

# Level Of Anxiety Among Over Weight And Obese Young Girls With Body Image Disturbance At Selected Nursing Colleges In Chennai.

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## Abstract

**Background:** Body image is a multidimensional construct and refers to a Person's Perception and attitudes, including feeling, thoughts and behaviours regarding their own body and appearance. The link between weight status and body image is complex, that body image might be affected by overweight through psychological distress, which has an impact on quality of life. Body image is an essential aspect of young girl's self-definition and individual identity which is influenced by various biological, psychological and social factors. Excessive concern about body image, body image misconception are leading to dissatisfaction, disturbed eating patterns, affecting the nutritional status and also leading to depression and anxiety disorders. This research study therefore sought to assess the level of anxiety among overweight and obese young girls with body image disturbance.

**Material and Methods:** A quantitative descriptive study was conducted to assess the level of anxiety related to body image disturbance among study participants. A structured self-administered questionnaire was used to assess the baseline data. Total of 248 young girls were screened for body mass index and among that 50 overweight and obese girls with body image disturbance (using body image disturbance scale) were selected using convenient sampling technique and also the anxiety level of the girls with body image disturbance were measured using Hamilton anxiety scale. Informed consent was obtained from all the participants.

**Result:** The study unveiled that among 248 young girls 12 were obese, 38 were overweight and 198 girls were in normal weight and underweight. Hence it showed that every 1 in 5 young girls are overweight and obese. The study also revealed that 4(8%) of young girls had mild body image disturbance, 27(54%) of them had moderate body image disturbance and 19(38%) of them had severe body image disturbance. It also showed that 18(36%) had mild anxiety, 15(30%) had moderate anxiety, 17(34%) had severe anxiety. The mean score of body image disturbance was 22.06+8.50 and the mean score of anxiety was 21.08 +12.22. The calculated Karl Pearson's correlation value of  $r=0.590$  shows a moderate positive correlation which was found statistically significant at  $P < 0.001$  level. It also revealed that only education of demographic variable ( $p=0.038$ ) had shown significant association with level of anxiety.

**Conclusion:** The study revealed that every 1 in 5 young girls had higher BMI more than 25kg/m<sup>2</sup> and all the girls with higher BMI had body image disturbance and it also shows that all the girls with higher BMI had anxiety towards their body image. It also shows the moderate positive correlation between body image disturbance and the level of anxiety. This clearly infers that when body image disturbance increases then the anxiety level of the young girls also increases. This need to increase awareness and importance of healthy dietary pattern and regular physical activity to improve the physical appearance, self-esteem, perception and satisfaction among young girls.

**Key word:** Body image disturbance, anxiety, young girls, overweight, obesity.

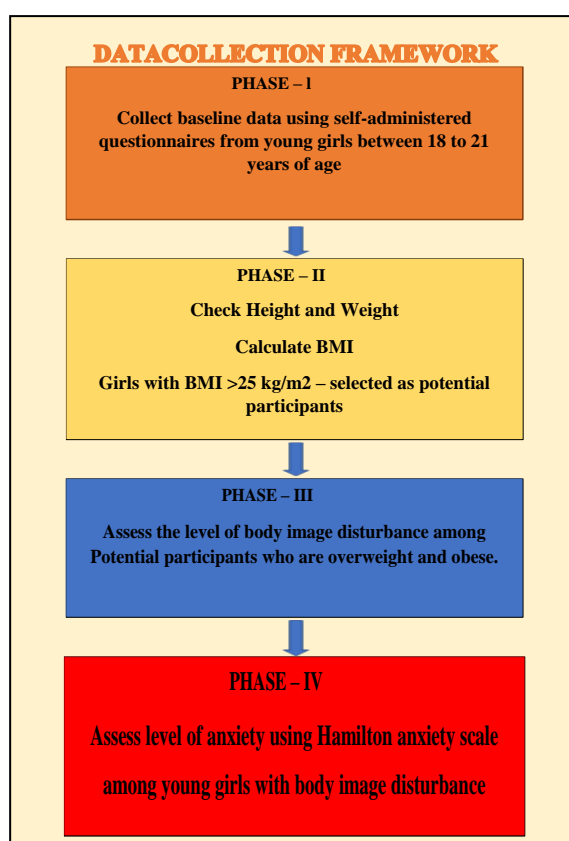
## INTRODUCTION

For human beings, there is more important than judgement about self and this evaluation becomes the most definitive factor in the process of psychological development. One of the Cases in which an individual deal with the judgement about himself/herself is regarding their own body images means a mental image which an individual has from his/her body and figure. A general perception that society will only accept an individual if they have an ideal body is also related to body images disturbance. Body image dissatisfaction is common among adolescents, with prevalence rates ranging from 30-80%. Moreover, such dissatisfaction confers increased risk for the onset of eating disorders, depression, substance use and abuse, and suicide in young girls. The use of anthropometric indicators for search purposes can inform individual strategies for intervention before obesity sets in. Body image is a multidimensional construct and refers to a Person's Perception and attitudes, including feeling, thoughts and behaviours regarding their own body and appearance. The link between weight status and body image is complex, that body image might be affected by overweight through psychological distress, which has an impact on quality of life. Body image is an essential aspect of young girl's self-

definition and individual identity which is influenced by various biological, psychological and social factors. Excessive concern about body image lead to increased anxiety, depression and other psychological concern. Health care Professionals need to outline the context of Social anxiety and distress and figure out the role of body -image Concern as well as the outcomes, functions and effects of false Perception of self. We need to encourage people to recognize that emotional qualities, character and individuality are equally expressive of beauty as Physical appearance. By providing interventions and Counselling.

## MATERIAL AND METHODS:

A quantitative descriptive study was conducted to assess the level of anxiety related to body image disturbance among study participants. Study was conducted in various Nursing colleges at Chennai. A structured self-administered questionnaire was used to elicit the baseline data. Weight and height of 248 young girls were checked and BMI was calculated. The girls with BMI >25 kg/m<sup>2</sup> were selected as potential participants. These Potential participants were assessed for body image disturbance using standardised body image disturbance scale and among that 50 samples who had body image disturbance and who met the inclusion criteria were recruited as samples after obtaining informed consent. The samples were then assessed for level of anxiety using Hamilton anxiety scale. Non- probability convenient sampling technique was used to select the participants.



**Table 1:** Frequency and distribution of BMI among adolescent girls. n=248

BMI	FREQUENCY	PERCENTAGE
Underweight (<18.5)	75	30%
Normal (18.5-24.9)	123	50%
Overweight (25.0-29.9)	38	15.2%
Obesity (>30)	12	4.8%
<b>Total</b>	<b>248</b>	<b>100%</b>

**Table 2:** Frequency and percentage distribution of level of body image disturbance among young girls. n= 50

Level of Body Image Disturbance	Frequency	Percentage
No disturbance < 10	0	0
Mild (≤ 20)	4	8%
Moderate (21 – 30)	27	54%
Severe (31 – 40)	19	38%

**Table 3:** Frequency and percentage distribution of level of anxiety among young girls. n=50

Level of Anxiety	Frequency	Percentage
Mild (≤17)	18	36%
Moderate (18 – 24)	15	30%
Severe (25 – 56)	17	34%

**Table 4:** Correlation between body image disturbance and anxiety among young girls. n = 50

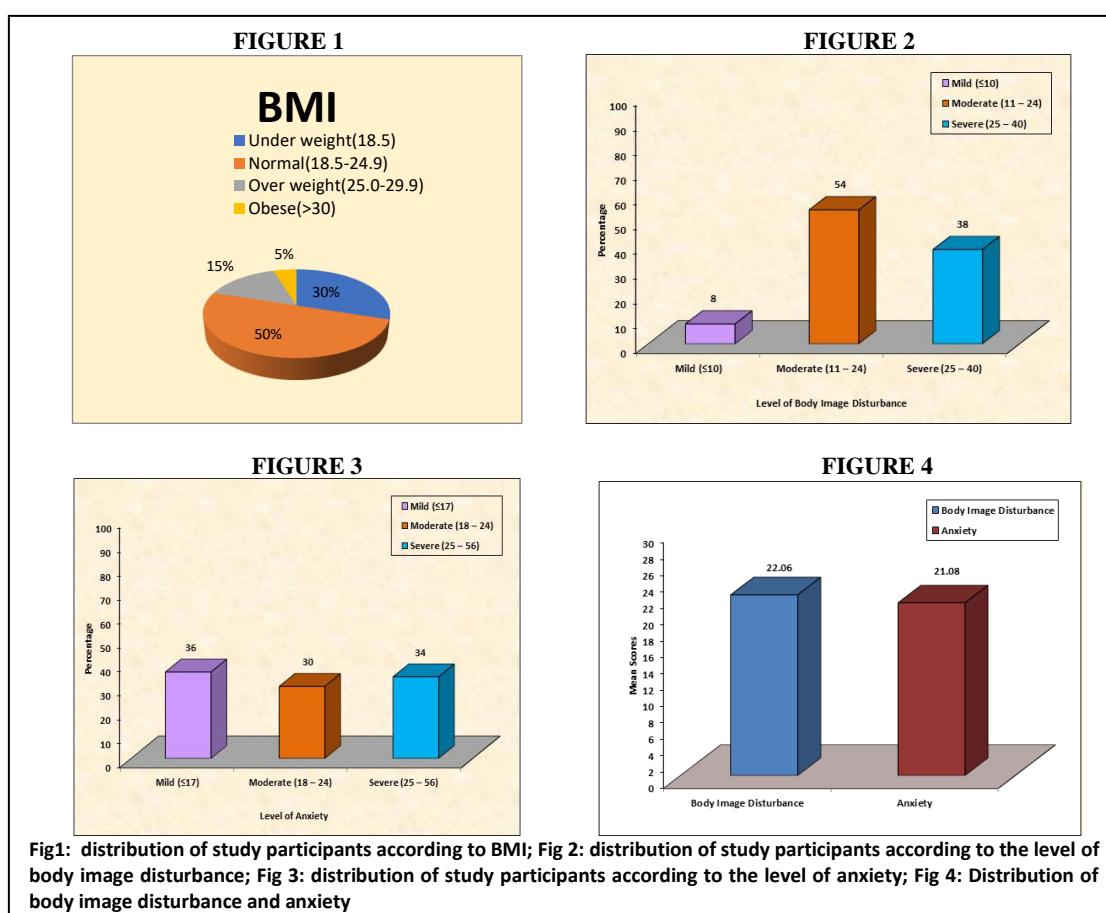
Variables	Mean	S.D	Karl Pearson's Correlation 'r' Value
Body Image Disturbance	22.06	8.50	r=0.590 p=0.0001 S***
Anxiety	21.08	12.22	

\*\*\*p<0.001, S – Significant

**Table 5:** Association of level of anxiety among young girls with their selected demographic variables. n= 50

Demographic Variables	Mild		Moderate		Severe		Chi-Square & p-value
	F	%	F	%	F	%	
<b>Education</b>							
B.Sc. (N) – I Year	6	12.0	6	12.0	4	8.0	χ <sup>2</sup> =13.337 d.f=6 p=0.038 S*
B.Sc. (N) – II Year	3	6.0	1	2.0	7	14.0	
B.Sc. (N) – III Year	1	2.0	4	8.0	5	10.0	
B.Sc. (N) – IV Year	8	16.0	4	8.0	1	5.0	

\*p<0.05, S – Significant, N.S – Not Significant



## RESULTS:

The table 1 and fig 1 shown that among 248 girls 75(30%) had underweight, 123 (50%) had normal weight, 38 (15.2%) had overweight and 12 girls (4.8%) had obesity.

The table 2 and fig.2 shown that among 50 girls 27(54%) had moderate level of body image disturbance, 19(38%) had severe body image disturbance and 4(8%) had mild level of body image disturbance among young girls.

The fig. 3 and table 3 shown that 18(36%) had mild level of anxiety, 17(34%) had severe level of anxiety and 15(50%) had moderate level of anxiety among young girls.

The fig 4 and table 4 shown the mean score of body image disturbance was  $22.06 \pm 8.50$  and mean score of anxiety was  $21.08 \pm 12.22$ . The calculated Karl Pearson's Correlation value of  $r = 0.590$  shows a moderate positive correlation which was found to be statistically significant at  $p < 0.001$  level. This clearly infers that when body image disturbance increases then the anxiety level of the young girls also increases.

The table 5 shown that the demographic variable education ( $\chi^2 = 13.337$ ,  $p = 0.038$ ) had shown statistically significant association with level of anxiety among young girls at  $p < 0.05$  level and the other demographic variables had not shown statistically significant association with level on of anxiety among young girls.

## DISCUSSION:

The study was selected in the aim to throw light on the unrevealed problems of overweight and obese young girls. Most of the adolescent girls' lifestyle have been changed, as they spend most of time in sitting in classrooms, spending much time in social media, electronic gadgets, eating junk foods and also have irregular sleep pattern. All these factors gradually increase their body weight. Most of the obese and overweight often come across the problems of body shaming and body image disturbance, which in turn increases their level of anxiety. Society mainly emphasis on thinness and beauty particularly affect girls and women. Many actress, pretty cartoon characters, dolls are portrayed in such a way that they are thin which negatively impact the perception of being obese. Thus the obese girls develop low self-esteem and become psychologically unwell due to their physical appearance. The main aim of the study is to investigate the correlation between the body image disturbance and the level of anxiety. In this study the Correlation value of  $r = 0.590$  shows a moderate positive correlation which was found to be statistically significant at  $p < 0.001$  level. This clearly infers that when body image disturbance increases then the anxiety level of the young girls also increases. This is in accordance with the study conducted by Anupama Korlakunta et al which revealed that Majority of women under study perceived high levels stress and the percentage of women having high scores of stress were comparatively more among those who had below average body image (55%) followed by average (33%) and above average body image (12%). The stress levels were found to be high in both the Grade I (61.4%) and Grade II obese women (86.7%).(16). The study also unveiled that every 1 in 5 girls are either overweight or obese. It also shown that 18(36%) had mild level of anxiety, 17(34%) had severe level of anxiety and 15(50%) had moderate level of anxiety among young girls. Almost all the girls with body image disturbance had mild, moderate and severe levels of anxiety. Hence the study clearly states that increase in body weight leads to body image disturbance and body image disturbance in turn increases the level of anxiety.

## CONCLUSION:

The prevalence of obesity is increasing worldwide and puts more individual at risk of suffering from negative physical and psychological well-being. Issues with increased body weight don't start and end with physical appearance. The mental aspect of having poor body image can create a toxic environment. Having negative thoughts about your body image can create a whole host of problems, including Anxiety, Depression, Eating disorders (anorexia, bulimia), Negative self-talk, Poor self-esteem, Preoccupation with weight/body type. Hence awareness regarding lifestyle modifications which includes healthy dietary pattern, regular physical activity and good rest and sleep, which will improve the physical appearance, self-esteem, perception and satisfaction among adolescent girls. As out lined above interventions to improve body image are not just beneficial to obesity management but also psychological well-being in general.

**Conflicts of Interest:** The authors declared no competing interests.

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