



OPEN ACCESS

Key Words

Bulimia nervosa, anorexia nervosa

Corresponding Author

Masaraddi Sanjay Krishna,
Department of Pediatrics, Sree
Mookambika Institute of Medical
Sciences, India

Author Designation

¹Associate Professor

^{2,3}Junior Resident

Received: 26 April 2024

Accepted: 19 June 2024

Published: 20 June 2024

Citation: Rakesh Faujdar, Anand Sharma, Avinash Sharma, Mayank Jeswani and Akash Chhari, 2024. Prevalence of Eating Disorder among Indian Adolescent Students . Res. J. Med. Sci., 18: 304-307, doi: 10.36478/makrjms.2024.7.304.307

Copy Right: MAK HILL Publications

Prevalence of Eating Disorder among Indian Adolescent Students

¹Masaraddi Sanjay Krishna, ²Riya Cherian and ³J. Bijin Jose

¹⁻³*Department of Paediatrics, Sree Mookambika Institute of Medical Sciences, India*

Abstract

Eating disorders refer to a group of conditions that involve either insufficient or excessive food intake that is detrimental to an individual's physical and emotional health. In India, there is a lack of awareness and a poorly defined diagnostic method for eating disorders. To estimate the prevalence of eating disorders and their associated risk factors. Study was conducted among the students studying in class tenth to twelfth in an age range of 15 – 18 years. The majority of the students belonged to the age group of 16 and 17. 41.3% adolescents were High risk category for eating disorder, whereas 58.6% adolescents were Low risk category. 51% of male and 48.1% of female were High risk category for eating disorder, whereas 56.8% male and 43.18% female were Low risk category. Developing culturally sensitive diagnostic tools and gathering locally relevant epidemiological data on eating disorders from both community and hospital settings in India are imperative.

INTRODUCTION

Feeding and eating disorders (FEDs) encompass atypical eating or feeding behaviours that cannot be attributed to other medical issues and are not considered developmentally typical or in keeping with the individual's sociocultural background. One of the most under-researched topics in India is eating disorders. Eating disorders refer to a group of conditions that involve either insufficient or excessive food intake that is detrimental to an individual's physical and emotional health. Binge eating disorder, bulimia nervosa, and anorexia nervosa are considered to be the most common forms of eating disorders, but in India they present in a less defined manner^[1]. According to the Diagnostic and Statistical Manual of Mental Disorders-5 ED may be classified into anorexia nervosa (AN), bulimia nervosa (BN), binge ED (BED) and many more which are beyond the scope of this study^[2]. Research suggests that approximately 18% to 50% of typically developing children encounter a feeding problem. However, the prevalence of FDs is notably elevated in children with developmental disorders, with as many as 89% experiencing these more severe issues^[3]. Earlier thought to be only a western problem, eating disorders are now seen in adolescents of all racial and socioeconomic groups and more than 75% of these cases begin during adolescence. They can also be associated with other psychiatric disorders, like depression and anxiety, making them more harmful and potentially lethal. To add to the burden, the diagnosis of eating disorders can be elusive, and more than one-half of all cases go undetected. In India, there is a lack of awareness and a poorly defined diagnostic method for eating disorders.

Objective: To estimate the prevalence of eating disorders and their associated risk factors such as stress, body mass index (BMI), body shape concerns, and other factors among adolescent students of 15-18 years of age.

MATERIALS AND METHODS

Study was conducted among the students studying in class tenth to twelfth in an age range of 15-18 years. The data collection of the study was done from May 15th 2023 till November 15th 2023. Two questionnaires were administered to the students, first was a general demographical questionnaire regarding their age, gender etc. The second was the short version of the Eating Attitude Test (EAT-26)^[4] which was used to assess the students' attitudes towards and their preoccupation with food, dieting, eating, physical appearance and personal control over eating. There are 26 questions and they are scored as follows - Always - 3, Usually - 2, Often - 1, Sometimes, Rarely,

never at 0. (Question 26 is scored in reverse.) A score of 20 or more on the EAT26 is considered to be a good determinant of high risk for an eating disorder, while a score less than 20 is low risk. The EAT26 is the most widely used screening measure to determine if people have an eating disorder that needs professional attention.

RESULTS AND DISCUSSION

The majority of the students belonged to the age group of 16 and 17 (table1 - 99). Table 2 shows that 41.3% adolescents were High risk category for eating disorder, whereas 58.6% adolescents were Low risk category. Table 3 shows that 51% of male and 48.1% of female were High risk category for eating disorder, whereas 56.8% male and 43.18% female was Low risk category. Table 4 shows that majority of students of age group 15- and 18-years were high risk category for eating disorders.

According to the results obtained in this study, 48.3 % female and 51 % male showed a high risk of eating disorder and scored above the recommended cut-off point on Eating Attitude Test- 26, and it is considered as a high figure according to the previous researches. The prevalence was almost equal in males and females, which is a rare finding, as in most demographics the male prevalence is lower. Our study shows that males are also at more risk for eating disorders and hence must be thoroughly screened. Eating Disorder and disturbed eating attitudes and behaviour are well-documented problems, in particular among females. However, in the past four decades, the prevalence of eating disorders has also risen among adolescent boys?^[5-7].

CONCLUSION

The obtained extent of eating disorder was higher in our study compared to the previous studies. Both males and females were at almost similar risk according to our study with minimal percentage difference between them. The prevalence of eating disorders risk is high among adolescents, but the awareness is low. Further research is needed to develop intervention programs to prevent eating disorder among adolescents. The relatively low prevalence of FED may explain the limited focus on eating disorders research in India. The epidemiological characteristics of other FEDs in children need further evaluation. This holistic approach is crucial for effectively addressing eating disorders and implementing preventive measures within the adolescent population. Therefore, developing culturally sensitive diagnostic tools and gathering locally relevant epidemiological data on eating disorders from both community and hospital settings in India are imperative.

Eating Attitudes Test (EAT-26)[®]

Instructions: This is a screening measure to help you determine whether you might have an eating disorder that needs professional attention. This screening measure is not designed to make a diagnosis of an eating disorder or take the place of a professional consultation. Please fill out the below form as accurately, honestly and completely as possible. There are no right or wrong answers. All of your responses are confidential.

Part A: Complete the following questions:

1) Birth Date	Month:		Day:		Year:	2) Gender:	Male	Female
3) Height	Feet :		Inches:				<input type="checkbox"/>	<input type="checkbox"/>
4) Current Weight (lbs.):			5) Highest Weight (excluding pregnancy):					
6) Lowest Adult Weight:			7: Ideal Weight:					

Part B: Check a response for each of the following statements:

1.	Am terrified about being overweight.							
2.	Avoid eating when I am hungry.							
3.	Find myself preoccupied with food.							
4.	Have gone on eating binges where I feel that I may not be able to stop.							
5.	Cut my food into small pieces.							
6.	Aware of the calorie content of foods that I eat.							
7.	Particularly avoid food with a high carbohydrate content (i.e. bread, rice, potatoes, etc.)							
8.	Feel that others would prefer if I ate more.							
9.	Vomit after I have eaten.							
10.	Feel extremely guilty after eating.							
11.	Am preoccupied with a desire to be thinner.							
12.	Think about burning up calories when I exercise.							
13.	Other people think that I am too thin.							
14.	Am preoccupied with the thought of having fat on my body.							
15.	Take longer than others to eat my meals.							
16.	Avoid foods with sugar in them.							
17.	Eat diet foods.							
18.	Feel that food controls my life.							
19.	Display self-control around food.							
20.	Feel that others pressure me to eat.							
21.	Give too much time and thought to food.							
22.	Feel uncomfortable after eating sweets.							
23.	Engage in dieting behavior.							
24.	Like my stomach to be empty.							
25.	Have the impulse to vomit after meals.							
26.	Enjoy trying new rich foods.							

Part C: Behavioral Questions:

In the past 6 months have you:		Never	month or less	times a month	a week	times a week	day or more
A	Gone on eating binges where you feel that you may not be able to stop? *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B	Ever made yourself sick (vomited) to control your weight or shape?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C	Ever used laxatives, diet pills or diuretics (water pills) to control your weight or shape?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D	Exercised more than 60 minutes a day to lose or to control your weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E	Lost 20 pounds or more in the past 6 months	Yes <input type="checkbox"/>	No <input type="checkbox"/>				

* Defined as eating much more than most people would under the same circumstances and feeling that eating is out of control

Copyright: EAT-26: (Garner et al. 1982, *Psychological Medicine*, 12, 871-878); adapted by D. Garner with permission.

Table 1: Distribution according to the age and gender

Age	Male (n=75)	Percentage	Female (n=75)	Percentage
15	9	12	10	13.3
16	23	30.6	24	32
17	32	42.6	20	26.6
18	11	14.6	21	28

Table 2: Distribution as high risk and low risk

High Risk	Percentage	Low Risk	Percentage
62	41.3	88	58.6

Table 3: Gender based distribution as high risk and low risk

	High Risk	Percentage	Low Risk	Percentage
MALE	32	51	50	56.8
FEMALE	30	48.3	38	43.18

Table 4: Age wise distribution of eating disorders

Age	High Risk	Percentage	Low Risk	Percentage
15	9	14.5	10	11.36
16	15	24.19	32	36.36
17	21	33.8	31	35.22
18	17	27.4	15	17

REFERENCES

1. A.P.A., 2013. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders 5th Ed. Edn., Arlington, American Psychiatric Publishing., ISBN-17: 978-0-89042-554-1,
2. King, S. and T. Burch, 2020. Blending as a treatment for feeding disorders: A review of the literature. *Behav. Interv.*, 35: 642-663.
3. Sawyer, S.M. and R. Cooke, 2004. Eating disorders in adolescence: An approach to diagnosis and management. 2004;33(1-2):27-31. *Austr. Fam. Physician*, 33: 27-31.
4. Dominé, F., A. Berchtold, C. Akre, P.A. Michaud and J.C. Suris, 2009. Disordered eating behaviors: What about boys? *J. Adolesc. Health*, 44: 111-117.
5. Gadalla, T.M., 2008. Eating disorders and associated psychiatric comorbidity in elderly canadian women. *Arch. Women's Mental Health*, 11: 357-362.