

PREVALENCE OF BODY IMAGE DISSATISFACTION AND ASSOCIATED FACTORS IN SCHOLASTIC ADOLESCENTS

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Currently, there is an excessive concern about worshipping beauty, muscle building or a lean body, especially in the Western society (Stenzel, 2006). The media often associates these characteristics with social and sexual success. The mass media spread messages, within the artistic and sports context, highlighting that there is no room in our society for those individuals who do not fit these aesthetic standards (Conti, Toral & Peres, 2008). Accordingly, adolescents, who are going through a phase of biological and emotional changes, are extremely vulnerable to the pressures of society with regard to their body image (McCabe & Ricciardelli, 2003).

Body image is built in the individuals' minds, consisting in the perception of their own body based on their experiences and feelings (Schilder, 1999). It is influenced by historic, cultural, social, individual, and biologic factors that change throughout time (Cash, 2004).

As a result, this study was developed aimed at investigating the perception of body image among students from Gravataí, state of Rio Grande do Sul, Brazil and its association with demographic, psychosocial, lifestyle, nutritional status and sexual maturity.

Cross-sectional study was conducted with a target population of 2,282 students enrolled in the 7th grade of city public schools in March 2005. How unaware of the outcome prevalence in our country, for the calculation of sample size, we considered a frequency of 50% for dissatisfaction with body image due to be the percentage that produces the largest sample size. In addition, we accepted a maximum error of $\pm 3\%$, and a significance level of 0.05. With this, we estimated a minimum sample of 728 students. Applying a design effect of

1.5, the sample increased to 1,092 students, with a 20% additional amount to cover for possible losses. The losses amounted to 14.3%, thus we evaluated 1,170 students.

Data collection was performed in the classrooms, using three questionnaires and two collective record cards: anthropometric data sheet and Tanner's sexual maturity rating form.

Questions related to body image were collected with the aid of the Body Shape Questionnaire - BSQ, translated into Portuguese (Cordás & Castilho, 1994) and validated for adolescents (Conti, Cordás & Latorre, 2009).

The associations of interest were tested with the aid of STATA 6.0, using the bivariate Cox regression modified for cross-sectional studies and the outcome was categorized as satisfied or dissatisfied with body image.

This study was approved by the Research Ethics Committee of ULBRA under the protocol number 375H/2004.

In relation to body image, we found that 76.4% of adolescents were not worried about their body image, 14.5% were slightly worried, 6.7% were moderately worried, and 2.4% were severely concerned about it.

Regarding the student's characteristics, the average age was 14 years (SD = 1.13), ranging from 12 to 18 years, 52.5% were girls, 52.5% self-reported being white, 19.2% belonged to classes D and E, and 20.6% were overweight/obese. We found statistically significant association between poor body image satisfaction and: female gender (PR: 4.61 95%CI: 3.42-6.22); overweight/obesity (PR: 5.80 95%CI: 3.39-9.92); lifetime use of tobacco (PR: 1.50 95%CI: 1.19-1.90); feelings of prejudice (PR: 2.1 95%CI: 1.71-2.57), loneliness (PR: 2.42 95%CI: 1.98-2.95) and sadness (PR: 1.97 95%CI: 1.61-2.43); sleep difficulty (PR: 1.74 95%CI: 1.40-2.16); suicidal ideation (PR: 2.23 95%CI: 1.78-2.78), and suicide planning (PR: 1.80 95%CI: 1.34-2.43).

We found that 23.6% of the students were dissatisfied with their body image. This might be understood as a natural phenomenon that occurs in adolescence, since the individuals are not familiar with their own bodies. Among these students, only 9.1% were moderately and severely concerned.

Dissatisfaction with body image affects both sexes, predominantly women, (Conti, Gambardella & Frutoso, 2005) but the concern with the body is

also present among men (Kakeshita & Almeida, 2006). In Gravataí, this rate was almost five times higher among girls than boys.

In terms of weight, there was a high prevalence of overweight and obese adolescents. And when we analyzed the perception of body image, we found that well-nourished girls are twice as dissatisfied with their bodies as those who are malnourished or at nutritional risk. It may be due to sociocultural peculiarities, responsible for giving more or less importance to a beauty standard related to a lean body (Ramalho et al., 2007). The pressure from the media and the social influences of family and friends can decrease female adolescents' self-esteem. Thus, those who do not fit this beauty standard are doomed to live with personal dissatisfaction (Conti et al., 2005).

The present study also identified that among adolescents who are overweight or obese, 68.3% of the girls are dissatisfied and 73.7% of the boys are satisfied. The literature reports that girls tend to overestimate their weight, while boys underestimate it, (Kakeshita et al., 2006) that is, for boys, overweight and obesity are signs of strength (Conti et al., 2005).

Regarding lifestyle, we did not find association with beginning of sexual life and lifetime use of alcohol and drugs. Probably, there was no association with drug use due to the small number of students who used drugs.

In Gravataí, the adolescents who used tobacco showed to be more dissatisfied with their body image. Fernandes (2007), in a study with students in Belo Horizonte, MG, Brazil, found that smokers were about twice as likely to want to lose weight as non-smokers.

Regarding the psychosocial factors studied, we did not identify association with: number of friends, feeling of being understood by parents/guardians, and the fact that parents/guardians knew where the adolescents were during their free time. However, feelings of discrimination, loneliness, and sadness; difficulty in sleeping; suicidal ideation and planning showed a strong association with body image dissatisfaction. The adolescents who do not feel comfortable with their body image and have low self-esteem are more susceptible to risky situations such as those studied in the present study (Brausch & Gutierrez, 2009).

A more detailed analysis showed that the girls who are the most dissatisfied are the ones who miss classes, engage in fights with peers and are

abused. It is possible that missing classes and involvement in these situations are related to low self-esteem (Pinheiro & Giugliani, 2006) and feeling discriminated.

The present study revealed that there are several factors associated with body dissatisfaction such as sex, nutritional status, tobacco use, psychosocial characteristics, and among these, feelings of discrimination, loneliness, and sadness, difficulty in sleeping, suicidal ideation and suicide planning.

As described above, currently, our society suggests beauty stereotypes, relating them to success, power, and sexual performance, neglecting values that are not related to appearance (Ramalho et al., 2007). For adolescents, the influence of media and sociocultural factors are among the causes of the distortion of their body image perception (Conti et al., 2008). In this context, the dissatisfaction with body image of adolescents, especially among girls, lead them to a situation of vulnerability regarding tobacco use, decreasing their self-esteem, and being associated with feelings of sadness and, in turn, increasing the risk of depression, suicidal ideation and planning.

It is advisable that educators, health professionals and members of the family are informed about the importance of reinforcing the self-esteem of youths, pointing out their positive qualities, encouraging physical activities, healthy habits and social living. By doing so, they will encourage them to have greater satisfaction with their body image and a better quality of life.

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