



RESEARCH ARTICLE

THE IMPACT OF SPECIALTY ON THE KNOWLEDGE OF PHYSICAL ACTIVITY AND SPORTS OF VARNA MEDICAL COLLEGE STUDENTS

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ABSTRACT

Physical activity is a substantial factor for mental and physical development of each person. The optimal physical activity plays an important role in the prevention of socially significant diseases. The aim of this article is to study the impact of specialty on the knowledge of physical activity and sports among students from two specialties from the Medical College of Varna. The study includes 76 students from Varna Medical College from the following specialties "Inspector of Public Health" (IPH) and "Rehabilitator". Study results indicate that most students are not familiar with the optimal norms for physical activity 56.6% (n=43). More than a half of students – 52.6% (n=40) claimed that physical activity is an essential element for healthy lifestyle. There is no statistically significant difference in terms of awareness and sport activities of students from both study groups. Indeed, there is a need to raise awareness about physical activity with a focus on optimal age norms.

INTRODUCTION

Physical activity is an important factor for mental and physical development of each person. It strengthens the cardiovascular system, maintains the normal body weight and provides growth and development of the skeletal structure. The optimal physical activity plays an important role in the prevention of socially significant diseases. Entertainment, communication and leisure activities increasingly virtualize in recent decades. Their implementation critically reduces the role of physical activity. There is a change in lifestyle and daily activities that require physical activity, such as walking and climbing stairs including prevalence of passive form of motorized transportation. Low physical activity is a risk factor for health, having a substantial contribution to the deterioration of population health status of the population in our country. It forms 4.3% from the Global Burden of Disease (by DALY's) and 7, 7% of all deaths in Bulgaria (WHO, 2004). Citizens from the Northern countries and the Netherlands are among the most physically active in EU, according to Eurobarometer studies. Citizens from the Mediterranean countries stand out as the least physically active in EU the same as those of the new twelve member states. A number of studies show that physical activity increases when providing sports teams and equipment (Davison *et al.*, 2003, Hennessy *et al.*, 2010, Jago *et al.*, 2010), parents' encouraging and institutions of education (Sallis *et al.*, 2000, Trost *et al.*, 2003). Studies from many European countries and worldwide suggest that physical activity among young people is low,

especially for girls. According to authors from the US the physical activity decreases annually among boys from childhood to adolescence by 2,7%, while among girls it decreases annually by 7,4%. In our country the low physical activity is widespread among all age groups, including children in preschool. According to NSI data 18-25% of boys and 30-48% of girls from the age group 7-18 yrs. report to insufficient physical activity as its relative share increases with age. The low physical activity becomes more relevant factor related to obesity among children. This problem becomes endemic and relates to developed countries worldwide. Bulgaria takes the second place in the world in obesity and overweight among children. The morbidity increase associated with adolescent overweight becomes an important socio-medical problem of modern society (Bozhkova 2013, Georgieva 2011). An informed civil society that knows how to support policies and environments positively influencing health is formed by knowledge encouragement, skills and habits for a healthy lifestyle.

Foundations of health education laid in primary and secondary education are upgraded of the nature of disciplines taught at the Medical College. This created our interest in studying and comparing awareness of students from two specialties "Inspector in Public Health" and "Rehabilitation" on certain aspects of sports activity related to their specific physical activities. The aim of this article is to study the impact of specialty on the knowledge of physical activity and sports among students from two specialties from the Medical College of Varna.

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MATERIALS AND METHODS

The study is conducted from September till October 2016 among 76 students of the Medical College of Varna from two specialties – “Inspector of Public Health” (33 students) and “Rehabilitation” (43 students). The data is collected by direct individual inquiry. Results are processed by using mathematical and statistical methods and graphical analysis.

RESULTS

Respondents are divided into two groups according to their gender: 65,8% (n=50) girls and 34,2% (n=26) boys. Results indicate that most students are not familiar with the optimal norms of physical activity 56,6% (n=43).

exogenous and lifestyle (physical activity) have the greatest impact on health according to them.

The greatest impact on health according to students – 81, 6% (n=62) has physical activity, followed by exogenous – 14, 5% (n=11) and genetic factors – 3, 9% (n=3). Results of different specialties are the following: for 84, 8% of students from “Inspector of Public Health” physical activity is more important in comparison with rehabilitators (79, 1%) (Figure 1). Therefore, students from both specialties recognize the outstanding role of physical activity to maintain health. Due to continuously increasing number of overweight young people it is interesting to find what is the main reason for obesity according to students.

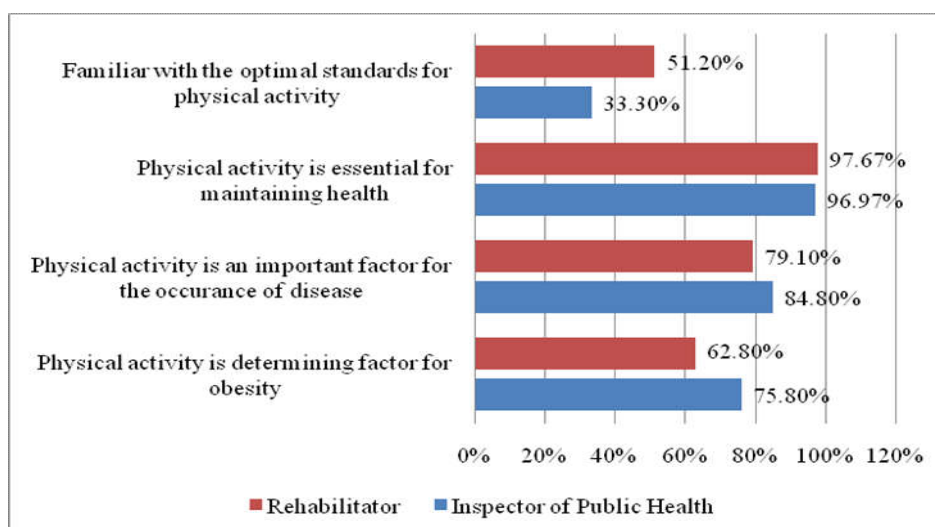


Figure 1. Relatively distribution of answers to basic questions according to specialty (p<0, 05)

Table 1. Selecting an approach to maintain a good physical shape

	Inspector of Public Health n%	Rehabilitator n%	Total n %
I exercise regularly	2 (2,6%)	13 (17,1%)	15 (19,7%)
I follow certain a diet	8 (10,5%)	8 (10,5%)	16 (21,1%)
I exercise regularly and follow a certain diet	10 (13,2%)	16 (21,1%)	26 (34,2%)
Other	13 (17,1%)	6 (7,9%)	19 (25,0%)
Total	33 (43,4%)	43 (56,6%)	76 (100,0%)

Table 2. Do you think regular time for sports at the Medical College is sufficient?

Regular time for sports at the Medical College is:	Inspector of Public Health n%	Rehabilitator n%	Total n %
Sufficient	17 (22,4%)	10 (13,2%)	27 (35,5%)
Insufficient	16 (21,1%)	33(43,4%)	49(64,5%)
Total	33(43,4%)	43(56,6%)	76(100,0%)

According to the specialty, rehabilitators – 51,2% (n=22) are more informed than inspectors of public health – 33,3% (n=11) (Figure 1). Assuredly, the majority of students believe that physical activity is important for health. For many of them it is very important – 52,6% (n=40), respectively 15,8% (n=12) claim that it is essential and 28,9% (n=22) it is relatively important for health. Only 2,6% (n=2) of students think that it is not important. No statistically significant difference is found in students’ opinion in two groups about the importance of physical activity for health ($\chi^2 = 4,190$ and $p = 0,24$). To understand what motivates students to play sports we asked them which of the following factors: endogenous (genetic),

Here again respondents have the same opinion – 68, 4% (n=52) of them believe that physical activity is essential, 28, 9% (n=22) claim that diet is the most important and 2, 6% (n=2) think that genetic factors are the most important (Figure 1). Most of them – 80, 3% (n=61) play sports and the rest of them 19, 7% (n=15) do not play sports. In both specialties the students who play sports are almost equally divided. Our expectations for a slight majority of students in “Rehabilitation” – 86% in comparison with students in “Inspector of Public Health” – 72, 7% are justified. The result is due to the point of disciplines which students are studying. There are no statistically significant differences found in

respondents' answers, depending on the specialty. Most respondents 34, 2% (n=26) share that they exercise regularly and follow a certain diet. The rest of respondents answer that they only follow a certain diet 21, 1% (n=16) and 19, 7% (n=15) rely on the regular sports activities. Some respondents 25% (n=19) answered "Other" that includes "I do not do anything." and "I go walking." (Table 1) There are differences in sports activities in both educational and scientific sectors on the choice of maintaining a good physical shape ($\chi^2 = 10, 903$ and $p \leq 0, 012$). "Rehabilitation" students that take part in sports activities (17, 1%) are more than students from the specialty "Inspector of Public Health" (2, 6%). Equal number of students from both groups (n=8) follow a certain diet (Table 1). Majority of respondents 64, 5% (n=49) define hours allotted for sports in College as insufficient (Table 2). Study results show statistically significant difference related to the specialty in Medical College regarding the choice of approach for maintaining physical fitness and sports training. There were not found any statistically significant differences in terms of awareness of students for standards of exercise from both groups, either in terms of their perception of the importance of sports activities for health.

DISCUSSION

Study among students reveals two very interesting themes for discussion. The first one is that rehabilitators are more familiar with the optimal norms of physical activity, which is reasonable according to their future professional development. The second one is that more students from the specialty "Inspectors of Public Health" think that physical activity is more important for sport motivation and their share is bigger than rehabilitation students. According to all respondents the factors that could decrease obesity among young people are physical activity, diet and genetic factors. The highest score of respondents for physical activity as a key to preventing disease seems reasonable. It is confirmed by the results describing sports activity of students. Once it became clear that students define physical activity as a factor of a great importance for obesity it was reasonable to question them how they maintain good physical shape. To this question one third of students answer that they combine both play sports and follow a certain diet in order to stay in good shape. Consequently, following a certain diet and staying more hours in gym could help students and young people feel healthy.

Conclusion

Respondent students are not familiar with the health standards for physical activity, but unanimously define it as extremely important for health. Students from both study specialties play sports regularly and follow a specific diet. As future health professionals they are ought to be adequately informed of all

factors that have a beneficial effect on human health. Thus they could recommend improvements in locomotor activity of relatives, friends and patients by stagnant lifestyle prevention and resulting socially significant chronic diseases. Therefore, it is necessary to raise the awareness of students about physical activity with an emphasis on standards referring to all ages.

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REFERENCES

- Bozhkova, AP. and Hinkova, M. 2013. Investigation on students' opinion concerning their health status. Health and science. 3(4):5-9. [in Bulgarian]
- Davison, KK., Cutting, TM., and Birch, LL., 2003. Parents' activity-related parenting practices predict girls' physical activity. *Med Sci Sports Exerc.* 35(9): 1589-1595.
- Fletcher, G., G. Balady, E. Amsterdam, *et al.*, 2001. Exercise standards for testing and training: a statement for healthcare professionals from the American Heart Association. *Circulation.* 104:1694-1740
- Georgieva, A. and Dimitrova, T.Z. 2011. Stress influence among first year students in Nursing in Medical University of Varna. Reports X National Students session, Pleven. 3(4):79-89 [in Bulgarian]
- Hennessy, E., Hughes, SO., Goldberg, JP., Hyatt, RR., 2010. Economos CD: Parent-child interactions and objectively measured child physical activity: a cross-sectional study. *IJBNPA.* 7: 71-PubMed CentralPubMed
- Jago, R., Davison, KK., Brockman, R., Page, AS., Thompson, JL., Fox, KR., 2010. Parenting styles, parenting practices, and physical activity in 10- to 11-year olds. *Prev Med.* 52: View ArticlePubMed
- Sallis, JF., Prochaska, JJ., Taylor, WC., 2000. A review of correlates of physical activity of children and adolescents. *Med Sci Sports Exerc.* 32 (5): 963-975. View Article Pub Med
- Trost, SG., Sallis, JF., Pate, RR., Freedson, PS., Taylor, WC., Dowda, M., 2003. Evaluating a model of parental influence on youth physical activity. *Am J Prev Med.* 25 (4): 277-282. 10.1016/S0749-3797(03)00217-4.
- WHO. Global strategy on diet, physical activity and health. Geneva: World Health Organization, 2004 http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_wcb.pdf.
