Assessment of Compliance with Healthy Lifestyle Standards by the Instructional Staff of Higher Educational Institutions

Ocena przestrzegania zaleceń zdrowego stylu życia przez kadrę dydaktyczną szkół wyższych

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SUMMARY

Aim: To assess the quality of compliance with the standards of a healthy lifestyle by instructors of higher educational institutions with specific learning environment and their attitude to exercise.

Materials and Methods: To achieve the aim of the research, we conducted a survey of instructors (n=126) of different age groups according to the questionnaire developed by the authors. The questionnaire is designed to investigate the current state of physical training with instructional staff; to clarify the issues of instructors' healthy lifestyle; to study ways to improve their physical fitness.

Results: It was found that only 10.3% of instructors regularly exercise in the morning; 85.7% get to the place of service by public transport or by car and only 14.3% go on foot. On weekends, 41.3% of instructors prefer passive types of motor activity and recreation; more than 50% smoke, in addition, 30.9% smoke one pack or more a day. On top of that, 46.8% of instructors do not engage in physical training at all; 50.9% of instructors answered that they attend training sessions in order to prepare for the test.

Conclusions: It was found that the majority of instructors (67.1%) rarely or almost never follow the standards of a healthy lifestyle. Insufficient efficiency of the current system of physical training of instructional staff was identified and the reasons for insufficient level of physical fitness, health of instructors and systematic absence from physical training sessions were revealed.

Key words: healthy lifestyle, health, physical training, instructors

Słowa kluczowe: zdrowy styl życia, zdrowie, trening fizyczny, instruktorzy

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INTRODUCTION

The scientific studies show that more than 50% of human health is determined by living conditions and lifestyle, i.e. most of it depends on the proper organization of motor activity [1, 2]. Motor activity is an integral part of everyone's life. Organized motor activity contributes to a healthy lifestyle, which, in turn, has a positive effect on the general level of well-being; prevention of non-communicable diseases; reduction of the impact of bad habits on the body, numerous antisocial manifestations and depressions [3, 4].

These are well-known facts, but, unfortunately, most people do not follow the standards of a healthy lifestyle. Today, the motor activity of both children and adults has sharply decreased in the conditions of active introduction of computer technologies in all spheres of human activities. As a result, the percentage of people with impaired health has increased. Quarantine restrictions caused by the global Covid-19 pandemic are exacerbating this negative trend in health status of the population [5].

The works of many scientists [6,7] note a deterioration of the state of health and the level of physical fitness of the population of Ukraine in recent years under conditions of social, economic and political instability: the rate of depopulation Ukraine ranks 2^{nd} in the world, $1-2^{nd}$ in Europe by mortality from cardiovascular diseases; the average life expectancy of men in Ukraine is 10-12 years lower than in the European Union; more than 70% of the adult male population have low and below average levels of physical health. The probability

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of death of men of working age is 38.4%, which is one of the worst rates among civilized countries.

Law enforcement officers are no exception, especially the instructional staff of higher educational institutions of Ukraine with specific learning environment (HEI SLE), whose professional activities are characterized by a significant reduction in physical load and motor activity [8, 9, 10]. Instructional activities, which are accompanied by many negative factors, take a long time, and over time, the negative factors result in a significant reduction in mental and physical working capacity, deteriorating instructors' health.

According to many scientists [11-13], one of the ways to solve this problem is to improve physical training (PT) of the instructional staff in the HEIs SLE. However, the analysis of the regulatory documents on the organization of physical training of the instructional staff of HEIs SLE allowed to reveal a number of shortcomings that reduce the positive impact of PT on the working capacity and health of instructors, including: insufficient consideration of peculiarities of the service activities of the instructional staff by the governing documents; insufficiently clear organization of training sessions; inefficient use of time allotted for PT; significant percentage of absences from training sessions due to the tasks of teaching activities, orders of commanders in the hours allotted for independent training sessions on PT; giving preference to improving the performance of special PT and preparing for tests; high percentage of instructors are exempt from physical activity due to their state of health. In addition, many instructors are characterised by bad habits and lack of sustainable motivation to follow a healthy lifestyle, to independent regular exercise.

The problem of adherence to the standards of a healthy lifestyle by instructional staff is topical, as it is the high level of motor activity and physical fitness, which is the basis for promoting instructors' health, improving their mental working capacity and enhancing instructional activities.

AIM

The aim is to assess the quality of compliance with the standards of a healthy lifestyle by instructors of higher educational institutions with specific learning environment and their attitude to exercise..

MATERIALS AND METHODS

To achieve the aim of the research, we conducted a study that involved a survey of instructor officers (n=126) in various academic subject areas of the National Academy of Internal Affairs (NAIA). The survey was conducted in accordance with the main provisions and requirements for sociological research on the questionnaire developed by the authors. The questionnaire was assessed by the experts in this field (3 professors and 7 associate professors) and was approved by the Academic Council of NAIA (Protocol No.12 dated 28.08.2020). The questionnaire contains 13 questions making up three blocks, designed to: study the current state of the organization and conduct of PT with the instructional staff (the first block; questions through 6); clarify the issues of

instructors' observance of a healthy lifestyle and the impact of negative factors of instructional activities on the state of their health and well-being (second block; questions 7 through 11); study of ways to improve PT (third block; questions 12 through 13). The survey was conducted during 2020-2022. In addition to questionnaires, the research methods included theoretical analysis and generalization of literature, pedagogical observation and statistical methods.

The procedure for organizing the study was previously agreed with the committee on compliance with Academic Integrity and Ethics of the NAIA. The topic of the study was approved by the Academic Council of the NAIA (No.12 dated 28.08.2020). Informed consent was received from all participants who took part in this study.

RESULTS

It was found that 46.8% of instructors do not engage in PT at all (citing a number of reasons); 26.9% of respondents attend training sessions for 1-2 hours a week; 17.5% of instructors engage in training sessions for 4 hours a week as it is scheduled; 6.4% are additionally engaged in training sessions during their personal time (Table 1). The instructors who are additionally engaged in physical training sessions beyond the scheduled 4 hours belong to the age groups up to 30 (62.5%) and 35 years (37.5%) (they are mostly members of national teams in various sports). It should be noted that the largest percentage of instructors who do not engage in PT at all belong to the age groups up to 35 and up to 40 years (33.9% and 44.1%, respectively). This confirms the findings of a number of scientists that 30-40-years-old instructors, who have insufficient indicators of physical fitness, are a "risk group" for cardiovascular disease.

The analysis of regulatory documents showed that the independent training of permanent staff must include PT sessions at least 4 hours a week during extracurricular activities. On the other hand, the service activities of instructors require performance of a large number of tasks at this time: details, preparation for the next academic classes, consultations, orders of commanders, involvement in activities to maintain public order, etc. – which are performed at the expense of time allotted for self-training. It was found that 43.6% of instructors are engaged in physical exercises one or two hours a week or less, 41.3% – are not engaged in PT, 8.7% – 4 hours a week, and only 6.4% of instructors are engaged in PT sessions independently two or three times a week (members of national teams). Most of the instructors who miss training sessions (59.6%) belong to the age groups up to 35 and 40 years.

It was found that 50.9% of instructors are engaged in PT to prepare for the test, 21.4% – to improve the appearance and well-being; 17.4% – in order to increase the level of physical fitness and promote health; 8.7% – to improve mental working capacity and enhance service activities. This shows that not all instructors consider PT as a means of improving health, mental working capacity and enhancing the indicators of their service activities.

The reasons of missing PT sessions are distributed in the following way: 70.7% of instructors noted a lack of free time

Table 1. The answers of instructors of the HEI SLE on the first block of the questionnaire (n=126, %)

		Age groups, years						
Question	Answer options	30	35	40	45	> 45	Total	
		n=21	n=27	n=32	n=27	n=19	n=126	
1. How many hours a week do you engage in PT?	4 hours as scheduled	18.2	9.1	9.1	27.3	36.4	17.5	
	4 hours and in private	62.5	37.5	0	0	0	6.3	
	1-2 hours	5.9	5.9	11.8	52.9	23.5	27	
	I do not work out at all	13.6	33.9	44.1	3.4	5.1	46.8	
	own answer	66.7	0	0	33.3	0	2.4	
2. How many hours a	4 hours as scheduled	18.2	0	0	45.5	36.4	8.7	
week do you engage in	4 hours and in private	62.5	37.5	0	0	0	6.3	
PT individually?	1-2 hours or less	10.9	21.8	23.6	21.8	21.8	43.7	
	l do not work out at all	15.4	23.1	36.5	19.2	5.8	41.3	
	own answer	0	0	0	0	0	0	
3. Why do you attend PT sessions?	to increase physical fitness and promote health	13.6	4.5	4.5	40.9	36.4	17.5	
	to increase mental working capacity	0	0	0	27.3	72.7	8.7	
	to improve appearance, well-being	37.0	18.5	7.4	37	0	21.4	
	to prepare for the test	12.5	32.8	46.9	3.1	4.7	50.8	
	own answer	0	0	0	100	0	1.6	
4. Indicate the reasons	lack of free time	16.9	21.3	22.5	27.0	12.4	70.6	
why you miss PT sessions	large amount of tasks	33.3	16.7	41.7	0	8.3	9.5	
	fatigue after academic classes	0	10	40	20	30	7.9	
	fuzzy planning	13.3	33.3	20	6.7	26.7	11.9	
	lack of desire	0	0	0	0	0	0	
	I do not consider it necessary	0	0	0	0	0	0	
	own answer	0	0	0	0	0	0	
5. Are you satisfied with	yes	32.1	35.7	10.7	17.9	3.6	22.2	
your level of physical fitness?	no	12.6	17.9	29.5	22.1	17.9	75.4	
	own answer	0	0	33.3	33.3	33.3	2.4	
6. Are you satisfied with the state of PT organization?	yes	2.9	37.1	54.3	0	5.7	27.8	
	no	22.4	16.5	12.9	29.4	18.8	67.5	
	own answer	16.7	0	33.3	33.3	16.7	4.8	

(due to participation in the educational process); 11.9% – fuzzy planning of PT sessions (instructors conduct academic classes with cadets during the hours for PT sessions); 9.5% miss training sessions due to a large amount of service tasks; 7.9% – due to fatigue after intellectual workload. Herewith, 75.4% of instructors stated that they were not satisfied with their own level of physical fitness for effective performance of teaching tasks; 22.2% of respondents gave a positive answer. It was also found that 67.5% of instructors are dissatisfied with the state of the organization of PT in the HEI SLE. Most instructors would like to work out on their own in their free time, as the vast majority of them are forced to skip training sessions due to scheduled academic classes with cadets and military students.

As a result of the analysis of the answers to the questions of the second block of the questionnaire (Table 2) regarding the observance of a healthy lifestyle by the instructional staff, it was found that only 10.3% of instructors regularly perform morning exercise daily (23% – sometimes and 66.7% – never); 85.7% get to the place of service by public transport or by car and only 14.3% go on foot (72.2%). On weekends and holidays, preference is given to passive types of motor activity and recreation (watching TV, working on a computer,

improving the professional level, etc.) -41.3%; 37.3% of officers spend their free time with family and friends, and only 9.5% of officers are engaged in exercise and sports, use tempering tools, and prefer walking.

The issue of bad habits, including smoking, is very acute. It was found that more than 50% of instructors smoke, whereupon 20.6% smoke no more than half a pack of cigarettes a day, 30.9% – one pack or more a day; 43.7% of instructors answered that they do not smoke. The analysis of the answers to the last four questions showed that many instructors (67.1%) rarely or almost never use factors that contribute to maintaining and promoting health.

Irritability, depression, fatigue, headache and other symptoms due to the negative impact of factors of teaching profession at the end of the working day (week) are experienced by 88.9% of instructors (22.2% – sometimes, 51.6% – often; 15.1% – always) and only 11.1% of instructors have never had such symptoms. It is important to note that the majority of instructors, who always have similar symptoms and complaints, belong to the older age groups (40 – over 45 years, 94.7%), which indicates that the negative impact of service activities is enhancing with age and increasing the risk of various diseases.

Table 2. The answers of instructors of the HEI SLE on the second block of the questionnaire (n=126, %)

		Age groups, years						
Question	Answer options	30	35	40	45	> 45	Total	
		n=21	n=27	n=32	n=27	n=19	n=126	
7. How often do you exercise in the morning?	every day	30.8	23.1	7.7	23.1	15.4	10.3	
	sometimes	27.6	20.7	24.1	10.3	17.2	23	
	never	10.7	21.4	28.6	25.0	14.3	66.7	
	own answer	0	0	0	0	0	0	
8. How do you get to the place of service?	by public transport	16.9	27.1	33.9	15.3	6.8	46.8	
	by your own car	16.3	20.4	22.4	26.5	14.3	38.9	
	on foot	16.7	5.6	5.6	27.8	44.4	14.3	
	own answer	0	0	0	0	0	0	
9. How do you spend	computer games	66.7	33.3	0	0	0	4.8	
your free time	listening to music	66.7	33.3	0	0	0	2.4	
(on weekends,	reading fiction	0	0	25.0	0	75	3.2	
holidays)?	watching TV	0	23.1	46.2	15.4	15.4	10.3	
	communicating with family, friends	19.1	17	27.7	23.4	12.8	37.3	
	raising your professional level	7.7	19.2	26.9	23.1	23.1	20.6	
	exercising, tempering	33.3	25	8.3	16.7	16.7	9.5	
	own answer	0	33.3	26.7	40	0	11.9	
10. How often	no more than half a pack a day	7.7	15.4	30.8	19.2	26.9	20.6	
do you smoke?	I do not smoke	30.9	21.8	12.7	23.6	10.9	43.7	
	one pack and more a day	2.6	28.2	35.9	20.5	12.8	30.9	
	own answer	16.7	0	50	16.7	16.7	4.8	
11. How often do you get irritable, depressed, headache?	never	85.7	14.3	0	0	0	11.1	
	sometimes	25	57.1	10.7	7.1	0	22.2	
	often	3.1	12.3	36.9	26.2	21.5	51.6	
	always	0	5.3	26.3	42.1	26.3	15.1	
	own answer	0	0	0	0	0	0	

Table 3. The answers of instructors of the HEI SLE on the third block of the questionnaire (n=126, %)

		Age groups, years						
Question	Answer options	30	35	40	45	> 45	Total	
		n=21	n=27	n=32	n=27	n=19	n=126	
12. How do PT sessions affect health and mental working capacity?	positively	16.8	21	24.4	21.8	16	94.4	
	indirectly	20	20	40	20	0	4	
	they do not affect	0	50	50	0	0	1.6	
	negatively	0	0	0	0	0	0	
	own answer	0	0	0	0	0	0	
13. How is it possible to improve the physical fitness, health and mental working capacity of instructors of HEI SLE?	increase of standards on PT	0	33.3	44.4	22.2	0	7.1	
	increase of requirements of commanders	25	25	50	0	0	6.3	
	increase of quantity of special PT sessions	6.7	40.0	53.3	0	0	11.9	
	increase of quantity of general PT sessions	16.1	14.5	14.5	30.6	24.2	49.2	
	increase of quantity of systematic independent training sessions	27.6	20.7	24.1	17.2	10.3	23.1	
	own answer	0	33.3	0	33.3	33.3	2.4	

The study of the answers to the questions of the third block (Table 3) revealed that 94.4% of instructors believe that PT sessions have a positive effect on health, mental working capacity and efficiency of undertaking instructional activities; 1.6% of respondents believe that PT sessions do not affect the health and efficiency of undertaking instructional activities.

The respondents answered the question "How is it possible to improve the physical fitness, health and mental working capacity of instructors of HEIs SLE?" in the following manner:

"increase quantity of general PT sessions" – 49.2%; "increase of quantity of systematic independent sessions on PT and sports within the daily routine" – 23.1%; "increase of quantity of special PT sessions" – 11.9%; "increase of standards on PT" – 7.1%; "increase the requirements of commanders" – 6.3%; 2.4% of officers noted a different answer. Thus, most instructors believe that physical fitness, health and mental working capacity can be improved by using general PT activities during regular self-training sessions within the daily routine.

DISCUSSION

The analysis of the scientific works [14-16] showed that one of the prevailing trends in the structure of modern work of instructors of HEIs SLE is its ever-increasing intellectualization and a sharp increase in requirements for quality, speed of mental and psychomotor operations. Instructors of theoretical disciplines of HEIs SLE spend most of their working time indoors in a forced working position, in conditions of insufficient motor activity. In addition, bad habits and lack of time for PT sessions do not provide the necessary level of physical fitness and health of instructors.

Low motor activity, as the main negative factor of instructional activities, results in various disorders of body systems, metabolism, overweight, which adversely affects instructors' health and causes various diseases with age [17, 18]. Instead, the optimal level of motor activity is the amount and content of motor activity that should meet the natural human need in motor performance to improve their health, prevent non-communicable diseases and improve professional working capacity, as well as positively affect the intellectual component of human life [19, 20].

The studies [21, 22] have shown that the indicators of service activities efficiency are reduced under the influence of adverse factors by 20% in law enforcement officers who have a high level of physical fitness, and by 40-50% in those who have a low level of physical fitness. High levels of physical fitness reduce the degree of fatigue and delay its occurrence date, allow to increase the body's resistance to specific adverse effects [23, 24]. The research of the scientists [25, 26] revealed that regular use of PT options promote the effective development of motor skills, while having a positive effect on the basic systems of the body and the emotional state of law enforcement officers. In addition, PT sessions contribute to the improvement of psychophysiological indicators of law enforcement officers (memory, attention, thinking) and the formation of moral and volitional qualities [27, 28].

In the process of the questionnaire, we studied the opinion and attitude of instructors on their compliance with the standards of a healthy lifestyle, on the effectiveness of PT in HEIS SLE. The results of the survey revealed the shortcomings of the current PT system of instructional staff and identified ways to improve it in order to promote the health, improve physical and mental working capacity of instructors, as well as enhance the effectiveness of their instructional activities.

The survey allowed to determine that the majority of instructors of HEIs SLE want to engage in PT sessions, with preference given to independent training sessions within their daily routine. The answers of the instructors confirm the conclusions of the leading scientists [29, 30] on the positive impact of PT sessions on promoting health, improving working capacity and enhancing the efficiency of service tasks performance.

CONCLUSIONS

It was found that only 10.3% of instructors regularly exercise in the morning; 85.7% get to the place of service by public transport or by car and only 14.3% go on foot. On

weekends, 41.3% of instructors prefer passive types of motor activity and recreation; more than 50% smoke, in addition, 30.9% smoke one pack or more a day. On top of that, 46.8% of instructors do not engage in physical training at all; 70.7% of them mention that participation in academic studies with cadets is the main reason for skipping their training sessions; 50.9% of instructors answered that they attend training sessions in order to prepare for the test.

It was found that the majority of instructors (67.1%) rarely or almost never follow the standards of a healthy lifestyle. Insufficient efficiency of the current system of physical training of instructional staff was identified and the reasons for insufficient level of physical fitness, health of instructors of HEIs SLE and systematic absence from physical training sessions were revealed.

PROSPECTS FOR FURTHER RESEARCH

It is intended to investigate the dynamics of the morphofunctional state of instructors of HEIs SLE during their pedagogical activities.

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