

EXPERIMENTAL VERIFICATION OF THE PROGRAM OF IMPROVEMENT OF PHYSICAL TRAINING OF OFFICERS-INSTRUCTORS AT HIGHER EDUCATIONAL ESTABLISHMENT OF THE MINISTRY OF INTERNAL AFFAIRS OF UKRAINE

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Annotation. Grounded, developed and tested efficiency of the program of improvement of physical training of officers-teachers. Borne change in organization of physical training, correlation of volumes of general and special physical training is changed, reading is entered with a prophylactic and training orientation. The level of physical preparedness of teaching staff of institutes of higher is investigational. In research 62 officers-teacher took part under age 40 years. The level of physical preparedness was determined on results at run on 100 meters, undercuttings on a cross-beam and runs on 1000 meters. It is set that employments on the experimental program were instrumental in more expressed growth of level of physical preparedness of teachers. A difference between the indexes of officers of experimental and control groups in speed qualities makes 0,12 seconds, in power qualities - 1,8 times, in endurance - 40,5 seconds.

Keywords: physical, training, program, officers, teachers.

Introduction.

Physical preparation plays an important role in preparation of skilled, moral and faithful to the state ideals law-enforcements [1, 6, 8, 10-12]. At the same time, in the orders of Ministry of internal affairs (MIA) of Ukraine is determined that quality of organization and realization of physical preparation with the workers of organs of internal affairs (OIA) became worse in recent year. As a result, the level of physical preparedness of workers goes down and estimated mainly on "satisfactorily" and "unsatisfactorily". Especially this problem sharply touches the teaching staff of higher educational establishments of MIA of Ukraine, professional activity of which is characterized the substantial decline of volume of physical activities (Collection of documents about organization of professional preparation on 2010-2011. K., KNUIA, 2010, 24 p.) [3, 7].

The analysis of organization of physical preparation in institution of higher education of MIA of Ukraine allowed to educe row of defects that reduce efficiency of physical preparation [2, 9]. Among them: the insufficient accounting of features of official activity of scientific-pedagogical staff in the leading documents; not enough order of organization of employments; considerable percent of admissions of employments; grant of advantage on employments to the improvement of indexes of the special physical preparation and preparation to verifications; plenty of addresses to medical part and high percent of teachers that on the state of health are attributed to the group of curative physical culture.

Scientists [5, 7] notice that efficiency of professional activity of teaching staff of institution of higher education depends on the level of development of physical qualities, motive abilities and skills, formed by systematic implementation physical exercises adequate to the requirements, to character and by the terms of official labour. This dependence is confirmed by validity of conformities to law of interaction of physical and professional qualities, motive abilities and skills that develop and improve in the process of physical preparation and capture a profession.

In works of row scientists are concentrated attention on the special physical preparation of workers of militia [5, 6, 8]. At the same time, according to V.G. Babenko and V.P. Leont'eva [1, 7] to develop and perfect physical qualities, and improve efficiency of official activity facilities of the special physical preparation, not having a sufficient level of body-conditioning, can not be. Exactly the high level of body-conditioning allows to develop basic physical qualities, improve functional possibilities of organism, strengthen a health, promote a capacity and form the background of development of the special qualities of officers-teachers.

Thus, the analysis of literary sources allows to make a conclusion, that one of the directions of decision of the above-mentioned problem is perfection of general physical preparedness of officers-teachers on the basis of application of simple and accessible facilities taking into account the age-related group and time of realization of employment in the mode of day.

An article is done according to SRW in the sphere of physical culture and sport 2011-2015 of Ministry of Ukraine in matters of family, young people and sport within the limits of theme 3.8 "Theoretical-methodological bases of construction of the mass checking system and estimation of level of development and physical preparedness of different groups of population" (number of state registration 0111U000192).

Aim, tasks, materials and methods.

Aim of work – to check the efficiency of experimental program of physical preparation of officer-teacher perfection of institution of higher education of MIA of Ukraine.

Tasks:

- to ground the authorial program of perfection of physical preparation of officers-teachers of institution of higher education of MIA of Ukraine;
- to investigate influence of employments on the authorial program on the level of physical preparedness of officers-teachers.

Methods of research. Theoretical analysis and generalization of literary sources, pedagogical observation, testing, pedagogical experiment, methods of mathematical statistics.

Organization of research. With the aim of research of efficiency of the authorial program, we organize a pedagogical experiment in the National academy of internal affairs (NAIA) in a period from 2010 to 2012. In research took part officer-teachers (man) aged 40 years old (n=62). To the control group entered 32 officer-teachers, who occupied according to operating system of physical preparation, to experimental - 30 teachers that occupied on the authorial program. A level and dynamics of indexes of physical preparedness of officers-teachers was analysed.

Results.

Official activity of officers-teachers of institution of higher learning of MIA of Ukraine, that is in conditions of subzero motive activity and action of other unfavorable factors, proposes high requirements to the level of their physical preparedness, health and mental capacity.

The tasks of physical preparation of teaching staff certainly according to the terms and features of official activity of officers-teachers: increase of level of general physical preparedness of health strengthening, improvement of the functional state, prophylaxis of diseases, lengthening of professional longevity; providing a high level of mental capacity; perfection of firmness to negative factors of official activity; forming of motivation to the systematic engaging in physical exercises and sport.

It is set that facilities of physical preparation of teachers that can assist the decision of the marked tasks, must be simple, accessible and simultaneously effective and health exercises of body-conditioning.

Certainly, that engaging in physical exercises must get organized and conducted taking into account the features of official activity, age-related groups of officers-teachers, and also time of employment during working day. So, application of physical exercises in the mode of day of officers-teachers must be sent to the decision of such tasks:

- in the process of teaching process (while holding studies) – to change the dynamics of subcortical processes, create an optimal background of excitability; to improve cerebral circulation of blood and metabolism, actively influencing on the cardiovascular system; to carry out prophylactic influence on a locomotorium and organs of digestion; to liquidate the stagnant phenomena (especially in the area of pelvis and lower limbs); to provide a high mental capacity (to improve the indexes of memory, thinking, attention); to improve the emotional state;

- at the end of working day (after realization of employments and completion of other types of intellection) - development and perfection of physical qualities; strengthening of muscles; strengthening of health, improvement of activity of and other cardiovascular, respiratory systems of organism; decline of action of hypodynamia and other unfavorable factors; proceeding in a capacity.

Based on works of leading scientists [1, 5, 7] and taking into account the results of searching researches [2, 3, 4], we worked out the program of perfection of physical preparation of officers-teachers of institution of higher learning of MIA of Ukraine.

The main purpose of the authorial program - to provide a high level of professional activity of officers-teachers facilities of physical preparation.

The tasks of the program: increase level of general physical preparedness, strengthening of health and improvement of the functional state, improvement of mental capacity, prophylaxis of professional diseases and lengthening of longevity, bringing in to engaging in physical preparation.

The features of organization of employments on the authorial program are: realization of employments after a repressing orientation on development of general physical preparedness; gain in specific weight of exercises on development of endurance and power qualities in maintenance of employments after teachers; realization of employments in a volume that answers normative documents (4 hours per week); depending on time of employment in the mode of day, realization of employments after a prophylactic and training orientation; a rational dosage of loading depending on the orientation of employments, level of bodily condition and age-related group of teachers; simplicity and availability of exercises will allow to provide the high closeness of employments and positive effect for teachers with the different level of physical preparedness and different age-related groups; minimum material charges for organization of employments.

According to leading documents the volume of employments after physical preparation on a year for permanent composition is 192 hours. From them: 100 hours on general and 92 - on the special physical preparation. Author program offers engaging in a body-conditioning to plan 144 hours on a year, for employments after the special physical preparation - 48 hours.

Depending on time of realization of employment in the mode of day, according to author program is offered realization of employments after prophylactic and training orientation. In a week's loop two employments on 1 hour with prophylactic orientation and one 2-hours employment with training orientation. Planning of employments on the author program is depended upon the chiefs of departments, depending on the educational loading of every teacher (on the basis of curriculum of lessons). Employments with prophylactic orientation were conducted as a rule between the first and third, between the second and fourth double periods, with training orientation - after realization of lessons or at the end of working day. The size of loading that was got by teachers in the process of employments is stale from the orientation of employment, time of realization for a day, age-related group and level of preparedness of teachers.

Efficiency of author program was tested during a forming pedagogical experiment. The indexes of physical preparedness of teachers of experimental and control groups on results implementation at running on 100 m, chin-up and running on 1000 m.

The analysis of results from running on a 100 m testifies that at the beginning of experiment, and also after the first, second and third stages of research the indexes of development of speed qualities for the officers of both groups inter se do not have a reliable difference ($P>0,05$) (table 1).

Only at the end of experiment indexes of teachers of EG at running on 100 m are certainly better, than at officers of CG on 0,12 c ($P<0,05$). There is a reliable improvement of speed indexes in EG – difference between basic data and results at the end of research presents 0,25 c ($P<0,001$) (table 1). In KG basic data and results fixed during completion of experiment inter se do not differ for certain ($P>0,05$).

Shown by teachers results did not have a reliable difference in undercutting during determination of weekend of data and after the first and second stages of experiment ($P>0,05$) (table 1). Influence of employments on the authorial program on development of power qualities of officers-teachers marked more brightly, beginning from the third stage of research - the indexes of teachers of EG are for certain higher than for the teachers of CG in 1,26 times after the third stage ($P<0,01$) and in 1,76 times at the end of research ($P<0,001$). During the experiment results for the teachers of EG grew in 1,8 times ($P<0,001$), for the teachers of CG of loud speaker of results has stable character (table 1).

Table 1

Dynamics of general physical preparation of officer-teachers of EG and CG according to basic exercises during an experiment

Stage of research	EG (n=30)			CG (n=32)			Reliability of difference	
	\bar{X}	σ	$\pm m$	\bar{X}	σ	$\pm m$	t	P
<i>Speed quality (running on 100 m, c)</i>								
VD	15,72	0,27	0,05	15,66	0,27	0,05	0,85	$>0,05$
1	15,61	0,26	0,05	15,69	0,22	0,04	1,25	$>0,05$
2	15,57	0,25	0,05	15,61	0,21	0,04	0,62	$>0,05$
3	15,53	0,27	0,05	15,64	0,21	0,04	1,72	$>0,05$
4	15,47***	0,22	0,04	15,59	0,23	0,04	2,12	$<0,05$
<i>Force qualities (chin-up, quantity)</i>								
V.d.	7,93	2,02	0,37	8,06	2,42	0,44	0,23	$>0,05$
1	8,00	1,98	0,36	8,13	2,37	0,42	0,22	$>0,05$
2	8,83	1,46	0,27	8,03	2,43	0,43	1,56	$>0,05$
3	9,17	1,32	0,24	7,91	2,21	0,40	2,69	$<0,01$
4	9,73***	1,36	0,25	7,97	2,14	0,38	3,82	$<0,001$
<i>Endurance (running on 1000 m, c)</i>								
V.d.	246,73	20,90	3,88	243,87	25,38	4,56	0,48	$>0,05$
1	235,27	17,23	3,20	248,12	22,16	3,98	2,52	$<0,05$
2	228,63	12,52	2,33	242,03	21,00	3,77	3,02	$<0,01$
3	219,77	9,78	1,82	249,08	22,55	4,05	6,60	$<0,001$
4	211,80***	8,55	1,59	252,27	21,04	3,81	9,80	$<0,001$

Note. Statistically meaningful differences of middle at the beginning and at the end of experiment: «*» - $P<0,05$; «**» - $P<0,01$; «***» - $P<0,001$.

It is necessary to notice the special effect from employments on the authorial program on the indexes of general endurance of teaching staff of institution of higher education. After the first stage of research a level of development of endurance the officers-teachers of EG had for certain better, than in CG on 12,85 c ($P<0,05$) (table 1). After the second stage of experiment the officers-teachers of EG and KG have a difference between middle results from running on 1000 m presented 13,4 c ($P<0,01$), after the third - 29,31 c ($P<0,001$), at the end of experiment - 40,47 c ($P<0,001$) (fig. 1).

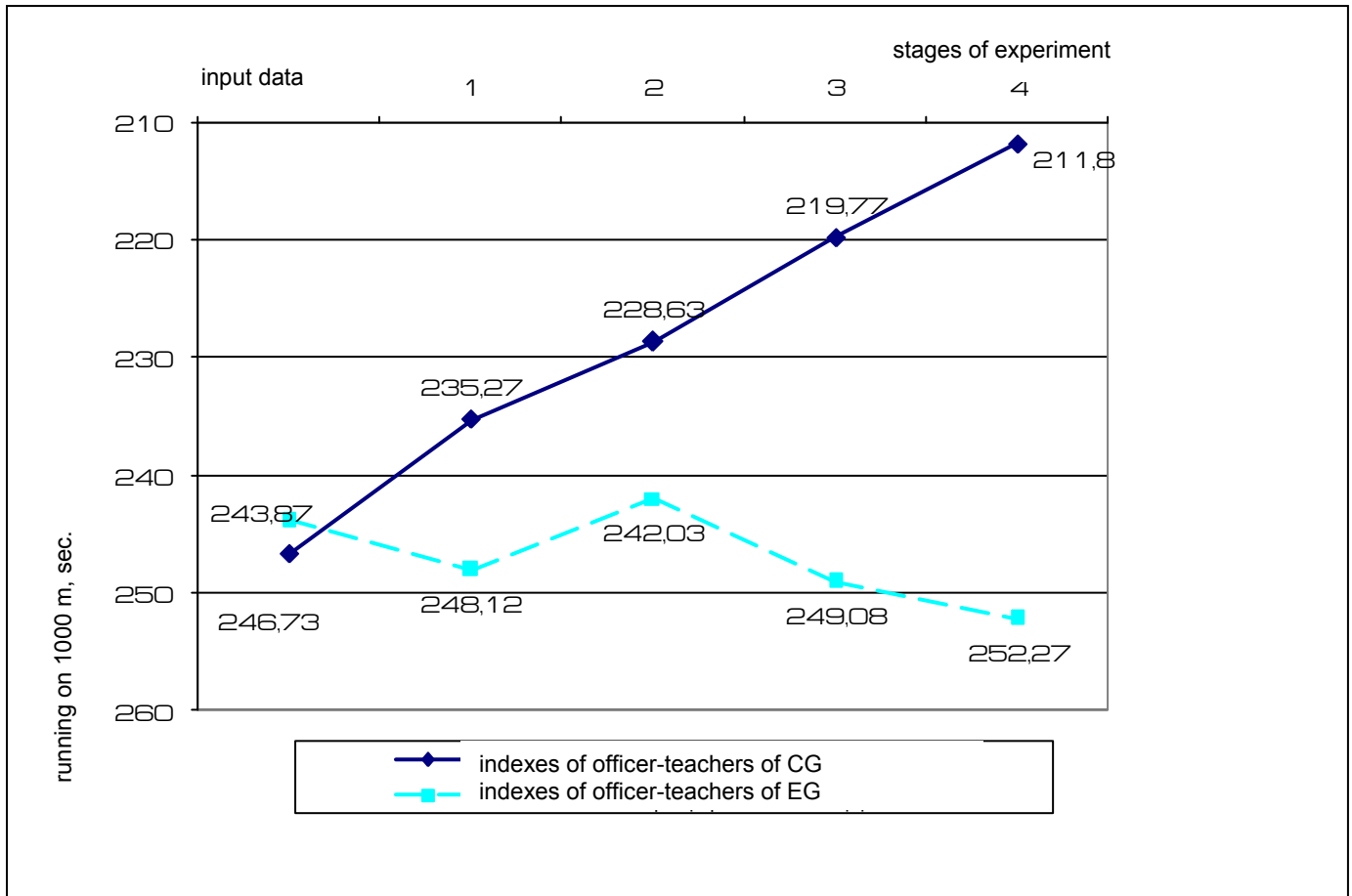


Fig. 1. Dynamics of indexes of officer-teaches of EG and CG endurance according to the results of running on 1000 m during the period of experiment (s)

The analysis of dynamics of indexes of endurance showed that the officers of EG have a continuous height of results from running on 1000 m during a pedagogical experiment ($P < 0,001$). For the teachers of CG the level of indexes of endurance became worse during experiment, but results certainly did not change ($P > 0,05$) (table 1, fig. 1).

Conclusions.

As a result of introduction of the authorial program changes it was change organization of physical preparation of teaching staff, that envisage realization of employments after a "flexible" chart depending on the educational loading of teachers; change a correlation of volumes of general and special physical preparation, that envisage the increase of specific gravity of body-conditioning (to 144 hours on a year); introduced exercises with prophylactic and training orientation depending on time of employment during working day; increased a level of attendance of engaging in after physical preparation teachers to 95%. As a result, the indexes of physical preparedness of officers-teachers of experimental group are improved.

Prospects of further researches. It is envisaged to ground, to work out and experimentally check the program of physical preparation for the officers-teachers of women in higher educational establishments of institution of higher education of MIA of Ukraine.

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Cite this article as: Bezpaliy S. M. Experimental verification of the program of improvement of physical training of officers-instructors at higher educational establishment of the Ministry of Internal Affairs of Ukraine. *Pedagogics, psychology, medical-biological problems of physical training and sports*, 2013, vol.3, pp. 3-7. doi:10.6084/m9.figshare.106928

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Received: 13.01.2013

Published: 31.01.2013