

Gender peculiarities of way of life and health of Belarusian teenagers

Tryb życia i stan zdrowia białoruskich nastolatków w zależności od płci

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Cel, materiał i metody. W oparciu o dane ankiety z 2010 roku przeprowadzonej wśród 15-18-letnie młodzieży ustalono specyficzne cechy trybu życia i stanu zdrowia współczesnej młodzieży białoruskiej w zależności od płci. 463 dziewczęta i 486 chłopców stanowiło grupę reprezentatywną dla miejsca i płci.

Wyniki. Dane wykazały, że samoocena nastolatków dotycząca zdrowia i odżywiania jest wysoka, zwłaszcza u chłopców. Jednocześnie stwierdzono niewystarczającą ilość snu (u obu płci) aktywności fizycznej (najniższa – u dziewcząt), palenia tytoniu i spożywania alkoholu (bez względu na płeć). Mimo braku rozróżnienia zależności płci od stosowania narkotyków (co 6/7 nastolatek) chłopcy częściej przyznawali się do prób ich używania.

Wnioski. Podsumowując dane, tryb życia młodzieży stanowi ryzyko dla jej stanu zdrowia.

Słowa kluczowe: młodzież, zdrowie, czynniki trybu życia, płeć

Aim, material & method. Based on the materials of the 2010 questionnaire of 15-18-year old persons some peculiarities of way of life and health of modern Belarus teenagers were established, with the influence of the gender factor. The sample of 463 girls and 486 young men representatively reflects the set of teenagers of Belarus by territory and gender.

Results. It was revealed that the teenagers' self-estimation of their health status and nutrition is high, especially at boys. At the same time, it is necessary to note insufficient duration of night sleep (both in boys and girls), of physical activity (the lowest – in girls), of high prevalence of smoking and alcohol use (irrespective of gender). Despite the lack of gender distinctions regarding the availability of narcotic substances (every sixth/seventh teenager), boys more often admitted having tried to use drugs.

Conclusion. On the whole, the way of life of teenagers represents risk to the condition of their health.

Key words: teenagers, health, life style factors, gender

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Introduction

The life style and behavioral factors make the basis of health. The modern Belarusian teenager is under the influence of huge informational stream, and it is not obviously possible to regulate it. As the consequence, behavioral stereotypes in health sphere change.

Teenagers in most cases do not reach the social maturity sufficient for independent decision-making until 15-17-years of age. According to the research in Nizhni Novgorod, the majority of children at the age from 14 till 17 years (68,7%) having health problems address parents first of all. The teenagers of that age remain children in the eyes of parents and doctors. Their own position concerning health protection only starts to be formed [1].

In the health sphere it is adequate to name a way of life including behavior as a category of culture [2]. The peculiarity revealed by professor I. V. Zhuravlyova

thereupon disturbs. Throughout the last 25 years during which the research of social factors of health in Russia has been conducted, one feature was universal for all without an exception of groups of respondents (irrespective of residence, nationality, age, gender, education). From six offered motives of care about health (namely: the example of surrounding people, influence of medical information, education, requirements of the family, desire to be physically stronger, health deterioration) the factor «health deterioration» was the first in all respondents in all research. People started to care about health only after an illness [3]. Threat to health is represented also by the youth's way of life in Ukraine. The prevalence of smoking among the population of over 15 years of age in Ukraine is 41%. Frequency of alcohol consumption among 5-11-grade pupils is the highest on the list of four dozen countries [4].

Similar tendencies are characteristic also for Poland. Results of the research among the student youth of Wrocław have shown that life style of students has mostly health-destroying, but not health-protecting character [5]. The research of 1124 students from the Lubelskie Voivodeship showed that in most topics under research students were not well prepared to protect and improve health, e.g. 73.76% of all subjects did not connect their physical activity with free time culture [6].

The specificity of health-protecting behavior is that it is determined by a set of factors, the majority of which do not mention material aspects of standard of living. These samples of behavior are in many respects connected with quality of education as a whole, including education in the field of physical training which should realize the purposes of health-protection [7].

The healthy way of life includes the whole group of stress-resisting factors: ability to resist psychological threats, self-checking, optimism, feeling of self-esteem and preservation of equal benevolent relations with surrounding people [8]. Therefore education of teenagers of the requirement to conduct a healthy way of life promotes strengthening of their mental health. The research of the epidemiology of suicides among persons of 15-59-years of age in 2004-2007 in Poland (according to WHO – Health for All Mortality Database), showed that young people required special attention as a group of risk [9]. Age features of suicide risk were confirmed also by the research in the USA: 1-2/100000 children under 15 years of age try to commit suicide, this figure increases to 11/100000 in the age group of 15-19-years [10], and the same in the European Union countries [11].

Thus boys and girls behave differently. The behavior in relation to own health, especially sexual, at teenage age has strongly pronounced gender peculiarities. Young men give higher estimation to their state of health than girls; simultaneously, they care about it insufficiently: according to Z.A. Sevkovskaya, only 12.3% of the questioned young men (288 students of high schools and 612 pupils of average educational institutions of the Republic, aged 16-24 years) visit the urologist regularly, 42.9% – irregularly, 44.8% – do not visit specialists at all [12]. The data of individual anonymous records of mortality cases of 10-19-year-olds in 1999-2006 in Poland (according to Central Administrative Statistics Board) show that 79% of suicides among 10-14-year-old children and 86% of suicides among 15-19-year-old young people occur among boys [13].

According to gender peculiarities of life style, possibilities of influence of family and school on the behavior of teenagers are also different.

The work purpose: to establish peculiarities of way of life and health of modern Belarus teenagers, according to the influence of gender factor.

Methods

We used data of the 2010 questionnaire of 463 girls and 486 young men of 15-18 years of age [14]. The sample was representatively reflecting the set of teenagers of Belarus by territory and gender. By means of statistical methods (STATISTICA 6.0, SPSS 13.0) the teenagers' self-estimation of health, nutrition, physical activity, duration of night sleep, presence of bad habits were studied; gender peculiarities of specified components of teenagers' way of life were established. The self-estimation of health was used in the given research as the base indicator of teenagers' state of health.

Results and discussion

Self-estimation of health is an estimation by the individual of own physical and mental condition, and is a key indicator of the relation to health. Three basic functions are characteristic for this parameter: regulating, estimating, prognosing [3]. Regulating function concerns mechanisms of psychological protection first of all. It has been established that psychological distress, depressive symptoms influence self-estimation of health more strongly than many serious chronic diseases. Self-estimation of health cannot be absolutely reliable in the definition of a true state of health.

At the same time, proceeding from modern approaches to health definition as «the condition providing realization of individual biological and social functions in full volume» [15], it is possible to confirm a high degree of conformity of self-estimation and the objective characteristics of health. It has thus been established that in comparison with similar data, characteristics for industrially developed countries, young men living in the countries of the post-Soviet territory give a less positive estimation of their state of health than their foreign contemporaries. To receive parity representation in the sample of teenagers with good and bad health, I.V. Zhuravlyova compared shares of the teenagers estimating their health as „very good” or „good enough” and estimating it as „satisfactory” and „very bad” accordingly among Russians, Estonians and Finns. In Russians this parity looked as 1.5 to 1, in Estonians – as 7 to 1, and in Finns – as 21 to 1 [16].

Our results show that the majority of the questioned teenagers have estimated own health as „good” (4 points at an estimation on a 5-mark system). Distribution of answers appeared as the following:

„bad” (1 point) – 2.3%; „satisfactory” (2 points) – 17.8%; «is closer to good» (3 points) – 21.2%; „good” (4 points) – 40%; „excellent” (5 points) – 18%. Less than 1% of teenagers did not answer the question about health self-estimation (fig. 1). Thus the average estimation in boys was 3.76 ± 0.046 points, in girls – 3.3 ± 0.049 points (distinctions are significant, $t=6.8$, $p<0.0001$).

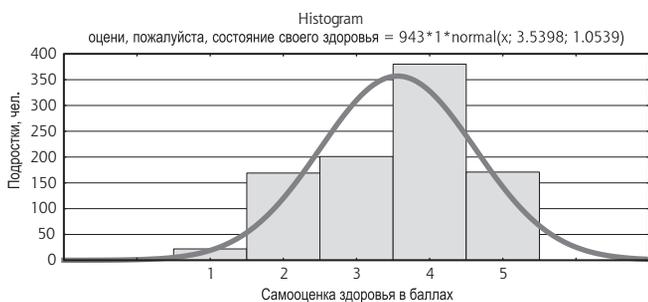


Fig. 1. Self-estimation of health by teenagers at an estimation on 5-points system (1 – “it is bad”, 2 – “it is satisfactory”, 3 – “it is closer to good”, 4 – “it is good”, 5 – “it is excellent”)

At the nutritional self-estimation by teenagers of full value of food it was established that about 1.5% of teenagers (0.8% of boys and 1.9% of girls) estimated own value of food as bad, more 12.2% (7.4% of boys and 17.3% of girls) as satisfactory (fig. 2). As a whole, the proportion of girls estimating their food on low points appeared above a share of boys 2.34 times. 13.8% of boys and 21.6% of girls considered that the condition of their food «is almost good but not always» (3 points on 5-points system). 4% of boys and 38.9% of girls estimated the food allowance as “good”. 35.8% of boys and 19.9% of girls ($\chi^2=16.9$, $p=0.00001$) considered the food „excellent”. Average value of self-estimation of full value of food (on 5-points system) was in boys 4.05 ± 0.042 , in girls – 3.58 ± 0.049 points ($t=7.2$, $p<0.0001$).

The risk to health of children in modern conditions is partly caused by an increased academic load. It underlies insufficient duration of night sleep of teenagers and senior schoolboys, default of norms of outdoor stay. At the same time, a variety of factors of a way of life of the child is connected with

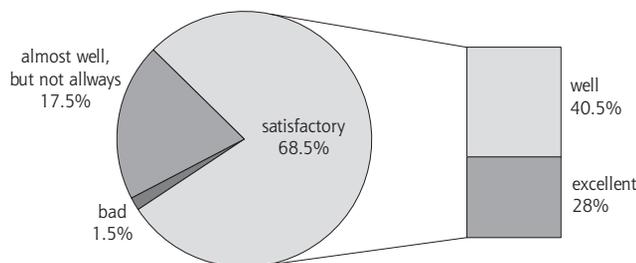


Fig. 2. Self-estimation of value of food by Belarusian teenagers

its family influence. The results of research of a way of life of elementary grade pupils (on an example of Gomel) showed that 46.3% of first-graders spent less and about 2 hours in lesson preparation, 14.8% – more than 2 hours. The norms of duration of sleep in one third-one half of children are not maintained already at younger school age. Almost 63.0 % of younger schoolboys have insufficient time for outdoor activities. About 55.6% of first-graders have breakfast. Only 69.4% of children in the fourth class never took alcohol [17].

We revealed that the sleep of 4% of teenagers of a sample lasted 5 and less hours per day, 12.2% – 6 hours, 26.2% – 7 hours, 28.9% – 8 hours, 14.1% – 9 hours. About 14% of teenagers specified that they slept 10 hours per day and more (fig. 3). Average duration of night sleep in boys was 7.86 hours, in girls – 7.77 hours (criterion of equality of dispersions $F=0.336$, Student criterion $t=0.9$, $p=0.37$).

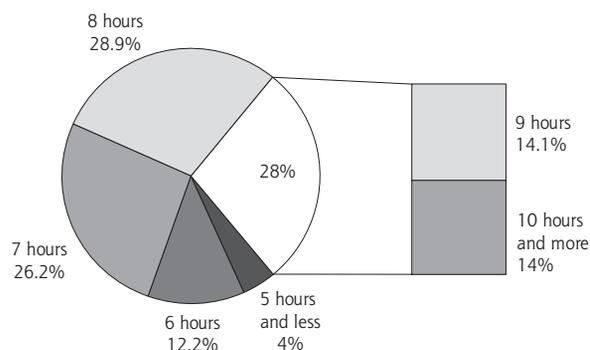


Fig. 3. Duration of night sleep of Belarusian teenagers

The correlation analysis did not reveal the interrelation between a self-estimation of state of health and duration of night sleep (the Pearson’s factor of correlation was 0.016, $p=0.63$).

It is possible to judge physical activity of teenagers by the frequency of physical training. According to answers of teenagers, it was: „Daily” – 23.6%, „Frequent” – 37.4%, „Sometimes” – 36.4%, „Never” – 2.2%. 31.07% of boys and 16.0% of girls ($\chi^2=18.5$, $p=0.00001$) are daily engaged in physical training, „Frequent” – 43.4% of boys and 31.1% of girls ($\chi^2=7.02$, $p=0.008$), „Sometimes” – 24.07% of boys and 42.3% of girls ($\chi^2=30.4$, $p=0.00001$), „Never” – 1.0% of boys and 3.5% of girls ($\chi^2=6.17$, $p=0.01$).

Almost every fifth (19.5%) teenager specified that they smoked (22% of boys and 16.8% of girls, $\chi^2=2.72$, $p=0.098$). About 5% of smokers had been smoking for 10 years and earlier, about 7% – for 12 years, about 13% – for 13 years. The greatest part of smoking teenagers (25% and 22% accordingly)

specified that the first experience of smoking had taken place in the 14th or 15th year of age (fig. 4). About 17% of smoking teenagers started to smoke in the 16th year of age and were more senior. Mean age for the beginning of smoking was 13.68 ± 0.258 years in boys, 14.23 ± 0.246 years – in girls ($t=1.5$, $p=0.1$).

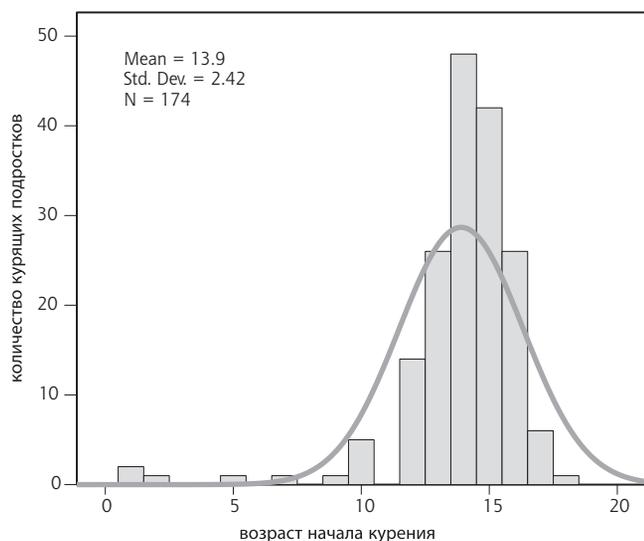


Fig. 4. The age of beginning of smoking

The greatest quantity of cigarettes smoked daily, according to answers, was 25. More often teenagers smoke from 2 to 5 (34% of smoking teenagers), or 10-15 (20.5% of smoking teenagers) cigarettes per day (fig. 5).

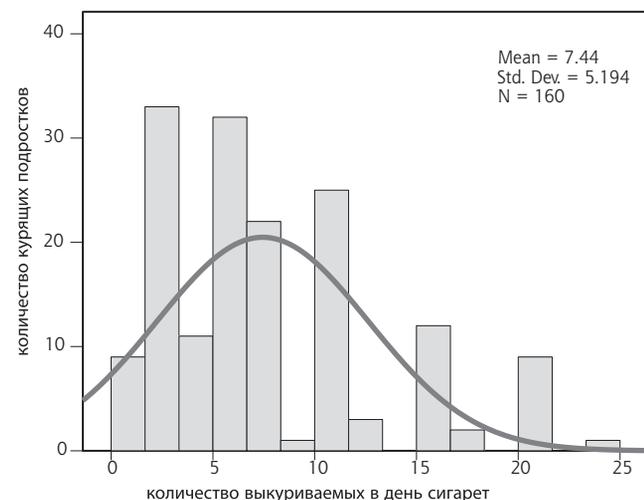


Fig. 5. Quantity of cigarettes smoked by teenagers per day

Almost 16.1% of teenagers (17.9% of boys and 14.3% of girls, $\chi^2=1.7$, $p=0.2$) answered that they had acquaintances using narcotic substances. About 7.4% of boys and 3.5% of girls ($\chi^2=6.4$, $p=0.01$) specified that they tried to use narcotic substances.

The question «Do you ever use alcoholic drinks at you own desire?» 70.8% of teenagers answered positively (67.1% of boys and 74.7% of girls, $\chi^2=1.15$, $p=0.28$), 1.4% of teenagers did not answer the question.

28.9% of teenagers (31.07% of boys and 26.6% of girls, $\chi^2=1.29$, $p=0.3$) do not use alcoholic drinks of less than 20% of alcohol content. About 4% of teenagers (4.5% of boys and 3.5% of girls) use alcohol once a week and more often, 18.4% (21.6% of boys and 15.1% of girls) a few times a month, 21.1% (19.7% of boys and 22.5% of girls, $\chi^2=0.7$, $p=0.4$) – a few times in 6 months, 23.3% (19.7% of boys and 27.0% of girls, $\chi^2=4.33$, $p=0.037$; fig. 6) – a few times a year.

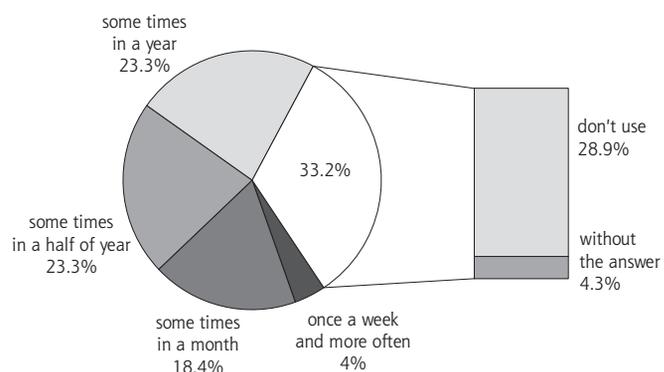


Fig. 6. Use of mild alcohol drinks by teenagers

46.7% of boys and 46.0% of girls do not use strong (more than 20% of spirits) alcoholic drinks. About 1.6% of boys and 1.08% of girls use it some times a week, 8.85% of boys and 4.5% of girls ($\chi^2=6.1$, $p=0.01$) – some times a month, 13.6% of boys and 11.4% of girls – some times in 6 months, 18.1% of boys and 20.7% of girls – one time in 6 months and more rarely. Half (50.6%) of the interrogated experienced the condition of alcoholic intoxication.

Conclusions

The teenagers' self-estimation of health status and nutrition is high, especially in boys. At the same time, it is necessary to note an insufficient duration of night sleep (both in boys and girls), of physical activity (the lowest – in girls), of high prevalence of smoking and alcohol use (irrespective of the gender). Despite the lack of gender distinctions regarding the availability of narcotic substances (every sixth/seventh teenager), boys more often admitted having tried to use drugs. The given facts are important for considering the organization of preventive work with youth. On the whole, the teenagers' way of life represents risk to the condition of their health.

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