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### *Evaluation of health promotion among grammar school students*

Health is one of the most important aspects of human life, indispensable for individuals to achieve full social development and utilize their creative power (7). Among the factors influencing human health one can enumerate the following: genetic factors, environmental factors (physical environment, social environment, the condition of health care system) and the most important one: lifestyle. Lifestyle, i.e. healthy behavior pattern, has the most significant influence on the health status, amounting to 50–60% (5). Awareness of healthy patterns of behavior allows both individuals and the whole societies to actively attend to their health status and prevent many diseases. Health promotion in a society requires intensive activities in the spheres of education, programming and economy directed towards the society. This is especially important in regard to children and adolescents because it is in this period of life that healthy attitudes and habits are shaped most effectively. Additionally, our lifestyle in the time of childhood and adolescence largely influences and often determines our health status in subsequent periods of life.

To a large extent, your health depends on your knowledge about it. The knowledge facilitates healthy attitudes and allows for conscious adopting of proper ways of disease prevention through appropriate healthy behaviors (2). Thus, in this paper, we attempted to perform an analysis of the level of knowledge about health and disease among grammar school students in order to check what actions in the spheres of education, information, legislation and economy should be undertaken for health promotion to be successful among the widest group of the future adult citizens of our country. The purpose of the study was: evaluation of the level of the students' knowledge about health and disease, learning about healthy attitudes among the youth, getting to know the sources of information about health and disease for the youth and evaluation of the students' need for additional information about health and disease.

#### MATERIAL AND METHOD

The study was performed among 3rd and 4th grade grammar school students. 158 people were included in the study (98 girls – 62%, 60 boys – 38%). In the studied population, 135 people came from the city (56 boys – 93.33%, 79 girls – 80.61%), while 23 came from the country (4 boys – 6.66%, 19 girls – 19.39%). In respect to the level of education of the parents, majority of the students had both parents with higher education – 63 (39.87%), 38 had one parent with higher education and the other with secondary education, 20 had one parent with secondary and the other with vocational education and 5 had both parents with vocational education. The study method used was a questionnaire. The first part of the questionnaire consisted of instructions and questions concerning personal data of the study group (sex, age, address, parents' level of education). The second part consisted of 41 questions grouped under 13 subjects.

## RESULTS

Among the studied population of students, 137 (86.7%) were able to answer the question what the word 'health' means, 21 (13.29%) could not answer the question. The explanations that the students gave were mostly compatible with popular understanding of the term 'health' (Tab. 1). The students characterized their health status as good (82%). Overall, 34% considered themselves to be very healthy, 48% described themselves as healthy and 18% as unhealthy. However, 73.41% declared that they did not follow proper eating habits, 52.53% admitted that they were not as physically active as they ought to be and 69.62% indicated not to have enough sleep (Tab. 2). One especially alarming fact must be stressed: 87.34% admitted to drinking alcohol, with 27.84% drinking every week and 5.69% every day (Tab. 3).

Table 1. Answers to question what 'health' is

Answer	Number	%
State of organism (absence of ailments)	52	37.95 %
Correct functioning of organism	37	27.00
Absence of disease	25	18.24
Healthy lifestyle	9	6.5
Physical and mental fitness	8	5.83
Absence of pain	6	4.4

Table 2. Students' self-evaluation of mistakes they make, which can lead to deterioration of their health in the future

Option	Number of students	%
The level of my physical activity is low	83	52.53
I have bad eating habits	116	73.41
I smoke cigarettes	80	50.63
I take too many medicines	16	10.12
I sleep too little	110	69.62
I drink too much alcohol	29	18.35
I take drugs	54	34.17
I do not control my health status	29	18.35
I do not know how to rest properly	50	31.64

Table 3. Frequency of alcohol consumption by students

Answer	Boys	%	Girls	%
I do not drink alcohol	8	13.4	12	12.3
I drink alcohol	52	86.6	86	87.7
Every day	7	11.66	2	2.04
Every week	28	46.66	16	16.32
Every month	9	15	18	18.37
Occasionally	16	26.67	62	63.26
Total	60	100	98	100

In the following subjects the students presented a satisfactory level of knowledge: circulatory system diseases prevention (93.9% of the study group), AIDS (95.1%), faulty posture prevention (96.4%), disease in general and some disease types (87.8%). However, the students did not know the principles of healthy nutrition (satisfactory level of knowledge of this subject was observed in only 21.9%). The majority could not enumerate all the elements of daily menu (68.3%), the results of excessive fat consumption (92.7%), the role of vitamins, proteins and other elements of food that should be either avoided or necessarily included in the diet (90.3%). The most common answers to the question about fat consumption were obesity and circulatory system diseases. Most frequently the students eat 4 times a day and rather fast. What should be stressed is the fact that, when answering one of the previous questions concerning mistakes that they make which can influence their health in the future, a significant majority, 73.41%, did mention inappropriate nutrition. The students revealed a low level of awareness of tobacco smoking effects. More than half smoked (51.26%). We found it disturbing that a high percentage of girls smoked (54.08%). 28.57% boys and 16.98% girls smoke habitually (Tab. 4). 34.1% students declared using intoxicants.

Table 4. Frequency of smoking cigarettes by students

Answer	Boys	%	Girls	%
I do not smoke	32	53.4	45	45.92
I smoke	28	46.6	53	54.08
Sporadically	11	39.28	33	62.26
Quite often	3	10.71	8	15.09
Often	6	21.42	3	5.66
Habitually	8	28.57	9	16.98
Total	60	100	98	100

## DISCUSSION

Students' good health is one of the most important conditions for good achievements at school. Among other things, a student that can be considered healthy grows up and lives in healthy conditions of domestic as well as educational environment and whose attitude, behavior and habits facilitate retaining and improving his or her health (10). Achieving this 'health ideal' is extremely difficult. In school-age population there occur many varied health problems: caries, accidents, injuries, poisonings, psychosocial health disorders, nutrition disorders (obesity), lack of physical activity, mobility defects (8,10,12).

Due to the fact that health defects are significantly widespread among our youth, except for the obvious necessity of covering them with universal health care, it is indispensable for the students themselves to intensify healthy ways of behavior, elimination of health risks and development of appropriate health education for both, students and their parents, as well as teachers. Following and evaluating the youth's health behavior must constitute the basis for implementation of health promotion program, which should become an essential factor in ensuring good health status (6).

Circulatory system diseases constitute the main reason for fatalities in developed countries, including Poland. The basic risk factors in ischemic heart disease are elevated cholesterol level, arterial hypertension, obesity, smoking tobacco, low physical activity and genetic predispositions. On the basis of long-term epidemiological, clinical and experimental observations it was demonstrated that the most effective way of limiting the incidence of

circulatory diseases is early detection and elimination of risk factors within the confines of primary prevention (3). Frequency of occurrence of these risk factors is varied in different populations. It may be due to environmental factors, especially lifestyle, including nutrition (9). A good example is provided by Finnish studies showing that inappropriate nutrition and especially consumption of fat combined with smoking, lack of physical activity and obesity increases the risk of dislipidemia and hypertension in young man 5.5 times and, consequently, the risk of incidence of heart and circulatory disease is also higher. Prevention of ischemic heart disease in childhood and adolescence should first of all depend on changing of inappropriate nutrition as well as increasing the level of physical activity and refraining from smoking. Nicotinism is a highly widespread habit that is being observed in younger and younger age groups. Statistical studies show that at the age of 7 to 10 years 1% girls and 6% boys start smoking, between 11 and 13 years old often as many as 9% girls and 23% boys smoke. They start smoking copying the behavior of their parents, older siblings, often teachers or their older friends who urge them to do that. Alcoholism is a frequent and major habit for any age group. Similarly to nicotinism, copying the behavior of adults as well as mental, emotional and social immaturity are the reasons for initiation into the habit. The process of getting addicted to alcohol in adolescents is much quicker than in adults and can occur within 2–3 years or even a few months. Young organism is very sensitive to alcohol and even drinking weak alcoholic beverages can lead to addiction. Youth under the influence of alcohol, within a short period, develop typical character changes – they start lying, become touchy and short-tempered, losing touch with their environment. Alcohol addiction leads to moral and mental degradation (4).

According to the provisions of National Health Program (NPZ) 1996–2005, one of the major strategic goals is improvement of people's health and, consequently, the quality of their lives. Three main paths that should be followed in order to reach the strategic goals are change of lifestyles within the population, shaping the environment and improving the conditions of everyday life, work and education to make them more favorable to health. Enhancing the efficiency of health education and health promotion activities were recognized as key elements applied to all the three paths mentioned above (1).

In the face of the results of studies on physical activity of young people – the ways of spending their free time, it is concluded that the main stress should be placed on promoting healthy lifestyle among young people. Lifestyle depends on many factors (11), but first of all it is the result of physical education, which puts health, exercising, fitness and physical efficiency on the highest level in the hierarchy of values. That is why physical education should be seen as the most important factor in health promotion. Systematic physical activity adjusted to individual needs does not only stimulate growth and maturing in childhood and adolescence and helps retaining good health and fitness in adulthood but is also a natural means of slowing down the aging processes, alleviating the symptoms of senile involution and ailments that intensify towards the end of one's life (11).

Many Poles that are currently physically inactive did not have any experiences of this kind in their childhood. Increasing health awareness of the society and promoting healthy lifestyle, in which the media should get actively involved and play a major role, must begin with broad health education at school. In Poland, physical activity of children and adolescents as well as that of adults is low. Lack of exercising in free time is not sufficiently compensated for by physical education classes and activities organized at a kindergarten or at school.

## CONCLUSIONS

1. Students' level of knowledge concerning health and disease is low.
2. Healthy nutrition principles are the least familiar of all the aspects of health education.

3. Addictions, i.e. alcohol consumption, smoking cigarettes and taking drugs, constitute a serious problem among young people.

4. It is necessary to intensify educational activities concerning healthy behavior of young people.

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#### SUMMARY

The study was performed among 158 students from the third and fourth grades of grammar school in Lublin. The study method was a questionnaire including 41 questions grouped under 13 subjects. In the light of the data it may be concluded that students evaluate their health condition as satisfactory (82% of respondents). Most of the examined students – 73.41% declare incorrect nutrition, lack of physical activity – 52.53%, chronic fatigue – 69.62%. Acceptable answers were obtained on questions concerning prevention of circulatory system diseases, AIDS, prevention of faulty posture, idea of “disease”. Respondents did not know the rules of correct nutrition, 87.34% admitted drinking alcohol (27.84% every week, 5.69% every day). Students knew little about adverse effects of smoking, more than a half (51.26%) smoked cigarettes. 34.1% declared taking psychoactive substances. The results indicate that the mass media are the most popular source of information on health and healthy living. Results show that there is a strong need to create a new form of teaching (preferably at school) young people how to live their lives in a healthy way.

#### Ocena zachowań prozdrowotnych wśród uczniów liceów ogólnokształcących

Badaniem objęto 158 osób – uczniów klas III i IV liceów ogólnokształcących. Jako metodę badania zastosowano kwestionariusz ankiety, który zawierał 41 pytań dotyczących 13

grup tematycznych. Po dokonaniu analizy i oceny odpowiedzi stwierdzono, iż uczniowie swój stan zdrowia oceniają jako dobry (82% ankietowanych). Jednakże 73,41% deklaruje brak przestrzegania prawidłowych zasad żywienia, zbyt małą aktywność fizyczną – 52,53%, zaś niewystarczającą ilość snu 69,62%. Zadowolające oceny uczniowie otrzymali z następujących bloków tematycznych: wiedza o profilaktyce chorób krążenia, wiedza o AIDS, wiedza o profilaktyce wad postawy, wiedza na temat choroby i niektórych jej rodzajów. Uczniowie nie znają zasad zdrowego żywienia. 87,34% przyznaje, iż pije alkohol, przy czym 27,84% w każdym tygodniu, a 5,69% codziennie. Respondenci wykazali się niskim poziomem wiedzy co do skutków palenia tytoniu, ponad połowa (51,26%) pali papierosy. 34,1% uczniów zadeklarowało zażywanie środków odurzających. Uzyskane wyniki wskazują na mass media jako główne źródło informacji na temat zagadnień zdrowotnych i ogólnych informacji o zdrowiu. W sytuacji tylko dostatecznej wiedzy uczniów z zakresu zdrowia i choroby konieczne jest wprowadzenie do programu nauczania przedmiotu promującego zdrowy styl życia.