemic.

Methodology. To achieve the goal, a number of theoretical methods were used, namely: generalization and systematization of scientific sources to substantiate the relevance of the research problem; content analysis of Internet sources to study the practical state of development of the problem; pedagogical experiment, testing.

The scientific novelty consists in providing recommendations regarding the organization of the training process of highly qualified track and field athletes in the conditions of the COVID-19 pandemic on the basis of the approved methodical recommendations of FAU and the recommendations of leading coaches who work with highly qualified track and field athletes.

Research results. The pedagogical experiment took place at the track and field training center on the basis of the municipal institution «Children's and Youth Sports School» (MI CYSS) of the Stepaniv Settlement Council of the Sumy District of the city of Sumy in a group of highly qualified athletes specializing in speed and power sports, such as sprint running, running with hurdles, long jump.

The young men who have the rank of KMS took part in the experiment. Athletes were divided into 2 groups – experimental and control. The experiment lasted for 5 months (between September 2020 and January 2021).

The experimental group included those athletes who were forced to observe a self-isolation regimen due to illness (asymptomatic current) or due to the illness of another person while in contact with him. These athletes were able to perform the planned training work to maintain the level of physical fitness [0, p. 35].

The results of testing at the beginning of the experiment were used to assess the initial level of preparedness. The distribution of athletes in the experimental group takes place in the process of studying everything in connection with the need to observe quarantine measures.

Table 1

**Results of testing the initial level of physical fitness
of highly qualified track and field athletes of the control and experimental groups**

Tests	KG (M±m)	EG (M±m)	P
Running for 30 m (s)	3,89±0,08	3,90±0,07	P>0,05
Running for 60 m (s)	6,96±0,07	6,96±0,11	P>0,05
Running for 30 m on the move (s)	3,19±0,21	3,05±0,12	P>0,05
Standing long jump (m)	2,85±0,11	2,63±0,08	P>0,05
Triple jump	8,38±0,29	7,94±0,35	P>0,05
Core push from below-forward (m)	12,89±1,40	12,91±0,84	P>0,05
Core push from below-forward (m)	13,60±0,97	13,50±0,39	P>0,05

As can be seen from Table 1, before the start of the experiment, the control and experimental groups were practically the same in terms of physical fitness ($P>0.05$), only in the standing long jump indicators, the differences were unreliable ($P\leq 0.05$); therefore, we can consider these groups to be homogeneous.

The developed technique was designed for 14 training days under conditions of self-isolation. The basis was exercises for general and special physical training, which could be carried out in a limited space in the conditions of the place of stay during quarantine: exercises with weights, running and jumping stairs, running and jumping in place on the frequency and technique of movements.

During the experiment, the exercises varied depending on the tasks of the mesocycle. During the retraction mesocycle, mainly general preparatory exercises with weighting were used to develop the strength of the main muscle groups. During the basic mesocycle, exercises were used to develop speed and strength abilities (jumping and running, exercises on stairs).

In the control-preparatory mesocycle, exercises on technique and development of movement speed were used.

To ensure physical training during training, a video instruction on training was posted at home, a set of exercises was selected, mainly cardio training, strength training, stretching, which did not require a lot of space and additional equipment. Separate classes on mobile fitness applications were also used. Dosing of physical activity was carried out in accordance with the tasks of mesocycles.

Telegram messenger was used for quick exchange of information of the «question-answer» type. After the end of self-isolation mode, training was carried out remotely in the open air: the trainers placed a map with the distance through the web service, the athlete covered the distance with the recording of the time of the distance and the GPS track through the phone or fitness watch, and sent the data to the trainer. Based on the results of the distance, the results were summarized and recognition for the next training session.

Also, during the experiment, athletes who fell into social isolation due to contact with a patient with COVID-19, in addition to the training plan, were provided with psychological support, which was developed after studying the relevant literature and interviewing the athletes themselves. A week before the first competition of the winter season, repeated testing was performed (Table 2).

Table 2

**Results of testing the achieved level of physical fitness of highly qualified
track and field athletes of the control and experimental groups**

Tests	EG (M±m)	KG (M ± m)	P
Running for 30 m (s)	3,75±0,05	3,71±0,04	P>0,05
Running for 60 m (s)	3,10±0,06	2,97±0,083	P≤0,05
Running for 30 m on the move (s)	6,86±0,12	6,80±0,11	P>0,05
Standing long jump (m)	3,05±0,03	2,63±0,08	P≤0,05
Triple jump	8,49±0,19	8,53±0,24	P>0,05
Core push from below-forward (m)	13,17±0,58	13,06±1,38	P>0,05
Core push from below-forward (m)	13,76±0,37	13,85±0,80	P>0,05

Analyzing the data presented in the table, we can see that the differences in the control and experimental groups after the experiment are statistically unreliable ($P > 0.05$) in five tests, except for two tests: running 30 meters at once and long jump from a standing position ($P \leq 0.05$). This indicates that, despite the forced self-isolation regime of the athletes of the experimental group, their level of preparedness managed to be kept at the level of the control group.

After the end of the experiment, on January 30–31, 2021, the Ukrainian Team Indoor Athletics Championship was held on the basis of the track and field arena of the Sumy State University in the city of Sumy. Our respondents took part in the competition. Comparative indicators of the competitive result in 2020 and 2021 after the experiment are presented in Table 3.

Table 3

Competitive result before and after the experiment

Спортсмени	Вид л/а	Result BEFORE	Result AFTER	Increase (%)
Control group				
1. Oleksandr	60 m	7,28 s	7,04 s	3,4%
2. Dmitry	Length	6,73 m	7,11 m	5,3%
3. Leonid	200 m	23,12 s	22,60 s	2,3%
4. Vyacheslav	Length	5,98 m	6,35 m	5,8%
Experimental group				
1. Stepan	60 m			2,4%
2. Denis	200 m			2,8%
3. Stas	200 m			2,9%
4. Andriy	60 m			3,2%

After the end of the pedagogical experiment, it was concluded that the developed set of exercises helped to maintain the level of preparedness of our athletes and this allowed them to perform decently at competitions and improve their results in the future.

The increase in the competitive result in the control group was from 2.3% to 5.8%, and in the experimental group from 2.4% to 2.9%.

Conclusions. Therefore, the above-mentioned increase in the competitive result is a fairly significant indicator of the improvement of the results and indicates that the developed method of organizing the training process of highly qualified track and field athletes helped the experimental group to maintain the level of preparedness in quarantine conditions and in the future to show decent results at competitions.

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ОРГАНІЗАЦІЯ ТРЕНУВАЛЬНОГО ПРОЦЕСУ ВИСОКОКВАЛІФІКОВАНИХ СПОРТСМЕНІВ ІЗ ЛЕГКОЇ АТЛЕТИКИ В УМОВАХ КАРАНТИННИХ ОБМЕЖЕНЬ

В умовах карантинних обмежень, пов'язаних із пандемією COVID-19 виникла необхідність пошуку нових підходів до організації тренувального процесу висококваліфікованих легкоатлетів, розробки нових форм, методів підготовки у різних видах легкої атлетики.

Мета даного дослідження: визначити особливості організації тренувального процесу висококваліфікованих легкоатлетів, що дозволить утримати або підвищити рівень фізичної підготовленості висококваліфікованих легкоатлетів, що спеціалізуються на швидкісно-силових видах легкої атлетики, в умовах пандемії COVID-19.

Методологія. Для досягнення поставленої мети використано низку теоретичних методів, а саме: узагальнення і систематизація наукових джерел для обґрунтування актуальності проблеми дослідження; контент-аналіз Інтернет-джерел для вивчення практичного стану розробленості проблеми; педагогічний експеримент, тестування.

Наукова новизна полягає у наданні рекомендацій стосовно організації тренувального процесу висококваліфікованих спортсменів із легкої атлетики в умовах пандемії COVID-19 на підґрунті затверджених методичних рекомендацій ФЛАУ та рекомендацій провідних тренерів, які працюють із висококваліфікованими легкоатлетами.

Висновки: отриманий вищезазначений приріст змагального результату є досить вагомим показником покращення результатів і свідчить про те, що розроблена методика організації тренувального процесу висококваліфікованих легкоатлетів допомогла експериментальній групі утримати рівень підготовленості в умовах карантину і надалі показати гідні результати на змаганнях.

Ключові слова: висококваліфіковані легкоатлети, карантинні обмеження, тренувальний процес.

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