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A Study on Clinical Profile, Risk Factors, and Medical Management of Anorexia Nervosa and Bulimia Nervosa: A Descriptive Study

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Abstract

Background: Anorexia nervosa (AN) and bulimia nervosa (BN) are serious eating disorders with overlapping but distinct risk factors and treatment needs. Objective: To describe demographic patterns, risk-factor distribution, and short term treatment outcomes in a cohort of 32 patients with AN or BN. Methods: Consecutive patients meeting DSM 5 criteria for AN or BN at a tertiary psychiatric centre were enrolled over 18 months. Baseline data, risk factors, and 12 week management outcomes were recorded. Results: Of 32 participants (mean age = 21.8 ± 3.4 yrs; 81% female), 18 (56%) had AN and 14 (44%) BN. The commonest risk factors were body image dissatisfaction (78%) and perfectionism (63%). Combination therapy (medical stabilization± fluoxetine) plus cognitive behavioural therapy enhanced (CBT E) achieved ≥10% weight restoration or ≥50% binge/purge reduction in 66% of AN and 71% of BN cases. Conclusion: Early multimodal intervention yields promising short term outcomes. Targeting modifiable psychosocial risk factors—especially distorted body image—remains essential. Long term follow up is required to assess relapse.

KEYWORDS: Eating Disorder, Anorexia Nervosa.

INTRODUCTION

Eating disorders impose high morbidity and mortality, yet Indian data remain sparse. AN is characterized by self-imposed weight loss and distorted body image, whereas BN involves recurrent binge eating with compensatory behaviours. Both share psychosocial and biological determinants[1]. This study aimed to map demographic features, delineate risk factors, and evaluate 12-week medical management in a small but well-characterized sample[2-5].

Mental health is an under-recognized field of medicine that has gained traction only in the last decade. A report by the World Health Organization (WHO) revealed that 7.5% of the Indian population suffers from some form of mental disorder. Mental illnesses constitute one-sixth of all health-related disorders and India accounts for nearly 15% of the global mental, neurological, and substance abuse disorder burden[6-7].

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[8[. 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

Eating disorders are extremely serious health issues that affect people of all ages but are mainly seen among adolescents and students The Multi-Service Eating Disorders Association (MEDA) 4 revealed that nearly 15% of women in the age group of 17 to 24 have eating disorders of some type. 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 [9-13].

These are serious psychiatric illnesses with significant morbidity and mortality rates. Eating disorders are predominantly represented by the mental effects of preoccupation with body weight, shape, and diet[14-17]. There is a multitude of factors that influence these disorders, like socioeconomic status, stress, media, and so on which have not been thoroughly researched 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[18-20].

In such a situation, a thorough screening program is the best strategy for the prevention of serious complications of advanced eating disorders. While eating disorders can only be correctly

METHODS

This study was conducted in a tertiary hospital. After obtaining institutional ethical committee approval. It was Cross-sectional observational study conducted on 32 patients in the department of Psychiatry, at a tertiary care centre, from January / 2020 to July/2020. Among them 18 patients were 18 Anorexia nervosa and 14 Bulimia nervosa. All patient were selected from OPD of General Medicine.

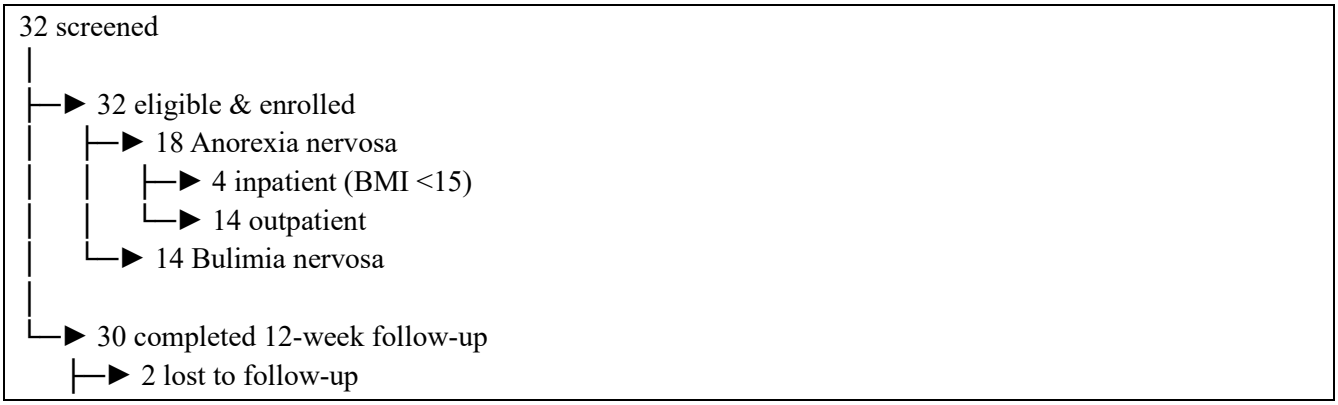
Total 32 participant were approached to project among them No one were excluded due to non-fulfilling of eligibility criteria and Total 32 Confirmed cases were included on the basis of fulling of the eligibility criteria.

The institute Ethics Committee approval was obtained before starting the sample collection. A written and informed consent was taken from the patient regarding the study in his/her vernacular language and English. In this study Patients were subjected to: A detailed history of sign & symptoms and its duration. Detailed history of systemic diseases and its duration, medication were noted. Patients were subjected to General physical examination

Item	**Description**
Design	Prospective descriptive study
Setting	Psychiatry & Nutrition Clinic, tertiary center
Duration	January 2023 – June 2024
Participants	DSM-5 AN or BN, age 16-30 yrs, first-contact or relapse, n = 32
Exclusion	Psychosis, substance-use disorder, severe medical instability
Assessments	Mini International Neuropsychiatric Interview, Eating Disorder Examination Questionnaire (EDE-Q), risk-factor checklist
Interventions	✓ Medical stabilization (inpatient if BMI < 15 kg/m² or electrolyte imbalance)
✓ Selective serotonin-reuptake inhibitor (fluoxetine 40-60 mg/day) for BN or severe anxiety/depression	

✓ CBT-E weekly × 12 sessions	
Outcomes	AN: ≥10 % weight gain from baseline; BN: ≥50 % reduction in binge/purge frequency at 12 wks

Participant Flowchart



RESULTS

In this study we found that Eating disorders (Anorexia nervosa (AN) and bulimia nervosa) is associated with demographic profile of patient. 44%% patient suffered of eating disorders belongs to 16-20 years years age group followed by 43 % belong to 21-25 years ag group.

It means age is important factors for eating disorders. Younger age group were more prone to develop eating disorders.

Female (81%) were more prone to suffered of eating disorders as compared to male gender. (Table 1)

Prevalence in Urban residence is more as compare to Rural area, its prevalence are 66 % of eating disorders (Table 1).

Demographic Profile Table 1 (n = 32)

Variable	Category	n (%)
Age (yrs)	16-20	14 (44)
	21-25	13 (41)
	26-30	5 (15)
Sex	Female	26 (81)
	Male	6 (19)
Diagnosis	Anorexia nervosa	18 (56)
	Bulimia nervosa	14 (44)
Residence	Urban	21 (66)
	Semi-urban/Rural	11 (34)
Socio-economic class*	Upper-middle	12 (38)
	Lower-middle	13 (41)
	Low	7 (22)

*Kuppuswamy scale 2021 update.

In this study we found that Body image dissatisfaction is important risk factors for eating disorders. its prevalence is 78%Followed by Perfectionistic traits its prevalence 63 % (Table 2)

Dieting history <14 yrs is also contributary risk factors for Eating disorder.

Risk-Factor Distribution Table 2

Risk Factor	Operational Definition	n (%)
Body-image dissatisfaction	EDE-Q shape/weight concern ≥4	25 (78)
Perfectionistic traits	Frost Multidimensional Perfectionism ≥ 1 SD above mean	20 (63)
Dieting history <14 yrs	Any sustained calorie-restriction episode	17 (53)
Adverse life events	≥1 significant trauma/grief in past 2 yrs	14 (44)
Family history of ED/obesity	First-degree relative	8 (25)
High social-media usage (>3 h/day)	Self-report	19 (59)
Comorbid anxiety/depression	MINI confirmed	15 (47)

Treatment outcome Table 3

Outcome	Anorexia (n = 18)	Bulimia (n = 14)
Completed treatment	17 (94)	13 (93)
Primary endpoint met	12 (66)	10 (71)
Mean weight gain (kg)	3.8 ± 1.2	–
Mean BMI change	15.6 → 17.1	21.2 → 21.6
Median binge episodes/wk	–	6 → 2
Median purge episodes/wk	–	5 → 1
Adverse events	Mild refeeding edema (2), SSRI-related nausea (3); no serious events	

DISCUSSION

This cohort reinforces global trends—young females predominate, with distorted body image and perfectionism topping the risk profile.

In this study we found that Eating disorders (Anorexia nervosa (AN) and bulimia nervosa) is associated with demographic profile of patient. 44%% patient suffered of eating disorders belongs to 16-20 years years age group followed by 43 % belong to 21-25 years ag group.

It means age is important factors for eating disorders. Younger age group were more prone to develop eating disorders. Female (81%) were more prone to suffered of eating disorders as compared to male gender. (Table 1)

Prevalence in Urban residence is more as compare to Rural area, its prevalence are 66 % of eating disorders (Table 1)

Since most patients with AN should be treated as outpatients, the assessment should determine whether outpatient treatment is safe[21]. A clinical interview is essential for risk assessment. Ascertaining the duration and severity of the patient's ED may help to identify likely complications.

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Assessment of nutrition should include information about the intake of bread and similar thiamine-containing nutrients, the intake of meat and fish and other zinc-containing nutrients, and whether the patient has a varied or monotonous diet with the associated risk of multiple deficiencies. Information about physical capacity compared with friends or relatives of the same age should be obtained[22-24]. The clinical interview should also assess whether the patient has excessive exercise, vomiting and use of laxatives or other medications, including those that aim to increase metabolism (*e.g.,* thyroxine), or herbs or other substances that may have metabolic or diuretic effects. he presence of purging behaviours is sometimes difficult to assess, and corroborative sources of data should be obtained whenever possible[25].

Information about past eating disorder treatment including previously diagnosed complications is also valuable. Anamnestic information regarding attacks of dizziness, syncope, or near-syncope warrants the acquisition of more detailed anamnestic information about possible arrythmia and other causes of the attacks such as hypoglycaemia or hypotension. Information regarding exercise (especially excessive exercise), vomiting or other purging activity, pulse rate during or before the attack, and data on altered medication can shed light on possible underlying mechanisms[26]. In particular, recent onset of symptoms suggestive of cardiac arrythmia is important because refeeding might alter the electrolyte balance and further worsen unstable arrythmia

Outpatient psychotherapy is the mainstay of treatment for AN, as it is less costly and disruptive than other, more intensive levels of care proportion of patients will need inpatient psychotherapy or supportive care[27]. Research data to guide choices among types of psychotherapy for outpatient and inpatient treatment are limited and disputed AN remains difficult to manage since patients are often challenging to engage, and outcomes are often poor, even in those who agree to commence treatment [28-29]. However, over the past 20 years there has been empiric support for the efficacy of several treatments

Early combined nutritional, pharmacologic, and CBT-E interventions produced clinically meaningful short-term improvement, echoing meta-analytic evidence that integrated care outperforms monotherapy [30]. High social-media exposure emerged as a modifiable correlate, supporting public-health calls to regulate body-ideal content. Limitations include the small sample, single-centre design, short follow-up, and reliance on self-report for some variables. Nevertheless, the study highlights feasible outpatient management even in resource-limited settings.

CONCLUSION

In a sample of 32 Indian patients with AN or BN, multimodal 12-week management achieved satisfactory short-term outcomes in two-thirds of cases. Targeting body-image dissatisfaction, perfectionism, and social-media influences should be integral to prevention and therapy programs. Larger longitudinal studies are warranted to confirm sustainability of gains and identify predictors of relapse.

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CONFLICT OF INTEREST

The authors report no conflicts of interest

SUBMISSION DECLARATION

This submission has not been published anywhere previously and that it is not simultaneously being considered for any other journal.

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