

Paweł Izdebski¹

Instytut Psychologii, Uniwersytet Kazimierza Wielkiego

Anna Rucińska-Niesyn²

Studia Doktoranckie na Wydziale Pedagogiki i Psychologii UKW

XII

FAMILY DETERMINANTS OF CHILDHOOD OBESITY – THE ROLE OF PSYCHOLOGICAL FACTORS RELATED TO THE FUNCTIONING OF FAMILY AND THE PERSONALITY OF PARENTS

**Rodzinne uwarunkowania otyłości u dzieci
– rola czynników psychologicznych związanych
z funkcjonowaniem rodziny i osobowością rodziców**

ABSTRACT

The aim of this article is a description, on the basis of available empirical data, of psychological factors associated with family and its behaviours which might lead to childhood obesity. In the first part of the article medical aspects of obesity are described and its psychosocial consequences. The awareness of psychological determinants of childhood obesity may help in better prevention of it.

Key words: obesity, children, family determinants/conditionings of obesity

STRESZCZENIE:

Celem niniejszego artykułu jest scharakteryzowanie na podstawie dostępnych danych naukowych, czynników psychologicznych związanych z funkcjonowaniem rodziny lub za-

¹ Paweł Izdebski, Institute of Psychology, Kazimierz Wielki University in Bydgoszcz, 85-868 Bydgoszcz, ul. L. Staffa 1, Poland, e-mail: pawel@ukw.edu.pl

² Anna Rucińska-Niesyn, doctoral student, Institute of Psychology, Kazimierz Wielki University in Bydgoszcz, 85-868 Bydgoszcz, ul. L. Staffa 1, Poland.

chowaniami rodziców, które mogą prowadzić do powstania otyłości dziecięcej. Zasadniczą część artykułu poprzedza ujęcie problemu otyłości dziecięcej w aspekcie medycznym oraz charakterystyka jej psychospołecznych konsekwencji. Świadomość psychologicznych uwarunkowań otyłości dziecięcej może przyczynić się do skuteczniejszego jej zapobiegania.

Słowa kluczowe: otyłość, dzieci, rodzinne uwarunkowania otyłości

INTRODUCTION

Overweight and obesity prove to be an enormous epidemiological problem throughout the world which brings about serious health, social, psychological and economical consequences for mankind. The problem exists mainly within the population of adults however the initiation of obesity usually happens at the developmental age. Over recent years the frequency of excess body mass occurring among children has revealed clear upward tendency for all age groups in the majority of countries. The growing prevalence of the problem is especially alarming regarding the danger of the particular consequences of obesity among children.

There are insufficient unambiguous standards describing the existence of overweight and obesity within the population of children and adolescents. The authors who conduct research very often employ centile charts of a particular country or region which considerably hinders the comparison of the spread of the problem among different populations.

According to the International Obesity Taskforce (IOTF), 155 million schoolchildren reveal the symptoms of overweight or obesity. Among them, 30-45 million are obese children and youth at the age of 5-17 years old and 22 million – children under 5 years old (IOTF, 2004). 22 out of 75 million children living in the European Union (29%) are affirmed to be overweight whereas 5,1 million (6,8%) suffer from obesity.

The frequency of obesity among children and youth in Poland is also becoming a serious issue. On the basis of the National Food and Nutrition Institute studies of centile charts for the population of Warsaw carried out in 2000, it was estimated that overweight existed among 8% of boys and 7,2% of girls between 10 and 18 years old. Yet, the percentage of obese people in the examined populations was 4,6% (Jarosz, Rychlik, 2006). Comparing the abovementioned data with the results of earlier research carried out by the National Food and Nutrition Institute it turned out that, since 1989, there had been an increase in the frequency of overweight and obesity occurrence among children and youth between 10-18 years old in Poland. The unfavourable tendency had appeared especially clearly in the age span of 13-15 years old (Jarosz, Rychlik, 2006).

Later research conducted in a group of Polish children between 7-9 years old proved that the excess body mass appeared among 15,8% of girls and 15% of boys out of which 3,7% of girls and 3,6% of boys were obese (Małecka-Tendera et al., 2005). Another Polish survey (Jodkowska et al., 2007) carried out over a group of adolescents indicated that the excess body mass among 13-15-year-old teenagers was 13,3% (14,9% among girls, 11,6% among boys). The overweight existed among 9% whereas obesity concerned about 4,5% of the examined young people.

Through the analysis of the data available in the subject reference books, which concern the frequency of observed obesity and overweight among children throughout the world, one could draw a conclusion that the problem increases. In order to prevent the dangerous physical and psychic aftermaths of the phenomenon, prophylactic and preventive measures need to be undertaken. Successful countermeasures to childhood obesity will only be possible after reliable identification of all its risk factors is carried out. In contemporary professional literature the least interest has been put into the psychological determinants of the issue. This, however, proves to be the area which may play an important role in the initiation of obesity among children. Therefore it should be characterised in detail.

The primary location where a child learns the behaviours that play conclusive role in the initiation of obesity is the family. Apart from the eating habits or the routines connected with the style of the family, a significant factor that determines obesity may be the emotional climate of the family or even the personality and temperamental traits of both parents.

The present paper aims at characterising the family determinants of childhood obesity with respect to the psychological functioning of the family and the personality of parents. Nevertheless, before the issue is explained some basic medical matters concerning childhood obesity and its health and psychosocial consequences will have to be presented.

OBESITY FROM MEDICAL PERSPECTIVE

Medical literature defines obesity as a chronic constitutional metabolic disorder ensuing the upset balance between the supply and consumption of energy revealing in an excess adipose tissue in the body. In the course of time and with the intensification of the process, pathologies and dysfunctions regarding all body systems and organs appear (Tatoń et al., 2007).

Another definition states that obesity arises from the inappropriate adaptation of an organism to the lifestyle, work and civilization progress. Characteristic

of the developmental age obesity is the increase in the number and size of fat cells. Excessive growth in the amount of the cells during childhood may cause a development of obesity in adulthood as the increase in the number of the cells is an irreversible process (Kłosiewicz-Latoszek, 2006).

The definition provided by the World Health Organization (WHO, 2006) describes obesity as a state of pathological increase in the amount of adipose tissue in the body which causes health deterioration or the risk of it.

To sum up, it ought to be observed that the definition of obesity may have different criteria yet it always denotes the accumulation of fat in the body with regards to the norm. For clinical and epidemiological examinations, norms established by international organisations, especially WHO, are adopted.

The existence of overweight or obesity is commonly described with the aid of the weight-height ratio BMI (Body Mass Index) also called the Quetelet Index which can be calculated by dividing the body mass (in kilograms) by the height squared (in metres) (Tounian, 2008).

The form of obesity most often found among children and teenagers is simple obesity also denoted as spontaneous, primary or maintenance. It is caused by unbalanced diet and restricted physical effort. Such type makes up 90% of all cases of child's obesity. Very rare for this population are the cases of obesity brought out by endocrinological disorders (hypothyroidism, Cushing syndrome and disease, pseudohypoparathyroidism, somatotrophic pituitary hypofunction, polycystic ovary syndrome) or genetic disorders (Turner's, Klinefelter, Prader-Willi or Laurence-Moon-Biedl Syndromes) (Oświęcimska, 2005).

For many years now discussions have been carried on by researchers whether childhood obesity should be regarded as an illness or rather as a natural reaction to pathologic environment (nutrition, physical activity, stress et al.). Moreover, they are abound in dilemmas with respect to its determinants.

In the vast majority of reviews that explain the obesity phenomenon the complex and multifactorial character of this illness is underlined. It emerges from the fact that obesity develops on the grounds of the interaction between genetic determinants and the environment (Kirchner, 2009; Respondek, Jarosz, 2006).

In the light of contemporary knowledge, it has to be highlighted that the causes that lead to obesity are of complex nature. Both genetic and environmental factors play significant role in the forming mechanisms of the illness. Nowadays, the number of obese children is considerably higher than it used to be 10 or 20 years ago which may suggest that it is not for the sheer genetic predisposition that one should become obese. Aside genetic proneness, factors motivated by behaviour are of profound significance towards the formation of excess body mass such as inappropriate eating habits or the lack of movement (Kolbe,

Weyhreter, 2007). These factors, in turn, stem from the functioning of family and the personality traits of parents.

Obesity entails health, social and psychological consequences. In medical literature (Małecka-Tendera, 2001) a lot of examples are enumerated which present pathologies in the development of children with simple obesity. The most serious of them are increased blood pressure among obese children, carbohydrate metabolism disorders (leading to diabetes), lipid balance disorders (increased total cholesterol level and triglycerides in blood), osseo-articular problems, growing susceptibility to the diseases of respiratory system or an acceleration of the puberty spurt.

To sum up, it has to be noticed that the data concerning the negative impacts of obesity on health have not appeared until recently and the researchers of the phenomenon highlight that the list of the negative consequences of the issue will surely extend in the nearest future. Due to the lack of studies it is difficult to obtain valid proofs that connect childhood obesity with illnesses appearing during the adult age and the premature death. Nevertheless, a lot of representatives of the medical milieu construct the hypothesis that the problem of obesity may have a badly influence on health in the adult life (Reilly, Wilson. 2009).

THE AFTERMATHS OF CHILDHOOD OBESITY IN PSYCHOSOCIAL ASPECT

Obesity is bound not only to health consequences. Its psychosocial after-effects carry a lot of weight with special respect to children. The excess body mass may deeply influence the self-esteem of children afflicted with it. It has been evidenced that obese children have a sense of lower physical attractiveness, consider their exterior in a negative way and feel unaccepted by their peers (Tabak, 2006). The sense of disapproval on the part of the surrounding leads them to states of sorrow and depression and, as a result, to the lack of faith in their own abilities (Tabak, 2007). The findings above have been confirmed by research carried out over a group of 413 Korean primary school children. The research concerned the relationship between obesity and good psychic disposition of the children. The scientists proved that obesity was strictly associated with the feeling of dissatisfaction with the body which lead to low self-esteem and depression symptoms among children (Shin, Shin, 2008).

What is more, a distorted attitude towards their bodies exists among overweight juveniles. A great deal of them do not experience their bodies in an intensive manner which is brought about by the fact that their corpulence forces

them to resign from various forms of sport activity. The lack of important physical experiences obstructs the obtaining of trust and harmony with self-corporeality. As an effect, motoric deficits induce disorders of psychic development which is inseparable from physical development (Kolbe, Weyhreter, 2007).

In modern society in which slim silhouette is the mark of beauty obese children very often have to face attitudes of rejection from their peers and adults. As it stems out of the works concerning such range of topics, they are accused of being lazy, having lower intelligence and inclination to lie. Moreover, they are regarded as being undisciplined and not eager to do physical exercises (Portman, 2007). In the works of reference it is even mentioned about a social branding of obese children (Puhl, Latner, 2007).

The longitudinal studies of the impact of the increase in the body mass among children on their school results and the existence of certain school problems have shown that girls, who were not overweight in the kindergarten but they were in the 3rd form of primary school, were lower assessed by the teachers with regards to social competences, school behaviour and attitude towards learning. They have also been obtaining lower results in reading and maths in comparison to girls with normal weight (Datar, Strum, 2006).

The excess body mass may not only be the cause of psychic problems but also their consequence. It has been proved that the negative emotions and stressful events experienced by the child may secondarily contribute to the initiation of obesity. Putting on weight can be a reaction to a stressful factor such as a divorce of parents, mourning, aggression or a birth of siblings. In these situations, eating becomes a substitute measure which provides them with a short-term feeling of good disposition (Tounian, Chantereau, 2008).

The presented, serious health and psychosocial consequences of obesity evoke questions about the sources and psychological determinants of the phenomenon. Through characterising the psychosocial aspects of childhood obesity one should notice that at this level of development the behaviour of children is basically subject to the closest surrounding environment which is the family. Eating is an integral part of the family everyday routine therefore it is motivated by the events happening among the family as well as its atmosphere. The researchers draw attention to the fact that, for all social classes, there is a link between the weight of parents and their children. It is also highlighted that the risk of being an overweight child in the families in which obesity has already appeared is twice or three times higher than in families unburdened with it. Following the observations of specialists an obese child who is submitted for treatment or therapy comes with an obese mother or father and, very often, with obese brothers or sisters. Studies confirm the thesis that the obesity of parents constitutes a risk factor for the initiation of childhood obesity (Agras et al., 2004).

The influence on such status quo is not only showed by the genetic determinants but also factors connected with the lifestyle of the family.

FAMILY ASPECT OF CHILDHOOD OBESITY IN THE PSYCHOLOGICAL THEORIES

Only until recently the family determinants of childhood obesity have become of interested to scientists. The review of available publications indicates that initially such range of topics was interesting mainly for specialists engaged in practical psychological help for obese children. Therapists at the earliest observed that the basis of successful help for obese children lies in the deep analysis of their problems including not only their eating habits or lifestyles but also factors related to the emotional climate of their families, the abilities of parents to fulfil their psychic needs, the quality of family inter-relations or the methods of solving everyday problems. According to practitioners, permanent restraint of the child's overweight is impossible without broader analysis of the structure and the conditions within their family (Kolbe, Weyhreter, 2007). It is underlined that the most important participants in the desired change of children's weight may, or even have to, be the parents. The younger the child is, the more restricted his or her individual input in the change of weight. Therefore, it is on the part of parents to be ready to critically view their own life and eating conditions.

The most frequent theoretical model in which the majority of modern research on childhood obesity and its determinants is carried out is the behavioural model. It focuses on the search for various causes, either biological or environmental, of excess body mass among children. The behavioural approach based on the theory of learning underlines the lack of balance between the absorbed and the used energy of a unit. A bulk of research conducted within this model look for the environmental causes of obesity resulting from the eating manners of the family (e.g. eating bigger amounts of food than needed, the lack of set times of meals, eating between the meals, eating highly caloric food) or the lifestyle of the family which influences the physical activity of a child (little physical activity, spending time in front of a television or computer).

To exemplify these findings the results of the latest research may be adduced that have been carried out in New Zealand (Duncan et al., 2008) which evaluated the factors that have an impact on the obesity of children. It has been revealed that there exist three significant factors connected with the lifestyles of overweight children i.e. insufficient amount of sleep, not eating breakfast by children and

low physical activity. It is family who decides about the lifestyle of children and who is in charge of shaping their physical health. Similarly, a connection has been confirmed between the amount of time devoted by children to watching television and their tendency to become overweight or obese. The fact has been stated through the research carried out by Danner (2008).

By means of analyzing the impact of parents on the physical activity of their children, Pugliese and Tinsley (2007) have managed to categorize the socializing behaviours of parents into five groups: encouraging, modelling, work-related habits, general support and instrumental influences. All of the socializing behaviours play the most significant role at the stage of childhood and their role is weakening through adolescence.

Other works highlight the importance of such early risk factors as a proper increase of body mass during pregnancy or the period of breast-feeding. Environmental factors that influence a child at the initial stages of its development may decide about the overweight or obesity at later stages. Scientists proved, via examining 1044 pregnant women and their children after 3 years since birth, that the excess increase in body mass during pregnancy is strictly connected with the increase in the amount of fat tissue of a child, the increase in the arterial pressure value among 3-year-olds as well as the increased risk of overweight of the child (Oken et al., 2007).

One of the important research queries of the model concerns the length of breast-feeding and the influence of this factor on future overweight or obesity. The longer period of breast-feeding (at least 16 weeks) is related to lower risk of overweight among children in comparison to those nourished artificially. Nevertheless, it has to be stated that the data of the authors are inconsistent upon this issue (Scholtens, 2008).

As it stems out of studies, considerable negative role in the unhealthy diet of children that leads to obesity is played by a complex marketing an advertisement of sweet and fatty products directed at the youngest customer (Hoek, Gendall, 2006). Practice shows that marketing undertakings in this respect achieve remarkable successes as not only children but also parents are susceptible to them. Another Australian research of parental consciousness reveal that parents are far from giving a critical look at commercials of food for children. Furthermore, they do not express their strong support for rigorous restrictions that should be imposed on those commercials (Morley et al., 2008).

Evidence of the role of behavioural factors is also given by the studies that verify the effectiveness of help programmes for overweight and obese children. The results of the meta-analysis of the research of treatment programmes based on the behavioural approach explicitly prove that such kind of therapeutic interactions is by all means effective (Young et al., 2007). Parents serve essential

role in these programmes on account of being those, who control the supply of food and decide about what and when does a child eat. They may influence the amount of the consumed calories.

For wider understanding of the determinants of childhood obesity equally significant seem to be the factors of psychological nature. Therapists dealing with practical help for children with eating disorders and their families emphasize that child's appetite is not only developed by the physiological need but it largely depends on the atmosphere within the family i.e. the emotional reactions with people who are important for a child. The appetite undergoes certain changes depending on the relationship with the feeding person and the surroundings as, with this respect, the emotional sphere prevails ordinary physiological needs (Bonnot-Matheron, 2003).

Above all, the significance of psychological factors is emphasized by the cognitive theories which treat obesity as a result of a failure of control mechanisms of an individual. The failure may occur both at behavioural level (eating habits) and psychic level i.e. beliefs and thoughts connected with eating (Radoszewska, 1993). Within the stream of cognitive psychology studies are conducted which aim at the perception of childhood obesity by their parents with special attention to the distortions in this perception (Doolen et al., 2009). Disturbances or rather disagreement between perceiving the real weight of a child and parents' perception were the subject of the analysis by Doolen and her assistants (2009). The authors have managed to review research concerning obesity and overweight of children as well as the perception made by their parents and stated that especially the parents of obese or overweight children perceive their children's weight in a distorted manner. It was particularly true for the mothers of 2 – 12-year-olds.

Among a great number of people with excess body mass a domination of the external control or a lack of ability to control may be observed (Radoszewska, 1993). Providing that the ability to control forms on the course of development certain parental attitudes connected with profuse control of a child may determine its absence. When the control is maintained by the parents child is not able to experience its own and independent one. Additionally, a child does not develop its skills and abilities in this field. The literature accentuates that distortions of the balance between child's self-control and the external, parental control are a typical 'force system' of an obese child's family.

Relationships have been studied between the localization of control among 10-year-olds and their health behaviours including those connected with overweight and obesity at the age of 30. The results have revealed that both men and women with more internalized sense of control during childhood had lower risk of overweight or obesity in adulthood (Gale et al., 2008).

The natural control mechanisms of a child are breached by demeanours of a parent, who tries to force it to take the food. As a consequence, the child presents a passive attitude and is not interested in taking up activities aiming at the achievement of proper body mass. Whenever a mother or a father, who does not understand the developmental regularities of a child, pushes the food in his or her mouth insisting on eating, they become an external satiety regulator. The consolidation of such habits causes considerable distortions of child's understanding of the signals sent by their own organism.

Similarly negative consequences are entailed by an emotional blackmail frequently applied by parents: 'One spoon for the mummy and one for the daddy'. A child then learns that it should eat to please relatives. Equally alarming is another form of blackmail often used by adults which is offering a prize (e.g. in a form of sweets) in turn for eating. The child finishes the meal not because it has appetite but because it has been blackmailed. Such type of prize develops an oral pleasure but hinders pro-developmental motivation (such as auto-discipline, self-control) of a child (Bonnot-Matheron, 2003).

A great deal of obesity treatment therapies draws attention to the significant role of activities that lead to the restoration of internal sense of control of a child as being one of the conditions of effectiveness of a therapy. The success of a therapy is when a child learns again how to properly recognize the signals sent by the body. Together with the overtaking of power over oneself, the motivation and self-esteem of a child increases.

This has been confirmed by the research conducted by Hilde Bruch from Baylor College of Medicine, the pioneer in studies of distortions in food-taking. It was her, who noticed that the parents of children suffering from anorexia or strong obesity often reveal the attitude of inordinate care or a tendency to dominate. The effect of that situation is the lack of chances of a child to individually regulate the amount of consumed food (qtd. in Jablow, 2000). A lot of anorexic or obese young people very often realised after years that their internal controlling and regulating mechanism of food supply has been taken away from them. This, in turn, happened to be one of the causes of future distortions.

The reference books also stress the value of emotional relations of a child to the formation and maintenance of obesity. This factor is paid attention to by psychoanalytic theories. The indicated model presupposes the defensive mechanisms to carry out the determining function in the formation of obesity and draws attention to the peculiarity of the relations cultivated within an obese child's family. Therefore, obesity is thought to be the result of parent-parent and parent-child relations (Radoszewska, 1993).

Studies prove that experiencing traumatic incidents during childhood is bound to an increased contingency of adult obesity. Encounters of rejection or

violence played significant role in the aetiology of obesity among boys (Gunstad et al., 2006). Moreover, research conducted over a population of adolescent Americans revealed that men who had experienced sexual abuse during childhood were more frequently prone to be overweight during adulthood (Fuemmeler et al., 2009).

With respect to the aforementioned findings food seems to be capable of compensating the difficulties and failures experienced by a child and helps satisfy the needs created by situations of emotional discomfort (e.g. in a situation when the child feels unloved or not accepted). Persistent obesity of a child may as well be a manifestation of distraction from other family problems or conflicts through the concentration on a "safe topic", namely obesity (Tabak, 2006).

In such a context it can not be omitted to mention the ambush that may be set up by the commonly applied parental practice of responding to children worries with the aid of sweets. Although this form of console is filled with good intentions on part of the parents, it teaches the child to employ wrong line of defence against anxiety. If preserved it may become a hazardous habit which leads to obesity (Bonnot-Matheron, 2003).

A great deal of adult people who undertake obesity treatment therapy notice that they usually turn to eating as an antidote to the tensions or stressful situation they come across. What they also remember from their childhood is that 'great medicine for all their ailments', namely the lollipop (Craggs-Hinton, 2008).

Feeding may as well serve as a compensating device. Parents feed their children because they are not able to satisfy other needs. Through giving food to the child, a parent decreases their feeling of guilt. On the other hand child's overweight may be bound to the feeling of shame and parental helplessness and therefore be perceived as a vivid symptom of negligence and the lack of engagement into the relationship with the child (Radoszewska, 2003).

Potential risk of childhood obesity may also be carried by certain forms of tie with the parents, certain behaviours of parents towards children. Longitudinal (lasting 6 years) American research concerning family conditions and weight of 6378 teenagers revealed that girls who had highly assessed the care and attention of parents and had higher self-esteem less frequently suffered from excessive weight during adulthood. Boys, however, who perceived their parents as having control over their diets and showing strong intimacy, after 6 years revealed a risk of extensive growth of their weight (Crossman et al., 2006). The fact may be related to the educational style applied by parents. Significant role for the development of obesity is ascribed to the authoritarian educational style.

Obesity of a child may be a somatic reflection of the failure of his psychic mechanisms functioning.

Also within the psychosomatic trend hypotheses may be found concerning the family mechanisms of the formation of obesity. The vast majority of studies under this approach refer to the social learning theory. On the basis of this model researches have created the hypothesis of the existence of a “false hunger” which accounts for being a learned reaction to stress. An individual who notices a threat, wrongly takes danger for hunger and reduces the tension with eating and, eventually, puts on weight.

The sources of such practices may be traced back to infancy when a child manifests its hunger in the only available way, namely crying. In such situations the children are most often cuddled and given food by the mother. Feeding serves not only the purpose of satisfying the physiological need but it also fulfils the psychological desire of physical and emotional contact with a close person. In the face of a lack of loving or interest from others the experiences from childhood and infancy contribute to the case of looking for a consolation in eating (Weber, Ziółkowska, 2009).

One of the psychosomatic theories treats obesity as being an effect of inadequate interpretation of baby’s crying. Parents understand the weeping that is truly an effect of emotions as a result of hunger. In consequence, whenever a child finds themselves in an emotionally uncomfortable situation they tend to look for food as a gratification of their needs (Andrews, Jones, 1990 qtd. in Ogińska-Bulik, 2004). Other studies within this stream prove that food may constitute a way of avoiding danger or be a distracting factor that redirects attention from the aversive stimulus.

Social grasp of the problem trying to define obesity recognizes it as a feature (property) ascribed to a unit by other people. The interest of scientists studying the matter of obesity under the indicated stream concentrates around the issues concerning the recognition of obese people, stereotypes and the consequences of a negative perception.

Although considerable changes in social awareness have taken place, what may be observed is that obesity is still not regarded by parents as a direct threat to their children’s lives. Parents are more likely to be concerned with the social aspects of overweight especially if they personally experienced its negative consequences during childhood. The prospect of health and emotional complications is specified at the very end (Dreyfus, 2008). Unfortunately, practice shows that a lot of parents is unable to spot the overweight of their children before it comes to considerable extent. A systematic review of 23 examinations concerning the parental recognition of obesity among their children indicates that more than half of the approximately 3800 interviewees could not identify obesity of their child despite it being clearly indicated by medical norms (Parry et al., 2008).

Parents tend to make light of the child's problem by comparing it to their own experiences: (e.g. "it is normal for your age", "she just looks good", "he will grow out of this", "our cousin was fat too and look how skinny he is now", "in our family everyone is alike", "I also sneak when I'm nervous"). The child adopts such way of thinking from the parents. If there exists a distorted norm of good-looking in the family, a child may not notice an excessive amount of body mass for a very long time. Moreover, if their parents are obese as well, for a child being overweight means being loyal and identify with them. Following the findings of Doherty and Harkway (1990, qtd. in Radoszewska, 2000) when there are obese parents in a family, being obese stands belonging to the family and being loyal to it. Loosing weight may be perceived as a manifestation of separation and lack of loyalty to the family.

Substantial for the full and reliable understanding of the family determinants of childhood obesity is also the systematic approach. It assumes that human behaviour should only be understood in the context of social environment in which he or she actually lives, the context of the system part of which he or she is (Czabała, 2002). Bearing the ability to explain mental disorders, the conception becomes especially visible in the family functioning theories as well as in the form of family therapy. Under such approach a family is regarded as a system that functions and realises its own rights in which particular units integrate and cooperate.

Specialists engaged in psychological help for obese children emphasize that the psychological causes of the problem of obesity are very often connected with distorted family relationships (Dreyfus, 2008). It is also highlighted that the so called "obese family", being perceived as harmonious, actually conceals internal dysfunctioning (Brytek-Matera, 2008). Parents are emotionally unstable. They may take advantage of them to satisfy their own needs. Child is very often obliged to soothe the gap between mother and father. As a consequence of over-protectiveness, parents can limit child's interactions with the environment and deform the reality which leads to developmental inhibition. In such case child's obesity is rather regarded as a psychosomatic symptom in which emotional conflicts of the family should find an outlet. The child is most often delegated to the illness simultaneously providing the family with specialist help without the need to reveal the fundamental problem.

Within the frames of the indicated stream the following constructs that may influence the obesity and overweight have been examined: hierarchy of the family (who rules?), integrity of the family (e.g. the "one-for-all" attitude) as well as the boundaries existing within the family (with special respect to the clarity of family roles). Unfortunately, according to the authors there is a lack of studies concerning the determinants of obesity and overweight in systemic

theories. Such approach is most frequently applied while creating therapeutic programmes. A review of adequate research can be found in the work by Kitzmann and Beech (2006).

The family where a child or an adult person suffers from obesity is described in literature as the so called "psychosomatic family". Its functioning is characterised by strong internal boundaries (i.e. matters of one member concern the whole system and not the individual, the protection of relatives from the external world, the inability to distinguish the self from non-self, over-protectiveness towards the children, lack of autonomy, the rigidity of interactions between the members of the family (every change e.g. physical, putting or losing weight may be dangerous to the balance of the family) as well as the inability to solve the problems.

CHILDHOOD OBESITY AND THE PERSONALITY TRAITS OF PARENTS

On the course of analyzing the psychological aspects of family determinants of obesity among children, issues connected with personality traits of the parents ought not to be omitted. Individualistic factors of the parents may influence the eating habits and lifestyle of the whole family.

Personality plays a significant role in the pathogenesis of obesity. Its traits constitute a rather stable marker of human thoughts and behaviours in various situations. Following this presumption, personality may as well be partly related to the kind of lifestyle or those eating habits that lead to obesity.

Reviewing the works of the explorers of the issue it might be observed that the relationship between personality and obesity is being considered via three perspectives. Some part of the works deal with searching for such traits of personality which could lead to the formation of obesity forasmuch as certain personality traits decide about the preferences of a unit towards the lifestyle related to small physical activity and a tendency to sneaking. Few researchers describe personality traits that are treated as consequences of being obese. Finally the third group of works presume an interaction between personality traits and environmental factors.

Despite there is a considerably large amount of research, their results should be elaborated on with a dose of caution. It is connected with a number of reasons. Firstly, the majority of the research have concerned mainly the population of women with obesity who have decided to undertake one of the suggested forms of therapy. It is therefore claimed that the results of the studies cannot be applied to

the whole population of obese people. Secondly, it has to be stated that a number of research returned results of little statistical significance (Ryden et al., 2003).

Although there are some discrepancies in the results of research concerning the relationship between personality traits and obesity, it must be observed that in the vast majority of them the hypothesis is being repeated which indicates that people with a tendency towards overweight reveal specific personality traits that predispose them to putting on weight. Yet, it is difficult to speak about a general personality profile. It is more likely that some of its traits predispose one to obesity.

Authors devoted to the matter distinguish the most frequently occurring features, namely: low self-esteem, emotional lability, lack of self-control and a tendency to depression and anxiety (Heerden, 2007). It is emphasized that these personality traits depending on combination may increase the risk of developing overweight and obesity.

In the studies carried out by Palme and Palme, obese women who had undergone a therapy because of eating disorders expressed stronger tendency to antisocial behaviour and stronger tendency to feel anxious in comparison to women presenting normal weight (Palme, Palme, 1999).

Other investigators report on higher impulsiveness of obese men as well as enumerate characterological features of overweight people such as aggressiveness, anger, hostility and impulsiveness (Fassino, 2002 qtd. in Ryden et al., 2003).

The awareness of the personality traits which lead to a particular lifestyle broadens common view on psychological factors that bring about obesity. *Ipsa facto*, it enables to draw attention to a wider aspect associated with the personality traits of a parent whose behaviour becomes a role model for children.

Parents who try to find the consolation for their low self-esteem in eating as well as those for whom food brings about the feeling of emotional satisfaction being the one and only stable factor among the swings of emotional sphere and allows to find the impression of self-control will probably shape such attitude towards food and eating among their children. They shall become a role model of similar behaviour.

Taking the principles of systemic model into consideration it might be presumed that psychological conditionings of a parent will decide about the way of functioning of the whole family, its individual members. As a result children will be encouraged and motivated either to more or less intensive physical activity. They will develop healthy or unhealthy lifestyle. It has to be indicated that the parent's personality profile should also influence the atmosphere within the family. Higher level of neuroticism of the parent implicates a bigger number of emotional tensions in the family and more stress-inducing factors for its members. The child functioning in such atmosphere may consequently undergo activities aiming at reduction of stress e.g. through excessive eating.

If considered separately, the personality traits of the parents that mark their lifestyle and the lifestyle of the whole family does not have to directly influence the excess body mass of the child. However, in connection with the influences of the environment, media and traits of the child itself they may be a condemnation to obesity.

Only few researches have been conducted so far in connection with the dependence of obesity and overweight among children and adolescents to the personality of parents. Providing that the first to be interested in the issue were clinicians the findings concentrated primarily on distinguishing the psychopathologic features among parents (e.g. excessive distress and/or psychiatric symptoms among mothers). Nevertheless, the studies were conducted over small groups which is why their results prove difficult to be generalized. Excluding the occurrence of depression among parents (Fairburn et al., 1998) the role of other psychopathologic factors remains unclear and the explanatory mechanisms are strictly hypothetical. Affective disorders influence the style of attachment of the child and therefore may be of key value to the later existence of obesity.

The realization of the broad range of psychological aspects related to childhood obesity should allow for the employment of more effective measures leading to deeper recognition of these determinants and, eventually, to application of the up-to-date knowledge in undertakings connected with practical help for the obese children.

SUMMARY

Family, being the primary and most important environment of a child, determines the path of its habits and eating preferences, develops the awareness of a healthy lifestyle and the attitude of the child towards physical activity as well as the motivation to undertake actions that lead to gaining physical health.

The attitude of a child towards food and its eating habits are also determined by a range of psychological factors such as emotions, motivations, learning or personality. Significant role in the formation of these factors is played by family. Its task is also buffering often unfavourable influences of the external environment connected with e.g. fashion, advertisement or social surrounding. It does not imply, however, that it is family who take the full responsibility for the child's obesity. Throughout this article the multifactority of the determinants of the problem has been emphasized.

It should remain clear that there is a range of psychological problems hidden behind the visible obesity. Most frequently the problems are associated with the

functioning of the family. Such a multipronged insight into the determinants of obesity on the one hand allows for a riddance of unfair and harmful stereotypes in thinking that e.g. obesity is an outcome of gluttony or indolence. On the other hand, it may lead to effective measures connected with practical help for obese children and successful prophylaxis against the phenomenon.

Widely underlined in scientific literature is that the risk factors combating proves to be the most important means of preventing from the illness. Increasing awareness of parents with regards to the psychosocial determinants as well as the health and psychological consequences of obesity is the rudiment of successful prophylaxis against it. Therefore, it may be considerably important for undertaking measures of practical help for the obese children.

The awareness of the substantial role of psychological factors in the formation of the problem effects in growing number of cases in which psychological help is applied for children suffering from overweight. Attention should be drawn to the fact that not only the obese child ought to be put under psychological treatment but also the entire family. The active participation of parents as partners seems equally important for the child struggling with the disease. Parents are the most important role model for their children with respect to the actions connected with healthy lifestyle and the promotion of physical activity. They may as well play significant role in motivating the child to undertake activities aiming at reduction of body mass.

The hitherto suggested choice of researches and theoretical approaches concerning the determinants of childhood obesity points to the intendment of parents in the process of forming of the disorder. Future studies ought to consider the approach which employs and blends the determinants from the polietiological perspective. The prevailing medical model of treating obesity influences certain marginalization of parents. While conducting further researches, psychological factors should be taken into consideration such as self-esteem, educational style, the placement of the sense of control and the obesity-coping style. The studies ought to present a longitudinal character providing that only then are we able to properly estimate the role of psychological factors related to family determinants of obesity.

REFERENCES

- Agras, W. S., Hammer, L. D., McNicholas, F., Kraemer, H. C. (2004). Risk factors for childhood overweight: A prospective study from birth to 9.5 years. *The Journal of Pediatrics*, 145, 20-25.

- Bonnot-Matheron, S. (2003). *Apetyt u dziecka*. (Appetite in a child). Kraków: Wydawnictwo eSPe.
- Brytek-Matera, A. (2008). *Obraz ciała-obraz siebie. Wizerunek własnego ciała w ujęciu psychospołecznym*. (Body image and self. Psychosocial approach to one's own body image). Warszawa: Difin.
- Craggs-Hinton, Ch. (2008). *Jak radzić sobie z zaburzeniami jedzenia*. (How to cope with appetite disorders). Łódź: Wydawnictwo JK.
- Crossman, A., Sullivan, A.D., Benin, M. (2006). The family environment and American adolescents' risk of obesity as young adults. *Social Science & Medicine*, 63, 2255-67.
- Czabała, J. Cz. (2002). *Czynniki leczące w psychoterapii*. (Treatment factors in psychotherapy). Warszawa: Wydawnictwo Naukowe PWN.
- Danner, F. W. (2008), A national longitudinal study of the association between hours of TV viewing and the trajectory of BMI growth among US children. *Journal of Pediatric Psychology*, 33, 1100-1107.
- Datar, A., Sturm, R. (2006). Childhood overweight and elementary school outcomes. *International Journal of Obesity*, 30, 1449-1460.
- Doolen J., Alpert P. T., Miller S. K. (2009). Parental disconnect between perceived and actual weight status of children: A metasyntesis of the current research. *Journal of the American Academy of Nurse Practitioners*, 21, 160-166.
- Dreyfus M. (2008). Opieka psychologiczna nad dzieckiem otyłym, (Psychological care of an obese child). qtd. in P. Tounian (red.), *Otyłość u dzieci*. (Children's obesity). (s. 155-167). Warszawa: PZWL.
- Duncan, J. S., Schoefield, G., Duncan, E.K., Rush, E. C. (2008). Risk factors for excess body fatness in New Zealand children. *Asia Pacific Journal of Clinical Nutrition*, 17, 138-147.
- Fairburn, C. G., Doll, H. A., Welch, S. L., Hay, P. J., Davis, B. A., O'Connor, M. E. (1998). Risk factors for binge eating disorder. A community-based, case-control study. *Archives of General Psychiatry*, 55, 425-432.
- Fuemmeler, B. F., Dedert, E., McClernon, F. J., Beckham, J. C. (2009). Adverse childhood events are associated with obesity and disordered eating: Results from a U.S. population-based survey of young adults. *Journal of Traumatic Stress*, 22, 329-333.
- Gale, C. R., Batty, G. D., Deary, I. J. (2008). Locus of control at age 10 years and health outcomes and behaviors at age 30 years: the 1970 British Cohort Study. *Psychosomatic Medicine*, 70, 397-403.
- Gunstad, J., Pul, R. H., Spitznagel, M. B., Cohen, R. A., Williams, L. M., Kohn, M., Gordon, E. (2006). Exposure to life trauma is associated with adult obesity. *Psychiatry Research*, 142, 31-37.
- Heerden, I. V., (2007). *The obese personality*. DietDoc. Source: <http://www.health24.com>. Access date: 03.01.2010r.
- Hoek, J., Gendall, P. (2006). Advertising and obesity: a behavioral perspective. *Journal Of Health Communication*, 11, 409-423.

- International Obesity Task Force (2004). Childhood report. *IASO Newsletter*, 6, 10-11.
- Jablow, M. M. (2000). *Anoreksja, bulimia, otyłość*. (Anorexia nervosa, bulimia, and obesity). Gdańsk: GWP.
- Jodkowska, M., Tabak, I., Oblacińska, A. (2007). Ocena częstości występowania nadwagi i otyłości u młodzieży w wieku 13-15 lat w Polsce przy zastosowaniu trzech różnych narzędzi badawczych. (Assessment of frequency of obesity and overweight in youth in the age 13 to 15 in Poland with the use of three different research methods). *Przegląd Epidemiologiczny*, 61, 585-92.
- Jarosz, M., Rychlik, E. (2006). Otyłość epidemią XXI wieku, (Obesity as an epidemic of the 21st century) W: M. Jarosz, L. Kłosiewicz-Latoszek (red.), *Otyłość. Zapobieganie i leczenie*, (Obesity: prevention and treatment). (s. 16-24). Warszawa: Wydawnictwo Lekarskie PZWL.
- Kirschner H. (2009). Zdrowie i jego uwarunkowania, (Health and its determinants). qtd. in J. Gawędzki, W. Roszkowski (red.) *Żywnienie człowieka a zdrowie publiczne*. (Human nourishment and public health). (s. 13-36). Warszawa: Wydawnictwo Naukowe PWN.
- Kitzmann, K. M., Beech, B.M. (2006). Family-based interventions for pediatric obesity: Methodological and conceptual challenges from family psychology. *Journal of Family Psychology*, 20, 175-189.
- Kłosiewicz-Latoszek, L. (2006). Co rozumiemy przez nadwagę i otyłość. (What do we understand as overweight and obesity). qtd. in M. Jarosz, L. Kłosiewicz-Latoszek (red.), *Otyłość. Zapobieganie i leczenie*, (Obesity: prevention and treatment). (s. 9-15). Warszawa: Wydawnictwo Lekarskie PZWL.
- Kolbe, H., Weyhreter, H. (2007). *Moje dziecko ma nadwagę*. (My child is overweight). Warszawa: Oficyna Wydawnicza „Aba”.
- Łuszczynska, A. (2007). *Nadwaga i otyłość. Interwencje psychologiczne*. (Obesity and overweight. Psychological interventions). Warszawa: PWN.
- Małecka-Tendera, E. (2001). Otyłość w wieku rozwojowym. (Obesity in developmental age). *Standardy Medyczne*, 3, 21 -23.
- Małecka-Tendera, E., Klimek, K. Matusik, P., Olszanecka-Glinianowicz, M., Lehingue, Y. (2005). Obesity and overweight prevalence in Polish 7-to-9-year-old children. *Obesity Research*, 13, 964-968.
- Morley, B., Chapman, K., Mehta, K., King, L., Swinburn, B., Wakefield, M. (2008). Parental awareness and attitudes about food advertising to children on Australian television. *Australian and New Zealand Journal of Public Health*, 32, 341-347.
- Ogińska-Bulik, N. (2004). *Psychologia nadmiernego jedzenia*. (Psychology of extreme eating). Łódź: Wydawnictwo Uniwersytet Łódzki.
- Oken, E., Taveras, E. M., Kleinman, K. P., Rich-Edwards, J. W., Gillman, M.W. (2007). Gestational weight gain and child adiposity at age 3 years. *American Journal of Obstetrics and Gynecology*, 196, 322.

- Oświęcimska, J. M. (2005). Otyłe dziecko: rozpoznawanie i postępowanie w otyłości u dzieci. (An obese child: diagnosis and treatment of obesity in children). Source: www.psychiatria.pl. Access date: 12.02.2009r.
- Palme, G., Palme J. (1999). Personality Characteristics of Females Seeking Treatment for Obesity, Bulimia Nervosa and Alcoholic Disorders. *Personality and Individual Differences*, 26, 255-263.
- Parry, L. L., Netuveli, G., Parry, J., Saxena, S. (2008). A systematic review of parental perception of overweight status in children. *The Journal of Ambulatory Care Management*, 31, 253-268.
- Portmann, R., (2007). *Problemy z nadwagą u dzieci. Istota zagadnienia*. (Problems with overweight in children). Kielce: Wydawnictwo Jedność.
- Puhl, R. M., Latner, J. D. (2007). Stigma, obesity, and the health of the nation's children. *Psychological Bulletin*, 133, 557-580.
- Radoszewska, J. (1993). Problem otyłości w teoriach i badaniach psychologicznych. (The problem of obesity in psychological theories and research). *Nowiny Psychologiczne*, 4, 101-111.
- Radoszewska, J. (2000). Jestem gruby, więc jestem. (I am fat, therefore I am). *Nowiny Psychologiczne*, 1, 65-73.
- Radoszewska, J. (2003). Problem otyłości w psychologii klinicznej. (The problem of obesity in clinical psychology). *Nowiny Psychologiczne*, 3, 23-31.
- Reilly, J., J., Wilson, D., (2009). Otyłość u dzieci, (Obesity in children). qtd. in N. Sattar, M. Lean, (red.), *ABC otyłości* (ABC of obesity). (s. 53-57). Warszawa: Wydawnictwo Lekarskie PZWL.
- Respondek, W., Jarosz, M., (2006). Jakie czynniki wpływają na rozwój nadwagi i otyłości?, (Which factors have influence on development of overweight and obesity). qtd. in M. Jarosz, L. Kłosiewicz-Latoszek (red.), *Otyłość. Zapobieganie i leczenie*, (Obesity: prevention and treatment). (s. 25-36). Warszawa: Wydawnictwo Lekarskie PZWL.
- Rydén, A., Sullivan, M., Torgerson, J. S., Karlsson, J., Lindroos, A., K., Taft, C. (2003). Severe obesity and personality: a comparative controlled study of personality traits. *International Journal of Obesity*, 27, 1534-1540.
- Scholtens, S., Brunekreef, B., Smit, H. A., Gast, G-C. M., Hoekstra, M. O., de Jongste, J. C., Postma, D. S., Gerritsen, J., Seidell, J. C., Wijga, A.H. (2008). Do differences in childhood diet explain the reduced overweight risk in breastfed children? *Obesity*, 16, 2498-2503.
- Shin, N. Y., Shin, M. S. (2008). Body dissatisfaction, self-esteem, and depression in obese Korean children. *The Journal of Pediatrics*, 152, 502-506.
- Tabak, I. (2007). Samoocena wyglądu i masy ciała, (Self-esteem of body appearance and mass). qtd. in A. Oblacińska, M. Jodkowska (red.), *Otyłość u polskich nastolatków. Epidemiologia, styl życia, samopoczucie*. (Obesity in Polish teenagers. Epidemiology, life style, and well being). (pp. 94-100). Warszawa: Instytut Matki i Dziecka.

- Tabak, I., (2006). Psychospołeczne skutki otyłości, (Psychosocial consequences of obesity). W: A. Oblacińska, I. Tabak (red.), *Jak pomóc otyłemu nastolatkowi? Rola pielęgniarki szkolnej i nauczyciela wychowania fizycznego we wspieraniu młodzieży z nadwagą i otyłością*, (How to help an obese teenager? The role of a school nurse and a physical education teacher in supporting obese and overweight youth). (s. 31-35). Warszawa: Instytut Matki i Dziecka.
- Tatoń, J., Czech, A., Bernas, M.(2007). Kliniczna definicja nadwagi i otyłości, (Clinical definitions of overweight and obesity). qtd. in *Otyłość. Zespół metaboliczny* (Obesity. Metabolic syndrome). (s. 26-41). Warszawa: Wydawnictwo Lekarskie PZWL.
- Tounian, P. (2008). Ocena kliniczna i biologiczna dziecka otyłego, (Clinical and biological assessment of obese child). qtd. in P. Tounian, (red.) *Otyłość u dzieci*, (Obesity in children). (s. 80-109). Warszawa: Wydawnictwo Lekarskie PZWL.
- Tounian, P., Chantreau H., (2008). Leczenie dziecka otyłego, (The treatment of an obese child). qtd. in P. Tounian, (red.) *Otyłość u dzieci*, (Obesity in children). (s. 136-154). Warszawa: Wydawnictwo Lekarskie PZWL.
- Weber, M., Ziółkowska B., (2009). Czynniki psychologiczne jako determinanty sposobu żywienia, (Psychological factors as determinants of a style of nourishment). qtd. in Gawędzki J., Roszkowski W. (red.) *Żywność człowieka a zdrowie publiczne*, (Human nourishment and public health). (s. 195-218). Warszawa: Wydawnictwo Naukowe PWN.
- World Health Organization (2006). Obesity and overweight. Source: <http://www.who.int/mediacentre/factsheets/fs311/en/> Access date: 10.02.2009.
- Young, K., M., Northern, J. J., Lister, K. M. Drummond, J. A., O'Brien, W. H. (2007). A meta-analysis of family-behavioral weight-loss treatments for children. *Clinical Psychology Review*, 27, 240-249.