

Impact Of Eating Behavior and Lifestyle Factors on Adolescent Obesity

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Abstract—Adolescent obesity is a major public crisis of 21st century. Increasing prevalence expands the comorbidities of future generation. Family and school should implement preventive strategies from early ages of life employed through the objectives: To assess the lifestyle factors and eating behavior among adolescents and their relationship with the level of obesity. **Methodology:** A descriptive research approach with cross sectional design was used. Using enormous sampling technique, 123 adolescents (14 to 16 years) were selected from Kuzhithurai Educational District. Data were collected using demographic variables, predictive variables, Obesity Screening Tool, Adolescent Lifestyle Rating Scale Eating Disorder -15 (ED-15) rating scale. **Result:** A strong negative relationship was found between the level of obesity, lifestyle factors (γ value = -0.350, $p < 0.001$) and eating behavior (γ value = -0.149, $p > 0.05$) which suggests that unhealthy eating behavior leads to obesity. The findings highlight the importance of lifestyle modification and healthy eating behavior for managing adolescent obesity

Index Terms—eating behavior, lifestyle, and adolescent obesity.

I. INTRODUCTION

Adolescent obesity, a multifactorial disease affects almost every one in five child worldwide¹. India ranks second with nearly 26.40 million obese adolescents and it may turn to 464 million at 2030². Adolescents adapting faulty lifestyles, unhealthy eating behavior, and urbanization pose highest risk and undoubtedly leads to adult obesity supplementing with non-communicable diseases. To reduce this global crisis, grassroots preventive measures like modifying dietary habits, performing physical activities and lifestyle changes should be implemented from family and schools

1.1 Objectives

- To assess the lifestyle factors and eating behavior among adolescents
- To find out the relationship between the level of obesity and their lifestyle factors and eating behavior among adolescents

1.2 Methodology

The researcher has utilized descriptive research approach with cross sectional design.

1.3 Samples and sample size

The participants were 123 adolescents (14 to 16 years) with a BMI between the 85th percentile and less than the 99th percentile from Kuzhithurai Educational District

1.4 Sampling technique

Enormous sampling technique was adapted

1.5 Data collection Tools

Data was collected using validated tools such as demographic variables, predictive variables, Obesity Screening Tool, Adolescent Lifestyle Rating Scale to assess lifestyle factors, eating disorder -15 (ED-15) rating scale to assess eating behavior

II. RESULTS AND FINDINGS

- The major findings shows that 15 (12.2%) adolescents had a poor lifestyle, 105 (85.4%) adolescents had an intermediate lifestyle and the remaining 3 (2.4 %) adolescents had a balanced lifestyle.
- Out of 123 participants, 17 (13.8%) adolescents from the study group had healthy eating behavior, 95 (77.2%) adolescents had moderately healthy

eating behavior. In terms of unhealthy eating behavior, 11 (9%) adolescents had unhealthy eating behavior.

- There was a strong negative relationship found between the level of obesity and lifestyle factors (γ value = -0.350, $p < 0.001$) which proves that poor lifestyle factors lead to obesity.
- There was significant negative relationship found between the pre-intervention level of obesity and eating behavior (γ value = -0.149, $p > 0.05$) which suggests that unhealthy eating behavior leads to obesity.

III. DISCUSSION

A similar Cross sectional study conducted by Jiayan Gui et al (2021) among 1212 adolescents showed that adolescents following passive health maintenance (50.9%, 618), and high-risk lifestyle (16.5%, 200) has higher risk of obesity compared to self-disciplined group (32.7%, 396). The findings also supported that emotional eating increased the possibility of obesity (OR = 1.74, 95%)³

A study done by Tsekoura E et al. in 2021 revealed high positive correlation between obesity with body shape and weight concern, restricting meals and feeling of guilt due to overweight ($Y = 0.076$, $p < 0.001$) and also demonstrated negative correlation towards parental pressure to excessive eating ($Y = -129$, $p < 0.001$)⁴.

Nafis faizi et al (2018) in his cross-sectional school-based study identified that adolescents with poor dietary behavior had higher probability of being obese [1.82 (1.20–2.78)] compared to adolescents with fair dietary behavior [1.07 (0.737–1.54)]⁵.

Divya bharti (2024) in his cross-sectional study among 8 to 12 years showed that there was a positive correlation between BMI and food behaviours, ($p = 0.539$, < 0.001)⁶.

IV. CONCLUSION

The researcher findings revealed that poor lifestyles and unhealthy eating behaviors are the key predictive factors of adolescent obesity. Adhering healthy practices through school helps to maintain body weight. Family should encourage good eating

behaviors in order to reduce the burden and its associated crises.

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