OP2: Prevalence and socio-demographic factors of malnutrition among children aged 1 to 5 years in Jaffna district

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Introduction: Malnutrition continues to be a significant contributing factor to infant and child mortality and public health problem throughout the country.

Objectives: To determine the prevalence of malnutrition among children aged 1 to 5 years in terms of wasting, underweight, stunting and overweight and to investigate some socio-demographic risk factors associated with malnutrition in Jaffna district.

Methods: Multistage cluster sampling was used and a total of 846 children were recruited in this study. Anthropometric measurements such as height, weight, Head Circumference (HC) and Mid Upper Arm Circumference (MUAC) were used to compute age and sex specific Z scores for malnutrition based on World Health Organization (WHO) standards. Information regarding Socio-demographic factors such as age, gender, sector and details on household members were collected by using interviewer administrated questionnaires. Data were analyzed with SPSS version 16.0. The association between malnutrition and socio-demographic factors were tested using the Pearson's Chi-squared test.

Results: Among 846 children, 414 (48.9%) were males and the mean age were 34.73 months [95 % CI (33.84, 35.62)]. The overall prevalence of wasting, underweight, stunting and overweight was 21.6, 33.1, 26.4 and 3.4 % respectively. Among the children, 8.6% had less HC-for-age, and 11.5% had less MUAC-for-age. Trend of underweight and stunting were significantly increased while overweight was decreased with age [Chi-squared for trend was applied ($p<0.01$)]. Mean value of the Z scores for Weight-for-height, Weight-for-age and Height-for-age were significantly higher in males than in females ($p<0.05$). Of this study population, 75.8% (n=641) were from rural area and had wasting (OR=2.157, p=0.001), underweight (OR=2.014, p=0.001 and stunting (OR=1.471, p=0.04) than urban children. Prevalence of overweight [5.9% (n=12)] was significantly higher in urban children than in rural children [2.3% (n=15)] (p= 0.013). Under nutrition was significantly high in children from nuclear families (59.1% (n=500) than those from extended families. Prevalence of under nutrition was significantly increased with the number of children in a household.

Conclusion: In the studied population, malnutrition was persistent and is a serious public health problem. The risk factors identified in this study confirmed the influence of socio-demographic factors on the nutritional status of children in Jaffna district.