Physical Education of Different Groups

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Program of Applied Physical Preparation of Officers Mobilized from the Reserve

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Abstract:

In the article it is presented the program of applied physical preparation which, to our minds, is aimed at more effective professional activity of officers who were call up for military service after finishing the department of preparation of reserve officers. The objective of the work is to ground the program of applied physical preparation for officers during adaptation to military service. It was developed the author program with logical stage-by-stage structure of its realization which allows by means of physical preparation which are close by their dynamics to professional action to provide adaptation of officers call up for military service (after finishing the department of preparation of reserve officers). For today the author program is introduced into the system of physical preparation of 184 educational centers for the purpose of effectiveness control.

Key words:

officer, preparedness, load, physical preparation, recovery, adaptation.

Introduction. Officers' professional conduct is difficult and has its own peculiarities. It encompasses absorbing a great deal of material, undertaking physical strain, working with personnel in difficult conditions. Due to this the officers are held to a higher standard in regard to professional military readiness [1]. The level of the difficulty of this problem lies in the lack of universal methodological approaches and technical means for learning different factors that influence the progress of professional conduct (work and rest schedules, physical activity, physical condition, individual physiological characteristics of the body, health condition and so on) [8].

The urgency of forming of military staff subdivisions requires the leadership of Ukrainian Armed Forces to fill the officer positions by utilizing reserve officers, and those who graduated from Higher Military Institutions. Today up to 40 % of the military personnel, who graduated from the department of reserve officers called up for military service in the various security forces [6; 7]. According to unit commanders, reserved officers' level of professional, physical, psychological readiness does not allow to fully perform their duties [10; 11], and is also significantly different from the level of readiness of graduates from higher military institutions, who entails additional time to adapt to military life and to improve their qualities necessary for effective professional conduct.

So, today, it is necessary to look for ways to improve physical and professional training of graduate officers, especially those who have been called up for military service after graduating from the department of reserve officers.

The research article is performed in accordance with the theme «Justification of criteria and indicators for determining the psychophysiological capabilities of military personal conducting military warfare», code «Opportunity» consolidated plan of research of Ukrainian Armed Forces Physical Education Office (0101U001767).

Analysis of recent researches and publications. The following scientific works of O. M. Olhovyi (2005), V. M. Krasota (2007), S. V. Romanchuk (2012), S. S. Fedak (2015), Yu. V. Verenha (2015), I. L. Shliamar (2015) and others highlight the question of adaptation of troops to the conditions of professional conduct. They also study categories such as students of higher military institutions,

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conscripts, the officers in the new climatic conditions, etc. [1; 2; 5; 8; 9; 10; 11]. Despite the considerable number of research in this field, there are still many unsolved problems concerning adaptation of officers to military service, who did not complete quality training and are taking up responsibilities which they never had any experience with.

Analysis of physical training guidance documents, individual training programs for officers, the content of these classes found that officers who were called up for military service after completing the program of the department of reserve officers are involved in the general group of officers who graduated from higher military educational institutions. The results of the final examinations show that this category of officers unable to master the subject of combat training and they need to develop specific programs. This fact also led to the choice of research topic, namely the justification of the study program applied physical training for this category of officers.

The main purpose of the research is to justify the program of applied physical training during adaptation of officers to military service.

Materials and methods of the research. To accomplish the main purpose of the research we have used general scientific methods: analysis, comparison, systematization and generalization. It was previously analyzed the organization of physical training concerning the adaption of military personnel to completing their duties in the Armed Forces of Ukraine and leading countries of the NATO, compared the results of physical fitness, indicators of physiological health of the officers at rest and after exercise, and the level of psychological qualities. After systematizing data, it was identified the need for justification of the applied physical training for officers who came to military service after the department of reserve officers. The investigation has proved the main elements of the author's program.

Results of the research. Our analysis shows that the level of physical fitness correlates with anthropometric indices, functional status, level of mental qualities, etc. It is therefore extremely important that the phenomenon of low physical fitness of man considered holistically, in conjunction with indicators that reflect different levels of personality functioning: morpho – functional, psychological and behavioral. Perhaps only in this case, the development of author's program is possible.

The practice of physical training on military installations shows that there is a certain percentage of officers who have not finished higher military education, it is the officers called up from the reserve. In this case, there are two approaches: the first – involves completing a certain group of these soldiers, and the second – includes guidelines for leaders to provide periods of instruction for officers called up from the reserve which are engaged in the general group. Increasing of physical fitness includes: rest schedule, the right combination of physical fitness which is directed at optimizing of the operational readiness of military personnel.

Therefore, the choice of physical training in the period of adaptation to military service for officers involves the following tasks:

- increasing the overall endurance and ensuring a smooth transition from low to high and even close to the maximum (for particular age group) physical exertion according to the table of instruction for physical preparation 2014 circulatory function, increased respiratory muscle strength;
- raising different kinds of specific and nonspecific endurance of the body in the studied categories of servicemen;
 - removal of the neuro-emotional stress.

Based on the objectives from the author's program it is appropriate and logical to pursue the phased implementation of its structure and formation. The first stage is a preparing the body of the service member to accept further physical exertion with overwhelming focus on exercises to improve aerobic capacity. The second stage is an enhancing the function of the body by increasing the amount of stress applied, which should positively affect physical performance and a reserve military background adaptation to physical stress, similar to the level of stress specific to the profession. The third stage is the stabilization of the volume and the increase of intensity of stress, contributing to a high level of physical fitness (Fig. 1).

One of the important features of the author's program is the use of different means for physical training, which causes interest among service members, and also a creation of a positive emotional growth. These means of physical training should closely simulate the actions in their respective field of work. At the same time physical training should be adequate to the level of physical fitness of soldiers, not overloading them, promoting normalization or improvement of body functions. Periods of instruction need to be held utilizing the principle of group individualization.

PRACTICAL PHYSICAL READINESS PROGRAM FOR OFFICERS ACTIVATED FROM THE RESERVES

Purpose

to provide long-term officers' adaptation to perform professional tasks by means of applied physical preparation

Tasks:

- 1. increasing the overall endurance and ensuring a smooth transition from low to high and even close to the maximum (for particular age group) physical exertion according to table of instruction for physical preparation 2014 (circulatory function, increased respiratory muscle strength;
- 2. raising different kinds of specific and nonspecific endurance of the body in the studied categories of servicemen;
- 3. removal of the neuro-emotional stress.

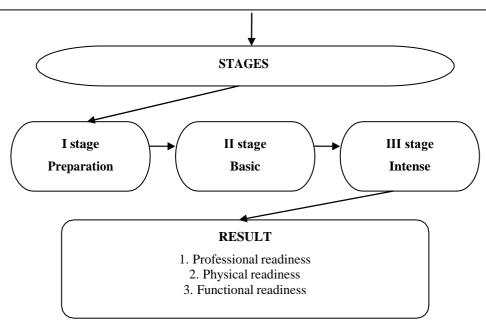


Fig. 1. Chart of author's program

Its essence lies in the fact that the preparatory and final parts are the same for everyone, but the basic training is conducted in groups of soldiers that have approximately the same level of physical fitness. Thus, the exercise is presented and regulated based on the fact that the value of physical activity can be show by soldiers in accordance with the table of instruction for physical preparation -2014 (for all 7-aged groups).

The main forms of physical training, which introduced author's program are: educational and training sessions, and moral support activities. These forms of physical training organized and conducted on the basis of the overall health of military personnel. The duration and intensity of the exercises, their quantity, that determines the total physical workload plans based on age and type of physical activity and functional capacity of the organism. In that case, it is necessary to follow the principle of gradual increase in physical activity. Training sessions are held twice in the first week, lasting 50 minutes each. The basic exercises included in the following periods of instruction are: walking, jogging, floor exercise, sports and outdoor games, exercises with weights, exercises on gymnastic apparatus. All classes are held in accordance with the complex method (Table 1).

Table 1

	I stage	II stage	III stage
Task of the	preparing the body of the	enhancing the function of the body by	the stabilization
stage	service member to accept	increasing the amount of stress applied,	of the volume
	further physical exertion	which should positively affect physical	and the increase
	with overwhelming focus on	performance and a reserve military	of intensity of
	exercise to improve aerobic	background adaptation to physical	stress,
	capacity	stress, similar in size to the level of	contributing to a
		stress specific to the profession	high level of
			physical fitness
Duration	1 st week	2 nd -14 th weeks	15 th -52 nd weeks
Number of	2 physical training sessions	2 physical training sessions each lasting	2 physical
sessions per	each lasting 2 hours	2 hours	training sessions
week (hours)	1 physical training session	1 physical training session (MSA) –	each lasting
	(MSA) - 2 hours.	2 hours.	2 hours
			1 physical
			training session
			(MSA) - 2 hours.
Purpose	Training sessions are held	Training sessions are held twice in the	Exercises closely
	twice in the first week,	first week, lasting 50 minutes each. The	simulate the
	lasting 50 minutes each. The	basic exercises that are included in the	action in
	basic exercises that are	following periods of instruction are:	professional work
	included in the following	walking, jogging, floor exercise, sports	environment
	periods of instruction are:	and outdoor games, exercises with	combined with
	walking, jogging, floor	weights, exercises on gymnastic	exercises of
	exercise, sports and outdoor	apparatus. All classes are held in	discipline in
	games, exercises with	accordance with the complex method in	combat training.
	weights, exercises on	military uniform with proper gear	
	gymnastic apparatus. All		
	classes are held in		
	accordance with the		
	complex method.		
Method of	complex	complex	circular
organisation			4.5.5.
Physical	up to 130 bpm	up to 150 bpm	up to 180 bpm
workload			

The structure and content of classes depends on the operational readiness of military personnel. In the initial period it is recommended the training sessions should be conducted as follows: general developmental exercises in motion and in place for 10–15 minutes, strength exercises on the bar and parallel bars for 5–7 minutes, running 5 minutes, two-way game of volleyball 30-40 minutes. In order to adapt one's body to physical exercise, it is advisable in the early sessions to use low and medium difficulty exercises with a gradual approach to high level of difficulty, while taking into account the age and physical fitness standards according to the table of instruction for physical preparation – 2014. General developing exercises are performed with the same number of repetitions and with the equal amount of rest periods between them, over three sessions. The pace of the run and the distance is determined by the following procedure: at the first session military members are offered the optimal pace for them to overcome the distance of 1 km. At the end of the run, the speed of the military personnel and the average score of the group is calculated and is used as a training standard for the first three sessions. The unnecessary acceleration during the run can result in military personnel stopping or losing their pace during the run that is why the run is conducted with at a constant speed. Especially important during the run of the investigated contingent is the breathing. In order to run properly, you must correctly and rhythmically breathe. In order to run in an optimal pace the uniformity of breathing and its regulation is very important.

If you periodically control heart beat it would give an opportunity to calculate the exact pulse pressure at the given run speed. Practical experience shows that during first sessions the most difficult exercises are the ones that target coordination and the muscles of the whole body. While conducting exercises in order to improve coordination it is necessary to perform the exercises slow and with the supervisor.

During the exercises targeting the muscles of the whole body it is important to increase rest breaks between movements and repetitions. Conducting the same exercise for the first three sessions provides a stable adaptation period for the service member to the proposed work load.

The most prominent feature of the successful adaptation is confidence and the precision in movements and relatively quick recovery of the heart rate during the rest pause. In addition, after the third lesson all military personnel subjectively marks their improvement in operational readiness and efficiency. Starting after the fourth session, physical activity increases due to additional exercises with gear and longer duration of the run at a set pace, which is determined again by the method described above and is standard to stabilize the pulse for about 12–14 sessions.

The method for increasing the work load in this case is a standard second – nature. Allowable target zone for intensity in the first week for the first group is heart beat – 130 bpm, run 1000 meters in 4.30–5.00 min. Intensity level 2^{nd} –14th weeks for first group is working heart beat 130–135 bpm; acceptable – 150 bpm. During the initial sessions of physical training for officers rest intervals are utilized, providing a full recovery before the start of the next exercise. It should be emphasized that the number of repetitions per given exercise intensity, duration and magnitude of the rest intervals effects the direction of changes in the body. This should take into account the required number of repetitions.

Conclusions. As a result of our research we presented author's vision of the program study applied in physical training of officers who were mobilized from the reserve (called up for military service after completing the program of the department of reserve officers) with a low level of physical fitness. Author's program with a phased and logical structure should allow its implementation by means of physical training, simulated by its dynamic professional actions in order to provide a quick and long-term adaptation of officers to the conditions of military service. Today author's program is implemented into the system of 184 physical fitness training centers in order to verify its effectiveness.

The directions for the future research caused by introducing the program of physical training for officers who are called up for military service after completing the program from the department of reserve officers. The main purpose is to adapt them to professional work and to military service conditions as soon as possible.

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