KATARZYNA SYGIT

Styl życia dzieci i młodzieży wiejskiej z nadwagą i otyłością

Lifestyle of rural children and youth with overweight and obesity

Streszczenie

Wstęp. Styl życia człowieka odpowiada w 60% za jego stan zdrowia. Liczne badania tego problemu wskazują, iż w środowisku dzieci i młodzieży szkolnej zarówno ze środowisk miejskich, jak i wiejskich, dominują w stylu życia zachowania antyzdrowotne nad prozdrowotnymi.

Cel. Poznanie stylu życia dzieci i młodzieży wiejskiej z nadwagą i otyłością.

Materiał i metodyka badań. Badaniami objęto 300 osób w wieku od 15 do 19 roku życia, ze środowisk wiejskich województwa zachodniopomorskiego. Do badania zastosowano kwestionariusz-ankiety oraz wskaźnik BMI do oceny występowania nadwagi i otyłości. Badając styl życia młodzieży wiejskiej, analizowano: racjonalne odżywianie, stosowanie używek, odpoczynek, stres, spożycie soli, aktywność fizyczną.

Wyniki. Nadwaga występowała częściej w grupie badanych dziewcząt niż chłopców, natomiast otyłość występowała dwukrotnie częściej w grupie chłopców niż dziewcząt. 64.9% osób z nadwagą oraz aż 78,3% osób otyłych odżywiało się nieprawidłowo, a tylko 21,7% odżywiało się prawidłowo. W grupie osób z nadwagą przeważał odpoczynek bierny (83,8%) nad czynnym (16,2%). Również w grupie osób z otyłością przeważał odpoczynek bierny (86,9%) nad czynnym. W grupie osób z nadwagą – 81,8% to średnio aktywni, a aktywni – 8,1%. W grupie osób z otyłością – najwyższy odsetek stanowią osoby nieaktywne w ogóle – 52,2%. W grupie z nadwagą aż 21,0% pali papierosy, 48,6% pije alkohol i 43,2% stosuje narkotyki. W grupie otyłych aż 86,9% pali papierosy, 43,5% pije alkohol i 30,4% stosuje narkotyki.

Wnioski. Znaczna część badanych z nadwagą i otyłością odżywiała się nieprawidłowo. Badani w większości preferowali wypoczynek bierny. W grupie badanych z otyłością stwierdzono częste występowanie sytuacji stresowych. Brak aktywności fizycznej przeważał w grupie badanych z nadwagą. Badani zarówno z nadwagą i otyłością stosowali systematycznie używki.

Słowa kluczowe: styl życia, środowisko wiejskie, nadwaga, otyłość.

Abstract

Introduction. Life style is responsible in 60% for a person's health status. Numerous research articles on this problem indicate that the unhealthy lifestyle prevails over the health-promoting one in the environment of children and school youth from both towns/cities and villages.

Aim. The aim of the study was to examine the life style of rural children and youth with overweight and obesity.

Material and methods. The research covered 300 young people aged between 15 and 19 from a rural environment in the West Pomerania province. A questionnaire developed by the authors was used in the study and BMI index was applied to evaluate overweight and obesity. Surveying the rural youth lifestyle, the following factors were analysed: rational eating, stimulant consumption, leisure, stress, salt consumption, and physical activity.

Results. Overweight occurs more frequently in the group of surveyed girls than boys. However, obesity occurred twice as frequently in the group of boys than in that of girls. There were 64.9% of the overweight respondents and as many as 78.3% of the obese ones who ate improperly while only 21.7% ate correctly. In the group of people with overweight, passive leisure prevailed (83.8%) over active leisure (16.2%), and in the group of people with obesity, passive leisure (86.9%) prevailed over the active one. In the group of people with overweight, 81.8% were averagely active and 8.1% - highly active. In the group of people with obesity, the respondents who were not active at all made up the largest group (52.2%). In the group with overweight as many as 21.0% of the respondents smoked, 48.6% drank alcohol and 43.2% used drugs. In the group of the obese respondents - 86.9% smoked, 43.5% drank alcohol and 30.4% used drugs.

Conclusions. A significant part of the respondents with overweight and obesity were nourished incorrectly. The respondents mostly preferred passive resting. It was found that the group with obesity frequently experienced stress situations. No physical activity prevailed in the group of the overweight respondents. The overweight respondents and those with obesity systematically consumed stimulants.

Key words: life style, rural environment, overweight, obesity.

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INTRODUCTION

Lifestyle is responsible for 60% of a person's state of health [1]; lifestyle may be health promoting or anti-health. Numerous studies have shown that, unfortunately, anti-health behaviours among rural and urban children and teenagers predominate [2]. However, the lifestyle of young people in a rural setting does differ in certain aspects from that of their urban peers [3]. Overweight and obese children can be found both in rural and urban environment [4].

AIM

The aim of the study was to determine what kind of lifestyle overweight and obese young people lead, as well as to answer the question: Does the lifestyle lead to obesity, or does obesity determine the lifestyle?

MATERIAL AND METHODS

The respondents were young people aged between 15 and 19 years, from seven rural districts drawn by lots from the West Pomerania province. The analysis ultimately comprised 300 people, a representative sample of rural teenagers. A questionnaire was designed for the study, and the BMI index was used to determine excess weight and obesity.

The following areas of the teenagers' lifestyles were analysed:

- balanced diet
- stimulants consumption
- leisure
- stress
- salt consumption
- physical activity.

RESULTS

As Table 1 shows, girls are more frequently overweight than boys ($p<0.05$). Boys, however, are more than twice as likely as girls to be obese ($p<0.05$). 135 girls are statistically significantly more likely to be overweight than obese ($p<0.05$). In the group of 165 boys, being obese is significantly more common than being overweight ($p<0.05$).

Thirty per cent (30%) of the respondents were found to have a balanced diet, while 70% ate inappropriately (statistically significant difference between groups: $p<0.05$). Inappropriate diet was reported by 64.9% of the overweight respondents, while only 35.1% followed a balanced diet (statistically significant difference: $p<0.05$). As many as 78.3% of the obese respondents did not have a balanced diet while only 21.7% ate in a healthy way (statistically significant difference between groups: $p<0.05$). Adding salt to food is an important factor in the risk of circulatory diseases. The overweight participants of the study used the following amounts of salt: a lot – 70.2%; a little – 26.5%, and only 3.3% used no salt at all (statistically significant difference between groups: $p<0.05$). In the obese group: 69.2% used a lot of salt, 17.4% - a little, and 13% - none. Among all the respondents, as many as 70% used a lot of salt, 23% used a little and only 7% none (Table 2).

TABLE 1. Number of overweight or obese respondents.

Bodyweight	Sex				∑	
	Girls		Boys			
	n	%	n	%	n	%
Overweight n=185	100	54.0	85	45.9	185	51.6
Obese n=115	35	30.4	80	69.6	115	48.4
∑ n=300	135	45.0	165	55.9	300	100

TABLE 2. Balanced diet among the overweight and obese respondents.

Bodyweight	Respondents' diet				Salt					
	Appropriate		Inappropriate		A lot		A little		None	
	n	%	n	%	n	%	n	%	n	%
Overweight n=185	65	35.1	120	64.9	130	70.2	49	26.5	6	3.3
Obese n=115	25	21.7	90	78.3	80	69.6	20	17.4	15	13.0
∑ n=300	90	30.0	210	70	210	70.0	69	23.0	21	7.0

In the whole group studied, passive leisure (85%) was far more common than active one (15%) (statistically significant difference: $p<0.05$). In the group of overweight respondents, passive leisure pursuits were far more frequent than active ones, at 83.8% to 16.2%, respectively (statistically significant difference between groups: $p<0.05$). In the group of obese respondents passive leisure pursuits also prevailed, at 86.9%, over active ones at 13.1% (statistically significant difference: $p<0.05$) (Table 3).

Stress is also a highly important factor in diseases of the circulatory system, and not only in them. As many as 51.7% of the respondents admit to being stressed often, with 24.3% of those who get stressed rarely, while only 14% never get stressed (statistically significant difference between groups: $p<0.05$). Amongst the overweight, the proportion of those who often get stressed is as high as 54%, 31.4% get stressed rarely, whereas 14.7% - never (statistically significant difference: $p<0.05$). In the group of obese respondents, as many as 73.9% often suffer from stress while 13% are rarely stressed, and the same percentage never get stressed (statistically significant difference between groups: $p<0.05$).

The obese respondents suffer from stress (either often or rarely) more frequently than the overweight ones (differences between groups were statistically significant: $p<0.05$) (Table 4).

TABLE 3. Leisure of overweight and obese respondents Leisure of overweight and obese respondents.

Bodyweight	Leisure				∑	
	Passive		Active			
	n	%	n	%	n	%
Overweight n=185	155	83.8	30.0	16.2	185	61.7
Obese n=115	100	86.9	15	13.1	115	38.3
∑ n=300	255	85.0	45	15.0	300	100.0

TABLE 4. Stress in overweight and obese young people.

Bodyweight	Stress						Stress avoidance			
	I often get stressed		I rarely get stressed		I never get stressed		I can control it		I can't control it	
	n	%	n	%	n	%	n	%	n	%
Overweight n=185	100	54.0	58	31.4	27	14.7	158	85.4	27	14.6
Obese n=115	85	73.9	15	13.0	15	13.0	105	91.3	10	8.7
∑ n=300	185	51.7	73	24.3	42	14.0	263	87.7	37	12.3

TABLE 5. Physical activity in overweight and obese young people.

Bodyweight	Levels of physical activity						∑	
	No physical activity		High level of physical activity		Moderate level of physical activity			
	n	%	n	%	n	%	n	%
Overweight n=185	20	10.8	15	8.1	150	81.8	185	61.7
Obese n=115	60	52.2	5	4.3	50	43.5	115	38.3
∑ n=300	80	26.7	20	6.7	200	66.6	300	100.0

The respondents with a high level of physical activity made up only 6.7% of the whole studied population, the largest group being those moderately active (66.6%). However, 26.7% took no exercise at all (a statistically significant difference between groups: $p<0.05$). In the group of overweight respondents, 81.8% were moderately active, 8.1% - highly active, and 10.8% - inactive ($p<0.05$). Amongst the obese respondents, 52.2% - the largest group – were completely inactive, while 43.5% were moderately active. Only 4.3% showed high levels of physical activity ($p<0.05$). In the latter group (obese) the number of completely inactive people is the highest (five times higher than that in the group of respondents with overweight). Moderate activity in this group is also at half the level of moderate activity in the overweight respondents (Table 5).

Amongst 300 respondents, as many as 46.3% smoke cigarettes, 46.7% drink alcohol and 38.3% take drugs (statistically significant difference between groups: $p<0.05$). In the group of respondents with overweight, 21.0% smoke cigarettes, 48.6% drink alcohol and 43.2% take drugs (statistically significant difference: $p<0.05$). Amongst the obese respondents, those rates were 86.9%, 43.5% and 30.4%, respectively ($p<0.05$). Therefore, it can be seen that the obese smoke more cigarettes than those with general overweight, but drink less alcohol and take less drugs (Table 6).

TABLE 6. Stimulant use in overweight and obese young people.

Bodyweight	Stimulants					
	Smoke cigarettes		Drink alcohol		Take drugs	
	n	%	n	%	n	%
Overweight n=185	39	21.0	90	48.6	80	43.2
Obese n=115	100	86.9	50	43.5	35	30.4
∑ n=300	139	46.3	140	46.7	115	38.3

DISCUSSION

Inappropriate bodyweight is most frequently a result of an excess intake of calories in comparison with the body's energy needs, added to low levels of physical activity. Movement is not only pleasure in itself, but also protects against heart diseases, cancers and obesity [4]. Jakubek and Susik [5] have confirmed that a gradual increase in the "dose" of movement to at least one hour daily and limiting of physical "inactivity" can, to a significant extent, reduce the occurrence of excess weight and obesity in children and teenagers. In around 5% of children, obesity coincides with other conditions affecting, for example, the thyroid or the circulatory system [6].

The research shows that 70% of young people in a rural environment do not have an appropriate diet; similar results were achieved by Chrzanowska [7], who showed that rural children consume high levels of fats and sugars. The results furthermore suggest that not only is the overall amount of fat significant, but also the type of fats consumed: saturated and trans fats. The diet of children in a rural environment is lacking in fibre, antioxidants and certain trace elements.

The more obese the children, the worse the quality of life. According to WHO, quality of life consists of physical, psychological and social well-being [8]. This gradually decreases as the BMI rises, when a given child exceeds the average weight for his or her age group. This is clearly evident for obese children who are usually characterized by low levels of physical activity, a passive use of leisure time, susceptibility to stressful situations (many suffer from depression), and substance abuse [9]. WHO reports that amongst primary and secondary school pupils in Poland, 6% are overweight and 4% - obese. If the current trend continues, it is estimated that by 2020 one third of adults will be obese [8].

CONCLUSIONS

1. A significant proportion of overweight and obese respondents do not have a balanced diet.
2. The majority prefer passive leisure pursuits.
3. Those suffering from obesity often experience stressful situations.
4. A lack of physical activity predominates in the group of overweight respondents.
5. Both overweight and obese groups systematically use stimulants.

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