EDITORIAL

The Paradoxes of Body Weight

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Accompanying the article "Perceived or True Obesity: Which Causes More Suffering in Adolescents?" by Bärbel-Maria Kurth and Ute Ellert in this issue of *Deutsches Ärzteblatt International*

The article from the Robert Koch Institute published by *Deutsches Ärzteblatt International* on the following pages contains some remarkable results. However, it also illustrates the great complexity of the topic of weight among young people. One of the most important findings obtained by Bärbel-Maria Kurth and Ute Ellert is the dissatisfaction felt by many 11- to 17-year-olds with their body weight although they do not in fact weigh too much according to the currently applicable medical rules. Almost half of normal-weight girls and about a quarter of normal-weight boys consider themselves overweight. This reveals an enormous discrepancy between the medical understanding of appropriate weight and the self perception of adolescents.

Kurth and Ellert justifiably call into question the use of the BMI percentiles applied to differentiate the weight categories: these percentiles are based on older data sets. It seems trivial to mention the fact that body weight varies between individuals. In today's obesity promoting environmental conditions there must be a considerable number of persons who exceed a specific threshold value established in past surveys. The quantitative differences are the product of genetic inheritance – about 50% to 70% of BMI variance are genetically determined – and environmental factors (1). Our present day environment simultaneously encourages an excessively high energy intake and physical inactivity. However, it appears at least unlikely that a different standard for overweight would have resulted in completely different findings than those obtained by Kurth and Ellert.

The social conception of what constitutes excessive weight, however, is anyway based only to a limited extent on medically defined threshold values of overweight or obesity; adolescents also give little consideration to the medical risks associated with obesity. It would therefore be interesting to ascertain whether the girls and boys who think they are overweight have a still normal but higher BMI than those who are happy with their weight. What counts most for adolescents are their esthetic perceptions – in this context, "too fat" actually means "ugly." As the results of the German Health Interview and Examination Survey for Children and Adolescents (KiGGS) show, young people are under intense pressure to be slim. It is uncertain whether this perceived pressure results in a lower quality of life and/or whether adolescents with a low quality of life also more often feel themselves to be overweight.

In a society in which obese individuals are subjected to considerable stigmatization and in which outward appearance plays such an important role, it is nothing

short of astonishing that no less than 40.4% of 11- to 17-year-olds are of the opinion that they are "just the right weight." Equally astonishing is the fact that adolescents who actually are obese report having only a slightly reduced quality of life. In the words of Kurth and Ellert, three out of five girls and three out of ten boys with obesity have an awareness of their overweight problem. Awareness of having a problem is regarded as a precondition for changes in behavior and it is always particularly welcome to us physicians whenever health risks are involved. However, patients seem scarcely able to effectively implement our advice to lose weight over the long term: one year after starting a weight reduction program, an adult's body weight – assuming he/she has not already dropped out – is on average 7 kg lower and after two years only 3 kg lower (2); after five years, hardly any effect is any longer apparent. As regards adolescents and adults, it is hotly debated whether weight reduction programs may further exacerbate the problem or even increase mortality – (3, 4, 5–9). Especially among adolescents, there is evidence that excess weight gain and/or a deterioration in eating behavior follow short-term successful weight reductions.

Pharmacological treatments for obesity generally lead to weight reductions that are about 3 to 5 kg higher than when taking placebo (2). However, this is only the case for as long as the substance continues to be taken. The currently accepted "slimming pills," however, provide no recognizable solution to the problem of obesity; this applies especially to adolescents. Only surgical interventions produce significant and lasting weight reductions (2). These procedures, however, are reserved for persons suffering from extreme obesity ($= 40 \text{ kg/m}^2$) or with Grade II obesity ($= 35 \text{ kg/m}^2$) and related secondary disorders; surgery is rarely performed in adolescents. We can only hope that in future we shall be able to help severely overweight persons of every age group more effectively.

Against this background, the interesting finding of Kurth and Ellert can also be seen as going against the grain from the perspective of child and adolescent psychiatry: how do adolescents benefit from their problem awareness at the present time? This insight could reduce their quality of life. Adolescents who are constantly attempting to reduce their weight also have other problems: they tend to have an increased incidence of depression, suicidal ideation, as well as alcohol and drug consumption (5). Sometimes, not only equating slimness with beauty appears exaggerated, but also equating normal weight with health and overweight

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with illness. Considered from this viewpoint, one can actually only be happy for overweight children and adolescents if they are not also suffering psychologically from their overweight.

Conflict of interest statement

The author declares that no conflict of interest exists as defined by the guidelines of the International Committee of Medical Journal Editors.

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