

ZDZISŁAWA SZADOWSKA-SZLACHETKA, ANDRZEJ STANISŁAWEK,  
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## Standardy realizowane przez pielęgniarkę szkolną, a wiedza i postawy młodzieży licealnej w odniesieniu do prawidłowej masy ciała

## Standards applied by the school nurse versus the knowledge and attitudes of secondary school students concerning normal body weight

### Streszczenie

**Wprowadzenie.** Standardy w profilaktycznej opiece zdrowotnej nad uczniami mają na celu ujednolicenie procedur postępowania pielęgniarki szkolnej. W populacji polskiej coraz częściej spotyka się młodzież stosującą diety odchudzające. Mimo to ciągle zwiększa się też odsetek osób z nadwagą. Stąd ważne jest, aby młodzież zdobyła obiektywną i pełną wiedzę na temat właściwego odżywiania, a także znała metody i kryteria oceny masy ciała.

**Cel.** Celem pracy było ukazanie zadań pielęgniarki szkolnej w zakresie standardów w profilaktycznej opiece zdrowotnej oraz uzyskanie informacji o poziomie wiedzy uczniów na temat zasad zdrowego żywienia, a także o korzyściach wynikających z ich przestrzegania i zagrożeniach związanych z ich ignorowaniem.

**Materiał i metody.** Materiał empiryczny zebrano metodą sondażu diagnostycznego. Narzędziem był kwestionariusz ankiety. Badaniem objęto grupę 42 uczniów jednej z lubelskich szkół licealnych.

**Wyniki.** Ustalono na podstawie obliczenia BMI, że (23%) ma niedowagę, (71 %) ma prawidłową masę ciała, zaś (4%) uczniów ma nadwagę. Dwadzieścia trzy procent osób, które obiektywnie mają prawidłową masę ciała podało, że ma nadwagę, zaś osoby z niedowagą – (23%) uważają, że mają prawidłową masę ciała.

**Wnioski.** Poziom wiedzy ogólnej o przestrzeganiu zasad zdrowego żywienia można uznać za zadowalający. Niepokojący jest fakt istnienia różnicy między posiadaną wiedzą obiektywną o metodzie i kryterium ustalania prawidłowej masy ciała u badanych a ich subiektywną samooceną, czyli przekonaniem o nadwadze. Wskazane jest zwrócenie uwagi rodzicom, nauczycielom i wychowawcom na właściwy sposób odżywiania się młodzieży.

**Słowa kluczowe:** prawidłowa masa ciała, niedowaga, nadwaga, wiedza uczniów.

### Summary

**Introduction.** Standards of the prophylactic healthcare of students are aimed at achieving the uniformity of procedures applied by the school nurse. In the Polish population, adolescents using slimming diets are found increasingly frequently. In spite of that fact, the percentage of overweight people is constantly increasing. Therefore, it is important for adolescents to gain an objective and full knowledge on proper nutrition as well as on methods and criteria of assessing body weight.

**Objective.** The paper aimed at presenting the tasks of the school nurse in the field of prophylactic healthcare standards as well as to obtain information about the level of knowledge of students concerning the rules of a healthy diet, together with benefits resulting from obeying these rules and risks associated with ignoring them.

**Material and methods.** The empirical material was collected with the use of the diagnostic survey method. The applied tool was a questionnaire. The survey included 42 students of one of the secondary schools in Lublin.

**Results.** On the basis of the BMI calculation, it was determined that 23% is underweight, 71% has normal body weight, and 4% of students are overweight. Overweight is claimed by 23% of people with objectively normal body weight while those who are underweight (23%) claim that their body weight is normal.

**Conclusions.** The level of general knowledge about rules of proper nutrition can be assessed as sufficient. However, a discrepancy between the objective knowledge on the method and criteria of determining normal body weight in the case of the surveyed and their subjective self-assessment, i.e. their belief that they are overweight, may be regarded as alarming. It is recommended that parents, teachers and educators pay attention to the proper nutrition of adolescents.

**Key words:** normal body weight, underweight, overweight, students' knowledge.

## INTRODUCTION

Standards in nursing constitute specific sets of requirements and norms which define an agreed level of performing nursing practice which is possible to implement, which has been established in order to ensure quality of nursing care as well as a basis for education and professional training [1]. Standards in prophylactic healthcare of students performed by nurses should unify requirements in the area of qualifications and competences required from a person taking a position of a school nurse, together with ensuring material conditions necessary for effective work in this position. An important task of the standard is also unification of prophylactic procedures in care over students by enabling all students equal access (in all types of schools in the whole country) to this care as well as improving its quality [2].

Knowledge concerning nutrition and the proper food supply constitute the central issues of health promotion and they influence well-being of an individual. Both insufficient and excessive amount of food have negative impact on human health [3].

At the age of puberty an adolescent, depending on his/her living conditions, health behaviour patterns and traditions concerning nutrition (passed from generation to generation in a given culture), can gather "capital" for health, or, on the contrary, "risk factors" both for the present and future health [4].

Living conditions of an adolescent are also influenced by his/her family and school environment. He/she can derive health behaviour patterns from parents, peers and teachers. Therefore, school, through information passed by teachers and the school nurse, should influence shaping of proper convictions concerning health, also in terms of nutrition.

Certain opinions and beliefs on nutrition are developed by a young person by reading juvenile press, watching television or using the Internet. These media not always have a positive influence on the proper knowledge and attitudes towards health associated with nutrition. Propagating excessively thin figure in the case of girls (together with other personality factors) may cause nutrition disorders (including particularly anorexia, but sometimes also bulimia, which, however, can occur in girls and boys). Moreover, boys often use prohibited and harmful medicines, especially the so-called anabolics, in order to increase their muscle mass.

Therefore, an important role in correcting improper health behaviour in terms of nutrition should be played by the school nurse, who, in her work, should implement standards concerning health education of students and their parents, and participate in school programmes regarding prophylactics and health promotion [5]. The most frequent problems which require nurse intervention in nutrition seem to be nutritional mistakes and their effects on health. In this case, the scope and nature of nurse intervention within the prophylactics of health disorders caused by improper nutrition is defined by nutritional recommendations, especially their qualitative analysis determined according to the criteria of the Committee of Human Nutrition Science of the Polish Academy of Sciences as well as the Institute of Food and Nutrition, and the Polish Society of Nutrition Sciences [6].

## OBJECTIVE

To present the tasks of the nurse in the field of developing the ability of adolescents to control and assess body weight as one of the standards in prophylactic healthcare operations carried out by the school nurse.

## MATERIAL AND METHODS

The survey includes secondary school students taking part in the health education program with the participation of students from the Faculty of Nursing and Health Sciences of the Medical University of Lublin. The adolescents learned about the rules of proper nutritional styles and consequences of inappropriate diet as well as about ways of controlling body weight. The survey was conducted in February 2009 after the end of the educational program.

## RESULTS

On the basis of data obtained from the surveyed adolescents concerning their height and body weight, the BMI for each of them was defined. On the basis of the BMI calculation, it has been determined that 23% is underweight, 71% has normal body weight, and 4% of students are overweight. Overweight is claimed by 23% of people with objectively normal body weight, while those who are underweight (23%) claim that their body weight is normal. In the case of the latter group, discrepancy between the objective results of measurements of their body weight and knowledge based on these results, and the self-assessment (the subjective impressions of the surveyed) can be a result of the mentioned influence of the mass media (television and juvenile press) on the "aesthetic awareness" of these young people. However, when it comes to the knowledge of obesity causes (not only among adolescents), it should be stated that they were provided correctly.

According to the young people, the factors causing overweight are:

- the lack of physical activity – the answer given by 69%
- overconsumption of food – the answer given by 47%
- improper diet content – the answer given by 42%
- too slow metabolism – the answer given by 28%

Thirty percent of people from the surveyed group claimed that there are cases of overweight in their families, which could suggest that obesity in their families can be of hereditary nature.

The proper body weight and wellbeing can be enhanced by physical activity applied in good proportions. Adolescents have an opportunity to be physically active during physical education classes. Among the surveyed 73% participate in the classes regularly, while 26% do not always take part in the classes.

Among the surveyed, 54% participate in additional physical activities apart from the physical education classes. A great majority of the surveyed claim that obesity is conducive to the occurrence of some diseases (83%).

According to the surveyed, obesity is conducive to:

- neoplastic diseases – (23%)
- hypertension – (14%)
- diabetes – (11%)
- heart attack – (4%)

Five persons from the surveyed claimed that they were on a slimming diet.

## OVERVIEW

Nutrition method and health quality of products have a significant influence on physical development and mental well-being of adolescents [4].

The age of puberty is the period in which attitudes and behaviour are shaped in an adolescent, and they are transferred to the subsequent periods of his/her life. Therefore, it is important to help adolescents in developing desirable health-promoting attitudes by passing proper knowledge and developing skills [7].

The survey indicates that in the analysed population 23% is underweight, and 23% of persons with a normal body weight think they are overweight, which may result in unnecessary attempts to lose weight in the future due to the alleged overweight. In the case of underweight people, in turn, the result may be nutrition disorders, e.g. in the form of anorexia.

The major role of prophylactics of nutrition disorders in the form of anorexia and bulimia should be played by parents. They should watch the nutrition style of their children, correct it, and notice symptoms which may indicate irregularities. Therefore, it is important to introduce educational actions directed at students' parents (including the subject matter of nutrition disorders) within educational actions implemented by, among others, the school pedagogue and the nurse as well as educators.

National studies indicate [4] that only 43% adolescents believe that they have a normal body weight – every fifth young person claims that he/she is too thin and every third thinks that he/she is slightly overweight. However, in our survey five people (i.e. 8% of the total number of people included in the survey) admitted that they were on a slimming diet. The national studies (mentioned above) [4], in turn, show that 12% of adolescents are on a slimming diet, while 16% think that they should go on a diet.

The majority of the surveyed realise that obesity is harmful to one's health, they know factors influencing obesity but their knowledge on diseases which can be caused by considerable overweight, i.e. obesity, is insufficient.

The survey demonstrates that 73% of the surveyed regularly participate in physical education classes, and 54% take exercises apart from physical education classes. When it comes to national studies [4], 26% of boys and 42% of girls do exercises associated with a considerable physical effort once a week (or less frequently). In Poland the percentage of adolescents exercising for one hour (or less) a week amounts to 43% and is lower than in comparison to data from similar studies carried out in 29 highly or moderately developed countries.

## CONCLUSIONS

1. The level of general knowledge concerning obeying the rules of healthy nutrition can be assessed as satisfactory.

2. However, the knowledge of particular effects, i.e. diseases caused by obesity, turned out to be poorer.
3. However, it may be regarded as alarming that there is a discrepancy between the objective knowledge on the method and criteria of determining normal body weight in the case of the surveyed and their subjective self-assessment, i.e. their belief that they are overweight (this was the case in 1/4 of the surveyed persons);
4. The knowledge concerning methods of objective assessment of one's body weight should be promoted (e.g. calculating the BMI index).
5. It is recommended to carry out educational classes concerning nutrition disorders (including anorexia) for students.
6. Educational classes in the area of nutrition disorders should also be conducted among parents and educators of the surveyed adolescents.
7. It is suggested to direct the attention of parents, teachers and educators to nutrition styles applied by adolescents.
8. It is recommended to prepare standards in the practice of the school nurse for the purpose of optimising the use of current medical knowledge (constituting a basic educational tool).
9. The quality and availability of services provided by the school nurse should be improved and an extended educational curriculum in the field of healthy nutrition should be introduced.

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