

Concern and dissatisfaction about body image and body weight among the urban adolescent girls

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■ **ABSTRACT** : An enormous interest in the topic of body image perception, distortion, and satisfaction has developed during the past 10-15 years. Dissatisfaction with one's body image is often seen as a correlate of eating disorders. In this study the focus group was the adolescents, because many eating disorders appear to start soon after puberty and persist through later years. Present study was conducted among 90 adolescent college going girls of Bhubaneswar city. General dissatisfaction regarding body weight was observed among the girls and around 83 per cent of the respondents were reported to adopt various dieting practises to reduce body weight

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Body image is the dynamic perception of one's body—how it looks, feels, and moves. It is shaped by perception, emotions, physical sensations, and is not static, but can change in relation to mood, physical experience, and environment. Because adolescents experience significant physical changes in their bodies during puberty, they are likely to experience highly dynamic perceptions of body image. Body image is influenced strongly by self-esteem and self-evaluation, more so than by external evaluation by others. It can, however, be powerfully influenced and affected by cultural messages and societal standards of appearance and attractiveness. Given the overwhelming prevalence of thin and lean female images and strong and lean male images common to all westernized societies, body image concerns have become widespread among adolescents.

Consciousness over body image and losing weight has become very common among adolescent girls. Modernized societies prefer thinness and socially discriminate against obese individuals. Incidence of obesity is also on the rise as a result of excessive consumption of processed foods, high fat diets, and less exercise (Neumark-Sztainer *et al.*, 2008 and 1997; Mishra and Mukhopadhyay, 2011 and Mueller *et al.*, 1995). Dietary pattern of a population group is generally governed by its socio-economic and cultural characteristics along with their exposure to outside world (Kant, 2004). Weight related conditions like disordered eating behaviours adversely affect the growth process, psychosocial development, and physical health of young people (Bachrach *et al.*, 1990 and Singh, 2014). Thus, unhealthy eating habits among adolescents pose serious

public health concerns (Journal of Adolescent Health, 2003). This appears to be a universal issue.

Dissatisfaction over body image followed by unhealthy eating habits and attitudes may be a risk factor for the development of eating disorders such as anorexia nervosa and bulimia nervosa (French and Jeffery, 1994). Both these disorders are common among adolescents, who often remain confused regarding what constitutes overweight, normal weight, and underweight. Body image dissatisfaction and a desire to be thinner are two most important motivating factors for dieting among majority of teenagers (Wertheim *et al.*, 1997).

Driven by the feeling of dissatisfaction over body image, adolescents practice dietary modifications and/or dieting, which usually refer to changes in the food preferences and amount of consumption and also can help increase or decrease body fat (Wertheim *et al.*, 1997). Dieting is a poorly defined behaviour having various meanings to patients and professionals. Overall, it stands for an intentional, often temporary, change in eating to achieve weight loss (Neumark-Sztainer *et al.*, 1997 and Schur *et al.*, 2000). Chronic dieting (more than 10 diets in a year), fad dieting, fasting, and skipping meals are also considered as unhealthy strategies (Grigg *et al.*, 1996; Stice and Whitenton, 2002 and Story *et al.*, 1991). Many authors have described these behaviours as disordered eating if the behaviours are not sufficiently severe to warrant a diagnosis of an eating disorder (Croll *et al.*, 2002).

A study by Chugh and Puri (2001) among teenage girls of Delhi, India, have reported that approximately fifty per cent of the girls presently are on a diet which could easily be called as “starvation diet,” leading to various nutrient deficiencies, hormonal imbalance, and sometimes amenorrhoea (cessation of menstruation). Another study by Sadana *et al.* (1997) showed that 73.3 and 78.4 per cent of urban adolescent girls consumed fast foods between meals, hence, reducing appetite for regular meals.

Adolescents and body image :

Adolescence and puberty bring a variety of physical, social and emotional changes. Furthermore, there is evidence that the body changes that occur during puberty for females can be more of a struggle than for boys (Davidson and McCabe, 2006). Along with the physical, emotional and social changes adolescents’ experience,

they also undergo changes in relationships. Adolescence can be a confusing time, as peer and family relationships contribute to how teens perceive themselves. During adolescence, there is a possibility of heightened self-awareness and concerns of how an adolescent girl’s peers portray her (Davison and McCabe, 2006). Also, Feingold and Mazzella (Davidson and McCabe, 2006) stated that “concerns about the body have been documented as widespread among female populations, with adolescence considered an especially vulnerable period for disturbances in female body image”.

Physical changes also can be difficult because “adolescents receive the most criticism regarding their physical appearance and the most efforts to change their appearance” (Croll, 2005). “Socialization encourages males to strive to become stronger and more developed, while females are to make their bodies more beautiful” (Croll, 2005). Social Psychology has shown the impact of an adolescent girl’s appearance on how others perceive and interact with her, with unattractive individuals receiving negative evaluations from their peers and reduced social contact from their peers as well (Davidson and McCabe, 2006).

Adolescent girls in particular, because of their excessive concern with body weight or obsession with thinness, are reported with moderate level of disordered eating behaviours (Madanat *et al.*, 2011; Tiggemann and Dyer, 1995). Disordered eating behaviours refer to many disturbed eating patterns which affect the nutritional status of adolescent girls (Tsai *et al.*, 2011; Dittmar and Howard, 2004 and Fox *et al.*, 1994) because they become preoccupied with and sensitive to their changing body size, shape, and physical appearance. This growing concern has led many of them to adopt dietary modifications that potentially throw serious threat on psychosocial development, nutritional status, and development of eating disorder.

In India, adolescents (from 10 to 19 years) accounted for 22.8 per cent of the population (Working group report on Adolescents-of Planning Commission, 2013) and they face a series of serious nutritional challenges that are affecting not only their growth and development but also their livelihood as adults. On the other hand, presently Indians are experiencing nutritional and lifestyle transition due to globalisation. Many of the adolescent girls modify their normal dietary pattern and follow disturbed eating behaviours (Mishra and

Mukhopadhyay, 2011) and these also affect their nutritional status (Chugh and Puri, 2001). Very few studies have been done in India considering eating behaviour and its impact on nutritional status of adolescent girls.

Many studies have found that adolescent girls are interested in losing weight and more than 40 per cent have even tried to lose weight due to concern over their body weight (Wardle and Marsland, 1990; Kann *et al.*, 1996). Yannakoulia *et al.* (2004) observed that eating behaviours like skipping meals, snacking, eating away from home, consumption of fast food, and following alternative dietary patterns (in terms of dieting) are the common eating behaviours of Greek adolescents. This type of eating habits may lead to nutritional deficiency during adolescence (Gleason and Sutor, 2001) which may have long term consequences such as delayed sexual maturation and lower final adult height.

It has been said that more than half of teenage girls are or think they should be on diets, especially when they go through puberty (Women's Health, 2007). Many young females experience weight gain as puberty begins. This leads many young women to desire to lose the weight in an effort to conform to societal expectations (Women's Health, 2007).

Women are more likely than men to describe themselves as fat, to weigh themselves often, and to diet frequently. They are also generally more dissatisfied with their physical appearance than are men (Cooper and Fairburn, 1983; Furnham and Calnan, 1998). Women are more likely to judge themselves overweight when by objective standards they are not.

■ RESEARCH METHODS

Objectives :

The objectives of the present study are :

- to assess the weight perceptions, and body composition of normal weight, overweight adolescent girls
- to identify perceived sources of pressure to be a certain weight among these groups.
- to identify weight loss behaviours ever used to consciously lose or control weight among groups.
- to identify the most prevalent weight control products and commercial diets used by the adolescent girls.

Research design :

The study was conducted in the city of Bhubaneswar, Odisha. 90 numbers of Adolescent girls aged 16-18 years were selected randomly as the sample for the study. Age of the subject were considered to the nearest whole number.

Data collection :

A structured personal interview schedule and questionnaire with guidelines will be developed in keeping view the objectives of the study.

The anthropometric measurements :

Height of the respondents will be measured while the subject is standing without foot wear, to the nearest 0.1 cm, using a portable Anthropometry rod. Weight will be measured with the subject standing and wearing light clothes to the nearest 0.5kg using a portable electronic weight machine. Body Mass Index (BMI) is a widely used parameter and it is moderately associated with height among adolescents. The formula $\text{weight (kg)}/\text{height (m}^2\text{)}$ is to be used to calculate Body Mass Index (BMI) and international cut-off for BMI will be used for classification of subjects as malnourished/ malnutrition (BMI below 18.0 kg/m^2), normal $18 < \text{BMI} < 25 \text{ kg/m}^2$, over weight ($25 < \text{BMI} < 30 \text{ kg/m}^2$) and obesity ($\text{BMI} > 30 \text{ kg/m}^2$) (WHO, 1995). Height and weight will be recorded to the nearest 0.1 cm and 0.5 kg, respectively.

■ RESEARCH FINDINGS AND DISCUSSION

The results obtained by the present investigation is presented in Table 1 to 3.

Overall, 100 female participants completed the study. However, 10 were excluded for the following reasons: age greater than 18 years ($n=4$), BMI less than 18.5 kg/m^2 ($n=6$). BMI less than 18.5 kg/m^2 is classified by the WHO as an underweight condition. The final sample size was 90. Mean age of participants was 17.1 years ($SD = 0.66$).

It was found that young females perceive healthy and attractive weights to be lower than current weight, and that media influence contributes pressure to be a certain weight. Klesges *et al.* (1987) reported that college females are more likely than male counterparts to engage in healthy and unhealthy physical activity and food restriction behaviours and place higher importance on

appearance benefits of maintaining an ideal body weight. In this study, regarding body composition, the mean height of the respondents was 1.6 meter (SD = 0.043), mean body weight was found 53.7 kg (SD = 3) and the mean BMI was 21 (SD = 2.049). Significant differences were found among the respondents for perceived healthy weight and attractive weight compared to current weight. Mean perceived healthy weight (50 kg, SD = 2.33) for the respondent was 7 per cent lower than current weight. Mean perceived attractive weight (48.5 kg, SD = 2.61) followed the same trend, and was 9.6 per cent lower than current weight. All groups perceived natural weight to be greater than current weight, meaning if no attempt was made to control weight then weight would be 2 per cent to 6 per cent greater than current weight. The mean perceived natural weight was 60 kg, SD = 3.1.

Concerning question two, 83 per cent of participants reported ever consciously trying to lose or control their

weight. Mean age when dieting was initiated was 15.7 years. Seventy eight per cent (F=70) of participants reported pressure to be a certain weight; the primary sources were self (55.7%), media (15.71%), and friends (22.85%) and family (5.71%).

Findings from this study support the general belief that dieting by college females is a common weight management strategy, irrespective of weight status. Abraham and O'Dea (2001) reported that females as young as 12 years of age had tried to lose weight, including 44 per cent who dieted using food restriction and 78 per cent who exercised to lose weight. Referring to the question of whether the respondents adopted any weight loss behaviour, 8 dieting behaviours were assessed to determine what type of method/ methods were adopted by the participants. The five most common behaviours used by all participants were consciously eat less than you want (61%), eating or drinking low fat or

Variable	Weight classification mean	SD
Body composition		
current height (in meter)	1.6	±0.043
current weight (in kg)	53.7	±3
BMI (weight (kg)/ height (m ²))	21	±2.049
Weight perceptions		
Perceived healthy weight (in kg)	50	±2.333
Perceived attractive weight (in kg)	48.5	±2.61
Perceived natural weight (in kg)	60	±3.1

Variables	Frequency "yes" response	
	F	%
Self	39	55.7
Media	11	15.71
Friends	16	22.85
Family	4	5.71

Variable	Frequency "yes" response (%)
Consciously eat less than you want	61
Count grams of fat	8
Count net carbohydrates	7
Count calories	18
Eat or drink low fat or fat free versions of foods/drinks	39
Eat or drink sugar free versions of foods/drinks	13
Exercise	26
Skip breakfast / lunch /dinner	16

fat free versions of foods/drinks (39%), exercising (26%), skip breakfast/lunch/dinner (16%) and eating or drinking sugar free versions of foods/ drinks (13%). The other behaviours assessed, which had low frequency of use reported included, count calories (10%), count grams of fat in the food (8%), count net carbohydrate content of the food (7%).

Conclusion :

These findings suggest that :

- Health education and intervention strategies for adolescent girls that encourage appropriate weight control practices and dispel unhealthy and ineffective weight loss myths (skipping breakfast, inductive vomiting after taking food are effective weight control methods) should be promote in curriculum.
- Adolescent girls, regardless of weight status, would benefit from open discussions with health educators to identify healthy and unhealthy dieting practices they use. Throughout these discussions, girls could identify healthy dieting practices that could be expanded upon to promote a healthy weight status and recognize the health consequences associated with using unhealthy dieting practices. Adolescents must be made realise the difference between “ideal body” and “this ideal body”.
- Furthermore, collaboration with health and physical education teachers in schools/colleges to develop clubs for regular exercise and fitness programme for students could be very much beneficial. The activities should include instruction on healthy eating, different types of exercise (swimming, running, team and individual sports, etc.), and being educated on a healthy lifestyle that will help young people maintain fitness in line with what is a proper weight for them. This might reduce the frequency of dangerous behaviours some young people engage in seeking an unrealistic and unhealthy “ideal.”

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