

COMPARISON OF THE NUTRITIONAL STATUS OF ADOLESCENTS LIVING IN CHANKANAI MEDICAL OFFICER OF HEALTH AREA, JAFFNA DISTRICT BASED ON BODY MASS INDEX, WAIST TO HIP RATIO AND MID UPPER ARM CIRCUMFERENCE

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ABSTRACT

Adolescence is a critical period of growth and development, marked by physical and metabolic changes that influence long-term health outcomes. Assessing weight status and anthropometric indices during this phase helps to identify malnutrition and associated health risks. The study was aimed to compare the Body Mass Index (BMI), Waist to Hip Ratio (WHR) and Mid Upper Arm Circumference (MUAC) to evaluate the nutritional status of 72 adolescents aged between 17 and 19 years from Chankanai MOH area, Jaffna District. To gather socio economic background of the participants an interviewer administrated questionnaire was used during household visits. Weight, Height, Waist Circumference (WC), hip circumference and Mid Upper Arm Circumference (MUAC) were measured. Ethical approval for the study was obtained from the Ethics Review Committee, Faculty of Medicine, University of Jaffna. Among the adolescents 34 males and 38 females were have the mean age of 17.76 (± 0.8) and 18.11 (± 0.8) years respectively. Underweight pparticipants were based on BMI ≤ 18.5 were 52.9% males and 57.9% females. The WHR of 11.8% males and 15.8% females were < 0.7 while 11.5% males and 10.5% females had the MUAC < 21.4 cm. The findings highlighted the substantial prevalence of underweight (more than 50%) among the adolescents aged 17 to 19 years in the Chankanai MOH, Jaffna District. The WHR and MUAC values indicated a lower percentage of malnutrition having closer values of malnutrition (13.9% and 8.3% respectively). The findings suggest the need for closer monitoring of nutritional status for a better health of these adolescents.

Keywords: *Adolescents, Nutritional Status, Body Mass Index, Mid-Upper Arm Circumference, Waist to Hip Ratio*

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