

---

PP 09

## Prevalence and Risk Factors of Anaemia in Children Aged between 6-24 Months at the Teaching Hospital Karapitiya

Ramsith M.R.M.<sup>1#</sup>, Hewawasam R.P.<sup>2</sup>, de Silva M.H.A.D.<sup>3</sup>

<sup>1</sup>*Department of Medical Laboratory Sciences, Faculty of Allied Health Sciences, University of Ruhuna, Sri Lanka*

<sup>2</sup>*Department of Biochemistry, Faculty of Medicine, University of Ruhuna, Sri Lanka*

<sup>3</sup>*Department of Paediatrics, Faculty of Medicine, University of Ruhuna, Sri Lanka*

*#Corresponding author: 12ramsith1997@gmail.com*

**Background:** Prevalence of anaemia remains high in children, and it is associated with many factors. Limited studies related to this topic are available in local settings.

**Objectives:** To assess the prevalence of anaemia in children aged between 6-24 months and to describe the known risk factors

**Methods:** A descriptive cross-sectional study was conducted at all paediatric units at the Teaching Hospital Karapitiya, using a convenient sampling method among the mothers and children who were admitted. Haemoglobin (Hb) concentration and other red cell parameters were collected from the full blood count (FBC) report. Socio-demographic details, infant's birth weight, gestational age and maternal Hb concentration during pregnancy were collected. Serum iron levels of children were estimated using a colorimetric technique. Anaemia was diagnosed if the Hb concentration <110g/L at sea level. Data were analysed using Chi-squared test and the correlation between parameters were determined.

**Results:** Among the 78 children, 55 (70.5%) were males. Of the sample 49 (62.8%) children were anaemic. Hb concentration of children was positively correlated with the children's age and mother's first and second trimester Hb concentration. The prevalence of anaemia in children had a significant association with maternal anaemia, children's malnourishment and ethnicity. Male children had significant associations with the development of iron deficiency (ID) and iron deficiency anaemia (IDA). IDA had a significant association with maternal anaemia during pregnancy. Maternal anaemia had a significant association with premature birth (PMB) and low birth weight (LBW). Development of malnutrition had a significant association with maternal education, paternal education and LBW.

**Conclusions:** The prevalence of anaemia and IDA in children was high with higher rates among males. Prevalence of anaemia was significantly correlated with age and maternal anaemia. Maternal anaemia was significantly associated with LBW, PMB, anaemia and IDA in children.

**Keywords:** Anaemia, Haemoglobin, Iron deficiency, Maternal anaemia