

Original Research Article

How conscious are adolescent boys about their body image?

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ABSTRACT

Background: Perceived body image is an important determinant of nutritional status of adolescent boys. Body image misconception during adolescence is mostly unexplored field in Indian boys. The objective of this study is to assess the perceived body image and degree of dissatisfaction about it, among adolescent boys of different socioeconomic class.

Methods: This multistage observational study was conducted on 200 adolescent boys of Gwalior in two different schools. Anthropometric measurements were taken. Information about socioeconomic status and perceived body image, desired body size and actual body size was collected with predesigned questionnaire.

Results: Out of 200 study subjects 155 had normal BMI and 36 had high BMI, remaining were thin. Majority of adolescents (90%) desires to be neither thin nor fat and 10% (20) studied adolescent boys desires thin body. Lesser number of study subjects (63, 31.5%) adolescent boys were satisfied with their perceived body image. Satisfaction was more (34.65%) in middle adolescent age group as compared to late adolescent (28.28%). Almost two third (137, 68.6%) adolescent boys were dissatisfied with their perceived body image. Majority of adolescent boys (160, 80%) correctly estimated their body image, only 03% adolescent boys overestimated their body image whereas 17% adolescent boys underestimated their body image.

Conclusions: Majority of adolescent boys are dissatisfied with their body image and almost all of them desire to have perfect body size.

Keywords: Adolescent, Body image, Desired body image, Perceived body image

INTRODUCTION

Adolescence is a period of life when a child enters into adulthood, this transition phase is very sensitive period in terms of emotional as well as physical changes. The never ending sequence of physical and psychological adaptations of adolescents has a remarkable influence on the social and behavioral aspects of their lives. Adolescence is a period of increased awareness of bodily cues and self reflection, including evaluation of body and appearance.¹⁻³ Body image is viewed as central to many aspects of human functioning, including emotions, thoughts, behaviors and relationships. Therefore, the

effect of body image on quality of life is potentially extensive.

There are two aspects of body image, Perceptual and attitudinal. Perceptual body image relates to over or underestimation of body size whereas attitudinal involves dissatisfaction with body image or size.⁴⁻⁶

Lifestyle of adolescents from upper socioeconomic status is also quite different from that of the middle class and lower class adolescents.⁷ Self esteem is positively correlated with self assessment and overall assessment of body image perceptions.⁸

It is unfortunate that body misconception and body dissatisfaction, two very important potential causative factors of bad nutritional status of adolescent boys have not been adequately investigated in India. Few studies have been conducted on body dissatisfaction and its consequences in adolescent boys belonging to Indian society.⁹⁻¹¹ The present study on adolescent boys of Gwalior was conducted to assess the degree of dissatisfaction and misconception of their body.

METHODS

The observational study was conducted in Gwalior, Madhya Pradesh. A total of 200 adolescent boys of age group 14-18 years were selected for study. These adolescent boys were selected from two higher secondary schools of Gwalior. In these schools, students come from different areas of Gwalior and periphery and they are from different socioeconomic class. The demographic data for each of the selected boy included information on age, number of family members, birth order, family income, education and occupation of parents. Information on perceived and desired body image was collected with the help of predesigned questionnaire. Actual body sizes were determined by measuring height and weight.

Measures

“Perceived body image” was measured by the following questions. “what do you think about body image? with four responses “too fat”, “about right”, “perfect”, and “too thin”. “Desired body image” was asked by question: “what is your desired body image? and the responses were “too thin”, “thin”, “neither too thin nor fat”, “fatty”.

Anthropometry measurements

Height and weight were measured using stadiometer and weighing machine. Body mass index (BMI) was subsequently computed by formula Weight (kg)/height (mtr)² as per WHO standards.

The anthropometric nutritional status was assessed by BMI for age. The subjects with BMI below 5th percentile were categorized as thin and BMI above 85th percentile as overweight and above 95th percentile as obese.

Statistical analysis

The data were analysed using Statistical Package of SPSS, version 11. Statistical measures such as frequency, percentage, mean, standard deviation, and Chi-square test were implicated to describe and analysis of data.

RESULTS

Out of 200 study subjects 155 had normal BMI and 36 had high BMI, remaining were thin. Only 10% (20) studied adolescent boys desire thin body. The difference in desired and perceived body image was significant (p=0.032). Body satisfaction was measured by difference between perceived body image and desired body image.

If perceived and desired body image were same, it is categorized as satisfied. Only 31.5% (63) adolescent boys were satisfied with their perceived body image.

Satisfaction was more (34.65%) in middle adolescent age group as compare to late adolescent (28.28%). 68.5% (137) adolescent boys were dissatisfied with their perceived body image.

Correlation of body image satisfaction to socioeconomic class was insignificant (p=0.12). Assessment of discrepancy of body image shows that 80% (160) adolescent boys correctly estimated their body image, only 03% adolescent boys overestimated their body image whereas 17 % adolescent boys underestimated it.

Out of 200 adolescents maximum number comes from 16 year age group followed by 17 and 18 years. Least number were seen in 14 year age group (Table 1).

Table 1: Age wise distribution of subjects.

| Age (years) | No. of students | Percentage |
|-------------|-----------------|------------|
| 14 | 15 | 7.5 |
| 15 | 31 | 15.5 |
| 16 | 56 | 28 |
| 17 | 51 | 25.5 |
| 18 | 47 | 23.5 |
| Total | 200 | 100 |

Table 2: Perceived body image and desired body image.

| Desired body image | Perceived body image | | | | | | | | Total |
|--------------------------|----------------------|-------|-------------|-------|---------|-------|----------|-------|-------|
| | Too fat | | About right | | Perfect | | Too thin | | |
| | No. | % | No. | % | No. | % | No. | % | |
| Thin | 01 | 2.38 | 06 | 10.90 | 11 | 18.03 | 02 | 4.65 | 20 |
| Neither too thin nor fat | 41 | 97.61 | 49 | 89.09 | 49 | 81.96 | 41 | 95.34 | 180 |
| Too fat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 42 | 100 | 55 | 100 | 60 | 100 | 43 | 100 | 200 |

Chi square=8.76, DF=3, p value=0.032 (significant)

Table 3: Boys satisfied with their body image in different socioeconomic class.

| Age group (years) | Kuppuswamy scale | | | | | | Total |
|----------------------|------------------|-------|--------------|-------|---------------------|-------|----------------|
| | Upper | | Upper middle | | Middle lower middle | | |
| | No. | % | No. | % | No. | % | |
| 14-16 | 6/18 | 33.33 | 22/71 | 30.98 | 7/12 | 58.83 | 35/101, 34.65% |
| 17-18 | 4/15 | 26.66 | 23/82 | 28.04 | 1/2 | 50.00 | 28/99, 28.28% |
| Total | 10/33 | 30.30 | 45/153 | 29.41 | 8/14 | 57.14 | 63/200, 31.5% |

Chi square=5.4, DF=5, p value=0.12 (insignificant)

Table 4: Consciousness and attitude towards actual body size.

| | Number of boys (n=200) | Percentage | Chi-square, p value |
|--------------------------------|------------------------|------------|----------------------------------|
| Actual body size* | | | |
| Low BMI group | 09 | 4.5 | Chi sq. 101 DF-2 p-0.001 |
| Normal BMI group | 155 | 77.5 | |
| High BMI group | 36 | 18 | |
| Perceived body weight | | | |
| Thin | 43 | 21.5 | Chi sq. 52.08 DF-2 p-0.01 |
| Normal | 115 | 57.5 | |
| Overweight | 42 | 21 | |
| Discrepancy in weight** | | | |
| Underestimated | 34 | 17 | Chi sq. 201 DF-2 p-0.001 |
| Correct | 160 | 80 | |
| Overestimated | 06 | 03 | |
| Satisfaction | | | |
| Satisfied | 63 | 31.5 | Chi sq. 27.38 DF-1 P-0.001 |
| Dissatisfied | 137 | 68.5 | |

* Low BMI group=<5th percentile. Normal BMI group=5th 85th percentile, High BMI group=>85th percentile, ** Discrepancy in weight is assessed by comparison between actual and perceived body size.

Too thin and thin responses in desired body image were merged as thin. No one in the study subjects wants to become fatty. There are 18.03% boys who have perfect body yet they desire to become thin. 4.65% boys are too thin and they want to remain as thin.

Overall there are 10% adolescent study boys want to become thin. There was a significant difference among desired and perceived body image (p=0.032) (Table 2).

More than half (57.14%) of adolescent boys were satisfied with their body image from middle lower middle socioeconomic class as compared to upper class (30.30%), and (29.41%) upper middleclass. The difference in satisfaction among various socioeconomic class is not significant (p=0.12) (Table 3).

Majority of adolescent boys (77.5%) have normal BMI as compared to 4.5% with low BMI and 18% with high BMI. 77.5% adolescent boys have normal BMI but only 57.5% perceived normal body image. 80% adolescent boys correctly perceived their body image, 17% underestimated and 3% overestimated. 31.5% adolescent boys were satisfied whereas 68.5% were dissatisfied (Table 4).

DISCUSSION

In India very few studies have been done on body image perception among adolescent boys. In India there is wide variation among various socioeconomic, ethnic and cultural groups. The present study includes subjects from different socioeconomic classes and shows if there is any correlation of the same with body image.

In present study, 21.5% adolescent boys perceived themselves as thin and only 10% of total study adolescent boys desired to be thin, which is lesser than that reported by Pallan et al, (18.7%) and Prabhu S et al, (17.2%).^{10,11}

In present study, 21% adolescent boys perceived themselves as too fat and no one desired to be fattest, in contrast to Pallan et al and Prabhu S et al, where 4.8% adolescent boys desired to be fattest.^{10,11} These differences may be due to social, cultural, ethnical and study time aspects. In Pallan et al study there might be some type of fashion of being thin rather than being normal.¹¹

In present study more than half study group (115) perceived themselves as about right and perfect and out

of them 8.5% (17) adolescent boys desired to be thin, majority desired to be neither too thin nor fat.

Majority of study adolescent boys (137,68.5%) were dissatisfied with their body image. Dissatisfaction was more (131,65.5%) in upper and upper middle class adolescent boys, and in late adolescent boys group (71,35.5%) in contrast to middle adolescent boys group (66,33%) but the difference was not significant therefore it can be concluded that social class has little effect on body image satisfaction.

On observing actual BMI, it is found that majority of adolescent boys (77.5%) have normal BMI as compared to 4.5% with low BMI and 18% with high BMI. In the study 155 adolescent boys have normal BMI but only 115 perceived normal body image therefore it can be concluded that almost 20% of adolescents are not perceiving their body image correctly. 80% adolescent boys correctly perceived their body image, 17% underestimated and 3% overestimated. On comparing perceived and desired body image 31.5% adolescent boys were satisfied whereas 68.5% were dissatisfied. Large majority of adolescents are dissatisfied with their body image therefore a universal counseling about body image needs to be done for adolescent boys as it is one of the most important cause of low self esteem.

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