

# Eating Disorders among Adolescent students in Kerala's Metro City: A growing concern

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Received: 13.07.2024

Revised: 16.08.2024

Accepted: 03.09.2024

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## ABSTRACT

This study investigates the eating habits and associated health risks among adolescent students in Kerala's metro cities, highlighting the growing prevalence of eating disorders (EDs). By examining dietary patterns, sociocultural influences, and psychosocial impacts, the research uncovers alarming trends such as increased consumption of fast food and sugary beverages, poor dietary choices despite awareness of healthy eating, and the lack of sufficient physical activity. Additionally, this study identifies gaps in access to nutritional counseling and awareness programs. Using a quantitative methodology, survey data from 100 adolescents reveal critical insights into their eating habits and attitudes. The findings underscore the need for interventions targeting schools, parents, and policymakers to address the epidemic of adolescent eating disorders.

**Keywords:** Eating disorder, health issue, adolescent, healthy snacks, parent's mistakes, awareness, nutritious food, diet

## INTRODUCTION

This study primarily examines the dietary habits and lifestyle choices of adolescents in metropolitan areas of Kerala, focusing on individuals aged 10 to 19 years who participated in the research. The aim is to shed light on the potential health challenges these students may encounter in the future. Despite being aware of the importance of a healthy and balanced diet, many adolescents are consuming fast food and sugary beverages (Smith & Kumar, 2022).

Through in-depth discussions with some participants, it became evident that while most understand the benefits of a nutritious diet, they struggle to adhere to it due to their demanding schedules (Thomas et al., 2021). Medical professionals warn that poor eating habits during adolescence significantly increase the risk of developing conditions like type 2 diabetes. Snacks made from refined flour (Maida) and oil are particularly harmful to the digestive system, and popular carbonated beverages contain approximately six tablespoons of sugar per 250 ml serving, highlighting the alarming daily sugar intake among adolescents (WHO, 2020).

Unhealthy snacking is also a major contributor to obesity. Furthermore, the hectic routines of students often leave little time for physical activity, exacerbating the risk of lifestyle-related diseases (Johnson & Lee, 2019). However, experts emphasize that adopting a healthy diet can mitigate these issues, even without regular exercise (Patel, 2018).

A significant challenge lies in meal preparation. Working mothers often find it difficult to dedicate time to making nutritious snacks, and even non-working mothers occasionally hesitate to prepare homemade alternatives. As a result, adolescents gravitate toward readily available snacks such as puffs, samosas, cutlets, and fast food like burgers and pizzas. The influence of peer recommendations and the widespread appeal of bakery snacks further drives this preference (Singh et al., 2022).

## Literature Review on Eating Disorders Among Adolescents

Eating disorders (EDs) are becoming increasingly prevalent among adolescents, posing severe physical, mental, and sociological health challenges. They often manifest in the form of anorexia nervosa, bulimia nervosa, and binge-eating disorders, each characterized by specific behavioral patterns and health risks (Neville, 2003). Anorexia nervosa is particularly common in this demographic and involves extreme dietary restrictions, while bulimia nervosa is associated with episodes of binge eating followed by compensatory behaviors such as vomiting, excessive exercise, or fasting (APA, 2013).

### **Sociological and Psychological Impacts**

Eating disorders are strongly linked with sociological, psychological, and behavioral issues. They are identified as priority mental health concerns due to their significant health risks and association with psychiatric comorbidities, such as depression (23.3%), anxiety (10%), and adverse family relationships (43.3%) (WHO, 2020). Cultural and societal pressures, including the "thinness culture," play a substantial role in exacerbating body image issues, particularly among adolescent females (Alonso et al., 2005). Additionally, the media's emphasis on aesthetics contributes to unhealthy dieting and weight-loss behaviors in adolescents (Ruiz-Lázaro et al., n.d.).

### **Gender Differences and Prevalence**

Although EDs are more commonly reported among females, there is an increasing recognition of their prevalence among males. Studies reveal a male-to-female diagnostic ratio of 1:10 for clinical cases, though non-clinical instances report a more balanced 1:4 ratio (Silén et al., 2021). Recent research highlights the need for gender-inclusive approaches in identifying and treating EDs, as traditional studies have predominantly focused on females, resulting in significant gender bias (Suarez-Albor et al., 2022).

### **Diagnostic Evolution and Challenges**

The DSM-5 and ICD-11 have expanded their diagnostic criteria to include conditions like atypical anorexia nervosa and purging disorder, addressing broader manifestations of EDs (APA, 2013). Despite these updates, methodological challenges persist, particularly in measuring prevalence accurately across diverse demographics. Additionally, EDs such as Night Eating Syndrome (NES) and Purging Disorder, though less common, represent clinically significant variations requiring specialized attention (Eating Disorders in Adolescents, 1998).

### **Risk Factors and Developmental Impact**

EDs disrupt critical developmental milestones during adolescence, often leading to social isolation, family conflicts, and hindered emotional growth (Peleg et al., 2022). Biological, psychological, familial, and sociocultural factors collectively contribute to the onset of these disorders, emphasizing the multifaceted nature of the problem (Martin Fisher et al., 1999). Moreover, adolescents with EDs are at heightened risk of long-term health complications, including anxiety disorders, cardiovascular issues, chronic pain, and even suicidal tendencies (N.d.-a, 2023).

### **Interventions and Solutions**

Effective management of EDs involves counseling, nutritional education, and early intervention strategies tailored to the specific needs of adolescents. A balanced diet that meets energy and nutritional requirements is essential for recovery and long-term health (Neville, 2003). Research underscores the importance of clinician training, improved healthcare infrastructure, and expanded prevention programs to address these disorders comprehensively (Sangvai, 2016).

### **Research Design**

The study employs a quantitative research methodology to examine the prevalence and patterns of eating disorders among adolescent students in Kerala's metro city. This approach was chosen to ensure the collection of objective, measurable data that could provide valuable insights into the eating habits, risk factors, and associated challenges among the target population.

### **Target Population**

The study focuses on adolescents aged 10 to 19 years, aligning with the World Health Organization's definition of adolescence. The participants included students from both schools and colleges, representing a diverse cross-section of educational institutions in the metro city.

### **Sampling Technique**

A random sampling method was utilized to ensure unbiased representation. Participants were selected from multiple schools and colleges across the city, encompassing a range of socioeconomic and cultural backgrounds. This approach ensured the generalizability of the findings to the larger adolescent population in the region.

### Sample Size

The sample comprised 100 adolescent students, with approximately equal representation from schools and colleges. This sample size was deemed sufficient to identify key trends and patterns while maintaining statistical reliability.

### Data Collection Method

Data were collected through a survey-based questionnaire designed to assess the following:

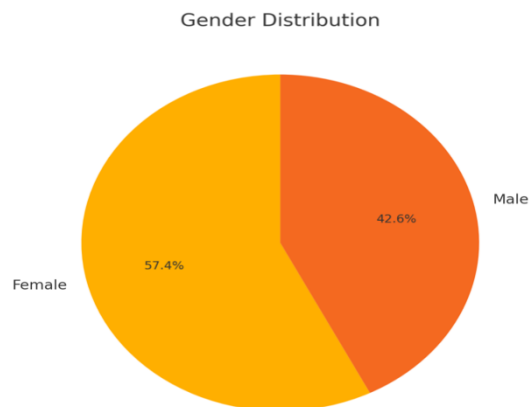
- Demographic details (age, gender, educational level).
- Eating behaviors (meal frequency, snacking habits, and food preferences).
- Perceptions of body image and attitudes toward weight management.
- Indicators of eating disorders, including behaviors associated with anorexia nervosa, bulimia nervosa, and binge-eating disorder.
- Sociocultural influences, such as peer pressure and media exposure, affecting eating habits.

The questionnaire was developed based on validated tools used in previous studies on eating disorders, ensuring the reliability and validity of the collected data.

### Analysis

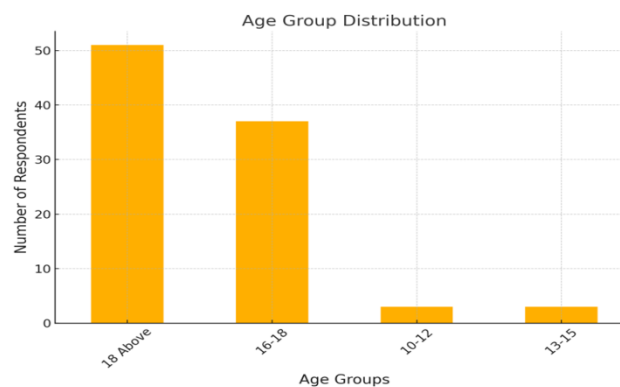
The survey conducted among 95 adolescent students from Kerala reveals significant insights into their eating habits and awareness of eating disorders. The gender distribution shows that 57.4% of the respondents were girls and 42.6% were boys. The age group primarily participating in the survey ranged from 16 to 18 years. Interestingly, while the study targeted metro cities, students from other parts of Kerala also took part, providing a broader perspective on eating behaviors across the region.

### Gender Distribution



The gender distribution appears balanced, ensuring the survey captures insights across male and female perspectives. This balance is important for identifying trends that might differ based on gender, such as meal-skipping behaviors or food preferences.

### Age Groups



- The dominant age groups are 16-18 years and 18+ years, which represent adolescents and young adults. These groups are critical in understanding dietary habits since this stage is formative for lifelong behaviors and susceptibilities to eating disorders.

**Meals Per Day**



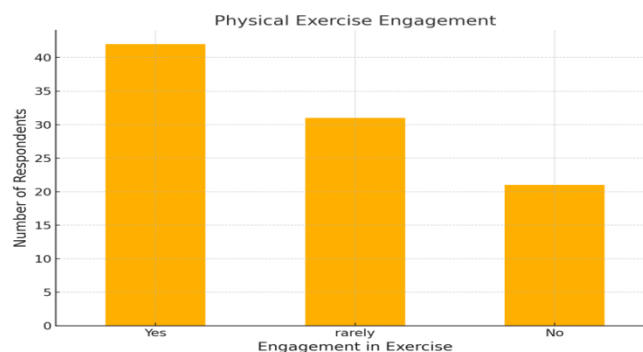
- The majority of respondents consume 3 meals per day, indicating a relatively standard dietary pattern. However, outliers with fewer meals may point to meal-skipping trends, which are risk factors for disordered eating.

**Awareness vs Following Healthy Diet**



- A significant proportion of respondents are aware of healthy diets, but fewer actively follow them. This gap suggests barriers such as:
- Lack of access to healthy options.
- Preference for convenience foods.
- Social or peer influences that may prioritize fast food or trendy diets over health.

**Physical Exercise Engagement**



- While many respondents engage in physical exercise, a notable portion does so irregularly or not at all. This variation reflects opportunities for promoting physical activity as part of a comprehensive health strategy.

### Interpretation

The data reflects a mix of encouraging and concerning trends among adolescents. While most respondents have three meals a day, 38% reported skipping meals, with breakfast being the most commonly skipped meal. This pattern indicates the prevalence of unhealthy eating habits that could lead to long-term health complications. Encouragingly, only 9.6% of the respondents consume sugary drinks daily, and 42% reported regular consumption of fruits and vegetables. However, emotional eating is a notable concern, with 39.4% of participants consuming food when stressed, sad, or bored. Furthermore, 37.2% admitted to feeling out of control while eating, indicating potential early signs of eating disorders. Body image concerns are evident, as only 43.6% of respondents expressed satisfaction with their body weight. While 70% of participants are aware of eating disorders and their associated health issues, many lack knowledge about available resources to address these problems.

### DISCUSSION

The findings highlight critical areas of concern regarding eating behaviors among adolescents in Kerala. While awareness about eating disorders and their health implications is relatively high, this does not always translate into healthy eating habits. Social influences play a significant role in shaping dietary choices, with many respondents reporting frequent visits to fast food centers for socializing with friends. Additionally, the preference for bakery items and fast food over healthy alternatives underscores the challenge of promoting nutritious eating habits.

The survey also reveals a gap in physical activity among adolescents, which exacerbates the risk of lifestyle diseases. Despite being aware of healthy diets, many students struggle to follow them due to convenience and social influences. Encouragingly, most respondents expressed a preference for homemade food and a willingness to seek help for eating disorders. However, the lack of awareness about resource persons and professional help indicates a need for better outreach and education. These findings align with existing literature that highlights the rising prevalence of eating disorders among adolescents due to sociocultural and psychological factors. Effective interventions should focus on educating students and families about healthy eating habits, improving access to counseling services, and creating supportive environments in schools and colleges to promote mental and physical well-being.

### CONCLUSION

This study highlights the complex and concerning patterns of eating behaviors among adolescent students in Kerala's metro city. While a significant proportion of respondents demonstrate awareness of eating disorders and their associated health risks, this awareness does not always translate into healthy eating habits or behaviors. The tendency to skip meals, particularly breakfast, and the prevalence of emotional eating reflect underlying challenges in maintaining balanced diets among this demographic.

Social influences, such as peer pressure and the convenience of fast foods, play a pivotal role in shaping adolescents' dietary choices. Furthermore, while most participants prefer homemade food, frequent visits to fast food centers and bakeries suggest that convenience and socializing often outweigh health considerations. The lack of regular physical activity compounds these issues, increasing the risk of lifestyle diseases in the future.

Encouragingly, the study reveals that a majority of adolescents are willing to seek help if they face eating disorders. However, the gap in knowledge about available resources and professional support highlights an urgent need for awareness programs and counseling services. Schools, colleges, and families must collaborate to create an environment that fosters healthy eating habits and addresses the psychological and sociocultural factors contributing to eating disorders.

In conclusion, targeted interventions focusing on nutritional education, mental health support, and lifestyle modifications are essential to curb the growing concern of eating disorders among adolescents. By addressing these challenges proactively, it is possible to promote healthier lifestyles and reduce the long-term health risks faced by this vulnerable population.

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