PREVALENCE OF ANAEMIA AND NUTRITIONAL STATUS OF ADOLESCENT STUDENTS IN TELLIPALAI MEDICAL OFFICER OF HEALTH (MOH)AREA, JAFFNA

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Adolescents are tomorrow's adult population and their health and well-being are crucial. The aim of the study was to assess the prevalence of anaemia and nutritional status of adolescent students in Tellipalai MOH area. A cross sectional descriptive study was carried out and a total of 170 students were recruited from aged 12-19 years. Anthropometric measurements were obtained and an interviewer-administered questionnaire was used to collect the details on socio-demographic and economic status and dietary pattern. The number of males and females were 100(58.8%) and 70 (41.2%) respectively. Mean ($\pm$SD) age of the male and female students were 15.4 ($\pm$1.8) and 16.1($\pm$2.0) in years respectively. The mean ($\pm$SD) hemoglobin (Hb) level for males and females were 12.67($\pm$0.12) and 11.81($\pm$0.14) g/dL respectively ($p<0.001$). Mean ($\pm$SD) of serum ferritin concentration was 8.62 ($\pm$8.07)µg/dL with range between 0.2µg/dL-39.1µg/dL. Mean ($\pm$SD) of PCV, MCV, MCH and MCHC were 40.47 ($\pm$4.14) %, 86.79 ($\pm$7.3) femto litre, 26.56 ($\pm$2.28) pg/cell and 30.49($\pm$3.05)g/dl respectively. Among the 170 students, 56.5% (n96) of the students was affected with anemia (Hb=<13g/dL in males and <12g/dL in females). In this study, 22.4% (n=38) and 56.5% (n=96) of students had low PCV (<36% for female; <38% for male) and MCH respectively. Among the anaemic adolescents, 60.8% (n=87) were affected with iron deficiency anamia (serum ferritin <15µg/dL in males and serum ferritin<12µg/dL in females). Prevalence of stunting (<-2SD of height-for-age), thinness (<-2SD of BMI-for-age) and overweight (>+2SD of BMI-for-age) were 11.3, 20.8 and 0.6% respectively. Under logistic regression model, gender, income, educational level of parents and low consumption of

leafy vegetables were significantly associated with anaemia ($p<0.05$). This study revealed that, undernutrition and prevalence of anaemia was observed to be high in this population and main cause of the anaemia is iron deficiency. Moreover, the selected associated factors such as gender, income, educational level and low consumption of leafy vegetables were influencing on anaemia.