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A CROSS – SECTIONAL STUDY TO DETERMINE THE PREVALENCE AND FACTORS ASSOCIATED WITH BODY IMAGE DISSATISFACTIONS AMONG TEENAGERS.

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ABSTRACT:

Introduction: Misconceptions about body image can result in behaviors harmful to both mental and physical well-being. Body dissatisfaction arises when individuals harbor negative perceptions of their own bodies. Accurately assessing the prevalence of body dissatisfaction would offer crucial insights into identifying individuals susceptible to developing eating disorders and other psychiatric conditions. **Aim:** The study aims to determine the prevalence of Body Image Dissatisfaction and its associated factors that affecting the teenagers. **Methodology:** Cross sectional research design was used after getting approval from the ethical committee. **Results:** A total of 200 adolescents participated in this study, comprising 54.5% males and 45.5% females. It was observed that 39.5% reported severe concerns regarding body image, with 47% falling within the age group of 16-17 years. Additionally, 40% experienced moderate anxiety, and 66% reported mild depression related to their appearance. Furthermore, 183% of the participants expressed concerns about their dietary patterns. Regarding demographic variables, females were more likely to exhibit higher levels of body image dissatisfaction ($B= 4.621, p < 0.001$) compared to males.

Key words: Body image dissatisfaction, Teenagers, anxiety, depression.

1. Introduction

Body image dissatisfaction refers to a negative personal assessment of one's own body weight and shape.¹ Both men and women experience this dissatisfaction, influenced by biological, interpersonal, and socio cultural factors, including pervasive media exposure. Recently, concerns about body image have been on the rise, particularly affecting adolescents and young adults. These concerns lead to various negative effects such as dissatisfaction with body shape, eating disorders, low self-esteem, depression, and the adoption of unhealthy weight control behaviors².

According to Steg et al. poor body image could be associated with self-esteem issues, depression, anxiety, and disordered eating behaviors. A number of studies have reported that BID is a risk factor for the development of depression suicidal ideation and social anxiety³.

On the spectrum of body image disturbance, which encompasses satisfaction (such as contentment with specific body areas) and dissatisfaction (such as dissatisfaction with weight or muscle mass), body dissatisfaction represents one end.⁴ It serves as a precursor to the development of various mental disorders, including binge eating disorder and social anxiety disorder. Importantly, body dissatisfaction can also occur in individuals who are otherwise mentally healthy⁵.

Need for the study:

The proliferation of Western media in Eastern cultures may be a contributing factor to shifts in socio cultural values in non-Western communities.⁶A study among young Asian males seeking treatment for eating disorder expressed significant fear of BID accompanied by fat phobia. Strong implicit anti-fat bias internalization was reported as a valid predictor of weight-related behavioral concerns leading to body image trepidations among Asian female students⁷. Thus, BID is not only prevalent in developed Western countries but also is increasingly seen in developing non-Western countries.

This study was designed to establish the prevalence of body image dissatisfaction among teenagers also elucidates the associations of BID with socio-demographic factors, and emotional and physical well-being.

Aim & Objectives:

Aim: The study aims to determine the prevalence of Body Image Dissatisfaction and its associated factors that affecting the teenagers.

Objectives:

1. To determine the prevalence of body image dissatisfactions among adolescents in Pooncheri Community areas.
2. To identify the associated factors of body image dissatisfaction among adolescents in Pooncheri community areas.
3. To associate the prevalence of body image dissatisfactions with selected demographic variables

2. Methodology**Study Design**

Cross sectional research design was used in this study to determine the prevalence of Body image dissatisfactions and to identify the associated risk factors.

Sample

Teenagers between the ages of 14 to 17 residing in the Pooncheri rural community of Chengalpet district were recruited as participants for this study, with data collection taking place from December 2023 to January 2024. The total sample size was 200 ($n = (DEFF \times NP) \times (1 - p) \times (N - 1) + px(1 - p) = 200$) individuals. Participants were selected using a convenient sampling technique, whereby teenagers who expressed willingness to participate were included. However, individuals suffering from mental or physical illnesses, as well as dancers and athletes, were excluded from the study. Informed consent was obtained from the participants both parents /guardians.

Ethical considerations

All study materials and procedures were reviewed & approved by The Institutional Human Ethics Committee (CARE IHEC-II) ethical approval code (Ref No: IHEC-II/0469/23).

Main Instruments

1. Section A: Socio demographic Variables-It includes age, gender, socio-economic status, type of diet, Number of meals per day and education.
2. Section B: Body Shape Questionnaire (BSQ16B)⁸. This is a 16 item self-report scale to measure the feelings about their appearance for the past 4 weeks. Each item is scored 1 to 6 with Never -1, rarely -2, sometimes-3, often -4, veryoften-5, always -6. Four groups are developed based on summation scores: no concern with shape (less than 80), mild concern with shape (between 80–110), moderate concern with shape (between 111–140), and marked concern with shape (more than 140) Cronbach's alpha was 0.933.
3. Section C⁹: Beck's Anxiety Inventory (BAI): This is a 21-item self-report measure of severity of anxiety in adults and adolescents on a 4- point scale. The BAI assesses emotional, physiological, and cognitive symptoms of anxiety. Each item refers to one of four aspects of anxiety behavior: (1) subjective (e.g., "unable to relax"), (2) neurophysiologic (e.g., "numbness or tingling"), (3) autonomic (e.g., "feeling hot"), or (4) panic-related (e.g., "fear of losing control"). A total score is summed for all 21 items ranges between 0 (no anxiety) to 63 (severe anxiety). Cronbach's alpha was 0.948.
4. Section D¹⁰: Beck's Depression Inventory: This is a 21-item self- report measure of depression in adults and adolescents on a 4-point scale. The BDI assesses symptoms corresponding to criteria for diagnosing depressive disorders such as hopelessness, irritability, and guilt, as well as physical symptoms such as fatigue. A total score is summed for all 21 items ranging between 0 (no depression) to 63 (severe depression). Cronbach's alpha was 0.935.
5. Section E¹¹: Eating Attitude Test (EAT-26). This is a 26 –item screening attitude towards food and is a useful measure to identify those at risk for an eating disorder. Participant's scores are assessed in three main dominants. (1) dieting, (2)bulimia and food preoccupation, and (3)oral control scales.Scores range 0 and 75 and are determined on a 6-point Likert scale (Always, usually, often, sometimes, Rarely, Never) with scores greater than 20 indicatives.The EAT-26 has been shown to be a psychometrically sound instrument displaying high internal consistency ($\alpha = 0.90$).Cronbach's alpha was 0.871.

3. Results

The study was conducted among 200 teenagers in Pooncheri, Community. Among the samples 54.5% were Male and 45.5% were Females.

1.To determine the prevalence of body image dissatisfactions among adolescents in Pooncheri Community area.

Based on the summation of scores on the Body Shape Questionnaire (BSQ16B).

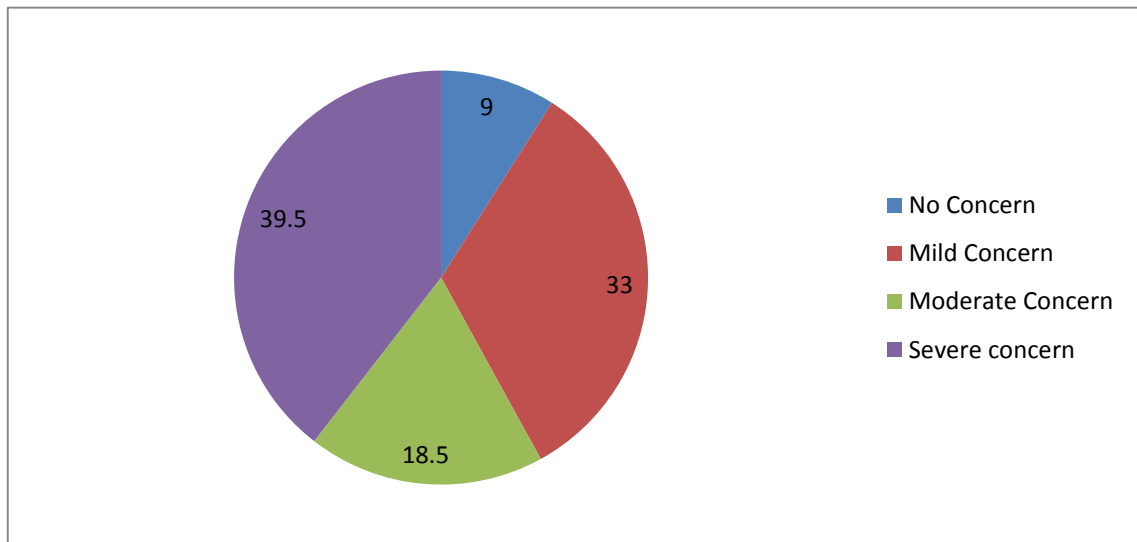
Table: 1 Frequency and percentage distribution of Prevalence body image dissatisfactions among adolescents in Pooncheri Community area,

Scoring criteria	Frequency	Percent
No concern	18	9
Mild	66	33
Moderate	37	18.5

Severe	79	39.5
Total	200	100

Among the study participants, 39.5% reported severe concern, 18.5% reported moderate concern, and 33.0% reported mild concern. The age group between 16-17 years’ teenagers showed high prevalence (47%) compared than other age group.

Fig: 1 Percentage distribution of Prevalence body image Dissatisfactions among adolescents in Pooncheri Community area,



2. To identify the associated factors of body image dissatisfaction among adolescents in Pooncheri community areas,

Anxiety:

Scoring criteria	Frequency	Percent
Mild	48	24
Moderate	80	40
Severe	72	36
Total	200	100

Among the participants, 40% experienced moderate anxiety, 36% experienced severe anxiety, and 24% experienced mild anxiety regarding their appearance.

Table:3: 1 Frequency and percentage distribution of Prevalence depression among adolescents in Pooncheri Community area:

Depression Inventory:

Scoring Criteria	Frequency	Percent
No Concern	92	46
Severe	66	33
Borderline	18	9
Extreme	24	12
Total	200	100

Among the Participants 46.0 % had no signs of depression and 66% has mild depression about their appearance.

Table:4: 1 Frequency and percentage distribution of prevalence Anxiety among adolescents in Pooncheri Community area,

Eating Disorder

Scoring Criteria	Frequency	Percent
No Concern	17	8.5
Eating disorder	183	91.5
Total	200	100

In Eating disorder 91.5% of the participants had concerns about their dietary pattern.

3.To associate the prevalence of body image dissatisfactions with

Selected demographic variables: -

While association with demographic variables Females were more likely to have higher Body Image Dissatisfaction ($B= 4.621, p < 0.001$) compared to males.

There were no significant association of BID with Demographic variables like age, gender, socio-economic status, type of diet, Number of meals per day and education.

While analyzing with Risk factor, Education level had significant association with Anxiety.

4. Discussion

The current study identified the prevalence of Body Image dissatisfaction is Severe (39.5%) in Teenagers. However, our study observed positive, significant associations between Body Image Dissatisfaction and females (42%). Females are more worried and dissatisfied with their body image than males due to the social pressure for a slim body and hence being overweight or even imagining oneself being overweight leads to a higher BID. BID among females is related to self-perceptions of being overweight by evaluating specific body features negatively which may pose a risk for anxiety disorders.

The study found that the 40% of teenagers experienced moderate level of anxiety regarding their appearance. Male had higher levels of anxiety (40%) regarding body image rather than females (32%). In Eating habits 91.5% of them found to have eating disorder, which is major risk factor found in this study. It was also found that the tendency to skip meals due to sociocultural pressure was more among those with higher concern with body image

Prior evidence also suggests that, while males tend to show dissatisfaction with slimness, being female is more likely to be associated with dissatisfaction due to excess weight.

5. Conclusion

In conclusion, the current study reflects that Body Image Dissatisfaction is prevalent among the female teenagers in rural areas of Pooncheri and it is associated with anxiety and eating disorders. Awareness of prevalence of body image dissatisfaction and the magnitude of its effects on an individual's behavior must be emphasized by clinicians to their patients. This will be beneficial in early detection and its treatment in order to prevent the increase in Body Image Dissatisfaction prevalence in this population.

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