PP 23: Prevalence and factors associated with anaemia among children aged 12-59 months in Jaffna district

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Introduction and objective: Anaemia still persists among children and women of childbearing age in Sri Lanka. This study assessed the prevalence of anaemia and associated factors among children aged 12-59 months in Jaffna district.

Methods: Multistage cluster sampling was used and a total of 846 children (414 males and 432 females) were recruited. Height and weight were used to compute age and sex specific Z scores to derive wasting, underweight and stunting based on WHO standards. Information regarding socio-demographic and economical factors and feeding practices were collected. Biochemical variable such as haemoglobin (<11g/dL), serum ferritin ($<12\mu$g/L), albumin (<3.5g/dL) were determined.

Results: Mean haemoglobin concentration was 11.7g/dL (95% CI 11.6-11.8), in males (11.7 g/dL) and in females (11.8 g/dL). The prevalence of anaemia was 36.4 % (mild and moderate anaemia was 20.5% and 16.0% respectively). Among anaemic children, 31.7 % were affected by iron deficiency anaemia (IDA) and mean ferritin concentration was 8.01 (1.4) μg/L. Prevalence of anaemia was significantly higher in urban children (23.9%) than in rural children (15.9%) ($p=0.007$) and the prevalence of IDA was significantly higher in urban children (37.6%) than in rural children (29.8%). Educational level of the parents, number of children in a household, birth weight ($r=0.17$), albumin concentration ($r=0.21$) and duration of exclusive breastfeeding ($r=1.36$) were correlated with haemoglobin concentration ($p<0.05$). Risk of anemia was high in children with wasting [OR 3.37 (95% CI 2.40-4.73, $p<0.0001$)], underweight [OR 2.78 (95% CI 2.06-3.74, $p<0.0001$)] and stunting [OR 1.50 (95% CI 1.10-2.05, $p=0.01$)]. **Conclusions:** The prevalence of anaemia is high and commonly due to iron deficiency. The risk factors associated with anaemia in Jaffna were identified.