



GENERALIZATION OF RECOMMENDATIONS ON CHILDREN PHYSICAL ACTIVITY

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SUMMARY

The focus of this article is how physical activity one of the leading health and wellbeing factors in the European Region. The synthesis of recommendations for physical activity presented in the literature of the world will allow specialists in physical education to focus in choosing the duration of organized physical activity for children with the purpose of positive impact on their health.

Key words: physical activity, children's health.

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INTRODUCTION

Physical activity is one of the most basic human functions. It is an important foundation of health throughout life. Its known health benefits include a reduced risk of cardiovascular disease, hypertension, diabetes and certain forms of cancer; it also has an important role in the management of certain chronic conditions. Physical activity is a key determinant of energy expenditure and is therefore fundamental to achieving energy balance and weight control. Throughout childhood and adolescence, physical activity is necessary for the development of

basic motor skills, as well as musculoskeletal development. Furthermore, physical activity is also embedded in the United Nations Convention on the Rights of the Child.¹²

In the world community there should be dominated a conviction, according to which a systematic and optimal physical activity is an effective means of strengthening and preserving health.³

Despite the known benefits of physical activity, there is a worldwide trend towards less total daily physical activity⁴.

The increasing rates of physical inactivity among children and adolescents are alarming. Only 34 % of European adolescents aged 13–15 years are active enough to meet the current guidelines . This contributes to rising rates of overweight and obesity among children in Europe, particularly among children from low socioeconomic backgrounds.⁵

While there are some continuing challenges in terms of the validity and comparability of data on levels of physical activity across Europe, recent figures from member States of the European Union (EU) indicate that six in every 10 people above 15 years of age never or seldom exercise or play a sport and more than half never or seldom engage in other kinds of physical activity, such as cycling, dancing or gardening.

As for the data of numerous studies, no less than 60 % of the population in the world do not adhere to the required level of physical activity, corresponding to physiological norms for a positive effect on health.⁶

The results of the survey in Ukraine indicate that at the beginning of the XXI century a sufficient level of wellness of physical activity (at least 4 - 5 lessons per week duration of one session at least 30 minutes) had only 3 % of the population aged 16 to 74 years, the average level (2 - 3 sessions per week) – 6 %, the lowest

¹Binder. V. Global recommendations on physical activity for health. World Health Organization, 2010

² Imas E.V.ак, Dutchak M.V., Trachuk S.V. Strategies and recommendations for a healthy lifestyle and physical activity. Collection WHO materials. Olympic Literature, 2013.

³ Pures D.K.Steps to health: a framework for promoting physical activity to improve health in the European Region / Regional Office for Europe, 2006

⁴ Vyborg G.M. United Kingdom Chief Medical Officer. At least five a week. Evidence on the impact of physical activity and its relationship to health. London, Department of Health, 2004.

⁵ Lamer F. T. Physical activity and health in Europe: evidence for action / Copenhagen, WHO Regional Office for Europe, 2006.

⁶ Mutterer B. P. Physical activity strategy for the WHO European Region 2016–2025. WHO, 2015.

level (1 - 2 classes per week) – 33 % of the population. For most of the adult population is characterized by hyperkinesias. Among children growing popularity of sedentary leisure activity.

Deficiency of the motor activity of the population is detrimental to the economy of Europe and is around 150-300 Euros per person per year.

Of particular importance it is properly organized physical activity during childhood with its fast growth and development of the organism. Current living conditions require finding new ways to improve physical education of children⁷.

OBJECTY AND AIM

To compile in a global context the recommendations for physical activity those have a positive impact on health.

METHOD

Analysis of scientific methodical and special literature in order to examine the essence of the recommendations on physical activity for health promotion. There have been analyzed information resource sites of the WHO (www.who.int), WHO (www.euro.who.int).

RESULTS AND DISCUSSION

Recommendations for physical activity in different European countries and the world began to appear in recent years as a result of active processes of globalization and integration in the world.

The analysis of scientific data provides that in order to ensure the harmonious development of health the children need physical activity, of moderate and high intensity, in general, at least 60 minutes.⁸ Types of physical activity for children should include games, competitions, sports, travel, household chores, leisure, and physical education or planned activities in the families,

⁷ Bar-Or O. Children's health and physical activity: from physiological basics to practical applications: Olimp. I-ra, 2009.

⁸ Nichols N.N. Promoting physical activity for health - a framework for action in the WHO European Region // WHO European Ministerial Conference on Counteracting Obesity, 2006.

schools and other health and fitness classes. The modern system of physical education should focus on the global trend in this area, the needs of society, and today we need a qualitative component for solution of main health problems at school age⁹.

Scientific recommendations on the problem of physical activity for children: the forms of classes' organization, frequency, intensity, duration of total volume of physical activity are essential information for professionals in physical education and human health.

Our scientific research has its basis in the scientific literature. In Table 1 we have presented generalized, data accumulated by the scientists from different countries as for organization of required amount of children's physical activity in organized forms of exercise^{10 11}.

Table 1 Generalization of the data as for organization of exercise involvement in different countries of the world (on the base of summarized data from literature S. Trachuk, 2011)

Motor activity of moderate intensity every day in combination with high intensity 2-3 times a week. (National Board of Health and Welfare stated * Sweden, 1971)	3-5 times per week, 15-60 minutes, aerobic exercise of 60-90% of maximum heart rate. (ACSM **, USA, 1978)	At least 2 times a week, motor activity, which causes an increase in heart rate and respiratory rate? (Silvennoinen, Finland, 1984)
Physical activity is mild, moderate and high intensity must be total for a week in girls from 4 to 9 hours, and the boys - from 7 to 12 hours. (All-Union Scientific Research Institute of Physical Culture (VNIIFK) USSR, 1984)	Rational volume of physical activity per week for students 14-21 hours a day at a value of 10-20 thousand. Steps (All-Union Scientific Research Institute of Physical Culture (VNIIFK) USSR, 1984)	At least 3 times a week, lasting for 20 min, the intensity of 60% of maximum heart rate, involving large muscle groups. (Ross and Gilbert, USA, 1985)
At least 30 minutes physical	3-5 times a week, 15-60	Motor activity of moderate

⁹ Trachuk SV Compile data world practice of motor activity for health (analytical review) // Slobozhansky scientific and sports Gazette. Number 2, 2011.

¹⁰ Stemmer J.F. The Physical Activity Guidelines Advisory Committee Report, 2008.

¹¹ Clements S., Silverman I. Hygiene standards of physical activity of children and adolescents 5-18 years "Zbirnik Vazhlivih ofitsiynih materialiv s sanitarnih i protiepidemichnih power" Volume 8. Chastina 1, 1998.

activity a day, every day, using exercises, which involve large muscle groups. (Haskel and other, USA, 1985)	minutes, aerobic exercises focus 60-90% of maximum heart rate, strength exercises. (ACSM, USA, 1991)	and high intensity for 30 minutes or more in most days of the week (150 kilocalories per day), possibly small amounts but not less than 10 minutes. (CDC, USA, 1996)
3-5 times per week for 15-60 minutes, aerobic exercises direction 55-90% of maximum heart rate, strength exercises and flexibility exercises. (ACSM **, USA, 1998)	Motor activity of at least moderate intensity 60 minutes per day, 2 times a week or more to maintain muscle strength, flexibility. (Biddle S, Sallis JF, Cavill N, England, 1999)	Motor activity of 30 minutes or more of moderate-intensity daily or 3 times a week for 20 minutes of high intensity physical activity and as a supplement 2 times a week power workload. (ACSM, USA, 2007)
All children and adolescents and should participate in motor activity 60 minutes or more per day of moderate and high intensity. (ACSM, USA, 2008)	Daily physical activity for 90 minutes, of which 60 middle and 30 minutes of high intensity, you can do 5 - 10 minute blocks. Achieving the effect is possible with optimal exercise endurance, flexibility and strength. (WHO, 2010)	Children and young people aged 5-17 years old should accumulate at least 60 minutes of moderate to vigorous-intensity physical activity daily. Most of daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least 3 times per week (WHO, 2016)

Notes: * – National Board of Health and Welfare stated - National Directorate for the protection of health and welfare; ** ACSM – American College of Sports Medicine

There are many different forms, kinds and levels of intensity of physical activity. These include fundamental movement skills, active play, leisure activities, such as walking, dancing, hiking and biking, sports and structured exercise. Physical activity can take place in a range of domains and settings, such as in “green” or “blue” spaces (water landscapes), at school, in the workplace, during transport from place to place, at home or as part of the activities of daily living, such as gardening or household chores. For children and young people of this age group physical activity includes play, games, sports, transportation, recreation, physical education or planned exercise, in the context of family, school, and community activities.

CONCLUSIONS

Thus, a systematic analysis of the world experience, best practices of the specialists in physical education and health in abroad with respect to frequency, duration, intensity, character, and total volume of physical activity, can become the basis for developing national programs on physical activity directed to strengthen and preserve health of the younger generation.

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ОБОБЩЕНИЕ РЕКОМЕНДАЦИЙ ПО ФИЗИЧЕСКОЙ АКТИВНОСТИ ДЕТЕЙ

АННОТАЦИЯ

Фокусом этой статьи является физическая активность, как один из ведущих факторов здоровья и благополучия в Европейском регионе. Синтез рекомендаций по физической активности, представленных в мировой литературе, позволит специалистам в области физического воспитания ориентироваться в регулировании организованной двигательной активности детей с целью положительного влияния на их здоровье.

Ключевые слова: физическая активность, здоровье детей.

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