

**NUTRITIONAL STATUS OF ADOLESCENT GIRLS IN THE
CHAVAKACHCHERI MEDICAL OFFICER HEALTH AREA OF JAFFNA
DISTRICT**

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ABSTRACT

Adolescence is a critical stage of growth and development. This study aimed at assessing the nutritional status of female adolescents (from 17 to 19 years old) in the Chavakachcheri Medical Officer of Health (MOH) area of Jaffna District. Ethics Review Committee, Faculty of medicine, University of Jaffna granted ethical approval for the study. Sociodemographic information of the participants was collected using an interviewer administered questionnaire through household visits. Anthropometric measurements included weight, height, waist circumference, hip circumference, and mid-upper arm circumference (MUAC). Venous blood samples were collected for biochemical analysis of haemoglobin and serum albumin concentrations. Of the participants, 53% (n=52) were female, with a mean age of 17.9 (± 0.1) years. The mean Body Mass Index (BMI), waist circumference, waist-to-hip ratio (WHR), and MUAC were 20.5 (± 0.4), 74.8 (± 0.6) cm, 0.85 (± 0.01) and 26.9 (± 0.4) cm, respectively. Based on BMI, 21.1% (n=11) were underweight, 75.0% (n=39) were of normal weight and 3.8% (n=2) were overweight. Central obesity (WHR > 0.85) was observed in 36.5% (n=19) of females. MUAC analysis revealed that 7.7% (n=4) were malnourished (MUAC < 21.6 cm), while 3.8% (n=2) were obese (MUAC > 32 cm). Mean serum albumin concentration was 3.76 (± 0.1) g/L, and mean haemoglobin concentration was 11.9 (± 0.3) g/dL. Anaemia prevalence included 3.9% (n=2) with severe anaemia (Hb < 7 g/dL), 11.5% (n=6) with moderate anaemia (Hb 7.1–9.9 g/dL), and 28.8% (n=15) with mild anaemia (Hb 10–11.9 g/dL). Targeted nutritional interventions and health promotion strategies are essential to address both deficiencies and excesses, ensuring healthier transitions into adulthood.

Key Words: Female, Jaffna, Nutritional status