ORIGINAL RESEARCH ARTICLE

Prevalence of Eating Disorders and Their Association with Psychosocial Wellbeing Among Adults in an Urban Area of Tamil Nadu, India

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ABSTRACT

Background: Eating disorders are caused by the dynamic interaction of biological, psychological and socio-ocultural factors that affect physical and psychological well-being of humans. It leads to abnormal behavior in eating habits and excessive concern with body appearance and shape.

Methodology: A cross-sectional study was conducted among 350 people in urban field practice area of tertiary care hospital, Chengalpattu district by simple random sampling. Data was collected using standard questionnaires and analysed using SPSS v25. Analytical tests like Chi-square and odds ratios were used to find association between the presence of eating disorders following which enter method of logistic regression was done.

Results: Out of 350 participants prevalence of eating disorder was found to be 81(23.1%). Gender (AOR-6.15, 95%CI- 2.31-16.34), Occupations (AOR-2.49, 95%CI-1.13-5.48), Diet (AOR-6.06, 95%CI-2.01-18.30), family history of mental health problems (AOR-4.71, 95%CI-1.42-15.54), BMI and poor wellbeing (AOR-2.82, 95%CI-1.32-6.01) were statistically significant.

Conclusion: The risk of eating disorders was high among the female participants. Exercise, Body image perception, and family history of mental health problems are also associated with eating disorder. These findings show the need for targeted awareness programs and mental health interventions, particularly among high-risk groups such as females and individuals with poor well-being, to effectively address and prevent eating disorders.

Keywords: Eating Attitude, Body Perception, Wellbeing, Binge Eating, BMI, Psychiatric Disorders

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Introduction

Eating disorders (EDs) are complex psychiatric illnesses that are characterized by a persistent disturbance in eating habits, as well as cognitive and emotional reactions about food, body shape, and weight. The implications of eating disorders result in ill physical health effects, distress, and also affect overall quality of life.[1] Eating disorders usually develop from multiple factors. These conditions can precipitate a variety of problems, compromise quality of life and even leading to death.[2]

Eating disorder was first observed in Western cultures, the increasing incidence of eating disorders in non-Western populations, especially in India, indicates the need for extensive studies and intervention strategies. The most commonly known eating disorders include of anorexia nervosa, bulimia nervosa, and binge eating disorder, with each one displaying specific clinical signs. The essence of anorexia nervosa lies in drastic food limitation linked with a strong anxiety over weight increase, whereas Bulimia Nervosa is distinguished by cycles of binge eating succeeded by measures to counteract weight gain, and Binge Eating Disorder is characterized by regular binge episodes without any follow-up corrective actions.[3]

The global burden of eating disorders has increased significantly over recent decades. Global eating disorder statistics increased from 3.4% to 7.8%, indicating a substantial rise in prevalence worldwide. According to systematic reviews and meta-analyses, the pooled lifetime and 12-month prevalence of eating disorders were 0.91% and 0.43% respectively.

In India, a study reported atypical eating behaviours were prevalent, with Bulimia Nervosa and Other Specified Feeding or eating disorders (OSFED) occurring more frequently than anorexia nervosa.[4] A study conducted in South India indicated that the risk factors for eating disorders are largely attributed to stress, body image concerns, and peer influence.[5]

Eating disorders are multifaceted disorders that have impact on individuals' psychological well-being. People suffering from eating disorders tend to have a poor body image, viewing themselves as too fat or ugly even when they are underweight or within normal weight. Emotional disturbances also lead to mood swings, impulsivity, and emotional outbursts and therefore continues disordered eating and the resultant associated noxious behaviours.[6] Childhood experiences, family dynamics, and parenting styles are some of the factors that significantly influences one's relationship with food. Family problems and concern of weight control is one of the contributing factors of development of eating disorder.[7] Moreover, early exposure to dieting practices and discussions surrounding weight may adversely influence body image perceptions and contribute to disordered eating behaviours.

In conclusion, the increasing incidence of eating disorders and their association with mental distress in urban India is a widespread condition that requires immediate attention. The severity of eating disorders is compounded by the complex interplay between various processes. Therefore, it is necessary to understand the causes and consequences. This study seeks to find out the prevalence of eating disorders and its association with well-being among urban Indian adults, learn valuable insights on eating disorders in this setting and contribute to future public health planning.

Methodology

Study area & population: The study was carried out in Anakaputhur field practice area of tertiary care hospital in Chengalpattu district from July to December 2024. The study participants include adults aged 18yrs and above. Bedridden patients and those unable to respond are excluded.

Sample size & sampling method: Based on the study done by Shashank KJ et al[8] in Karnataka reported eating disorder prevalence of 29.2%. Considering this as prevalence (p) and applying formula $n=Z^2pq/d^2$, Z=1.96 for 95%CI, p=29.2%, q=(100-p) = 70.8% and allowable error (d) =5%, the sample size was 317. Allowing 10% non-response rate, the required sample size was rounded off to 350. According to 2023 census, Anakaputhur municipality has approximately 64,000 population, with 8,259 individuals residing in urban slums.[9] Data from the Anakaputhur Urban Health Centre revealed that the municipality is divided into four wards. Using Simple Random Sampling, a proportional number of participants from each ward's urban slum population were selected. A total of 88 participants per ward were randomly chosen using a random number generator meeting our final sample size of 350.

Data collection: A pretested structured questionnaire was employed to collect demographic information and validated questionnaires like Eating Attitude Test 26 (EAT26) to screen ED, Self-reporting questionnaire (SRQ) and WHO-5 wellbeing index were used to analyse the well-being of the participants. **Eating Attitudes Test (EAT-26)** is a standardized test to detect symptoms and concerns common in eating disorders. It has 26 self-report items assessing attitudes, behaviours, and symptoms of eating disorders such as anorexia nervosa and bulimia nervosa. A score <20 indicates that one is less likely to have disordered eating behaviours. A score ≥ 20 acts as a positive screen for eating disorder, requiring further evaluation by a health care provider.[10] **The Self-Reporting Questionnaire** (SRQ) is a 20-item psychiatric disorder screening instrument. Each of the 20 items had a score of 0 or 1. One indicates that the symptoms were felt in the previous month, whereas 0 indicates that they were not felt. The scale had a minimum score of 0 and a maximum score of

20. The higher the score, the more likely the individual is to have mental disorders and needs further evaluation.[11] **WHO Well-Being Scale Index**: The WHO-5 is a highly concise self-report assessment of well-being during the last fortnight. It is a battery of five items with positive wording rated from 0 (never) to 5 (always). Scores are mapped onto a 0-25 scale, score 0-13 are suggestive of poor well-being and screening for depression. Score between 14-25 are suggestive good well-being, but lower scores also suggest psychological assistance. A score less than 13 is generally used as a cutoff to identify individuals at risk for mental disorders, such as depression, and may require further clinical assessment e.g., via the PHQ-9 in depression diagnosis.[12]

Data Analysis: Data was entered in Microsoft Excel and analysed using IBM SPSS v25. Descriptive data are presented in frequencies and percentages. Chi-square and odds ratio are used to determine association of risk factors and eating disorder. Statistically significant in bivariate analysis were taken to logistic regression analysis.

Results

Table 1 shows out of 350 study participants, about 70.6% were below the age of 30. More than half of the participants were female (71.7%). Almost 60.9% of the respondents were graduates, and the majority of the participants were unemployed (55.7%). Table 1 shows the sociodemographic distribution of study participants.

Table 2 shows the distribution of other related variables. It was found that 36% of the participants felt they are physically not attractive. Around 9.4% are currently on a specific diet for weight loss.

Table 3 shows the association of eating disorders with socio demographic variables. Eating disorder was seen to occur at a 6.61times higher odds (AOR = 6.6051, 95% CI: 2.7708 - 15.70) among females when compared to males, who served as the reference group. Other statistically significant factors are Age (OR-0.294, 95% CI – 0.13-0.64), Occupation (OR-1.87, 95% CI – 1.06-3.30), Exercise (OR- 2.46, 95% CI – 1.14-5.16), BMI (OR-4.34, 95% CI- 2.13-8.82), Taking specific diet for weight loss (OR-7.49,95% CI-3.49-16.07), Feel physically not attractive (OR- 1.85, 95% CI- 1.11-3.09), Family history of mental health problems (OR-5.41, 95% CI- 2.30-13.72).

Table 4 shows the association of eating disorders with wellbeing and mental distress. Among participants with eating disorders, it was found that, 36.5% had mental distress (SRQ >10), compared to 16.6% in those without eating disorders. This association was statistically significant (p-value <0.001). Those individuals experiencing mental distress were found to have 2.89 times higher odds (OR = 2.891, 95% CI: 1.732 - 4.825) of having an eating disorder compared to those without mental distress.

Table 1: Sociodemographic characteristics of study participants

Variable	Female (%)	Male (%)	Total (n=350)
Age			
<30	171(69.2)	76(30.8)	247(70.6)
31-60	56(76.7)	17(23.3)	73(20.9)
>60	24(80)	6(20)	30(8.6)
Gender	251 (71.7)	99(28.3)	350
Religion			
Hindu	166(69.2)	74(30.8)	240(68.6)
Christian	55(85.9)	9(14.1)	64(18.3)
Muslim	30(71.7)	16(34.8)	46(13.1)
Education			
Graduate	161(75.6)	52(24.4)	213(60.9)
High school	59(66.3)	30(33.7)	89(25.4)
Primary school	31(64.6)	17(35.4)	48(13.7)
Occupation			
Professional	71(74.7)	24(25.3)	95(27.1)
Skilled	44(73.3)	16(26.7)	60(17.1)
Unemployed	136(69.7)	59(30.3)	195(55.7)
Exercise			
Everyday	37(64.9)	20(35.1)	57(16.3)
>3 days a week	79(73.8)	28(26.2)	107(30.6)
1-3 days a week	53(72.6)	20(27.4)	73(20.9)
Never	82(72.6)	31(27.4)	113(32.3)
BMI			
Obesity	34(75.6)	11(24.4)	45(12.9)
Overweight	58(64.4)	32(35.6)	90(25.7)
Underweight	25(59.5)	17(40.5)	42(12)
Normal	134(77.5)	39(22.5)	173(49.4)

Table 2: Distribution of related variables

Variable	Female (%)	Male (%)	Total (n=350)
Taking specific diet for weight loss			
Yes	27(81.8)	6(18.2)	33(9.4)
No	224(70.7)	93(29.3)	317(90.6)
Doesn't feel physically attractive?			
Yes	89(70.6)	37(29.4)	126(36)
No	162(72.3)	62(27.7)	224(64)
Family history of eating disorder			
Yes	12(75)	4(25)	16(4.6)
No	239(71.6)	95(28.4)	334(95.4)
Family history of mental health problems			
Yes	21(87.5)	3(12.5)	24(6.9)
No	230(70.6)	96(29.4)	326(93.1)

Participants with poor well-being (WHO-5 score 0-13) were at higher chance of having an eating disorder (32.9%) compared to those with good well-being (16.2%). This association was found to be statistically significant (p-value <0.001). Individuals with poor well-being had 2.54 times higher odds (OR = 2.538, 95% CI: 1.527 - 4.218) of developing an eating disorder compared to those with good well-being.

Table 5 On logistic regression analysis, Gender, Age, Occupation, BMI, Diet for weight loss, Family history of mental health problems, WHO 5 wellbeing were statistically significant.

Table 3: Association of sociodemographic variables with EAT26

Variable	Eating Disorder		p-value*	Odd's Ratio (95%CI)
	Present (%)	Absent (%)		
Age				
<30	51(20.6)	196(79.4)	**0.002***	0.29 (0.13-0.64)
31-60	16(21.9)	57(78.1)	**0.014***	0.32 (0.12-0.79)
>60	14(46.7)	16(53.3)	-	Reference
Gender				
Female	75(29.9)	176(70.1)	**<0.001***	6.60 (2.77-15.70)
Male	6(6.1)	93(93.9)	-	Reference
Education				
Graduate	54(25.4)	159(74.6)	0.336	1.47 (0.66-3.23)
High school	18(20.2)	71(79.8)	0.836	1.09 (0.45-2.67)
Primary school	9(18.8)	39(81.3)	-	Reference
Occupation				
Professional	29(30.5)	66(69.5)	**0.028***	1.87 (1.06-3.30)
Skilled	15(25)	45(75)	0.312	1.42 (0.71-2.82)
Unemployed	37(19)	158(81)	-	Reference
Exercise				
Everyday	18(31.6)	39(68.4)	**0.020***	2.43 (1.14-5.16)
>3 days a week	22(20.6)	85(79.4)	0.374	1.36 (0.68-2.71)
1-3 days a week	23(31.5)	50(68.5)	**0.013***	2.42 (1.19-4.91)
Never	18(15.9)	95(84.1)	-	Reference
BMI				
Obesity	21(46.7)	24(53.3)	**<0.0001***	4.34 (2.13-8.82)
Overweight	15(16.7)	75(83.3)	0.984	0.99 (0.50-1.96)
Underweight	16(38.1)	26 (61.9)	**0.003***	3.05 (1.45-6.40)
Normal	29(16.8)	144 (83.2)	-	Reference
Taking specific diet for weight loss				
Yes	21(63.6)	12(36.4)	**<0.001***	7.49 (3.49-16.07)
No	60(18.9)	257(81.1)	-	Reference
Feel you are Physically not attractive?				
Yes	41(32.5)	85(67.5)	**0.002***	1.85 (1.11-3.09)
No	40(17.9)	184(82.1)	-	Reference
Family history of eating disorders				
Yes	4(25)	12(75)	0.857	1.11 (0.34-3.54)
No	77(23.1)	257(76.9)	-	Reference
Family history of mental health problems				
Yes	14(58.3)	10(41.7)	**<0.001***	5.41 (2.30-12.72)
No	67(20.6)	259(79.4)	-	Reference

*p-value statistically significant <0.05 in bivariate analysis.

Table 4: Association of Eating disorder with SRQ & WHO 5 well-being index

Variable	Eating Disorder		p-value*	Odd's ratio (95%CI)
	Present (%)	Absent (%)		
SRQ- Mental distress				
Present (>10)	42(36.5)	73(63.5)	**<0.001***	2.89(1.73-4.82)
Absent (<10)	39(16.6)	196(83.4)		
WHO 5 (Total 25)				
Poor wellbeing (0-13)	48(32.9)	98(67.1)	**<0.001***	2.53(1.52-4.21)
Good wellbeing (14-25)	33(16.2)	171(83.8)		

SRQ – Self reporting questionnaire; WHO 5 – WHO wellbeing 5 scale index; *p-value statistically significant <0.05 in bivariate analysis.

Discussion

The primary objective was to determine prevalence of eating disorders. From this perspective the prevalence of eating disorder in the present study was 23.1% among our study participants. In a 2022 study from Karnataka among medical students by Shashank KJ et al prevalence of eating disorder was 29.2% among female medical students.[8] A 2018 study in Mysore among student population by Nivetha N et al found that 26.06% of students in Mysore, South India, exhibited a propensity for eating disorders (ED) due to abnormal eating attitudes, indicating a significant prevalence among this population.[13] In a 2024 study conducted by Muley A in Gujarat among adults with type 2 diabetes, prevalence of eating disorder was found to be 35%.[14] In a 2015 study conducted by Ramaiah R et al in Karnataka the prevalence of eating disorder among medical students was 16.9%.[15] In a 2023 study done by Abdulla Zara et al in Bahraini the prevalence of eating disorder was found to be 21.2 among young adults.[16] A study done by Bouhmidi M in 2024 Morocco prevalence of eating disorder was 19%.[17]

Table 5: Logistic Regression analysis of eating disorder and related variables

Variable	p-value**	aOR (95%CI)
Gender		
Female	**<0.001****	6.15 (2.31-16.34)
Male	**-**	Reference
Age		
<30	**0.047****	0.31 (0.10-0.98)
31-60	0.07	0.33 (0.10-1.11)
>60	-	Reference
Occupation		
Professional	**0.023****	2.49 (1.13-5.48)
Skilled	0.59	1.34 (0.45-3.92)
Unemployed	-	Reference
Exercise		
Everyday	0.18	2.00 (0.72-5.56)
>3days/week	0.87	1.07 (0.44-2.57)
1-3days/week	0.11	2.16 (0.83-5.65)
Never	-	Reference
BMI		
Obesity	**<0.001****	5.15 (2.03-13.05)
Overweight	0.72	0.86 (0.36-2.01)
Underweight	**<0.001****	6.84 (2.60-17.99)
Normal	**-**	Reference
Diet for weight loss		
Yes	**0.001****	6.06 (2.01-18.30)
No	-	Reference
Feel physically not attractive		
Yes	0.18	1.60 (0.79-3.26)
No	-	Reference
Family history of mental health problem		
Yes	**0.011****	4.71 (1.42-15.54)
No	-	Reference
SRQ- Mental distress		
Present	0.67	1.17 (0.55-2.45)
Absent	-	Reference
WHO 5 wellbeing		
Poor wellbeing	**0.007****	2.82 (1.32-6.01)
Good wellbeing	**-**	Reference

aOR - Adjusted Odd's Ratio

**p-value statistically significant <0.05 in logistic regression analysis.; SRQ – Self reporting questionnaire; WHO 5- WHO wellbeing index scale

The difference may be due to variation in tools used for evaluation, sampling method of the study, comorbid conditions, cultural and regional factors may lead to differences in prevalence rates. In the present study, the prevalence of eating disorder was high among the female participants (29.9%). In a 2023 study by Cuff A in Malta among young population, prevalence of eating disorder was high among male participants.[18] In a 2023 study by Dias RG et al in among adolescents the prevalence of eating disorder symptoms was around 56.9%, with a higher prevalence in females (63.6%).[19] In a 2020 study done by Smith A et al in USA among ROTC cadets, both genders are at risk for eating disorder 28.0% in male and 44.4% in female respectively.[20] In a 2021 study done by Shruti Iyer et al in Chennai among medical college students the prevalence was almost equal in both males and females.[5] Both genders are at equal risk of developing eating disorder in a study done by Weltzin TE which is a rare finding. Mostly, the prevalence in men is lower.[21] Most studies show higher prevalence in females, likely due to societal and psychological pressure related to body image. Few studies males are also increasingly affected, possibly due to changing ideal such as muscularity and leanness.

The prevalence of obesity and overweight in our study were 12.9% and 25.7% respectively. In a 2015 study done by Uehara M, perceived ideal BMI of ≤17.5 kg/m^2 was significantly associated with eating disorders, with an odds ratio of 4.55.[22] In a 2016 study done by Silva BY da C et al among participants with a BMI of 25 kg/m^2 or greater, 3% were diagnosed with severe binge eating disorder (BED), 20% with moderate BED, and 77% did not have BED, indicating a significant prevalence of eating disorders in this population.[23] In a 2017 study done by Mowafy M et al in Egypt 11% of overweight and obese patients attending the clinic had an eating disorder, with a significant prevalence among females (72.7%). This study highlights a strong correlation between obesity and the occurrence of eating disorders.[24] In a 2020 study done by Sabry W et al in Egypt among school students overweight adolescents (BMI 25-29.9 kg/m^2) were significantly associated with eating disorders. The study found that 6.1% had bulimia nervosa and 3.2% had anorexia nervosa, highlighting the prevalence of eating disorders linked to BMI.[25] Most of the studies support that overweight and obesity are associated with higher risk of eating disorders and females are disproportionately affected. This difference may be due to different study population, cultural context.

The co-occurrence of eating disorders and poor mental well-being has been well established in our study. Individuals with Eating Disorders often experience high rates of psychiatric comorbidities, including depression, anxiety, obsessive-compulsive disorder (OCD), and post-traumatic stress disorder (PTSD).[26] A 2018 longitudinal study by Smith AR et al found that over 70% of individuals with anorexia nervosa or Bulimia nervosa also met the criteria for major depressive disorder (MDD) at some point in their illness.[27] Our study reinforces these findings by demonstrating the significant association between eating disorders and psychological health using the WHO-5 well-being index, highlighting the impact of poor mental well-being among individuals with eating disorders. In 2016 study by Holland G et al, Body image dissatisfaction was one of the strongest predictors of mental distress in the ED populations. Negative self-perception, often reinforced by societal beauty standards and social media exposure, leads to chronic stress, emotional distress, and increased vulnerability to mood disorders.[28] In 2023 study by Mastorci F et al among school dropout adolescents, Despite the growing recognition of eating disorders as a serious mental health condition, many individuals do not seek treatment due to misconceptions about eating disorders. In particular, considering Health-Related Quality of Life, eating disorders were related to physical impairment and well-being perception and self-perception.[29] The differences could

be due to stressors like poverty, overcrowding and body image pressure. Western settings may have better mental health awareness.

Conclusion

The findings of this study reveal a significant prevalence of eating disorders (23.1%) within the young adult population. Statistical analysis indicates a notably increased risk among female individuals, those reporting diminished psychological well-being as assessed by WHO-5 index, and those experiencing mental distress. Furthermore, factors including negative body image, dieting for weight reduction, elevated BMI and familial history of mental health disorders shows a statistically significant association with increased odds of presenting with eating disorders.

Recommendations

Future research should prioritize longitudinal studies to elucidate the temporal relationship between identified risk factors and the onset of eating disorders in young adults. Investigations employing diverse methodologies, including qualitative approaches, could provide insights contributing to these conditions. There are still gaps in knowledge about the treatment and its accessibility, as well as the long-term management of these disorders which complicate treatment. More research into preventative strategies, improving treatment options needs to be aimed at the true mental health of those with eating disorders.

Approval of Institutional Ethical Review Board: IHEC, Sree Balaji Medical College and Hospital, Ref no: 002/SBMCH/IHEC/2024/2244

Individual Authors' Contributions: II designed and provided the concept for the study. **MAS**, **SG** and **SDR** collected the data. **GS** analysed the data and prepared the manuscript. **AEVM** reviewed the manuscript. All contributing authors approved the final manuscript.

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References

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington (VA): American Psychiatric Association; 2022. Doi: https://doi.org/10.1176/appi.books.9780890425787
2. Galmiche M, Déchelotte P, Lambert G, Tavolacci MP. Prevalence of eating disorders over the 2000-2018 period: a systematic literature review. Am J Clin Nutr. 2019 May 1;109(5):1402-1413. Doi: https://doi.org/10.1093/ajcn/nqy342
3. Motwani S, Karia S, Mandalia B, Desousa. Eating Disorders in India: An Overview. Annals of Indian Psychiatry. 2021; 5(1): 12-17. Doi: https://doi.org/10.4103/aip.aip_27_21
4. Raval CM, Bhatt RB, Tiwari DS, Panchal BN. Prevalence and characteristics of eating disorders among college students of a nonmetro city of Gujarat. Ind Psychiatry J. 2022 Jan-Jun;31(1):74-80. Doi: https://doi.org/10.4103/ipj.ipj_28_20 PMid:35800878 PMCid:PMC925560
5. Iyer S, Shriraam V. Prevalence of Eating Disorders and Its Associated Risk Factors in Students of a Medical College Hospital in South India. Cureus. 2021 Jan 26;13(1):e12926. Doi: https://doi.org/10.7759/cureus.12926. PMID: 33654608
6. Harshika Baweja. Psychological Impact of Eating Disorders- A Comprehensive Review. Universal Research Reports. 2024 Jul 22;11(4):46-56. Doi: https://doi.org/10.36676/urr.v11.i4.1305
7. Loth K, Wall M, Larson N, et al. Disordered eating and psychological well-being in overweight and non-overweight adolescents: Secular trends from 1999 to 2010. Int J Eat Disord. 2015 Jan 30;48(3):323-7. Doi: https://doi.org/10.1002/eat.22382 PMid:25641764 PMCid:PMC4792510
8. Shashank KJ, Gowda P, Chethan TK. A Cross-sectional Study to Assess the Eating Disorder among Female Medical Students in a Rural Medical College of Karnataka State. Natl J Community Med 2016; 7(6):524-527.
9. Anakaputhur Population, Caste Data Kancheepuram Tamil Nadu - Census India. www.censusindia.co.in. 2025 [Access Date 2025 April 27]. Available from: https://www.censusindia.co.in/towns/anakaputhur-population-kancheepuram-tamil-nadu-803353
10. Eating Attitude Test 26 (EAT26) questionnaire. [Access Date 2025 April 27]. Available from: https://insideoutinstitute.org.au/assets/eating%20attitudes%20test%20eat-26.pdf.
11. Beusenberg M, Orley JH, Health WHOD of M. A User's guide to the self reporting questionnaire (SRQ. iriswhoint. 1994. [Access Date 2025 April 27]. Available from: https://iris.who.int/handle/10665/61113
12. WHO. The World Health Organization-Five Well-Being Index (WHO-5) = world Health organization. 2024. [Access Date 2025 May 27]. https://www.who.int/publications/m/item/WHO-UCN-MSD-MHE-2024.01
13. Nivedita N, Sreenivasa G, Sathyanarayana Rao TS, et al. Eating disorders: Prevalence in the student population of Mysore, South India. Indian J Psychiatry. 2018;60(4):433-7. Doi: https://doi.org/10.4103/psychiatry.IndianJPsychiatry_97_16 PMid:30581208 PMCid:PMC6278223
14. Muley A, Deshmane A, Mahajan A, et al. Eating Disorders: Assessing Its Prevalence and Pattern Among Adults With Type 2 Diabetes. Cureus. 2024 Jan 17 ;16(1), e52425. Doi: https://doi.org/10.7759/cureus.52425
15. Ramaiah R. Eating disorders among medical students of a rural teaching hospital: a cross-sectional study. Int J Community Med Public Health 2015;2(1):25-28. Doi: https://doi.org/10.5455/2394-6040.ijcmph20150206
16. Abdulla ZARA, Almahmood HO, Alghasra RR, Alherz ZAS, Alsharifa HAG, Qamber SJ, Alomar NA, Almajed FE, Almahroos TR, Alnajjas ZA, Alsayyad AS. Prevalence and associated factors of binge eating disorder among Bahraini youth and young adults: a cross-sectional study in a self-selected convenience sample. J Eat Disord. 2023 Jan 10;11(1):5. Doi: https://doi.org/10.1186/s40337-022-00726-3 PMid:36627719 PMCid:PMC9831363
17. M. Bouhmidi, A. Hamami, A. Elouali, et al. Prevalence of Eating Disorders in a pediatric population in the Eastern Region of Morocco. Int J Adv Res (Indore). 2024 Jun 30;12(06):539-44. Doi: https://doi.org/10.21474/IJAR01/18914
18. Cuff A, Grech A, Azzopardi A, et al. A Population-Based Study of Eating Disorders in Young Persons in Malta: Prevalence in

Males Nearly Equals that in Females. Humanit. soc. sci. commun. 2023 Jun 13;6(2):21-29. Doi: https://doi.org/10.30560/hssr.v6n2p21

19. Dias RG, Rech RR, Halpern R. Prevalence and associated factors of eating disorder symptoms in adolescents: a cross-sectional school-based study. BMC Psychiatry. 2023 Jun 2; 23 (1):393. Doi: https://doi.org/10.1186/s12888-023-04898-3 PMid:37268900 PMCid:PMC10239165

20. Smith A, Emerson D, Winkelmann Z, et al. Prevalence of Eating Disorder Risk and Body Image Dissatisfaction among ROTC Cadets. Int J Environ Res Public Health. 2020 Nov 4;17(21):8137. Doi: https://doi.org/10.3390/ijerph17218137 PMid:33158069 PMCid:PMC7663585

21. Weltzin TE, Weisensel N, Franczyk D, et al. Eating disorders in men: update. J Mens Health Gend. 2005 Jun;2(2):186-93. Doi: https://doi.org/10.1016/j.jmhg.2005.04.008

22. Uehara M, Sakakibara H. Prevalence of Eating Disorders Assessed Using Eating Attitudes Test-26 and Their Relevant Factors in Japanese Working Women. Nihon Eiseigaku Zasshi. 2015;70(1):54-61. Doi: https://doi.org/10.1265/jjh.70.54 PMid:25744793

23. Silva BY da C, Sousa MES. Prevalência de compulsão alimentar periódica e avaliação do consumo alimentar de indivíduos com excesso de peso. 2016 Sep 30;29(3):326-33. Doi: https://doi.org/10.5020/18061230.2016.p326

24. A.Mowafy M. Prevalence of Eating Disorders among Overweight and Obese patients attending Obesity outpatient Clinic in Kasr Al Ainy Hospital. Egypt Family Med J. 2017 May 1;1(1):1-14. Doi: https://doi.org/10.21608/efmj.2017.67496

25. Sabry W, ElMahlawy N, Essawy H, et al. Occurrence, sociodemographic, and clinical correlates of eating disorders among a sample of secondary school students in Egypt. Middle East Current Psychiatry. 2020 Nov;27(1),66. Doi: https://doi.org/10.1186/s43045-020-00073-6

26. Kaye WH, Bulik CM, Thornton L, et al. Comorbidity of Anxiety Disorders With Anorexia and Bulimia Nervosa. Am J Psychiatry. 2004 Dec;161(12):2215-2221. Doi: https://doi.org/10.1176/appi.ajp.161.12.2215 PMid:15569892

27. Smith AR, Zuromski KL, Dodd DR. Eating disorders and suicidality: what we know, what we don't know, and suggestions for future research. Current Opinion in Psychology. 2018 Aug;22(22):63-67. Doi: https://doi.org/10.1016/j.copsyc.2017.08.023 PMid:28846874

28. Holland G, Tiggeman M. A Systematic Review of the Impact of the Use of Social Networking Sites on Body Image and Disordered Eating Outcomes. Body Image. 2016 Jun;17(1):100-110. Doi: https://doi.org/10.1016/j.bodyim.2016.02.008

29. Mastorci F, Francesca M, Paolo Piaggi, et al. Relationship between eating disorders perception and psychosocial profile in school-dropout adolescents. J Eat Disord. 2023;11(1),59. Doi: https://doi.org/10.1186/s40337-023-00783-2 PMid:37041596 PMCid:PMC10091672