

REVIEW OF KNOWLEDGE AND ATTITUDE RELATED TO ANOREXIA NERVOSA WITH ADOLESCENT GIRLS

Ms. Rajvir Kaur* | Dr. Bimla Rani**

*Research Scholar, Himalayan University, Itanagar, Arunachal Pradesh, India.

**Research Supervisor, Himalayan University, Itanagar, Arunachal Pradesh, India.

DOI: <http://doi.org/10.47211/trr.2024.v10i02.002>

ABSTRACT:

Anorexia nervosa is an eating disorder marked by severe weight loss, often leading to significant psychosomatic issues. Weight concerns have long been prominent among women, with many associating extreme weight losses with beauty or idealized appearance. In today's society, where fitness is heavily emphasized, women are particularly vulnerable to eating disorders and body image disturbances due to various pressures to maintain a certain weight. Among all genders, women are most commonly affected by anorexia nervosa, and this article reviews studies on adolescent girls with the condition. Some findings suggest that anxiety significantly contributes to the distorted body image in anorexia, while others highlight factors such as pre-existing anxiety, perfectionism, and emotional under-eating as key contributors to the disorder.

Key words: body image, emaciation, weight loss, women, adolescent.

ABOUT AUTHORS:



Author Ms. Rajvir Kaur is a Research Scholar in Himalayan University at Itanagar in Arunachal Pradesh, India.



Author Dr. Bimla Rani is a Research Supervisor at Himalayan University in Itanagar, Arunachal Pradesh, India. She has presented papers in various conferences and also has many publications to her name.

INTRODUCTION

Observational research aimed at identifying factors associated with eating disorders among adolescents was carried out using purposive and simple random sampling techniques. Data were gathered from 111 participants across several secondary schools in Malang City between July and August 2022. The results demonstrated a significant correlation between binge eating disorder and factors such as body image dissatisfaction ($p = 0.002$), elevated stress levels ($p = 0.001$), and social pressure ($p < 0.001$), indicating these factors significantly influence the likelihood of binge eating behaviors. In contrast, no significant association was found between fad dieting practices and binge eating disorder, suggesting that fad diets might not directly contribute to binge eating symptoms. Further analysis uncovered a complex multivariate relationship among eating disorders, fad dieting, body image concerns, stress, and social pressures, as shown by a Nagelkerke R-square value of 0.595. This study highlights the complexity of eating disorders and underscores the importance of adopting a comprehensive approach to address these issues among adolescents (Puspita et al., 2024).

A cross-sectional study investigated eating disorders among adolescent girls aged 13 to 18 using a simple random sampling method. Participants completed an online, self-administered questionnaire, which included the Arabic versions of the "Eating Attitude Test (EAT-26) and the Sociocultural Attitudes towards Appearance Questionnaire (SATAQ-4)". The findings revealed that more than half of the participants (53.6%) scored at or above the threshold on the EAT-26, indicating problematic eating attitudes. Family influence on body image was reported by 45% of respondents, while peer and media influences were noted by 36.7% and 49.4%, respectively. A significant association was found between family influence and eating disorders ($P = 0.013$), emphasizing the impact of family attitudes on adolescent girls' body image and eating behaviors (Almutairi et al., 2023).

A study examining anorexia nervosa (AN) in adolescence explored parental views on the causes and responsibilities associated with their children's condition. Interviews were conducted with 14 parents (11 mothers and 3 fathers), and qualitative content analysis was used to gain insight into their perceptions of the factors contributing to their child's anorexia nervosa. The study analyzed variations in these attributions, considering factors such as parents' self-efficacy levels. Additionally, a micro genetic positioning analysis of two parental dyads provided insights into their views on AN development in their daughters. The findings revealed parents' feelings of helplessness and their strong desire for understanding. Differences emerged in the emphasis on internal versus external causes, affecting feelings of responsibility and control over intervention. These findings emphasize the importance of understanding parental perspectives, particularly for therapists using systemic approaches aimed at reshaping family narratives to improve adherence to and outcomes of AN treatment (Carpinelli & Watzlawik, 2023).

A pre-experimental study was conducted to assess the impact of a planned teaching program on improving knowledge about anorexia nervosa (AN) among adolescent girls in Jalandhar. The study involved 60 adolescent girls, selected through non-probability convenience sampling. Data collection was done using a structured questionnaire on anorexia nervosa. Pre-test results revealed that 53.33% of the participants had poor knowledge, 28.33% had average knowledge, and 18.33% had good knowledge, with a mean score of 6.70 ± 3.55 . Post-test assessments indicated significant improvement, with only 1.67% scoring average, 8.33% scoring good, 31.67% scoring very good, and 58.33% scoring excellent, achieving a mean score of 19.93 and a percentage score of 79.73%. The 'p' value for overall knowledge was calculated at 0.000, signifying statistical significance. While there were no significant associations between knowledge improvement and factors such as parents' education, religion, place of residence, or source of information, age and food habits did show significant associations. These findings demonstrate the effectiveness of the planned teaching program in enhancing knowledge about AN among adolescent girls (Alekar & Mathew, 2022).

A qualitative study investigated the experiences of healthcare professionals in treating adolescents with anorexia nervosa (AN). Semi-structured interviews were conducted with 16 healthcare providers, including nurses, dietitians, and physicians, working in a pediatric ward in central Taiwan. The content analysis revealed several key themes: building a trusting relationship with patients, emphasizing client awareness and parental support as crucial for treatment success, maintaining consistency in treatment goals, empowering healthcare



THE RESEARCH RESERVOIR of Paramedical Sciences

International Peer- Reviewed, Referred, Indexed Journal

July - December 2024 Volume: 10 Issue: 2

professionals with ongoing education and interdisciplinary care, and applying a mix of firm and gentle interaction strategies. These findings highlight the importance of monitoring adolescents' psychological and emotional states, involving parents in treatment, and fostering early therapeutic alliances. To optimize treatment outcomes for AN, healthcare professionals should prioritize family involvement, develop support interventions, and enhance interdisciplinary collaboration (Chang et al., 2022).

A pre-experimental study evaluated the effectiveness of a structured teaching program on the health impacts of junk food among adolescents in selected senior secondary schools. Using convenience sampling, 60 adolescents meeting the study's criteria participated. The results indicated a notable improvement in knowledge about the health effects of junk food after the program. A significant association was observed between age and pre-test knowledge levels, while other demographic factors such as gender, religion, family income, dietary habits, residence, and information sources did not show significant links to pre-test knowledge. The findings support the effectiveness of the structured teaching program in enhancing adolescents' understanding of junk food's health risks (Bhat et al., 2022).

A study assessed the effectiveness of a planned teaching program designed to improve knowledge about eating disorders among adolescent girls in selected schools. The sample consisted of 80 girls from Small Wonder Sr. Secondary School, selected through convenience sampling. Results showed a significant increase in knowledge after the program, with post-test scores substantially higher than pre-test scores. Statistical analysis indicated a significant difference between pre-test and post-test results, confirming the program's effectiveness. Further analysis revealed that family income was significantly associated with pre-test knowledge levels (James et al., 2022).

A study investigated gender-specific responses to factors influencing disordered eating among adolescents in grades 7 to 9. The study involved 729 adolescents aged 13 to 16, with disordered eating behaviors assessed using the "Eating Attitudes Test-26 (EAT-26)". The results indicated no significant gender differences in the prevalence of disordered eating, but girls were more preoccupied with body fatness and thinness, while boys engaged more in extreme dieting behaviors like vomiting, fasting, and avoiding sweets. Girls with disordered eating showed higher levels of familial weight teasing, lower peer acceptance, and more pressure to control their weight, alongside greater physical activity. Boys' disordered eating was more associated with body weight perception. Additionally, adolescents with immigrant parents were more likely to display disordered eating behaviors in both genders (Chen et al., 2022).

A scoping study investigated the relationship between food intake, restricted eating behavior (REB), and anorexia nervosa (AN) among youths from various ethnic and gender backgrounds. The study reviewed 24 studies that met the inclusion criteria, finding that individuals with AN or REB, especially females, consumed fewer calories, fat, and certain micronutrients. Conversely, these individuals ate fewer low-quality snacks, fast food, and sugary, carbohydrate- and fat-heavy foods, while consuming more coffee, fiber, vegetables, legumes, and fruits. (Pereira et al., 2022).

A cross-sectional study assessed knowledge, attitudes, and behaviors related to eating disorders among children and adolescents involved in sports. The sample consisted of 650 young athletes, categorized into two age groups: Group I (ages 10–14) and Group II (ages 15–18). An unrestricted, self-administered survey was conducted in both English and Hindi. The study included athletes from various sports, such as basketball, yoga, wrestling, judo, cricket, gymnastics, boxing, badminton, and table tennis. The results showed varying levels of knowledge, attitudes, and practices regarding bulimia nervosa among the participants, with specific details for Group I provided in the study (Goswami et al., 2022).

A cross-sectional study assessed the knowledge of Polish dentists regarding anorexia nervosa (AN) through a pretested online questionnaire. The survey gathered data on participant demographics and evaluated their understanding of AN, including its physical and oral manifestations. The study involved 369 dentists, revealing that while most had adequate knowledge about AN, younger dentists and general practitioners tended to have lower knowledge scores. Despite having a general awareness of AN's symptoms, difficulties were noted in

recognizing the oral symptoms associated with the disorder. The study highlights existing gaps in the ability of Polish dentists to identify the oral manifestations of anorexia nervosa (Krukowska-Zaorska et al., 2021).

A study conducted in a public hospital evaluated the effectiveness of Enhanced "Cognitive Behavioral Therapy (CBT-E) for anorexia nervosa (AN)." The research included baseline predictors of treatment outcomes, dropout rates, and collected biological samples for future exploration of AN's pathophysiological mechanisms. A quasi-experimental design with a pre-test and post-test approach was used, involving 60 adolescent girls selected via nonprobability convenience sampling. Pre-test results revealed that most participants had average or poor knowledge about AN, while post-test results showed a marked improvement in knowledge, with the majority scoring good or excellent. The study concluded that the structured teaching program significantly enhanced knowledge of AN prevention among adolescent girls (Bokade et al., 2021).

A qualitative study was conducted to identify family factors influencing adolescent healthy eating through the lens of knowledge, attitudes, and practices (KAP). A comprehensive search across four databases identified studies that examined family influences on the eating habits of adolescents aged 10 to 19 years. The thematic analysis of 48 studies, mainly from North America, revealed ten themes under knowledge, attitudes, and practices. Parental education, family health orientation, and constraints of time and resources were among the key factors influencing adolescent dietary KAP. The findings emphasize the need for further research on culturally specific family influences, especially within Asian families (Liu et al., 2021).

A study conducted among teenage girls investigated the prevalence of "eating disorders (EDs) and obsessive-compulsive disorder (OCD) using the Eating Attitude Test (EAT-26) and the Obsessive-Compulsive Inventory-Revised (OCI-R)". The sample consisted of 224 female students from six schools in Abha. The findings revealed that 34% of participants had elevated EAT-26 scores, while OCD was present in 69.6% of the group. Higher EAT-26 scores were associated with factors like obesity, poor academic performance, and certain behaviors such as the use of laxatives for weight management. The study also reported a 40.2% correlation rate between EDs and OCD, suggesting a need for further research and counseling interventions (Alsubaie et al., 2020).

A narrative review explored the role of family relationships in the development and persistence of eating disorders during adolescence. The review emphasized the relational-systemic approach, which considers both risk and protective factors within family dynamics. The study advocates for a comprehensive understanding of adolescent eating disorders within the family context and suggests the merit of an integrated relational model for further exploration and intervention (Erriu et al., 2020).

An Egyptian study estimated the "prevalence of anorexia nervosa (AN) and bulimia nervosa among adolescents Using multistage random selection, 407 students were screened with the Eating Attitude Test (EAT) and Structured Clinical Interview for DSM-IV axis-I disorders." The prevalence of AN and bulimia was found to be 6.1% and 3.2%, respectively, with significant associations between ED risk and factors such as female gender, overweight status, and high body shape preoccupation. These findings highlight the need for public health interventions targeting adolescent eating disorders (Sabry et al., 2020).

A study assessing the effects of a 10-week Pilates program on anorexia nervosa (AN) participants revealed improvements in body dissatisfaction, physical well-being, and autonomy. Although there were standardized reductions in psychopathology, these changes were not statistically significant. However, significant improvements were noted in body dissatisfaction and physical well-being, indicating the potential of Pilates in improving certain aspects of quality of life for AN patient (Martínez-Sánchez et al., 2020).

A study on Kuwaiti undergraduate students examined the relationship between nutritional knowledge and eating habits. Although students with superior dietary habits had greater nutritional knowledge, the correlation was relatively weak. The study recommended integrating nutrition education programs into the academic curriculum to promote healthier lifestyle choices among students and mitigate nutrition-related health issues (Almansour et al., 2020).

The prevalence of eating disorders among adolescents in Al-Basra City was explored in a study involving 520 secondary school students. The study found that anorexia nervosa (AN) was moderately prevalent, with higher incidences in females. Factors associated with eating disorders included biological, psychological, emotional,

and social elements, with a strong positive relationship observed between AN and gender. These findings suggest a need for targeted interventions to address eating disorders in adolescents (Baji et al., 2019).

A cross-sectional study conducted among adolescent girls in northeastern Brazil assessed the risk of bulimia nervosa. The study found that 42% of the sample exhibited dietary risk behaviors, with 1.4% showing signs of bulimia. Fasting and restrictive practices were common among students, highlighting the importance of understanding eating behaviors and associated risk factors among adolescents (Brandt et al., 2019).

A study conducted with 250 university adolescent girls in Peshawar, Pakistan, aimed to examine their eating disorders, nutritional status, and overall health. Participants were assessed using the "Eating Attitude Test (EAT-26) and interviewed about their socio-economic status and body image concerns. Anthropometric and biochemical indices were also measured." The EAT-26 helped identify those with and without eating disorders, and the relationship between anemia and its risk factors was evaluated. A significant association between "EAT-26 scores and anemia was found, with symptoms of anxiety, depression, and stress being more common among girls with anemia." Notably, a higher proportion of anorexic girls were overweight or obese, but no significant difference in body shape or anemia was found. Anorexic participants also reported poorer physical activity, sleep disturbances, and lower energy levels. The study concluded that eating disorders, particularly anorexia, are prevalent among university adolescent girls and adversely affect their health and nutrition (Syed et al., 2018).

A cross-sectional study in Arar City, Saudi Arabia, assessed disordered eating attitudes among 314 adolescent girls aged 15-19. The results showed that a significant proportion exhibited disturbed eating behaviors, with higher EAT-26 scores observed among overweight, obese, and vegetarian participants. The study found notable differences in subscales like oral control and dieting, but no significant differences between Saudi and non-Saudi girls across BMI categories. The authors concluded that eating disorders are common among adolescent girls, strongly linked to weight status and eating habits, and recommended further research to identify risk factors for more effective prevention (Fatima & Ahmad, 2018).

CONCLUSION

Anorexia nervosa is a severe, complex mental disorder that affects multiple aspects of an individual's life, including their mental, emotional, and physical well-being. If left untreated, it can lead to life-threatening consequences and significantly shorten life expectancy. The disorder is marked by intentional self-starvation and behaviors such as excessive exercise, driven by an intense fear of gaining weight and a distorted body image. While some health issues, such as those related to heart disease, may resolve after recovery, conditions like osteoporosis can persist for a lifetime.

REFERENCES

1. Puspita, B., Lestari, A., & Andayani, T. R. (2024, March). The relationship between fad diet, body image, stress, peer pressure with eating disorders in adolescent girls aged 16-18 years. *Amerta Nutrition*, 8(1), 49-57.
2. Almutairi, R., Azuhairi, A. A., Mahmud, A., & Dablood, A. S. (2023, February). Eating disorders among adolescent female students in Jeddah, Saudi Arabia. *The Malaysian Journal of Medical Sciences: MJMS*, 30(1), 185.
3. Carpinelli, L., & Watzlawik, M. (2023, February 24). Anorexia nervosa in adolescence: Parental narratives explore causes and responsibilities. *International Journal of Environmental Research and Public Health*, 20(5), 4075.
4. Alekar, M. S., & Mathew, S. (2022). A study to assess the effectiveness of planned teaching programme on knowledge regarding anorexia nervosa among adolescent girls in selected schools of city. *International Journal of Nursing and Health Research*, 4(2), 29-35.
5. Chang, Y. S., Liao, F. T., Huang, L. C., & Chen, S. L. (2022, January 1). The treatment experience of anorexia nervosa in adolescents from healthcare professionals' perspective: A qualitative study. *International Journal of Environmental Research and Public Health*, 20(1), 794.
6. Bhat, M. A. U., Randhawa, R. K., & Chaudhary, P. (2022). A pre-experimental study to assess the effectiveness of planned teaching programme regarding effects of junk foods on health among adolescents of

- selected senior secondary school of Jandiala Guru, Amritsar (Punjab). *International Journal of Creative Research Thoughts (IJCRT)*, 10(4), e387-424.
7. James, A., Xavier, T., Mathew, B., & John, P. (2022). A study to assess the effectiveness of planned teaching program on knowledge regarding eating disorders among adolescent girls in the selected schools of Jabalpur City (MP). *International Journal of Trend in Scientific Research and Development*, 6(3), 2033-2040.
 8. Chen, D. R., Sun, G., & Levin, B. (2022, December). Gender-specific responses to multifaceted factors associated with disordered eating among adolescents of 7th to 9th grade. *Journal of Eating Disorders*, 10, 1-5.
 9. Pereira, E. M., da Silva, K. B., de Farias Costa, P. R., da Silva, L. E., Nepomuceno, C. M., da Silva, H. B., Belfort, É. S., de Magalhães Cunha, C., & de Santana, M. L. (2022, October). Restrained eating behaviour, anorexia nervosa and food consumption between children and adolescents: A scoping review. *British Journal of Nutrition*, 128(8), 1565-1586.
 10. Goswami, M., Kumar, G., Garg, A., & Bhardwaj, S. (2022, March). Knowledge, attitude and practice of eating disorders among children and adolescents engaged in sports: A cross-sectional study. *International Journal of Clinical Pediatric Dentistry*, 15(2), 135
 11. Krukowska-Zaorska, A., & Lipski, M. (2021). Knowledge of oral and physical manifestations of anorexia nervosa among Polish dentists: A cross-sectional study. *Frontiers in Psychiatry*, 12, 751564. <https://doi.org/10.3389/fpsy.2021.751564>
 12. Bokade, K., Wanjari, M., Kurian, B., Besekar, S., Wagh, P., Waware, S., Gujar, S. (2021). Effectiveness of the video-assisted teaching on anorexia nervosa among adolescent girls in selected colleges. *Journal of Pharmaceutical Research International*, 33(57B), 135-142. <https://doi.org/10.9734/jpri/2021/v33i57B33940>
 13. Liu, K. S., Chen, J. Y., Ng, M. Y., Yeung, M. H., Bedford, L. E., & Lam, C. L. (2021). How does the family influence adolescent eating habits in terms of knowledge, attitudes and practices? A global systematic review of qualitative studies. *Nutrients*, 13(11), 3717. <https://doi.org/10.3390/nu13113717>
 14. Alsubaie, S. S., Alalfard, B. A., Muhaya, A., Alalfard, H. A., Abdullah, K. M., & Albishi, H. A. (2020). Prevalence of eating disorders and obsessive-compulsive disorder among adolescent schoolgirls: Abha city Southern Saudi Arabia. *EC Psychology and Psychiatry*, 9, 1-10. <https://doi.org/10.31085/jpprs2019.06.002>
 15. Erriu, M., Cimino, S., & Cerniglia, L. (2020). The role of family relationships in eating disorders in adolescents: A narrative review. *Behavioral Sciences*, 10(4), 71. <https://doi.org/10.3390/bs10040071>
 16. Sabry, W., ElMahlawy, N., Essawy, H., Al-Saleet, G., Saad, M., & Morsy, M. (2020). Occurrence, sociodemographic, and clinical correlates of eating disorders among a sample of secondary school students in Egypt. *Middle East Current Psychiatry*, 27(1), 1-9. <https://doi.org/10.1186/s43045-020-00023-2>
 17. Martínez-Sánchez, S. M., Martínez-García, C., Martínez-García, T. E., & Munguía-Izquierdo, D. (2020). Psychopathology, body image and quality of life in female children and adolescents with anorexia nervosa: A pilot study on the acceptability of a Pilates program. *Frontiers in Psychiatry*, 11, 503274. <https://doi.org/10.3389/fpsy.2020.503274>
 18. Almansour, F. D., Allafi, A. R., & Al-Haifi, A. R. (2020). Impact of nutritional knowledge on dietary behaviors of students in Kuwait University. *Acta Bio Medica: AteneiParmensis*, 91(4). <https://doi.org/10.23750/abm.v91i4.10380>
 19. Baji, D. M., & Mohammed, Q. Q. (2019). Eating disorders and its related factors among adolescents at secondary schools in Al-Basra City. *Indian Journal of Forensic Medicine & Toxicology*, 13(3). <https://doi.org/10.37506/ijfnt.v13i3.5517>
 20. Brandt, L. M., Fernandes, L. H., Aragão, A. S., Luna, T. P., Feliciano, R. M., Auad, S. M., & Cavalcanti, A. L. (2019). Risk behavior for bulimia among adolescents. *Revista Paulista de Pediatria*, 37, 217-224. <https://doi.org/10.1590/1984-0462/2019;37;1;00005>
 21. Syed, A., Zeb, F., Khan, S., Safdar, M., Alam, I., Shahzad, M., ... & Munir, M. (2018). Exploration of eating disorders, nutritional and health status based on eating attitude test-26 amongst university adolescent girls. *Journal of Food and Nutrition Research*, 6(7), 464-470.
 22. Fatima, W., Fatima, R., & Anwar, N. S. (2018). Prevalence of eating disorders among female college students of Northern Broader University, Arar, Kingdom of Saudi Arabia. *International Journal of Child Health and Nutrition*, 7(3), 115-121.