

Nutritional status, physical activity, and dietary habits among grade 10 students in Nallur Education Division

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Background and objective: There is a dual burden of malnutrition in Jaffna with high levels of underweight and increasing rates of overweight/obesity. Body Mass Index (BMI) is widely used to assess nutritional status. This research describes the nutritional status, physical activity, and dietary habits among grade 10 students in Nallur Education Division.

Methods: This descriptive cross-sectional study was carried out among grade 10 students of the Nallur Education Division using multi-stage cluster sampling. Body weight was measured using a weighing scale and height by a portable stadiometer. BMI was calculated using the standard formula ($\text{weight}(\text{kg})/\text{height}^2(\text{m}^2)$). Results were analyzed using chi-square test.

Results: In total, 767 students participated in the study. The median BMI was 19.17 kg/m² (males 18.83, females 19.57). Almost two-thirds (65.2%) of the sample had a BMI within the normal range with only 3.4% recording a BMI in the obese range. Low levels of physical activity were observed in 60.5% of the sample. In the study, the majority (64.5%) of students consumed healthy foods. There was no evidence of an association between physical activity ($p=0.92$) or dietary habits ($p=0.27$) with BMI. There was an association between family income and BMI where students reporting higher income are more likely to be overweight ($p=0.006$).

Conclusion: Most grade 10 students in Nallur Education Division are in the normal BMI range with healthy dietary habits, but physical activity levels are low. BMI is associated with family income.

Keywords: BMI, Physical Activity, Dietary Habits, Jaffna