SPECIAL ASPECTS OF MOTIVATION OF THE STRUCTURAL SUBDIVISIONS OF THE STATE EMERGENCY SERVICE OF UKRAINE IN TERMS OF PHYSICAL SELF-CULTURE

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Annotation. *Purpose:* to determine the motivation of employees of structural subdivisions of the State Emergency Service of Ukraine to improve their level of professional competence by means of physical training. *Material:* questionnaire survey of 130 rescue workers aged 25 to 40 years. *Results:* the main motives of rescue team personnel for physical culture and sports activities are gain in physical health and professional competence, while performing rescue missions. It was established that, when on duty, most of the firefighters and rescue workers are not engaged in physical exercise at all; household chores and poor state of health in case of men prevent rescue team employees from doing exercises outside of working hours. It was found that fire-rescue specialists give preference to the development of muscle strength during professional physical trainings and would like to perform power exercises. *Conclusions:* the low level of motivation of current fire-rescue workers for physical self-improvement requires optimization of control over professional physical education in departments of the State Emergency Service of Ukraine.
Key words: firefighter, rescue worker, physical training, motivation, muscle strength.

Introduction

Modern development of Ukraine is characterized by rapid changes in all spheres of social life. They can not but concern system of firefighting-rescue officers' training. It conditions seeking of innovative technologies, oriented on rising of effectiveness of pedagogic management and specialists' professional training organization in State services on emergency situations (SSES) of Ukraine structures.

Problems of professional training are regarded in works of many domestic and foreign scientists that is a basis of conceptual principles and scientific methodic grounds of emergency situations specialists' training. Professional functioning of rescuer is realized in extreme conditions, which require constant and effective training [6]. Physical fitness of specialists and their readiness for fulfillment of service tasks are especially significant [12] and they are interconnected with psychological assurance [8].

Effectiveness of rescue works directly depends on defense of rescuers themselves against traumas [19]. In this connection professional perfection requires specialized programs and standards of physical training [11] considering individual features [17]. Besides, application of special equipment in rescue works requires certain strength from rescuers [1]. That is why it is quite reasonable that physical training shall be conducted with application of such equipment [16]. If influence of physical exercises on cardio-respiratory efficiency of firefighters' work has been studied rather profoundly, then functioning of supporting motor system has been remaining not completely researched. That is why power training requires more attention [14].

Among specificities of future SSES of Ukraine specialists' professional training great attention is paid to physical readiness of HEE cadets for future work [2, 3]. With it some authors pay attention to insufficient level of future specialists' physical fitness and low level of their motivation [7, 10]. At the same time only few publications are devoted to problems of perfection of physical training methodic of acting officers and rescue specialists [4, 5, 9, 13, 15]. With it, training of domestic specialists of SSES of Ukraine to certain extent differs from foreign analogues [18, 20].

Management of firefighting-rescue specialists' training is regulated by a number of governmental orders and decrees. From them one can see that rescuers shall constantly maintain good physical condition and perfect it (Order of SSES of Ukraine No. 444, dt. 01.07.2009 "On approval of instructions on organization of professional training and extra mural education of soldiers and officers of civil defense subdivisions"). Just physical training is one of main kinds of service training (Order of SSES No.10, dt. 05.08.2004 "On approval of instructions on physical training of SSES of Ukraine staff"). However, only 102 academic hours a year are assigned for general and special physical training of operative units of subdivisions, shift (watch), group, squad (Order of SSES of Ukraine No. 601, dt 01.09.2009 "On approval of Regulations on Organization of civil defense subdivisions' staff service training"). All these requirements can not ensure full fledged training. Hat is why the rest of classes shall be conducted independently in officers' free time. It will require their additional motivation.

Considering the existing problem we tried to determine motivation of manpower of SSES of Ukraine subdivisions for power physical exercises' practicing in process of their professional training.

The research was fulfilled in compliance with combined plan of scientific-research works in sphere of physical culture and sports for 2011-2015 by topic "Scientific theoretical principles of innovative technologies in physical education of different strata of population" (state registration number 0111U001169). Also this work is in compliance with complex plan of scientific-research works of Cherkassy institute of fire safety, named after Heroes of Chernobyl and Kharkov university of civil defense of Ukraine in field "Operative tactic functioning of detachments of civil defense operative rescue subdivisions".

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Purpose, tasks of the work, material and methods

The purpose of the research is to determine motivation of SSES of Ukraine officers for increasing of own professional competence by means of physical training.

The methods of the research: in order to achieve our purpose we used the following methods: theoretical analysis and generalization of scientific literature; studying of instructions and documents, regulating organization and realization of special physical training of SSES of Ukraine personnel staff; questioning; statistical analysis.

Materials of the research: the research was conducted on base of Cherkassy structural subdivisions of SSES of Ukraine. 130 firefighters and rescuers (118 men and 12 women) participated in questioning. They were of age from 25 to 40 years old.

Results of the research

Studying motives of firefighting-rescue specialists for physical culture – sport perfection and their significance in professional functioning, we determined that the most important motives for both male and female rescuers were the following: improvement of own health (1st rank), increasing of professional fitness (2nd rank); care of life and health of victims (3rd rank).

For men motives care of own health and life during rescue operations were less important (4th rank); motives of care of colleagues' health and life during rescue operations took 5th rank and improvement of own body constitution took 6th rank.

For women improvement of body constitution was less important (4th rank); care of own life and health in rescue functioning took 5th rank, care of colleagues' life and health in rescue functioning took 6th rank.

Motives for increasing of confidence in own potentials and increasing of colleagues' respect, which took 7th and 8th rank accordingly, were also not substantial for SSES of Ukraine officers.

It was determined that rescuers care of own health during physical training. Such care, in their opinion, facilitates rising of professional competence during rescue functioning and, consequently, promote saving of victims' lives and health.

We also determined that 62% of men and 73% of women do not practice physical training at all, when being on duty. Other part of personnel spends insignificant time for physical self perfection in respect to duration of working day. It points at extremely low motivation of SSES of Ukraine officers for perfection of physical condition. Probably such indicator is connected with fulfillment of service duties, absence of qualified instructors in physical training. Also it is connected with little quantity of hours assigned for sport functioning.

As we found, only 31% of men and 22% of women practice improvement of physical fitness in their free time. Episodically physical perfection is practiced by 50% of rescuers-men and 67% of women. With it 19% of men and 11% of women do not practice physical training at all.

Considering above mentioned we tried to determine reasons, which do not facilitate rescue personnel to improve professional competence by means of physical training in working hours. As a result of questioning we determined that large part of SSES of Ukraine officers is prevented from improvement of professional competence by means of physical means in free time. The questioning helped to determine that for large part of SSES of Ukraine think that family affairs and business (55% of men and 74% of women) and improper health condition (27% of men and 3% of women) are important reasons for not practicing of physical training. We determined that absence of motivation does not permit for 9% of men and 17% of women to physically train. 9% of men and 6% of women noted other reasons (see fig.1).

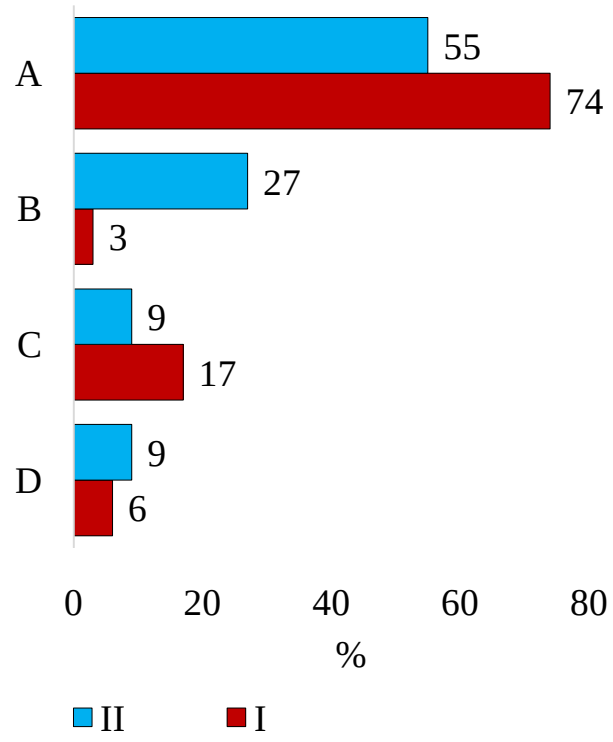

Fig.1. Factors, which prevents SSESU from physical training in free time: A – family affairs and business; B – physical condition; C – absence of motivation; D – other; I – women, II – men.

Effective fulfillment of rescue works requires rather high motion abilities from modern specialists in emergency situations. In connection with it we tried to determine: which physical abilities are required for firefighters and rescuers for more effective fulfillment of tasks in extreme conditions by them.

As a result of questioning we determined (see fig.2) that men officers consider endurance (43%) and muscular strength (31%) to be the most important for professional functioning. Respiratory functions (14% of them) and quickness (12%) are considered to be less important. It should be noted that only 10% of specialists in emergency situations consider their motion skills as sufficient for fulfillment of combat tasks.

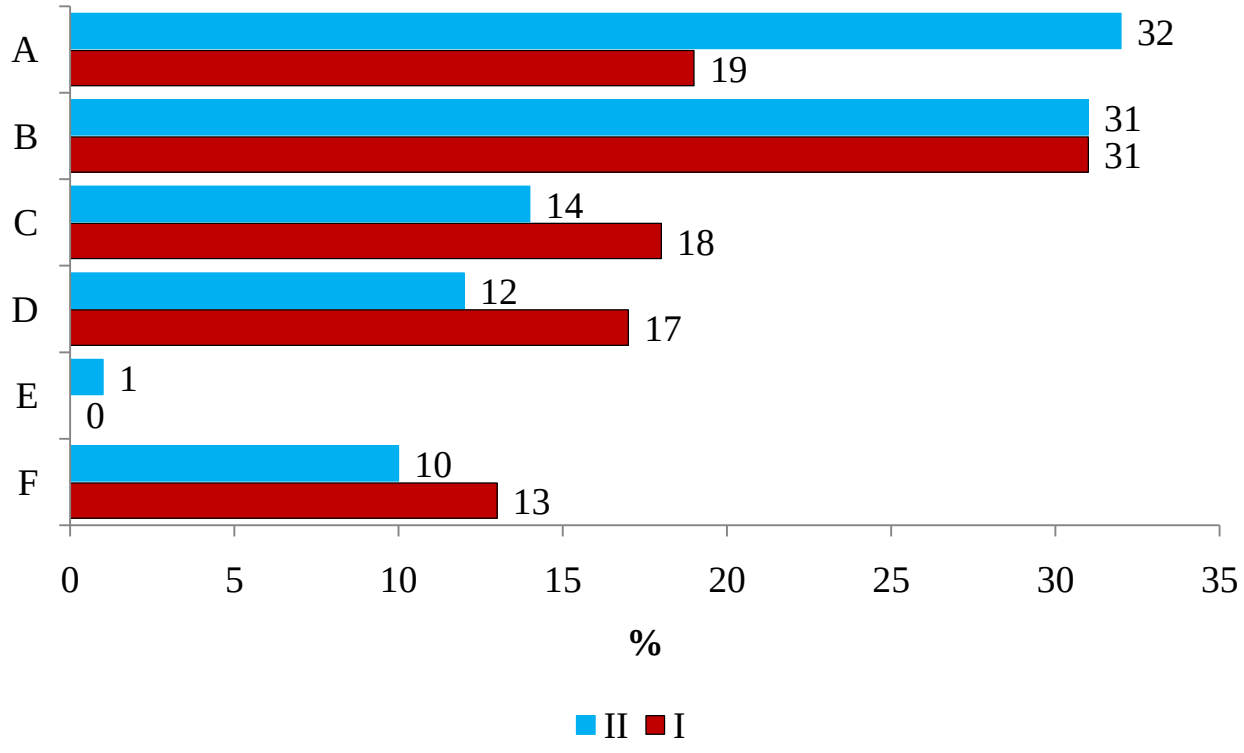

Fig.2. SSESU officers' answers to question: "What would you perfect for more effective fulfillment of rescue works?": I - women, II – men. A - endurance, B – muscular strength, C – respiratory functions, D – quickness, E – other, F – my fitness is proper.

Women also consider muscular strength to be necessary for firefighter (31%). Less required is, in their opinion, endurance (19%), respiratory functions (18%) and quickness (17%). It should be noted that only 13% of women estimate own physical fitness as sufficient for fulfillment of firefighting-rescue tasks.

It is obvious that rescue personnel think that it is necessary to train physical skills by means of different kinds of sports for improvement of own professional competences (see fig.3).

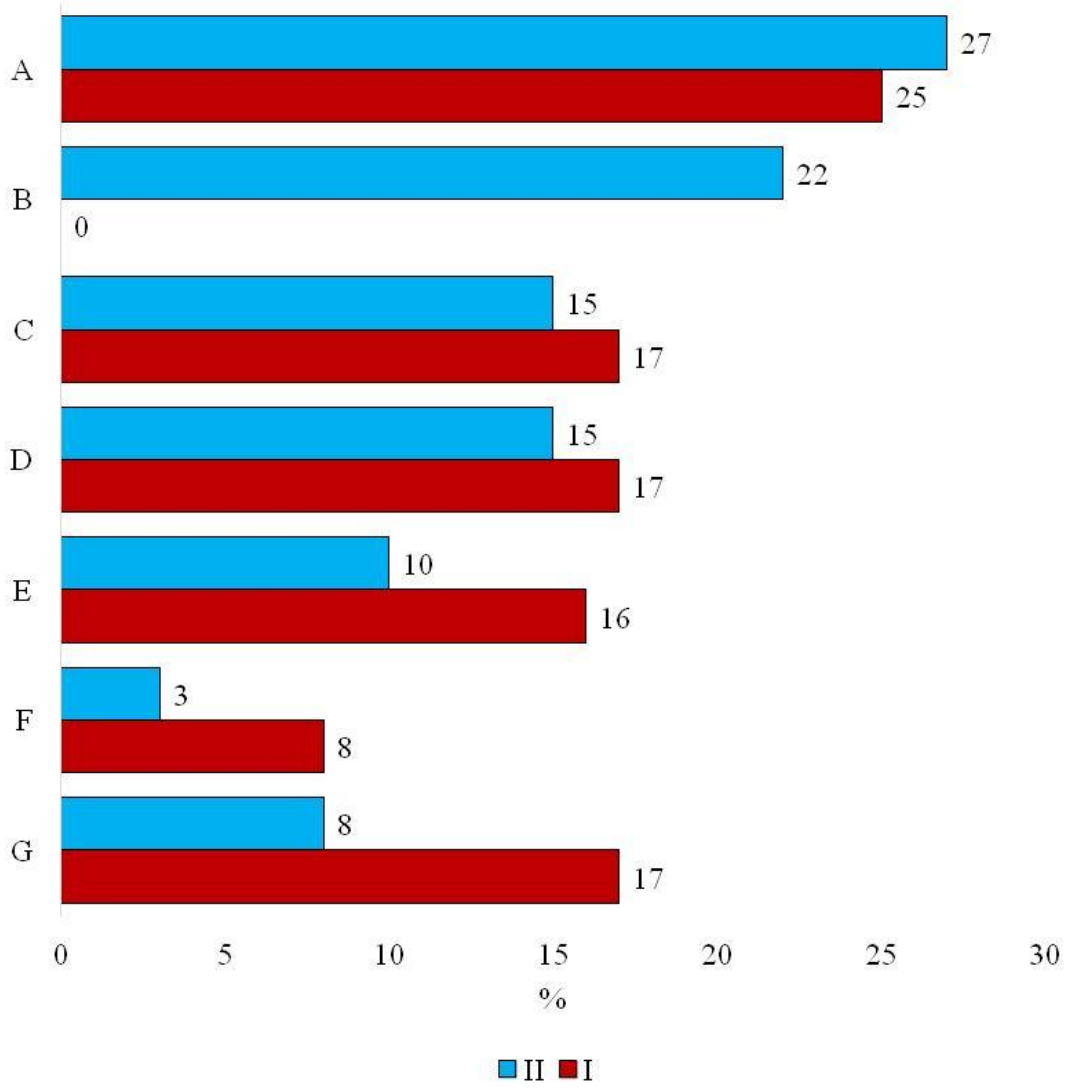

Fig.3. Kinds of motion functioning, which SSESU officers would like to practice additionally: A – exercise with weights. B – football, C – volleyball, D – martial arts, E – track and field events, F – firefighting applied sports, G – other. I – women, II – men.

That is why for further improvement of professional physical fitness firefighting and rescue specialists chose trainings with power oriented exercises (27% of men and 25% of women).

Football was chosen by 22% of men, volleyball – by 15%, martial arts – 15%, track and field events – 10%, other kinds of sports – 8%. Unexpectedly little quantity of specialists chose firefighting sport (3%) and this fact requires special research.

Concerning women-officers by 17% of the questioned chose trainings of martial arts, volleyball and other kinds of sports. Track and field events were preferred by 16% of women and firefighting sport – by 8%.

Analysis of rescuers' preferences of motion functioning kinds permits to affirm that for increase of own professional competences they prefer power oriented exercises. In opinion of the questioned exactly development of muscular strength can improve indicators of professional physical fitness that will ensure effective fulfillment of rescue tasks in extreme conditions in emergency situations.

Discussion

The received by us results about special importance of power physical training for rescuers are proved by other scientists [1, 14, 16]. For the first time motives for physical self perfection of domestic rescuers have been studied as well as conditions, in which special physical training is practiced. Results of our research point at demand in improvement of organizational-management mechanisms, oriented on rising of rescuers professional functioning's quality.

Conclusions:

1. Level of modern firefighting-rescue specialists' motivation for physical self-perfection is extremely low that is caused by different factors.
2. Main motives, which force firefighters and rescuers for physical culture-sport activity can be:

– Improvement of own somatic health and professional competences; preservation of victims' lives and health during liquidation of emergency situations' after effects and fulfillment of rescue tasks with high quality.

3. Most of officers prefer working out of muscular strength.
4. Management of professional physical training in subdivisions of SSES of Ukraine requires optimization.

The prospects of further researches in this direction envisage working out and experimental testing of effectiveness of modified standards to physical training and management-organizational model of SSES officers' special physical training.

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