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INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE (IPAQ) AS A TOOL TO ASSESS THE POTENTIAL REGULAR SOLDIERS

Abstract

Physical activity provides the amount of movement necessary for correct development and health maintenance of every human being. Proper development of physiological processes is determined by the need of providing optimal (pr at least minimal) amount of movement to a human organism. Low level of physical activity may cause numerous diseases of locomotor system, as well as cardiovascular diseases, also leading to disability. Thanks to physical activity one can successfully cope with stress. Increased and regular physical activity of candidates for professional soldiers can ease, or even remove numerous pathogenic factors. Nowadays, sport and tourist activities, physical recreation, as well as physical activity in form of everyday prophylaxis, have become a necessity. Constant, regular, and optimally intensive physical activity constitutes a condition of steady improvement towards a higher level of fitness, but also health-related aspects of human organism.

The research was carried out in 2008 on students of the Land Forces Non-Commissioned Officers' School in Poznań. The questionnaire was filled in by one hundred randomly selected students. The diagnostic poll was based on the International Physical Activity Questionnaire (IPAQ) – abridged version. The aim of the research is to establish the amount of time devoted to physical activity by candidates for professional soldiers, depending on their place of residence, and selected health-threatening behaviours.

Key words: *physical activity, candidate for professional soldier, military education, Land Forces*

Introduction:

The plans of adjusting our armed forces to the requirements of contemporary battle assume that systematic decrease of the army will be balanced by increase of basic quality indices from the domain of armament, technical equipment, and professional preparation of soldiers. Physical activity and efficiency are perceived as indispensable attributes of a soldier. They face increasing requirements concerning education, mental and health predispositions, as well as physical activity. Physical fitness is necessary for every professional soldier on a battlefield. It is one of the basic conditions for that job. Everyday physical activity has enormous influence on reaching high level of fitness.

Physical activity should be an element of life for everybody among us. It is linked with physical recreation which is most often practised in spare time. It is a method for good mood and enjoying life. It is also an opportunity for correct development of an organism. Thanks to physical activity we can prevent various diseases, cope with stress, and successfully deal with disorders and diseases stemming from professional military service.

Material and methods

Subjects

The research was carried out in 2008 on 100 students of the Land Forces Non-Commissioned Officers' School in Poznań. Average age of the students was 23,8 years. The students were divided into groups, depending on their place of residence:

- cities over 100 000 inhabitants,
- cities under 100 000 inhabitants,
- villages.

Division also took into consideration selected health-threatening behaviours:

- smokers,
- non-smokers.

Methodology

The questionnaire was based on the International Physical Activity Questionnaire (IPAQ) – short version. (International Physical Activity Questionnaire - IPAQ). (Biernat, Stupnicki 2005; Biernat, Stupnicki et al. 2006, 2007).

Results

It has been long accepted in the army that a professional soldier is personally responsible for his fitness, and – as a result – his health. Depending on hobbies he should maintain desirable level of physical activity that would guarantee proper psycho-physical and health features. Such a situation implies a necessity of introducing to the environment of professional soldiers intensive pro-health physical education.

Measure of fitness evaluation is the Polish version of the International Physical Activity Questionnaire (IPAQ) which was worked out by Elżbieta Biernat and Romuald Stunonicki in 2004.

Table 1.

Index MET-min./week of the examined soldiers.

Team	N	MET-min./week					
		0-4000	4001-8000	8001-12000	12001-16000	16001-20000	20001-24000
Soldiers of the Land Army Non-Commissioned Officers' School	100	40	24	13	11	9	3

MET

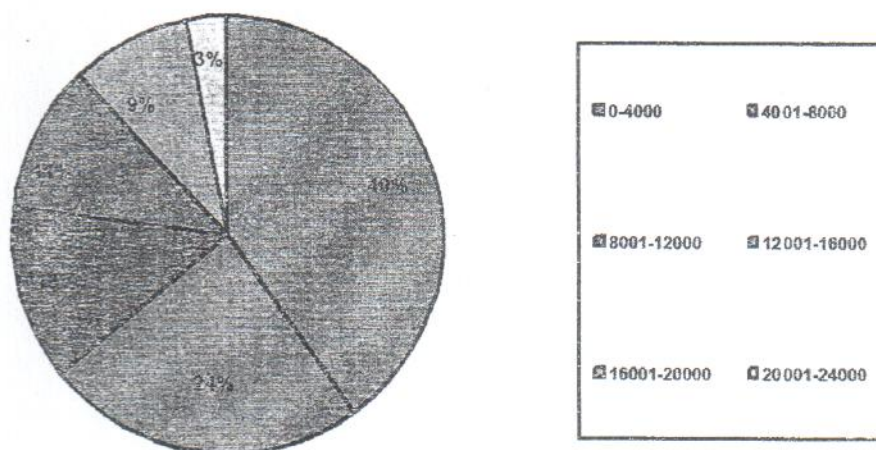


Fig. 1. Percentage values of MET-min./week of examined soldiers.

Values of MET-min./week among the examined soldiers are: 40% to 4000, 24% 4001-8000, 13% 8001-12000, 11% 12001-16000, 9% 16001-20000, 3% 20001-24000

Table 2.

Index MET-min./week of examined soldiers, depending on the place of residence.

Place of residence of students N-100	MET-min./week					
	0-4000	4001-8000	8001-12000	12001-16000	16001-20000	20001-24000
city over 100 000 inhabitants	8	6	2	2	3	0
city under 100 000 inhabitants	11	8	5	2	6	1
Village	21	10	6	7	0	2

MET

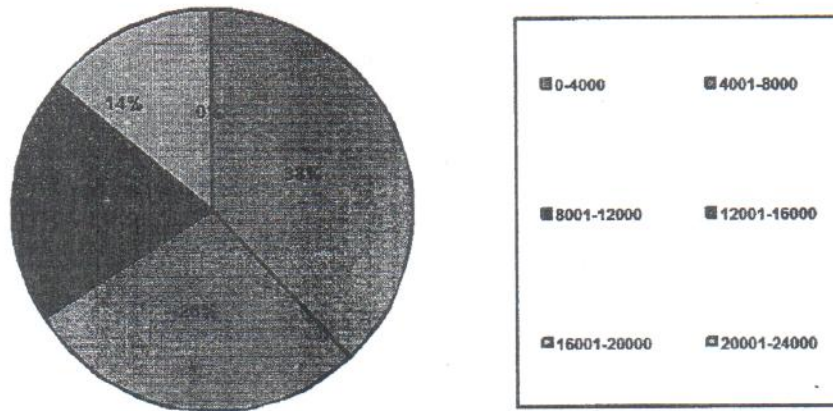


Fig. 2. Percentage values of MET-min./week of examined soldiers living in cities over 100 000 inhabitants.

Values of MET-min./week among the examined soldiers are: 38% to 4000, 28% 4001-8000, 10% 8001-12000, 10% 12001-16000, 14% 16001-20000, 0% 20001-24000

MET

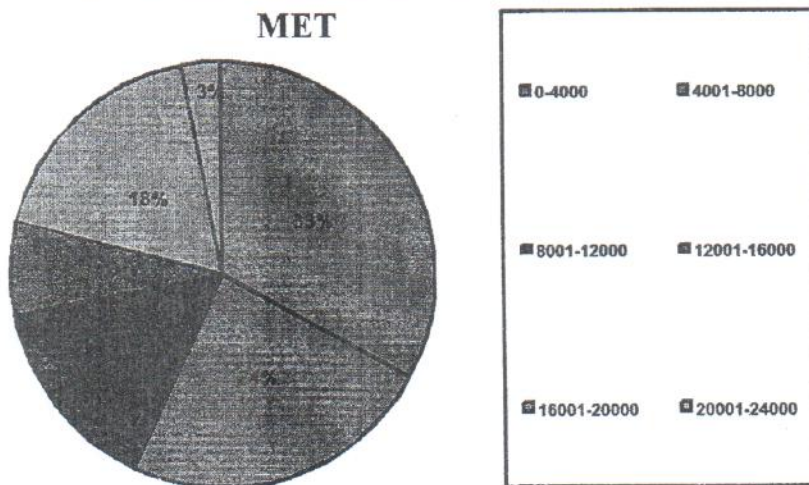


Fig.3. Percentage values of MET-min./week of examined soldiers living in cities under 100 000 inhabitants.

Values of MET-min./week among the examined soldiers are: 33% to 4000, 24% 4001-8000, 15% 8001-12000, 7% 12001-16000, 18% 16001-20000, 3% 20001-24000

MET

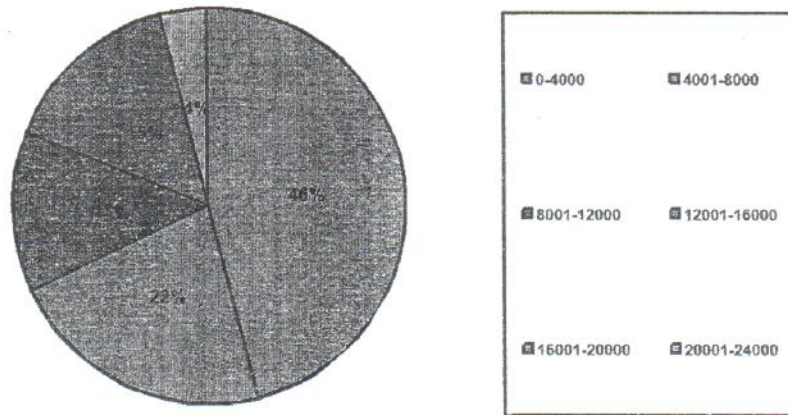


Fig.4. Percentage values of MET-min./week of examined soldiers living in villages.

Values of MET-min./week among the examined soldiers are: 46% to 4000, 22% 4001-8000, 13% 8001-12000, 15% 12001-16000, 0% 16001-20000, 4% 20001-24000

Table 3.

Value of index MET-min./week among the examined soldiers depending on health-threatening behaviours.

Health-threatening behaviour	Place of residence		
	City over 100 000 inhabitants	City under 100 000 inhabitants	Village
Smokers	10	18	24
Non-smokers	11	16	22

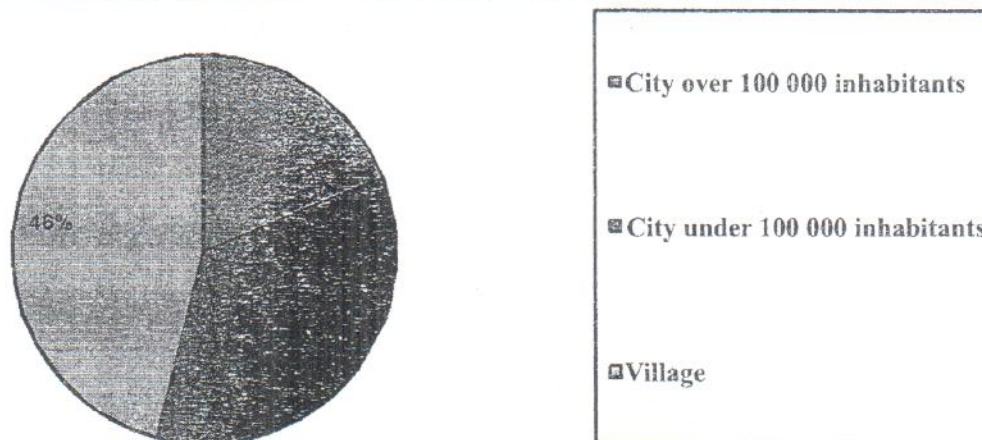


Fig.5. Percentage of smokers, with reference to place of residence.

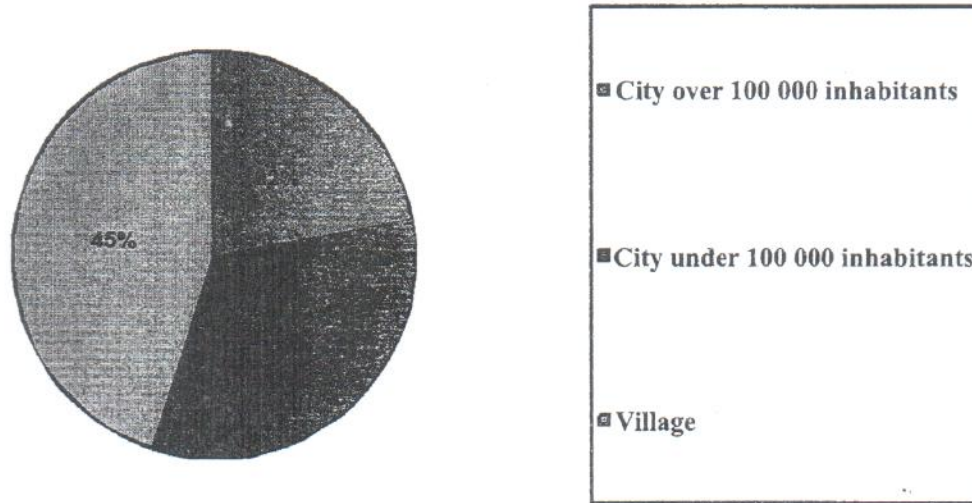


Fig .6. Percentage of non-smokers, with reference to place of residence.

Table 4.

Percentage of smokers and non-smokers with reference to place of residence:

Place of residence	Smokers	Non-smokers
City over 100 000 inhabitants	48%	52%
City under 100 000 inhabitants	53%	47%
Village	52%	48%

Data analysis proves that values of MET-min./week among soldiers are: 40% to 4000, 3% from 20001 to 24000, among soldiers living in cities over 100 000 inhabitants: 38% to 4000, 10% from 8001 to 12000, 10% from 12001 to 16000, among soldiers living in cities under 100 000 inhabitants: 33% to 4000, 3% from 20001 to 24000, among soldiers living in villages: 46% to 4000, 4% from 20001 to 24000. Among soldiers living in cities over 100 000 inhabitants: 48% smoke cigarettes, 52% are non-smokers, among soldiers living in cities under 100 000 inhabitants: 53% smoke cigarettes, 47% are non-smokers, among soldiers living in villages: 52% smoke cigarettes, 48% are non-smokers.

Conclusion

1. People who are physically active feel better, are fit and healthy. Regular exercises prevent civilisation diseases, remove fatigue and stress caused by profession one performs. They also help to regenerate organism needed for further actions. Active recreation makes out of one's life a dynamic, conscious, and creative existence.

2. Physical activity of examined soldiers (40%) is on sufficient level, three per cent of soldiers represent high level of physical activity. Sufficient level of physical activity was most often noted in soldiers-smokers living in villages.
3. Soldiers-smokers lead sedentary lifestyle and engage moderately in exercises, they spend the least time on intensive exercises. At the same time soldiers-non-smokers spend more time on intensive training, walk more, and spend less time on sedentary lifestyle.

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