A-10: Anaemia in pregnancy in a rural population in Sri Lanka

S T C Mahawithanage[1], A Jayasena[2], D Fernando[2], T Galapathy[1] Renu Wickremasinghe[3], A R Wickremasinghe[4]
([1]Malaria Research Unit, Dept of Parasitology, Faculty of Medicine, University of Colombo, Colombo 8, [2]Ministry of Health (Formerly Malaria Research Unit), [3]Dept of Parasitology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Nugegoda, [4]Dept of Community Medicine & Family Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura)

Anaemia has been recognised as a major public health problem in Sri Lanka with iron deficiency being considered the most important cause of anaemia. We report the Hb levels of 275 pregnant women residing in Kataragama, a rural area in southern Sri Lanka, and the impact of Hb levels at the first clinic visit during pregnancy, on birth weight.

A 5 ml sample of venous blood was collected using aseptic techniques by trained technicians and was subject to estimation of haemotological indices such as Hb levels, cell counts, MCV, MCH and MCHC the following day. The pregnant mothers were followed during their pregnancy and at the time of delivery, the date of delivery and birth weights were recorded. The majority of the pregnant females were in their first pregnancy (36.1%) and less than 30 years of age (80%), Anaemia was classified as severe, moderate, mild and normal based on the WHO classification.

None of the pregnant females were severely anaemic. 103 (44.2%) pregnant females were anaemic having a haemoglobin below 11 g%, Of the 103 anaemic pregnant females, only 11 (10.7%) had evidence of iron defieciency anaemia with hypochromic microcytic anaemia. The mean rbc count, Hb level, MCV, MCH and MCHC were within normal limits. The average birth weight was 2808.5 g. There was a significant difference in the birth weights by parity ($p=0.0178$) and age ($p=0.0002$). Birth weights did not differ by anaemia status, parity or age of the mother after adjusting for individual variables.

The data suggests that the proportion of pregnant females who are anaemic in rural populations is decreasing over time probably due to better education and improved diet. Among the anaemic pregnant women evidence of severe iron deficiency appears to be less than in earlier studies.