P-ISSN: 2618-0723
E-ISSN: 2618-0731

NAAS Rating (2025): 5.04
www.extensionjournal.com

International Journal of Agriculture Extension and Social Development

Volume 8; Issue 9; September 2025; Page No. 312-316

Received: 02-07-2025
Accepted: 06-08-2025

Indexed Journal
Peer Reviewed Journal

Prevalence of anorexia nervosa among adolescent girls in Jhansi district

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DOI: https://www.doi.org/10.33545/26180723.2025.v8.i9e.2420

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Abstract

Anorexia nervosa (AN) is a severe psychiatric condition identified by reduced food intake, anxiety of weight increase, and distorted body perception. It is also associated with psychological disorders, recurrent amenorrhoea, nutritional damage, a weakened endocrine system, problems related to the heart, gastrointestinal tract, and blood. Social pressure, especially on social media, has led to an increase in the prevalence of eating disorders like

Anorexia nervosa. Anorexia nervosa (AN) patient's experienced weight loss and energy loss as a result of their excessive physical activity, which is out of proportion to their degree of chronic under nutrition and dietary restriction. In addition to metabolic abnormalities, patients with AN exhibited hypothermia, rigidity in conduct, compulsivity, and mood disorders including despair or worry. A study was conducted to identify the prevalence of Anorexia nervosa among adolescence girls of Jhansi district. Results revealed that adolescence girls of 17-21 age group were more prone towards beginning stage of anorexia nervosa condition, as very least were encountered with serious anorexia nervosa phase. Anorexia nervosa (AN) was formerly thought to be more common in European nations, but it is now also recognized in teenage females in India. Curing anorexia nervosa (AN) in these countries does not involve the use of specific therapies or treatments. There is currently no therapy or treatment available for teenage girls suffering from anorexia nervosa (AN). It has been observed that when the early stages of the serious stage of the disease are reached, there is no improvement in the physical and mental development of these girls.

Keywords: Anorexia Nervosa (AN), psychiatric condition, psychological disorders, hypothermia, mood disorders

Introduction

The extreme an overestimation of shape and weight is the main psychological behaviour of anorexia nervosa. Also, anorexics have the physical endurance to put themselves through extreme self-imposed weight loss. Food restriction is just one component of the weight-loss strategies used. Many anorexias overwork themselves and engage in excessive activity to burn calories [1].

Severe and lasting anorexia nervosa (SE-AN), initially identified as "chronic AN" in 1981, is a severe condition that continues to worsen even after receiving "state of the art" therapy. Compared to schizophrenia and depression, AN affect 20–50% of the population and is associated with significant psychosocial impairment, increased mortality, and a heavier healthcare burden. Inequalities in treatment and research funding continue in spite of this. The current set of theoretically based SE-AN criteria includes treatment exposure specifiers for severity and duration. It is challenging, nevertheless, to apply such criteria—including the definition of severity—in clinical or scientific settings [12].

With an estimated lifetime frequency of up to 4% in females and 0.3% in males, AN affects people of all ages, ancestries, and genders. About 75% of patients with AN report having a co-occurring mood or anxiety problem throughout their lifespan. Patients with AN may be classified as restrictive or binge eating/purging type. Because of starving, binge eating, and/or purging habits, somatic symptoms of anorexia nervosa (AN) impact almost every organ system in the body, however they vary based on the degree and stage of the illness [15].

The average age of beginning is often around adolescence, a time when peer interactions are crucial, romantic relationships start to develop, and parents are less frequently sought out for emotional and social support. However, parents continue to be major attachment figures, particularly during difficult situations. Therefore, the interaction between teenagers and their parents may be of importance in the overall setting of EDs [4].

The presence of body image dissatisfaction, which in turn causes abnormal eating behaviours and extreme self-evaluation, distinguishes these two related inappropriate patterns of eating behavioural patterns. The development of eating disorders can be influenced by a number of factors, including early age, having a first-degree relative (such as a parent, sibling, or mother) who has an eating disorder, going through a loved one's death or illness, adjusting to a new school, workplace, or home environment, undergoing weight changes, divorce, puberty issues, socio-cultural norms, or sexual trauma [2].

The findings from multiple case-control studies reveal a

typical psychometric profile of AN-at-risk patients. Perfectionism, negative affectivity, and negative self-perception have been shown to be especially important indicators of personal susceptibility to develop AN. Research studies using the Oxford Risk Factors Interview (RFI) showed that subjects with anorexia significantly more frequently experienced perfectionism, negative affectivity, negative self-assess extreme conformity the absence of close relationships, and a history of family sadness than control cases did [3].

lower BMI signifies a more severe condition. Yet, previous research indicates that both groups face comparable levels of malnutrition, relapse rates, and mortality risk despite having lower BMIs than individuals with atypical AN. This is true even if adolescents and adults with AN have lower BMIs than those without AN. The majority of physical health, eating disorder, and psychological disorder markers were not different between people with AN and those with atypical AN, according to current metanalyses. The only exceptions were that adolescents and adults with AN had more menstrual disturbance and had lower bone mineral density than those with unusual AN. This expanding amount of research raises concerns regarding the usefulness of categorising AN and unusual AN into various illnesses, as well as [5].

When a person's body weight is 15% or less below a healthy weight and they meet the conditions for AN with many medical issues, there is a significant physical strain. The body's internal organs are dampened; the body temperature lowers, the hands and feet get chilly, the pulse and blood pressure drop, reflexes and muscular power are diminished, the metabolic rate declines, and the hair becomes brittle. Osteoporosis affects around 38% of people with AN, and changes in hormone production with amenorrhoea are a typical early indicator because menstruation is directly connected with weight and body fat tissue [11].

Patients with AN have ongoing metabolic alterations as a result of their reduced calorie intake, which can lead to various kinds of multi-organ difficulties. These include liver and cardiovascular disorders, neuroendocrine dysfunction, and, in certain situations, specific nutritional deficiencies [10].

There has been evidence of a link between AN and a number of autoimmune conditions, including multiple sclerosis, psoriasis, Crohn's disease, diabetes mellitus, thyroiditis, and celiac disease. It is suggested that immunological diseases play a major role in these situations. Immunopathological routes are essential for AN and other autoimmune disorders. Stressors related to psychological have the ability to coordinate immune cell mobilisation and initiate the synthesis of inflammatory mediators, both of which can accelerate the symptoms of systemic lupus erythematosus (SLE). AN symptoms are also connected to long-term disorders that are linked to anxiety and/or depression [14].

AN is a severe mental and nutritional disorder that can be disastrous. It is characterised by a body mass index that is low, hunger, and a great fear of gaining weight. An estimated 1% of women and 0.5 percent of males in the general population are expected to have AN [6].

Although AN is capable of affecting people of different ages, genders, sexual orientations, and ethnic backgrounds, young adult women and teenage girls are especially susceptible [7]. The beginning of AN increases the risk of impaired growth and difficulties reaching anticipated height [8].

Early intervention has been restricted in the past by severe weight-based eligibility requirements or delays in treatment brought on by medical practitioners' trivialization of symptoms. A complete recovery depends on early discovery and management; yet, people with atypical presentations frequently suffer from prolonged disease durations and are less likely to require inpatient treatment, which may indicate under recognition. Furthermore, peers, family, and medical professionals may minimise or even support initial weight reduction in sociocultural contexts where being thin is highly prized, restricted eating habits or "dieting" is the norm, and weight-based stigma is common [13].

Research Methodology

The study was conducted in the Jhansi District of Uttar Pradesh in the year 2023. The data was collected by random sampling technique through which 116 girls were chosen from colleges located in different areas of the district. The girls who were falling under the age group of 17 to 21 years; and studying in Undergraduate and Post graduate are main target group for the study. A questionnaire prepared by Dr. Vijaya Lakshmi Chouhan for Anorexia Test was administered to elicit the information for research work. The collected data was tabulated and analysed by using SPSS Software.

Results and Discussion

Table 1 records the presence of different stage of Anorexia Nervosa among college going adolescent girls. During data collection it was found that in more than half of the girls (55.2%) the beginning of anorexia nervosa which is first stage has been seen whereas, 37.1 percent girls were suffering from mild anorexia nervosa. The serious Anorexia nervosa condition was found in very least (7.8) percent of girls. While data collection, the researcher found that none of the adolescent girls of 17-21year group were experiencing the dangerous Anorexia nervosa condition (Plate 1).

Table 1: Presence of different stages of Anorexia Nervosa among girls n=116

Sl. No.	Stage of Anorexia Nervosa	No. of Respondent	Percentage
1	Beginning of Anorexia	64	55.2
2	Mild Anorexia	43	37.1
3	Serious Anorexia	9	7.8
4	Dangerous Anorexia	0	0

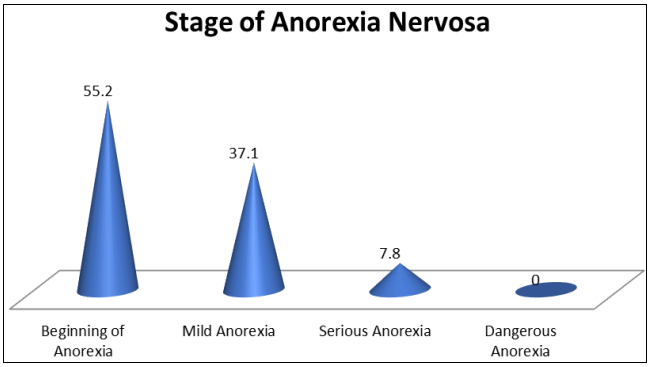

Plate 1: Graphical representation of presence of different stages of Anorexia Nervosa among girls

The association of different stages of Anorexia Nervosa with age of adolescent girls were depicted in Table 2. The beginning and mild stages of anorexia nervosa were mainly noticed in the girls of age group 17-21 years as 56.2% and 41.7% respectively. The results of the study focused that among adolescent's girls aged between 19-20 years, 54.4% were at onset in beginning of anorexia and 33.8 percent at mild anorexia nervosa stage. At the same time occurrence of serious anorexia nervosa was negligible nearly 2.1 percent in girls of 17-19 age group but more visible in girls of 19-21 age group (11.8 percent). It was observed that none of the adolescent girls of any age group were facing the problem of dangerous anorexia. On the basis of results as indicated in the table 2, it was cleared that the beginning of anorexia nervosa and mild anorexia nervosa stage were more common in the age group of 17 to 19 years while severe anorexia was more common in the age group of 20 to 21 years (Plate 2).

No significant difference in the $\chi 2$ value indicates there was no association between anorexia nervosa with age (Table 2).

Table 2: Association of Anorexia Nervosa with Age

Age (Year)	Beginning of Anorexia Nervosa	Mild Anorexia Nervosa	Serious Anorexia Nervosa	Dangerous Anorexia	$\chi 2$
17-19	56.2	41.7	2.1	0	.143
19-21	54.4	33.8	11.8	0	

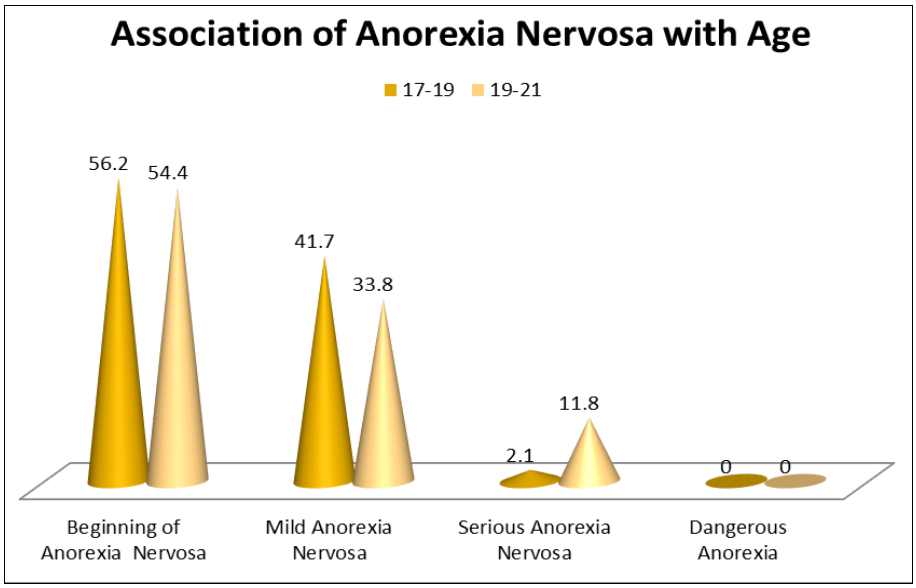

Plate 2: Association of Anorexia Nervosa stages with different age group

The results of various researches related to Anorexia nervosa disclosed that food Avoidance, medical complication, psychological factors and body or figure consciousness were four factors which affected the occurrence of different stages of anorexia nervosa at low/high risk level. Food avoidance by girls was main cause of mild anorexia stage (70.6%) at high risk level rather than beginning of anorexia (17.6%) and serious anorexia (11.8%) stage a clearly shown in Table 3. While, nearly half of the girl's population (57.6%) were onset of anorexia state at low risk level.

The 70.9% adolescent girls were facing the problem of first stage of anorexia at low risk level and 67.6% were mild anorexia at high risk level due to medical complication. Psychological factors caused beginning of anorexia at low risk in only 60% girls but at high risk level serious anorexia state was noticeable in 62.5% adolescent girls. Now a day's adolescent girls were having consciousness for body or figure which played crucial part in start of anorexia at low risk level in 61.1% girls, in other hand 47.6% girls were depicting the presence of mild anorexia at high risk level.

Table 3: Various causative factor for different stages of anorexia nervosa condition

Causes of Anorexia Nervosa	Food Avoidance		Medical Complication		Psychological Factors		Body or Figure Consciousness	
Stages of Anorexia Nervosa	Low Risk	High Risk	Low Risk	High Risk	Low Risk	High Risk	Low Risk	High Risk
Beginning of Anorexia	57.6%	17.6%	70.9%	10.8%	60%	Nil	61.1%	9.5%
Mild Anorexia	34.3%	70.6%	26.6%	67.6%	40%	37.5%	37.9%	47.6%
Serious Anorexia	8.1%	11.8%	2.5%	21.6%	Nil	62.5%	1.1%	42.9%
Dangerous Anorexia	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

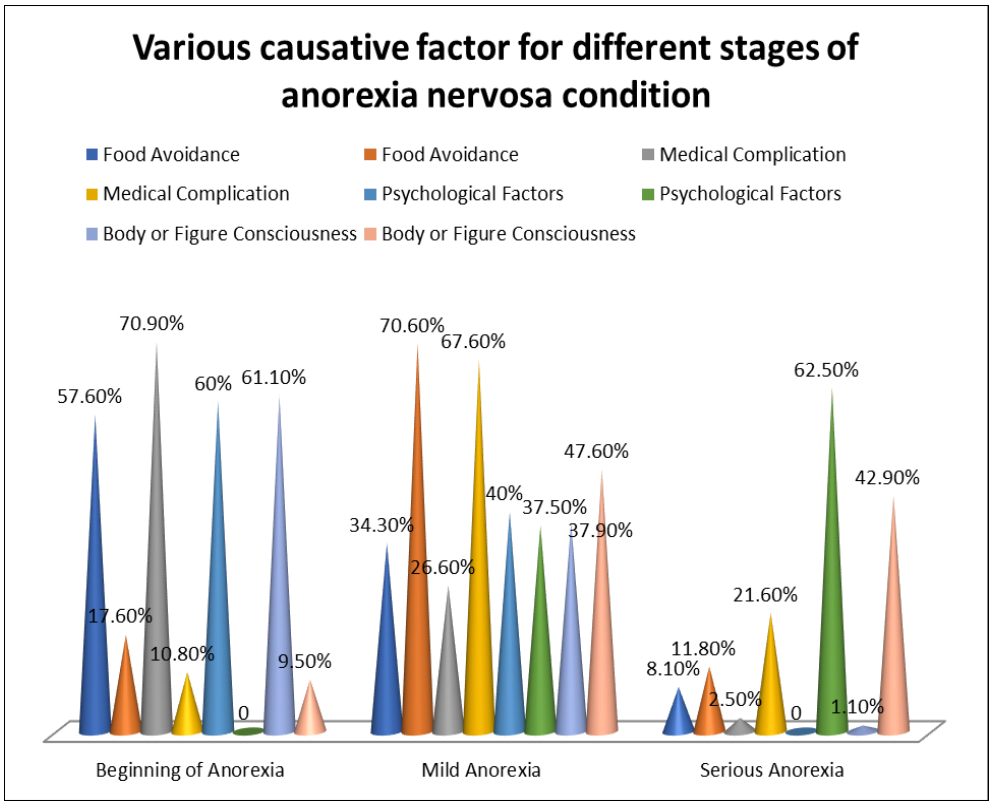

Plate 3: Representation of different factors causing Anorexia nervosa condition

Conclusion

At the end of study, the researcher wrap-up with the statement that adolescence girls were more prone towards beginning stage of anorexia nervosa condition, as very least were encountered with serious anorexia nervosa phase. None of the adolescent girls were facing the problem of dangerous anorexia nervosa stage. The prevalence of first stage of anorexia nervosa and mild anorexia was more in 17- to 19-year-old adolescence girls whereas, 19- to 20-year-old adolescence girls were encountered with the problem of serious anorexia. The various factors like food Avoidance, medical complication, psychological factors and body or figure consciousness were main causes which affected the occurrence of different stages of anorexia nervosa at low/high risk level. Medical complications and food avoidance by adolescence girls were major root cause of anorexia nervosa state.

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