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DETERMINING THE FREQUENCY OF EATING DISORDERS AMONG UNDERGRADUATE FEMALES OF AGE 18-26 YEARS IN LAHORE, PAKISTAN: USING EAT- 26 AND Its ASSOCIATION WITH EATING HABITS

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Abstract

Background: Eating disorders (EDs) such as anorexia nervosa, bulimia nervosa, and binge eating disorder are rising among young females, often linked to poor dietary habits, distorted body image, and sociocultural pressures. Objective: To assess the prevalence of eating disorders and their association with BMI, pica behavior, and junk food intake among undergraduate female students in Lahore. Methods: A cross-sectional study was conducted among 300 female undergraduates from two government and two private universities using the EAT-26 and FFQ questionnaires. Data were analyzed using SPSS 16.0; chi-square test was applied with $p < 0.05$ as significant. Results: Mean age of participants was 20.6 ± 1.78 years. Based on EAT-26, 49.3% were at risk of an eating disorder. Significant associations were found between eating disorders and BMI ($p = 0.003$), pica behavior ($p = 0.001$), and junk food intake ($p = 0.054$). Private university students showed a higher prevalence ($p = 0.000$). Conclusion: Nearly half of undergraduate females exhibited disordered eating attitudes. Preventive interventions and awareness programs are essential to promote healthy eating behaviors among university students.

INTRODUCTION

Eating disorders (EDs) represent a group of serious psychological and behavioral conditions characterized by disturbed eating habits, weight control behaviors, and distorted body image perceptions (1). The most recognized types anorexia nervosa, bulimia nervosa, and binge eating disorder pose significant threats to both physical and mental health. These disorders have seen a substantial rise globally over the past two decades, particularly among adolescents and young adults (2).

According to the World Health Organization, EDs are among the most fatal psychiatric conditions, following substance abuse and depression (3). Females are disproportionately affected due to sociocultural ideals that equate beauty with thinness, resulting in intense pressure to attain unrealistic body standards. This cultural obsession with slimness, combined with digital media influence, creates a breeding ground for unhealthy eating behaviors such as chronic dieting, food restriction, and purging practices (4,5).

University students are a particularly vulnerable population. Transitioning to adulthood, increased academic stress, and peer comparison often disrupt normal eating patterns (6). Previous studies conducted in Pakistan and neighboring countries have indicated that the prevalence of EDs among medical and non-medical students ranges from 15% to 40%, with higher rates in females than males. However, these studies have largely overlooked the role of junk food consumption, pica behavior, and institutional differences between public and private universities (7,8).

Junk food high in sugar, saturated fats, and sodium has become a dietary staple among youth, often replacing nutritious meals and leading to psychological distress, weight fluctuations, and guilt, which can contribute to disordered eating. Similarly, pica, characterized by the consumption of non-nutritive items such as clay, ice, or chalk, reflects an atypical eating pattern that may coexist with nutritional deficiencies and mental stress (9,10).

Despite these concerning trends, there is limited research exploring the relationship between eating attitudes and lifestyle factors among Pakistani female undergraduates (11). This study therefore aimed to determine the prevalence of eating disorders and their association with BMI, pica, and junk food intake among undergraduate female students in Lahore, providing a foundation for early prevention and mental health awareness programs (12,13).

METHODOLOGY

This study used a cross-sectional research design to assess frequency of eating disorders among undergraduate females (aged 18-26 years) and their association with eating habits.

Study Design: Cross-sectional analytical study

Settings: 2 Government universities and 2 private universities

Sample Size: 300 students

Sampling Technique: Descriptive study design

Duration of Study: 4 months

Selection Criteria

Inclusion Criteria
Females
Individuals who showed consent

Exclusion Criteria
Males
Individuals who did not showed consent (16)

Data Collection Procedure: Data collection was done through form using EAT-26, FFQ and other habits questions (14).

Data Analysis: In the present analysis, the EAT-26 (Eating Attitudes Test) scores were examined using SPSS to identify any significant associations between eating attitudes and demographic variables such as age, gender, and educational background. The Chi-square test was applied to assess the relationship between categorical demographic variables and the risk of disordered eating behaviors as indicated by EAT-26 scores. A significance level of 0.05 was used to determine statistical relevance (17).

RESULTS

Table 1: Demographic and Anthropometric Characteristics

Variable	Minimum	Maximum	Mean ± SD
Age (years)	17	27	20.59 ± 1.78
Height (cm)	132	182	160.58 ± 7.39
Weight (kg)	33	87	53.82 ± 9.65

Table 2: BMI Classification

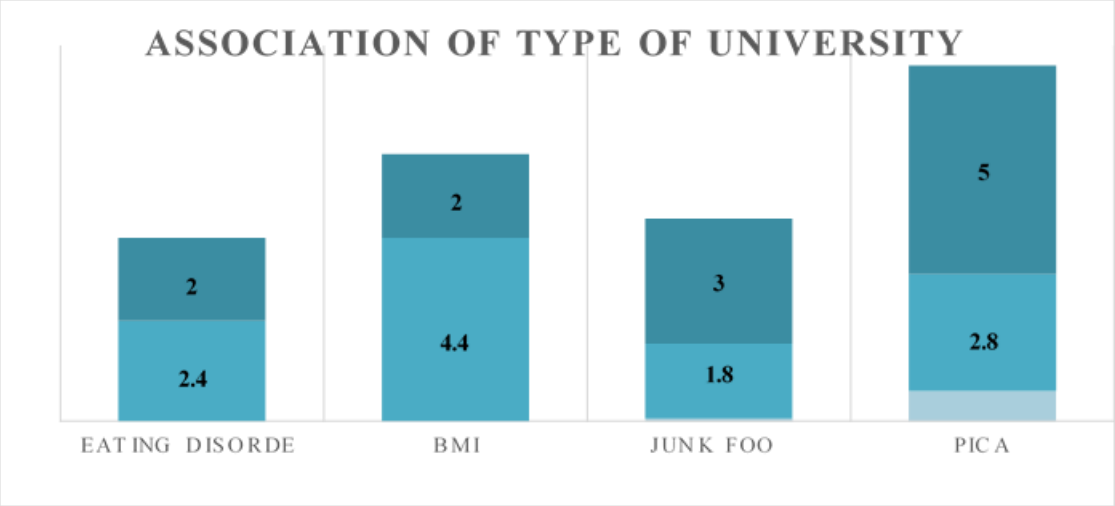
Category	Frequency (n)	Percentage (%)
Underweight	80	26.7

Normal	183	61.0
Overweight	34	11.3
Obese	3	1.0

Table 3: Association of Eating Disorders with Study Variables

Variable	p-value	Significance
BMI	0.003	Significant
Junk food intake	0.054	Borderline significant
Pica behavior	0.001	Significant
University type	0.000	Highly significant

Figure 1: Association of Type of University with factors like BMI, Junk food and Pica



DISCUSSION

The findings of this study highlight a disturbing prevalence of 49.3% of eating disorders among female undergraduate students, which is nearly double the rates reported in earlier Pakistani studies (15–25%) (15). This sharp increase may reflect evolving sociocultural dynamics, greater digital media exposure, and increasing dietary imbalances among university students. The high prevalence aligns with international studies, including one from Saudi Arabia (36.6%) and another from Turkey (17.1%), indicating that female students globally share common risk factors such as body image dissatisfaction, peer pressure, and unhealthy dietary patterns (18,19).

Students from private universities demonstrated higher rates of eating disorders than those from government institutions. This difference might be attributed to socioeconomic status, increased social comparison, and greater engagement with social media platforms, which reinforce idealized body images and diet culture (20,21).

The significant association between BMI and eating disorders supports previous research linking both underweight and overweight categories with body dissatisfaction and restrictive eating behaviors. Underweight individuals may experience pressure to maintain thinness, while overweight students may resort to extreme dieting or purging to conform to societal expectations (22,23).

Nearly 90% of respondents consumed junk food at least once weekly, with 12% doing so daily. Such dietary habits are linked to mood instability and poor nutrition. Although the relationship between junk food and eating disorders was borderline significant, the frequency of consumption reflects poor dietary awareness among

students. Moreover, 57% skipped breakfast regularly, which contributes to irregular eating patterns and binge tendencies (24,25).

One striking finding was the 35% prevalence of pica behavior, strongly associated with eating disorder risk. This suggests possible nutritional deficiencies or psychological coping mechanisms under stress. Pica remains underexplored in Pakistan, making this study an important contribution (26).

Digital media has intensified body image concerns among young women, fueling dieting trends and body dissatisfaction. Exposure to idealized figures on social media can distort self-perception, encouraging restrictive behaviors. Addressing these challenges requires integrating mental health awareness, nutritional education, and supportive counseling within universities (27,28).

Universities must treat eating disorders as both nutritional and psychological concerns. Awareness campaigns, counseling, and EAT-26 screenings can play a pivotal role in early detection. Educational programs emphasizing balanced diets, self-acceptance, and stress management are crucial for prevention (29).

CONCLUSION

Nearly half of the female undergraduate students in Lahore demonstrated abnormal eating attitudes, reflecting an alarming rise in disordered eating behavior. Significant associations were found between eating disorders and BMI, pica behavior, and junk food intake, with private university students showing greater vulnerability. These findings emphasize the need for immediate attention to students' nutritional and psychological well-being. Implementing routine screening, nutrition education, and mental health support services in universities could substantially reduce the growing prevalence of eating disorders among young Pakistani women.

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