International Journal of Obesity (2005) 29, S127–S129
 0307-0565/05 $30.00
www.nature.com/ijo

PAPER

The unhappy obese child

P Warschburger[1]*

[1]*University of Potsdam, Counselling Psychology, Postfach 60 15 53, 14415 Potsdam, Germany*

OBJECTIVE: One of the most painful aspects of obesity may be the emotional suffering it causes. The paper discusses the psychological and social effects of obesity.
METHOD: Current studies examining the psychosocial strains of obese children and adolescents are reported. The report especially focuses on stigmatization, mental health disorders, school performance and health-related quality of life.
DISCUSSION: Research is showing that obesity is associated with poorer psychosocial functioning—even compared with other chronic diseases. Future studies should further explicate the risk and protective factors for developing severe psychosocial strain.
International Journal of Obesity (2005) **29,** S127–S129. doi:10.1038/sj.ijo.0803097

Keywords: children and adolescents; psychosocial strain; quality of life; teasing

Introduction

Overweight and obesity receive great interest in psychological research. Special attention is given to the psychosocial strains that may result from weight status. Given the enormous visibility and negative evaluation of obesity (as a sign for lacking self-control, absent intention for self-restraint or 'offence' against aesthetical ideals), it was postulated that the obese people suffer from their weight situation—they become unhappy. Consequently, there is a wide range of psychosocial impairments and problems that have been investigated in association with obesity. In the following, the numerous studies according to the following categories is to be analysed: (1) social discrimination and teasing experience, (2) emotional problems (such as anxieties, depression or self-esteem), (3) school and functional restrictions as well as (4) effects on the quality of life.

Social discrimination and teasing experiences

Obesity is a highly visible disorder meaning that everybody can assess your weight status and comment on it. Obese persons are thought to be highly responsible for their condition. Scientific literature shows consistently that there are bias against and consequent discrimination of overweight people in three important areas of life: education, employment and health care.[1] These negative stereotypes of obese people emerge early in life. Already children at the age of 3–5 y rated chubby silhouettes as having fewer friends, doing less well at school and being less liked by their parents. The children's own weight only marginally influenced these stereotypical judgements.[2]

Given the high prevalence of obesity in our society, one could hypothesize that the degree of disapproval of obesity would have declined during the last decades. However, Latner and Stunkard[3] showed that the bias against obese children was even stronger in 2001 than it had been 40 y ago. Physical attributes, including weight, are common targets for teasing among children and adolescents. Neumark-Sztainer *et al*[4] interviewed overweight girls to explore their weight-related negative experience. Nearly all girls reported hurtful indirect and direct comments, being treated differently or even being rejected because of their overweight. Peers were most frequently involved in hurtful experience, but also other children, family members or strangers. Compared with average weight children, obese children reported to be teased at least three times more often.[5] Faith *et al*[6] could show that children who are the targets of weight criticism not only have negative attitudes toward sports but also report reduced physical activity levels. This relationship was influenced by the coping behaviour of the children.

These observations correspond with our own results exploring the role of teasing and coping behaviour in a group of 158 heavily overweight children and adolescents. As expected, the obese children and adolescents reported a significantly higher level of weight-related teasing compared with performance-related teasing. Yet, girls and boys did not differ from each other in the perceived frequency of teasing behaviour; but girls still perceived it to be more stressful. Unfamiliar children and classmates were reported to tease most commonly followed by classmates and brothers and

*Correspondence: Professor P Warschburger, University of Potsdam, Counselling Psychology, Postfach 60 15 53, 14415 Potsdam, Germany.
E-mail: warschb@rz.uni-potsdam.de

sisters. Coping with teasing the children and adolescents used above all avoidance, especially obese children and adolescents who experienced frequent weight-related teasing (Warschburger and Kröller, in preparation).

Keeping the negative social experience in mind, those children may have limited chances to develop social competences and supportive social relationships. There are conflicting results. Lower popularity of obese children and adolescents was found in several studies,[7,8] but others did not find such an effect.[9,10] In an examination of 88 adolescents seeking inpatient treatment due to their obesity, the parents rated that 50% of the boys and even 58.3% of the girls had significant problems with peers. Nearly all children yielded high scores in the prosocial behaviour (eg helping others; kind to others) scale. Above all emotional problems (like being anxious, feeling sad) were reported more often for girls and behaviour problems (like aggressiveness) for boys. In the following section, the emotional sequelae of obesity will be discussed more detailed.

Emotional problems

The clinical impression indicates that obese children and adolescents might experience significant restrictions in their emotional well-being. Psychological problems suggested to be associated with obesity included negative self-esteem, increased anxiety and depression levels. However, this clinical observation did not always coincide with the results of studies. The magnitude of association between weight status and the occurrence of psychological problems varies and suggests that obesity does not inevitably lead to psychosocial strain.[11,12]

A first access to this subject was made by a psychopathological approach: the frequency of psychiatric disorders was meant to be heightened with obese children and adolescents. Altogether, we may note that between 29 and 49% of the obese children had clinically relevant scores.[13,14] Social problems and internalizing behaviours were reported most frequently with the children. Braet *et al*[15] were able to demonstrate that studies with inpatients cause skewed results. Comparing obese in-patients, a normal-weight and an obese school group, they found no difference in the prevalence of behaviour problems between the obese children of the nonclinical sample and normal weight controls. Both obese groups scored lower in the physical and general self-esteem scales than the controls. High prevalence for psychiatric disorders was found in other studies as well. Britz *et al*,[16] for instance, reported on a clinical group of 47 extremely obese adolescents that 70% met the criteria for at least one DSM-IV diagnosis: 42.6% for mood disorder, 40.4% for anxiety disorder (especially social phobia). Both rates were clearly increased compared with a control group and with an obese population-based control group. The rate of anxiety disorders seems to be higher in obese children and adolescents in in-patient settings than in other chronic diseases.[17] In our own study twice as many obese children and adolescents (43.9%) compared to 27.8% of asthmatic children and adolescents showed anxiety levels in the clinical range. Social anxiety was even four times more prevalent in the obese compared to the asthmatic group. These results underline the observations of a large-scale clinical study, which detected significantly higher STAI-scores for obese children and adolescents in comparison to children with asthma and atopic dermatitis (Warschburger, 1998, unpublished data). Therefore, we can conclude that anxiety seems to play a crucial role in obesity.

It is to be mentioned that besides the fact that clinical groups are more strained, it can be differentiated within the clinical groups again. Thus, more and more studies indicate that the existence of a Binge Eating Disorder or of binging-behaviour is linked with higher psychosocial strain.[18–20]

School difficulties and functional impairments

Surprisingly, little research has been carried out on the social consequences of obesity for children and adolescents. In the majority, present results indicate intensified problems of children and adolescents in this field. Thus, Tershakovec *et al*[21] detected a twice as high rate of children who needed specific learning aids among obese children. Mo-suwan *et al*[22] only detected a negative correlation between the BMI and progress at school with adolescents, but not with primary schoolchildren. Difficulties at school seem to be a predictor for the development of obesity. At the moment, one can only speculate on the interpretation of such associations. Besides the association between higher emotional stress and the use of food as a coping strategy, a link between lower progress at school and the inability to control the own eating behaviour is also possible.

Functional restrictions owing to obesity are numerous. For instance, problems with breathing or joint difficulties play an important role.[23] Obese children report less enjoyment in sports.[6] In a semistructured interview, obese children and adolescents reported that they felt most bothered with sports activities such as running, athletics or sports lessons, daily activities like buying clothes or general walking as well as social activities like going to disco or eating out with friends, too.[24] Such functional restrictions in everyday life were examined more detailed in quality of life studies.

Quality of life

The reported studies examined psychosocial impairments mainly from a psychopathological point of view. These measures often focus on specific issues (like anxiety or depression), but they do not account two important aspects: firstly, the potential consequences of obesity on general health and well-being and secondly, the limitations of well-being that do not fulfil diagnostic criteria (subclinical range). As a multidimensional construct, health-related

quality of life aggregates the emotional and social well-being, physical health and the functional ability associated with a chronic disease.

The quality of life of obese children and adolescents has hardly been examined yet. However, first studies in this area have lately been submitted. Wake *et al*[25] reported in a large-scale study with 2863 schoolchildren significant restrictions in the areas physical functioning, bodily pain, general health, mental health and self-esteem, especially for boys. Significant setting effects appeared in the studies on quality of life as well. An own study referring to weight-related quality of life was able to confirm this observation. More than 500 children being in treatment due to their obesity and 800 schoolchildren took part in the study. As expected, within the group of schoolchildren scores differentiated between the different weight levels: Overweight children reported a lower quality of life compared to normal weight or underweight children and adolescents.[26] Furthermore, their quality of life was higher compared to the clinical group of overweight and obese children.

Summary and conclusions

To sum up one can say that obesity entails the risk of stronger psychosocial strain. The extent of these experienced problems fulfils the criteria of a psychiatric disorder for about 10–20% of the concerned children and adolescents. The quality of life research is certainly able to describe the psychosocial situation of obese children and adolescents far better than this psychopathological approach since restrictions in the health-related quality of life have appeared in many areas of everyday life. However, these results do not mean that every obese child or adolescent is automatically 'unhappy' or more strained. Special risk factors should be considered: More psychosocial burden could be found with clinical groups that have got treatment voluntarily, and those who suffer from binge eating or those being teased very often. Older adolescents seem to be stressed more heavily; sex differences depend on the problem behaviour investigated. The psychosocial situation of the obese children and adolescents has implications for the intervention. It is important to address such problems and support the children and adolescents to cope adequately with the situation.

References

1 Puhl R, Brownell KD. Bias, discrimination, and obesity. *Obes Res* 2001; **9**: 788–805.
2 Kraig KA, Keel PK. Weight-based stigmatization in children. *Int J Obes Relat Metab Disord* 2001; **25**: 1661–1666.
3 Latner JD, Stunkard A. Getting worse: the stigmatization of obese children. *Obes Res* 2003; **11**: 452–456.
4 Neumark-Sztainer D, Story M, Faibisch L. Perceived stigmatization among overweight African-American and Caucasian adolescent girls. *J Adolesc Health* 1998; **23**: 264–270.
5 Neumark-Sztainer D, Falkner N, Story M, Perry C, Hannan PJ, Mulert S. Weight-teasing among adolescents: correlations with weight status and disordered eating behaviors. *Int J Obes* 2002; **26**: 123–131.
6 Faith MS, Leone MA, Ayers TS, Heo M, Pietrobelli A. Weight criticism during physical activity, coping skills, and reported physical activity in children. *Pediatrics* 2002; **110**: e23.
7 Kimm SYS, Sweeney CG, Janosky JE, MacMillan JP. Self-concept measure and childhood obesity: a descriptive analysis. *J Dev Behav Pediatr* 1991; **12**: 19–24.
8 Manus HE, Killeen MR. Maintenance of self-esteem by obese children. *J Child Adolesc Psy Nurs* 1995; **8**: 17–27.
9 Israel AC, Ivanova MY. Global and dimensional self-esteem in preadolescent and early adolescent children who are overweight. Age and gender differences. *Int J Eat Disord* 2002; **31**: 424–429.
10 Phillips RG, Hill AJ. Fat, plain, but not friendless: self-esteem and peer acceptance of obese preadolescent girls. *Int J Obes Relat Metab Disord* 1998; **22**: 287–293.
11 French SA, Story M, Perry CL. Self-esteem and obesity in children and adolescents: a literature review. *Obes Res* 1995; **3**: 479–490.
12 Warschburger P. *Chronisch kranke Kinder und Jugendliche—Psychosoziale Belastungen und Bewältigungsanforderungen*. Hogrefe: Göttingen; 2000.
13 Epstein LH, Klein KR, Wisniewski L. Child and parent factors that influence psychological problems in obese children. *Int J Eat Disord* 1994; **15**: 151–157.
14 Epstein LH, Myers MD, Anderson K. The association of maternal psychopathology and family socioeconomic status with psychological problems in obese children. *Obes Res* 1996; **4**: 65–74.
15 Braet C, Mervielde I, Vandereycken W. Psychological aspects of childhood obesity: a controlled study in a clinical and non-clinical sample. *J Pediatr Psychol* 1997; **22**: 59–71.
16 Britz B, Siegfried W, Ziegler A, Lamertz C, Herpetz-Dahlmann BM, Remschmidt H, Wittchen HU, Hebebrand J. Rates of psychiatric disorders in a clinical study group of adolescents with extreme obesity and in obese adolescents ascertained via a population based study. *Int J Obes Relat Metab Disord* 2000; **24**: 1707–1714.
17 Vila G, Zipper E, Dabbas M, Bertrand C, Robert JJ, Ricour C, Mouren-Siméoni MC. Mental disorders in obese children. *Psychosom Med* 2004; **66**: 387–394.
18 Decaluwé V, Braet C, Fairburn CG. Binge eating in obese children and adolescents. *Int J Eat Disord* 2003; **33**: 78–84.
19 Isnard P, Michel G, Frelut ML, Vila G, Falissard B, Naja W, Navarro J, Mouren-Simeoni MC. Binge Eating and psychopathology in severely obese adolescents. *Int J Eat Disord* 2003; **34**: 235–243.
20 Warschburger P, Kröller K. Adipositas im Kindes- und Jugendalter: Was sind Risikofaktoren für die Entstehung einer Binge Eating Disorder? *Z Gesundheitspsychol* 2005; **13**: 69–78.
21 Tershakovec AM, Weller SC, Gallagher PR. Obesity, school performance and behavior of black, urban elementary school children. *Int J Obes Relat Metab Disord* 1994; **18**: 323–327.
22 Mo-suwan L, Lebel L, Puetpaiboon A, Junjana C. School performance and weight status of children and young adolescents in transitional society in Thailand. *Int J Obes Relat Metab Disord* 1999; **23**: 272–277.
23 Redline S, Tishler PV, Schluchter M, Aylor J, Clark K, Raham G. Risk factors for sleep-disordered breathing in children. *Am J Respir Crit Care Med* 1999; **159**: 1527–1532.
24 Warschburger P, Buchholz HAT, Petermann F. Entwicklung eines krankheitsspezifischen Interviews zur Erfassung der Lebensqualität adipöser Kinder und Jugendlicher. *Z Klin Psychol Psychiatr Psychother* 2001; **49**: 247–261.
25 Wake M, Salmon L, Waters E, Wright M, Hesketh K. Parent-reported health status of overweight and obese Australian primary school children: a cross-sectionalpopulation survey. *Int J Obes Relat Metab Disord* 2002; **26**: 717–724.
26 Warschburger P, Fromme C, Petermann F. Gewichtsbezogene Lebensqualität bei Schulkindern: Validität des GW-LQ-KJ. *Z Gesundheitspsychol* 2004; **12**: 159–166.