THE ROLE OF SCHOOL IN PREVENTING OBESITY IN CHILDREN AND YOUTH

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Summary: The understanding of social and psychological aspects of obesity is very important. Child obesity is also a very significant problem - medical, social and psychological. Nowadays, a great deal of importance is attached to including various sources that help in developing the policy that prevents obesity (children should be regarded as the group of special significance). The present paper presents an example of an approach to preventing obesity in children.

Key words: obesity, children, school.

OBESITY: A PROBLEM FOR CHILDREN AND YOUTH

Nowadays obesity is becoming a more and more serious social problem since the proportion of obese children, especially in developed countries, is increasing [1, 11]. Excess weight and obesity are the phenomena with the features of epidemics and concern both adults and children. All over the world c. 22 million of very young children, i.e. below 5 years of age, weigh too much [3]. The speed of growth of the phenomenon in the case of children and youth seems to be of equal importance. In many countries (also in Poland) during the last two decades the scope of the phenomenon has doubled [8]. The research carried out in a group of Polish children aged 7 to 9 showed that the problem of excess weight affects 15.8% of girls and 15% of boys [9].

There is also a growing number of reports indicating that child obesity may have a significant influence on a person’s future life, including their social and emotional experiences, social development and the quality of life in general. Being obese usually causes dissatisfaction stemming from experiencing the social rejection and marginalization of social contacts, which is often the person’s choice resulting from the negative reactions of others [12].

From the point of view of pathophysiology, the phenomenon of obesity is not only the domain of medical studies but, more and more often, it is also the subject of interdisciplinary research such as psychology, pedagogy, sociology and anthropology. The main factors responsible for spreading the obesity problem are genetic factors and changes in the lifestyle [7].

Preventing child obesity is an especially significant issue due to a constantly increasing number of obese children [15]. There is also a growing number of reports indicating that child obesity may have a significant influence on a person’s future life, including their social and emotional experiences, social development and the quality of life in general. Being obese usually causes dissatisfaction stemming from experiencing the social rejection and marginalization of social contacts, which is often the person’s choice resulting from the negative reactions of others [12]. This problem seems to be particularly traumatic for children. The obese are socially rejected by their peers and - what is particularly distressing - by adults. The childhood obesity is linked also to lower self-esteem and body-esteem, higher rates of depression, they blame themselves for their weight and other’s negative behaviours and reaction to them [14].
HEALTH EDUCATION IN SCHOOLS

School education seems to be one of the most effective and most recommended preventive actions. A particularly important task of modern school is health education, that is, those elements of the school education program in which children and young people learn how to live in order to maintain and improve the health of their own and other people, create the environment conducive to health, and in the event of an illness or disability to actively participate in the treatment or rehabilitation, manage and reduce its negative effects [17]. An important part of such health education should be issues related to the fight against the obesity problem.

Unfortunately, the overweight and obesity in children and adolescents in Polish schools, are not seen in the society. The action taken in Polish schools to prevent these phenomena and to promote a healthy lifestyle among children and young people are not sufficiently effective, often inconsistent, random, ad hoc, and therefore ineffective, as evidenced by the growing problem overweight and obesity in children and adolescents schools [6].

In this situation, it seems a reasonable action to refer to the solutions used in other countries. Using the proven effective international solutions can be very helpful in the design activities in Poland.

The programme prepared by Kansas LEAN School Intervention Project, presented below, is the good illustration of the place and role of educational institutions in the obesity prevention [5].

I. Modify school lunch

Recording of nutritional content of menu items (e.g. measuring or weighing and recording ingredients), determining of nutritional content of products (e.g. requesting dietary information from food vendors), receiving of feedback (before and after modifications) on the percent calories in menu items and menu combinations, modifying food preparation techniques (e.g. rinsing cooked grown beef in hot water before serving), modifying products ordered from vendors (e.g. lower fat fish sticks), changing menu combinations to reduce fat percent calories in overall weekly menus, locating or assisting vendors to develop new products (e.g. developing products with the higher percentage of wheat flavour).

II. Provide nutrition education

Assisting teachers and administrators to integrate the American Cancer Society’s (ACS) nutrition education program, Changing the Course (CTC) into health units or core subjects, providing training for teachers on nutrition and using CTC (CTC included individual worksheets, food tasting, small-group activities, fields trips, and class-discussion), arranging for coordinators, community volunteers or foodservice employees to serve as role models and provide general assistance, facilitating field trips and special activities (e.g. supermarket tours, lunch at McDonald’s), providing incentives for teachers to implement the curriculum (e.g. 100$ for classroom materials).

III. Increase physical activity

Installing physical fitness stations in each classroom, which consisted of individual workbooks (e.g. readings on fitness, songs about nutrition) and optimal physical fitness activities (e.g. stretching, sitting, and reaching), initiating the noncompetitive incentive system based on students’ personal goals (e.g. students earned class parties for using the fitness stations), training of PE teachers in how to increase the amount of time the students engaged in the cardiovascular fitness activities, providing lesson plans for PE teachers with the enhanced variety of physical activity (e.g. games, music and dance).

The first of the postulated directions of actions is the change of dietary patterns at school, especially these concerning lunch. It appears to be one of the most important preventive and corrective educational schemes. Planning the proper caloric value and assimilation meal is the chief goal of the presented programme. Teachers should fulfill this task through thematically workshops, involving the dietician who would point out the proper solutions in the educational process and, most of all, providing an example of own appropriate dietary patterns that would shape positive habits among the children.

The second direction of actions concerns providing the knowledge of dietary rules, the contents of particular products, the methods of resisting advertising and taking bigger portions. In addition, children should have a chance to receive some knowledge on this subject directly from doctors, nutritional specialists, people working in sales promotion, etc.

The third direction is creating chances for physical activity and intensifying the existing [4, 10]. It can also be pointed out that educational activity should pertain not only to children but also to teachers. This goal may be achieved through
installing small gymnastics apparatuses, such as 
steppers, skipping-ropes, tennis tables, etc., in 
classrooms and places adjusted to that (gymnasiums 
and recreational rooms). It should be added that, 
apart from preventing obesity, increasing physical 
activity of young people plays a great role in 
preventing cardiovascular diseases. The available 
models, however, stress that the uncompetitive 
character of physical activity is the one that should 
be preferred in schools.

Only this kind of a programme which 
includes all the three dimensions of work and 
action may significantly contribute to reducing the 
risk of becoming obese as well as the risk of the 
chronic diseases such as diabetes and problems 
with the cardiovascular system [2].

CONCLUSIONS

It is necessary to point out that in the above 
suggestions there is no mention of body-weight 
reduction. It should be firmly stressed that the 
prophylactic programmes for schools, adressed to 
children and youth ought to focus on emphasizing 
the importance of healthy diet, physical activity, 
as well as the impact of these on one’s health and 
well-being. These programmes should not include 
any contents expressing the necessity of staying 
slim and, in particular, reducing body weight since 
in this case they may encourage going on some 
drastic diets and other means of changing one’s 
looks. The increase in the instances of bulimia and 
anorexia that can be observed in Western Europe, 
and also in Poland, seems to be connected with the 
skinny body cult and the fashion for losing weight. 
A famished teenager has become a symbol of the 
ideal of attractiveness seeked by fashion creators, 
and a gaunt business woman is the synonym of the 
woman of success who can control all the spheres 
of her life, starting from her appearance. In the 
Western culture we may observe a phenomenon not 
attested before, i.e. weightism. The notion relates 
to the dictatorship of skinniness, which is the 
consequence of the influence of mass media that 
propagate the skinny figure as the only acceptable 
and desirable – a new model of “beauty” [13]. The 
exposure to the unrealistic ideal of beauty results in 
some body image disorders among many people. 
As a consequence, their self-esteem becomes 
lower, which in turn may result in starvation diet. 
It especially pertains to young women for whom 
physical appearance is to a large extent the basis for 
the development of their ego and self-esteem [16]. 

Therefore, the aim of the above presented 
preventive schools’ actions is stressing the 
importance of:
a. healthy diet (i.e. avoiding too large quantities 
of vegetable fats, sugar, etc.);
b. positive models of spending free time (e.g. 
avoiding excessive television viewing and 
spending long hours in front of the computer 
screen);
c. physical activity (on the level suitable for 
one’s developmental abilities);
d. knowledge concerning understanding the 
information provided on food products 
labels, healthy ways of preparing and 
combining food, optimal meal times, etc.

REFERENCES

overweight and obesity, J Nurs Scholarship 2011: 
43, 368–375.
2. Czelej D. Wpływ zmian warunków życia na 
rozwój chorób cywilizacyjnych. In: Tuszyńska-
Bogucka W., Bogucki J. eds. Styl życia a zdrowie. 
3. Deckelbaum R. J., Williams C. L. Childhood 
obesity, The Health Issue. Obes Res 2001; 9: 
239-243.
4. Ells L.J., Campbell K., Lindstone J., Kelly S., 
Lang R., Summerbell C. Prevention of childhood 
obesity. Best Pract Res Clin Endocrinol Metab 
and Fawcett S. B. Reducing elementary schools 
children’s risks for chronic disease through 
schools lunch modifications, nutrition education, 
and physical activity interventions. J Nutr Educ 
6. Informacja o wynikach kontroli realizacji zadań 
w zakresie zapobiegania nadwadze i otyłości 
u dzieci i młodzieży szkolnej, Najwyższa Izba 
Kontroli, Nr ewid. 149/2011/P/10190/KNO, 
Warszawa 2011.
7. Jablow M. M. Anoreksja, bulimia, otyłość. 
Gdańsk, GWP 2000.
8. Januszkiewicz P., Sygit M. Kluczowe problemy 
zdrowia publicznego: otyłość u dzieci i 
9. Małecka-Tendera E., Klimek K., Matusik P., 
Olszanecka-Glinańcowicz M., Lehungue Y. 
Obesity and overweight prevalence in Polish 
7-to–9-year old Children, Obes Res 2005; 13: 
964–968.
10. Mulvihill C., Quigley R. The Management of 
Obesity and Overweight: Analysis of Reviews


