

Media and their influence on occurrence of eating disorders among junior high school students

Media i ich wpływ na występowanie zaburzeń odżywiania wśród gimnazjalistów

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Wstęp. Wiele się mówi i pisze o różnych uzależnieniach, jakie dotyczą współczesne społeczeństwa. Oprócz takich nałogów, jak: uzależnienie od nikotyny, alkoholizm, narkomania – coraz więcej osób zmagają się z innym, bardziej współczesnym uzależnieniem – uzależnieniem od jedzenia. Zaburzenia odżywiania to narastający problem zdrowotny, dotyczący głównie osoby między 14-21 rokiem życia. Odżywianie się młodzieży, które często odbiega od prawidłowych zasad, jest spowodowane m.in.: aktualnymi kanonami piękna i mody, wpływem krytycznej oceny otoczenia oraz oddziaływaniem masmediów.

Cel badań. Określenie wpływu masmediów na występowanie zaburzeń odżywiania u młodzieży gimnazjalnej.

Materiał i metoda. Badaniami objęto 160 gimnazjalistów. Połowa z nich uczęszczała do szkoły w mieście – Kraków, a pozostałe 80 uczniów do gimnazjum na wsi – Sadek-Kostrza. Do przeprowadzenia badań wykorzystano autorski kwestionariusz a ocenę prawidłowości rozwoju fizycznego (BMI) dokonano za pomocą tablic wartości centylowych wskaźnika BMI.

Wyniki. Badania wykazały, że młodzież gimnazjalna mieszkająca na wsi w zdecydowanej większości sprzeciwia się medialnym wzorcom urody. Sprzeciw wobec „lansowanych” w mediach kanonów urody koreluje negatywnie z nadmiernym objadaniem się i nadmiernym dbaniem o wagę.

Słowa kluczowe: zaburzenia odżywiania, młodzież gimnazjalna, media

Introduction. A lot has been said and written about various addictions affecting contemporary societies. Apart from addictions such as nicotine dependence, alcoholism, drug addiction, more and more people struggle with another, more contemporary addiction – food addiction. Eating disorders are an increasing health problem experienced mainly by people aged 14-21 years. Nutrition of teenagers, which often deviates from the proper principles, is caused, among others, by current canons of beauty and fashion, the influence of the critical assessment of the environment and the impact of media.

Aim. To determine the influence of media on the occurrence of eating disorders among junior high school students.

Material & Method. The research included 160 junior high school students. Half of them attended the school in the city of Kraków, and the remaining 80 students attended a junior high school in the village of Sadek-Kostrza. An ad hoc questionnaire was used to conduct the research and the physical development assessment (BMI) was performed by means of the BMI percentiles.

Results & Conclusions. The research proves that a great majority of junior high school students living in the country object against the media models of beauty. The objection against the canons of beauty promoted in the media negatively correlates with overeating and excessive preoccupation with weight.

Key words: eating disorders, junior high school students, media

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Introduction

A lot has been said and written about various addictions which affect contemporary societies. Apart from addictions such as nicotine dependence, alcoholism, drug addiction, more and more people struggle with another, more contemporary addiction – eating disorders. We often hear about anorexia (*anorexia nervosa*) and bulimia

(*bulimia nervosa* – ravenous hunger). Glossy magazines, television, billboards promote smiling, exemplarily slim, very happy people. An ideal of a human which everyone should pursue is still promoted.

Due to the technological development of the 20th century the media have become the most widespread and simultaneously the fastest tool of passing infor-

mation, shaping opinions, but also exerting pressure. The mass communication media provide people with knowledge, social norms, role models, and give individuals the ability to communicate widely. Quite frequently they are called “the fourth power”. They have power to shape views, attitudes and behaviours of various social groups from an early age [1].

The changes in the children’s surroundings and environment are the reason why some known threats (e.g. the ones induced by infectious diseases) are diminishing, but they are replaced by new, previously unknown threats. In the recent decades, advertising has been an environmental threat of growing intensity. From an early age, an individual “absorbs” daily over two thousand images coming from mass media, which have an enormous scope of impact. The media power to influence people is huge. The reality created by media is very attractive, particularly for young people who often uncritically accept their offer [2].

The twentieth century brought incredible changes in all areas of life. What has changed is not only the view of the world, but also of the man and a broadly defined beauty. Moreover, mass media exert enormous influence on the image of an ideal female silhouette. Actresses and models, constantly present on our TV screens and on the first pages of women’s magazines have become role models [3]. Through mass media, mass culture has promoted a socially desired ideal of the female silhouette impossible to achieve for the majority of women, forcing them to make desperate attempts to achieve it. The situation of the contemporary women is extremely difficult since they are permanently bombarded with contradictory messages. On the one hand, a woman is expected to be slim and have control over her body, on the other hand, mass media encourage an unlimited consumption [4].

The Internet is one of mass media means, and it performs various functions in the life of an individual. Among others, it is a source of information, entertainment, and most importantly, it enables interactive communication with other people. Due to its properties it gives the sense of security which enables shy or socially withdrawn people to establish social contacts.

The development of communication by means of the Internet gave rise to virtual communities gathering people with similar views, interests or preferences. For a few years, there has been an Internet phenomenon of the pro-anorexia movement which connects people for whom anorexia has become a “lifestyle” rather than a deadly disease. They have created a virtual community called pro-ana, acting through blogs, Internet fora and social networking sites [5].

The notion of pro-ana refers to the Internet-wide movement (and actually virtually-existing only),

propagating the lifestyle based on the designations of eating disorders, mainly anorexia (pro-ana – pro-anorexia). The sentence “*Quod me nutrit, me destruit*” (“What nourishes me destroys me”) has become their motto. Pro-ana is an ideology in which the strive for achieving a very thin body becomes a path to happiness and being perfect in every respect. The community includes mainly adolescent girls and young women aged 13-25 years who have decided to diet. The membership is manifested by writing a blog with characteristic features, however, its members also appear on the Internet fora or popular social networking sites [6].

The coverage of the pro-anorexia phenomenon on the Internet is difficult to estimate. Every day new Internet websites appear, whereas others are liquidated. However, it seems that the phenomenon tends to grow. In 2006, when accessing “pro-ana” on Google.com, it was possible to obtain over 1.300.000 hits. When repeating this experiment in 2010, as many as over 4.460.000 hits appeared. For the entry “pro-ana blog” in 2006 Google.com displayed 58.000 hits, now it is over 3.640 which means over 60 times more! [5].

Objective

The aim of the paper was to define the influence of mass media on the occurrence of eating disorders among junior high school students.

Material and Method

The research included 160 junior high school students in the age range of 12-16 years. Half of them were young people attending Junior High School No 4 in Krakow, whereas the other 80 students attended the School Complex in Sadek-Kostrza. The research was conducted in May 2012. The participation of the students was anonymous and voluntary. The return of the completed questionnaires was the confirmation of the consent to participate in the research. Among the surveyed students from the city 60% were boys and 40% were girls. The majority of the students were 14 years old (45% students). In the surveyed students from the country half were male students, and the other half were female. The 15-year-olds (51% of the students) prevailed.

The diagnostics poll method was used to conduct the research, and the study technique was a survey. The assessment of the correctness of physical development (BMI) was made by means of the tables of BMI percentile values. The statistical analysis was carried out in the SPSS statistics software. To assess the impact of the dependencies between the nutrition-related behaviours a factor analysis was applied, performed on the variable: the influence of media on the occurrence of eating disorders.

Results

Out of the surveyed, the majority of the junior high school students – city dwellers (45%) – claimed that popularizing the image of an ideal silhouette by media was completely wrong. Similarly, the students attending the village school most often (48%) thought that it was inappropriate but they were not fully convinced about that. One fourth of the surveyed students chose the answer “rather yes”. The least number of students were convinced about the rightness of propagating the image of an ideal silhouette by media (Fig. 1).

The majority of the junior high school students from the city (34%) and from the country (41%) claimed that the lifestyles of famous people presented in media rather cannot serve as role models and encourage to change one’s appearance. Insignificantly fewer students (31% in the city and 28% in the country) claimed that the lifestyles of celebrities could be an example worth imitating. The majority of students, 71% from each school, responded that they watched TV every day. Significantly fewer junior high school students, 14% from the city and one fifth from the country, claimed that they watched TV 3-4 times a week. 5% of the city students and 1 person living in the country did not watch TV at all.

Over half of the students living in the city (66%) and in the country (65%) watched series and films most willingly. The second choice was music programmes – 34% of the students in the city and 54% in the country. The students much more seldom indicated TV quizzes, news, fashion and nature programmes.

Programmes about lifestyle, nutrition were watched by only 10% of the students from the city and from the country. The majority of the students (living in the city – 81% and in the country – 69%) used the Internet every day. As few as 4% of the surveyed from the city and 18% of the respondents from the country indicated that they used the Internet 1-2 times a week. Using the Internet 3-4 times a week was declared by 11% of the city dwellers and 10% of the rural students. 4% of the students from each groups did not use the Internet at all.

The students living in the city (91%) and in the country (95%) almost univocally declared that they did not browse the Internet blogs on eating disorders. Only 9% of the city students and 5% of the rural students admitted that they were interested in this blog type.

The majority of the students from both schools (73% – the country and 76% – the city) could not univocally determine the influence exerted on them by Internet blogs on nutrition. Less than one fourth of the surveyed (10% students from the city, 13% students from the country) were convinced about their negative impact on young people. The smallest number of the students claimed that this blog type provides

important information on diets and physical exercise helpful in the reduction of body mass (Fig. 2).

The students from both schools almost univocally (94% and 93%) answered that they had never bought diet products under the influence of media. Such purchase was made by 6% of the students from the city and 8% of the students from the country.

Among the surveyed population, the evaluation of Body Mass Index was conducted by means of the tables of BMI percentile values and according to the classification of the body mass disorders (Tab. I).

BMI of the majority of the surveyed was within the normal limits. The suspicion of the deficiency of the body

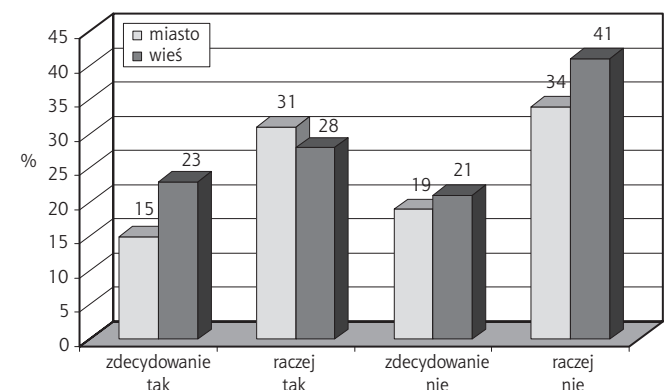


Fig. 1. Opinion of young people on lifestyles of celebrities as role models

miasto – city, wieś – country

zdecydowanie tak – definitely yes; raczej tak – rather yes; zdecydowanie nie – definitely no; raczej nie – rather no

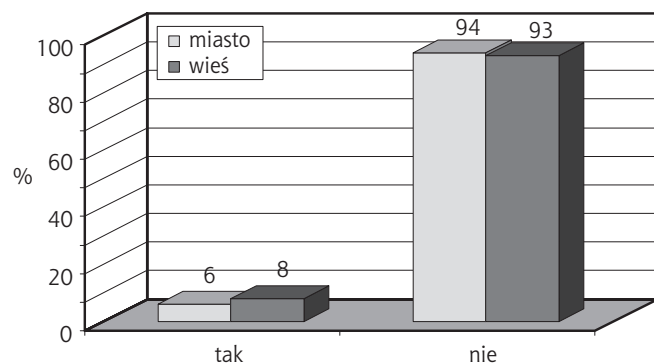


Fig. 2. Declaration of the junior high school students on buying diet products

miasto – city; wieś – country; tak – yes, nie – no

Table I. Interpretation of BMI by means of tables of BMI percentile values

Interpretation of BMI – tables of BMI percentile values	The City		The Country					
	Girls		Boys		Girls		Boys	
	N	%	N	%	N	%	N	%
Values below 5 percentile	3	4	2	3	4	5	1	1
Values between 5 and 85 percentile	25	31	40	50	32	40	35	44
Values equal/above 85 percentile and lower than 95 percentile	3	4	5	6	4	5	3	4
Values equal to and above 95 percentile	1	1	1	1	0	0	1	1

mass (below 5 percentile) was indicated in 7% of the students from the city (4% girls and 3% boys) and 6% of the students from the country (5% girls and 1% boys). The BMI values suggesting the risk of overweight appeared in the case of 10% of the students from the city (4% girls and 6% boys) and in 9% of the students from the country (5% girls and 4% boys). Obesity was suspected in case of 2% of the students from the city and in 1 student from the country. The results were also confirmed by the analysis made on the basis of the BMI interpretation according to the classification of body mass disorder. Most of the surveyed teenagers (68% of the students from the city and 64% of the students from the country) manifested proper weight. 27% of the students from the city (11% girls and 16% boys) and 35% of the students from the country (24% girls and 11% boys) were underweight. The BMI values in the range 15-17 proving considerable underweight were noted in 8% of the female students from the city and in 6% of the female students from the country. Overweight was diagnosed in 4% of the students from the city and in 1 boy living in the country. Obesity was identified in 1 boy from the city.

The factor analysis (rotation: Oblimin) was applied to study the influence of media on the nutrition-related behaviours.

On the basis of the analysis, we can distinguish three factors: – Interest in diets and “unhealthy” dieting – Factor 1; - Intensity of media use – Factor 2; – Objection against the canon of beauty popularized by media – Factor 3.

The answer to the question included in the research problem: Do media exert influence on eating

Table II. Influence of media on occurrence of eating disorders

The influence of media on the occurrence of eating disorders	Factor		
	1	2	3
8. How does this blog type influence you ?	.828		
10. Have you ever bought diet products under the influence of media?	.732		
7. Do you visit Internet blogs on eating disorders?	.642		-.287
6. How many times a week do you use the Internet?	.219	.886	.132
4. How many times a week do you watch TV?	-.444	.601	-.169
3. Can the lifestyles of celebrities as presented in media be role models and encourage to change one's own appearance, apply a diet?			-.768
2. Do you consider popularizing an image of the ideal silhouette by media right?			-.749

Table III. Normal nutrition and intensity of media use

	Intensity of media use	Normal nutrition	
Intense media users	Pearson Correlation	1	.188*
	Sig. (2-tailed)		.018
	N	160	159
Normal nutrition	Pearson Correlation	.188*	1
	Sig. (2-tailed)	.018	
	N	159	159

behaviours of junior high school students? – is positive. A significant, positive correlation occurred between the intensity of media use and the lack of signs of eating disorders (p=0.018, r=0.188). Media do not negatively influence teenagers’ health behaviours.

People objecting to the canon of beauty popularized in media more seldom manifest behaviours related to overeating. (p=0.0001, r=-0.294).

The influence of media on eating disorders also proves the relation between the objection against the canon of beauty popularized by media and excessive preoccupation with weight. People disagreeing with the TV canons of beauty more seldom present behaviours proving excessive preoccupation with weight (p=-0,002, r=-0,246).

Table IV. Objection against canon of beauty propagated by media and overeating

	Objection against the canon of beauty propagated by media	Overeating	
Objection against the canon of beauty propagated by media	Pearson Correlation	1	-.294**
	Sig. (2-tailed)		.000
	N	160	159
Overeating	Pearson Correlation	-.294**	1
	Sig. (2-tailed)	.000	
	N	159	159

Table V. Objection against canon of beauty popularized by media and excessive preoccupation with weight

	Objection against the canon of beauty popularized by media	Excessive preoccupation with weight	
Objection against the canon of beauty popularized by media	Pearson Correlation	1	-.245**
	Sig. (2-tailed)		.002
	N	160	159
Excessive preoccupation with weight	Pearson Correlation	-.245**	1
	Sig. (2-tailed)	.002	
	N	159	159

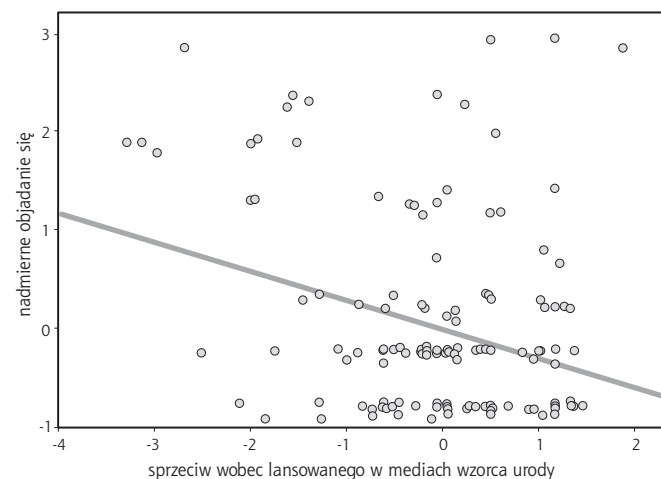


Fig. 3. Objection against canon of beauty propagated in media versus overeating

Nadmierne objadanie się – Overeating; Sprzeciw wobec lansowanego w mediach wzorca urody – Objection against the canon of beauty propagated by media

The analysis of variance also showed that the objection against media canons of beauty was more often expressed by country people than by city dwellers ($F(1.158)=4.389, p=0.038$).

Discussion

Eating disorders occur mostly among young people. The conducted research was purposefully planned and implemented in the group of junior high school students. The adolescence period is the time of shaping health behaviours. Most of them continue in adulthood. Therefore at that age it is important to implement in young people the habits of healthy behaviours which aim at keeping proper body weight and the sense of satisfaction with their own silhouette. Recently, the significance of the impact of numerous factors acting together is emphasized. Among them, mass media and the Internet take the first place.

The studies concerning the influence of media models on eating habits are undertaken more and more often. It was also undertaken by Ms Chmielewska E.A. The aim of her work was to define "whether media and the Internet exert influence on girls' eating habits and whether they shape the respondents' image of their own silhouette". The research included the total of 312 female students of Warsaw secondary schools aged 15 to 19 years (the average age 126.8) [7].

The omnipresent fashion of a slim silhouette, commonly popularized by media contributes to the wish of many people to lose weight at any cost. In such cases the most preferred way of obtaining information on diets is the Internet, and the dieting forum in particular. For the half of the school group people, 42% of the girls from the catholic group and 92.5% of the girls from the Internet group, such a forum was

a significant and needed assistance while dieting. The findings obtained by the authors from their own research indicate that only for 11% of the students from the city and 6% of the students from the country, such blog types are important in supporting the struggle with redundant body weight.

It is worth noticing that the problem presented in this paper is actually much more complex. It would be necessary to conduct a larger-scale research in the school environment to be able to find out all kinds of changes undergoing in nutrition and the reasons for these changes, as well as conducive factors. Perhaps in the future it would be possible to avoid the problems related to a disturbed perception of one's own body and nutrition owing to greater control over advertising and the accessibility of Internet information, as well as to a change in the perception of the shape of female body where the slim silhouette is a professional tool used as a way of earning money in the world of fashion, film and music because "success has a beautiful face, and the appearance is the first thing we notice in other people" [7].

Conclusions

Media do not exert negative influence on nutrition-related behaviours of junior high school students. In fact, people who watch TV and use the Internet more often, significantly more seldom manifest behaviours connected with eating disorders than people who use the media spontaneously. The objection against the canons of beauty propagated by the media negatively correlates with excessive overeating and excessive preoccupation with weight. People living in the country significantly more often than city dwellers disagree with the media beauty canons.

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