

Health-improving action effects of the system of P. K. Ivanov and Breathing Technique on the method of K. P. Buteyko for people of different age (from the long-term experience of the author)

Khoroshukha M.

*M. P. Dragomanov National Pedagogical University,
Kyiv, Ukraine*

Purpose: estimate efficiency of using of the system of Porfiry Ivanov and Breathing Technique on the method of K. P. Buteyko in health promotion for people of different age and physical condition.

Material & Methods: there were 160 adult persons (113 women and 47 men) on the age of 36–54 years with different physical condition under our supervision. All the researches were provided on the ground of Brovarskyi city club of natural health improvement of people using the system of P. K. Ivanov «Vodoliy» (Water Bearer) (Kyiv region). There were applicable theoretical methods (includes analysis and synthesis of scientific and methodical literature), empirical method (includes functional and psychophysiological analyses) and statistics methods.

Results: there were also indicated positive matters in the dynamics changes in indicators of the physical health.

Conclusions: there were proved that, health-improving system of P. K. Ivanov and Breathing Technique on the method of K. P. Buteyko reasonable for practical use on filling of take on the purpose of health-improving action effects for people of different age.

Keywords: system of Ivanov, method of Buteyko, health, adults.

Introduction

What kind of way in respect of preservation and promotion of health will chose a person of the XXI century? She will live in “harmony” with the Nature, to feel like a full-fledged member of the society from the birth till the extreme old age or, on the contrary, her existence will be connected with drugs and hospitals is defined in the majority by a way of life of a person, level of physical activity, training and so forth.

Today the special attention in the improvement of people of different age is deserved by methods of nonconventional medicine. It is necessary to distinguish the system of natural improvement of the person Porfiry Ivanov and the method of breath according to K. P. Buteyk among a big arsenal of the mentioned methods. These methods are simple and available to everyone. At the heart of the first method (system) – love and trust to the nature and people, wish health to everybody, help to those who need it, also bathing in open reservoirs or dousing with cold water, conscious refusal from food and drink for a certain period of time, mental self-control, observance of moral standards, and so forth [3]. According to the second – strong-willed elimination of deep breath which consists in reduction of depth of breath through strengthening of will of a person by relaxation of respiratory muscles [4].

It would seem, health of a person has to become his primary requirement as life needs it. Unfortunately, a «blind» belief in medicine, in its main remedy – pills by means of which a person without any efforts can become healthy, is a psychological basis of neglect of real opportunities of strengthening of

health. The last as I. Muravov and E. Bulich [7] note, has to be based on a replacement of traditional strategy of health care that provides prevention and treatment of diseases, and elaboration of essentially new strategy – stimulation of viability and protective forces of an organism. Not the last role in it, in our opinion, has to be allocated for nonconventional methods of the improvement of a person.

Spiritual and improving effects of training of teenagers who play sports, forces of nature according to the system of Porfiry Ivanov are given in the previous work [8]. We consider it is necessary to give results of our long-term researches which concern the improvement of people with a different physical state by means of the above-mentioned methods.

Communication of the research with scientific programs, plans, subjects

The research was carried out according to subject of of the RW of the department of biological bases of physical training and sports disciplines of National pedagogical university named after M. P. Dragomanov «Medicobiological and valeological problems of human health with a different physical state».

The purpose of the research

To estimate the efficiency of use of the system of Porfiry Ivanov and breath according to K. P. Buteyk's method in strengthening of human health, different in age and a physical state.

Material & Methods

There were 160 adult persons (113 women and 47 men) of 36-54 years old with a different physical state [almost healthy (29,4%) and sick on cardiovascular and bronchopulmonary chronic diseases under our supervision within 10 years (from 1990 till 2000), which were in a remission stage (70,6%)] for carrying out improving classes on mastering a technique of superficial breath and natural training.

Researches were conducted in the group "Zdorovyie" at Brovarsky city club of the natural improvement of a person according to the system of P. K. Ivanov «Vodoliy» (Brovary, the Kiev Region) (the state registration number is 406-271-Club of May 19, 1992). Educational and improving classes on mastering a technique of the strong-willed elimination of deep breath (SWEDB) according to Buteyck and training were carried out in the second half of a day (from 17:00 till 19:00 o'clock) through one-two days within 30 days. The assessment of a functional condition of men and women was carried out in three steps: the first stage – before classes, the second – in 30 days and the third – in 6 months after classes.

Classes were given under the leadership of the author of the article – the head of the club "Vodoliy" with avlong-term experience of training, and also the doctor-methodologist of SWEDB according to K. P. Buteyck (the certificate No. 7/2 of January 31, 1989 is issued by Kiev research institute of phtisiology and pulmonology of a name the academician of F. G. Yanovsky MES of Ukraine).

Research methods: 1) theoretical (the analysis of scientific and scientifically methodical literature from problems of use of nonconventional methods of improvement), 2) empirical: functional (the express method of an assessment of somatic health) and psychophysiological [testing of the main mental functions (memory, attention)] as the components of mental health of a person making intellectual [2], 3) statistics methods.

The research of specific features of a *short-term visual memory* was conducted by a technique "memory on geometrical figures" [5; 6]. The investigated was shown forms with the image of geometrical figures in number of 7 pieces at the implementation of this test. The investigated has to remember their arrangement during 30 s, and then to reproduce the given figures on the empty registration form for 45 s. The test task was performed twice with use of similar forms. The quantity of correctly located figures (QCLF, units) of the investigated was counted for the entire period of a work. The assessment to a condition of "visual memory" of an individual was given in conditional points by the results of a performance of two tasks.

The assessment of attention was carried out by the proof test of V. Ya. Anfimov with use of the alphabetic table [5; 6]. The investigated was offered to delete conditional two letters in each of lines of this table. In the following researches the ratio of letters changed. The work duration –is two minutes. The following indicators were defined, which characterize a function of attention: quantity of the reconsidered signs (A, units), quantity of correctly deleted letters (B, units), quantity of the carried-out mistakes for all the time of work (QMi, units), and also concentration of attention which was estimated by its such components as speed of revision of signs (SR, con. units), correctness coefficients (CC, con. units) and efficien-

cy of performance (Ke, con. units).

The research of somatic health was carried out by the express method of G. L. Apanasenko [1].

Results and discussion

At first we will analyze the nature of changes of functions of memory and attention that developed in an organism as a result of use the mentioned improving methods of the investigated.

As it was noted earlier, the assessment of function of *memory* was carried out according to the estimates of quantity of correctly located figures. We adhered to such situation when carrying out the direct estimation of this function: the more the investigated could reproduce correctly geometrical figures in each of two forms (the last, as a result, automatically influences reduction of quantity of the made mistakes), the higher indicator of function of memory was at him [6].

The analysis of tab. 1 and 2 testifies about thre essential (on 1% levels of the statistical importance) increase in quantity of correctly located figures which are registered on the second (II) and third (III) stages of the investigation in comparison with the first (I) both at men, and at women.

Almost the same nature of changes of function of *attention* is observed with the above-mentioned mental function. Results of the research of the last in dynamics (according to the first, second and third stages of the investigation) are presented in tab. 3 and 4.

The analysis of changes of indicators of the mentioned function at men which are given in the tab. 3, specifies on a reliable (at $P < 0,05 - 0,01$) increase in total of the reconsidered signs in two minutes of a work (A), quantities of correctly deleted letters (B) and reduction of quantity of the made mistakes (QMi), in the course of the carried-out improvement. The fact draws attention that a reliable (at $P < 0,01$) increase of efficiency of a performance (according to registration of an indicator of Ke) this group was carried out at the expense of a reliable (at $P < 0,01$) increase as *speed of revision* (SR), and the correct performance of work (an indicator of Cc).

The same nature of changes of function of attention is observed at women (tab. 4).

The distribution of the investigated (men and women) on indicators of somatic health which was defined by reserves of bioenergetics organism (G. L. Apanasenko's method) at different stages of the research is presented in tab. 5.

We find that men and women had a low level of somatic health. The investigated were on an average, below an average and low levels. There wasn't any person with high and above average levels. The level of their health has improved in 30 days of classes. The confirmation of it is the increase to percent of the investigated with an average (57,4% of men and 75,2% of women) and above an average (respectively 4,3% of men and 0,9% of women) levels and lack of persons with level below an average. The number of persons who have moved to the level above an average (12,5% of persons were among men, and among women – 4,5%) increased in 6 months of independent classes. As annoyingly, but there was no person with the high

Table 1

Average indicators of a short-term visual memory at men of 39-54 years old which were engaged according to P. K. Ivanov's system and a technique of breath of K. P. Buteyk, at different stages of the research, $X \pm m$

Stages of the research								
Before classes (I)			In 30 days (II)			In 6 months (III)		
(n)	QCLF, units	Assessment (points)	(n)	QCLF, units	Assessment (points)	(n)	QCLF, units	Assessment (points)
47	5,6±0,34	4,0±0,20	47	7,3±0,37	4,9±0,22	32	6,9±0,28	4,8±0,19
	t; P [I-II]		-	3,38; <0,01	3,03; <0,01	-	-	-
	t; P [I-III]		-	-	-	-	2,95; <0,01	2,90; <0,01

Table 2

Average indicators of a short-term visual memory at women of 36-48 years old which were engaged according to P. K. Ivanov's system and a technique of breath of K. P. Buteyk, at different stages of the research, $X \pm m$

Stages of the research								
Before classes (I)			In 30 days (II)			In 6 months (III)		
(n)	QCLF, units	Assessment (points)	(n)	QCLF, units	Assessment (points)	(n)	QCLF, units	Assessment (points)
113	5,7±0,38	4,1±0,22	113	7,3±0,33	5,0±0,23	66	7,0±0,30	4,9±0,20
	t; P [I-II]		-	3,18; <0,01	2,83; <0,01	-	-	-
	t; P [I-III]		-	-	-	-	2,69; <0,01	2,69; <0,01

Table 3

Average an indicator of function of attention at men of 39-54 years old which were engaged on P. K. Ivanov's system and a technique of breath of K. P. Buteyk, at different stages of the research, $X \pm m$

Stages	(n)	Attention						
		A, units	B, units	QMi, units	SR, con. units	Cc, con. units	Ke, con. units	
Before classes (I)	(47)	57,2±2,83	51,7±2,93	9,5±1,68	0,48±0,023	0,90±0,025	0,43±0,026	
In 30 days (II)	(47)	66,4±2,11	65,2±2,88	4,3±1,39	0,55±0,016	0,98±0,013	0,54±0,019	
In 6 months (III)	(32)	64,3±1,98	63,9±2,53	4,5±1,42	0,54±0,017	0,99±0,017	0,54±0,021	
	t; P [I-II]	-	2,61; <0,05	3,29; <0,01	2,38; <0,05	2,50; <0,05	2,84; <0,01	3,42; <0,01
	t; P [I-III]	-	2,06; <0,05	3,15; <0,01	2,27; <0,05	2,10; <0,05	2,98; <0,01	3,29; <0,01

Table 4

Average indicators of function of attention at women of 36-48 years old which were engaged on P. K. Ivanov's system and a technique of breath of K. P. Buteyk, at different stages of the research, $X \pm m$

Stages	(n)	Attention						
		A, units	B, units	QMi, units	SR, con. units	Cc, con. units	Ke, con. units	
Before classes (I)	(113)	55,9±3,08	49,6±2,97	7,6±1,47	0,46±0,031	0,88±0,024	0,41±0,029	
In 30 days (II)	(113)	64,6±2,64	62,3±2,67	2,5±1,32	0,54±0,018	0,96±0,017	0,52±0,018	
In 6 months (III)	(66)	63,9±2,40	60,5±2,39	2,7±1,37	0,53±0,014	0,99±0,022	0,52±0,021	
	t; P [I-II]	-	2,14; <0,05	3,18; <0,01	2,58; <0,05	2,23; <0,05	2,72; <0,01	3,22; <0,01
	t; P [I-III]	-	2,05; <0,05	2,86; <0,01	2,44; <0,05	2,06; <0,05	3,38; <0,01	3,07; <0,01

Table 5

Distribution of men and women on indicators of somatic health (G. L. Apanasenko's express method, 1992) at different stages of the research, %

Level of health	Men			Women		
	I (n=47)	II (n=47)	III (n=32)	I (n=113)	II (n=113)	III (n=66)
High	-	-	-	-	-	-
Above an average	-	4,3	12,5	-	0,9	4,5
Average	34,1	57,4	55,6	15,0	75,2	62,1
Below an average	48,9	38,3	31,9	60,2	23,9	33,4
Low	17,0	-	-	24,8	-	-

Note. The first stage (I) – to carrying out classes, the second (II) – in 30 days, the third (III) – in 6 months after classes.

level of physical health.

Conclusions

The long-term researches concerning influence of improving trainings with use of nonconventional methods are conducted (Porfiry Ivanov's system and breath according to K. P. Buteyk's method) allow drawing such conclusions:

1. That functions of memory and attention are in direct dependence on the level of development of highly genetically determined properties of the main nervous processes as it is possible to learn about it from the researches of V. M. Makarenko, V. S. Lizogub (2011), use of the above-mentioned methods, promotes the reliable improvement of mental functions at people different in age and a physical state.
2. The use of the improving system of Ivanov in combina-

tion with a breath method according to Buteyk promotes the increase of level of physical health. The last is estimated by reserves of bio-energetics organism (G. L. Apanasenko's method).

3. The above-mentioned points to the expediency of use of the system of P. K. Ivanov and the method of breath according to K. P. Buteyk in practice of a physical recreation for the purpose of improvement of different segments of the population.

Prospects of the subsequent researches

Carrying out the research in the direction of studying of influence of trainings by hardening according to the system of P. K. Ivanov is planned for the development of the main nervous processes at people of different age in the subsequent.

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Mykhailo Khoroshukha: PhD (Physical Education and Sport), Doctor of Science (Pedagogical), Associate Professor; National Pedagogical University named after M. P. Dragomanov: Pirogova str. 9, Kyiv, 01601, Ukraine.

ORCID.ORG/0000-0001-5024-5792

E-mail: horoshuha@gmail.com