

Assessment of Iron Deficiency and Red Cell Indices of Anaemic Pregnant Women attended antenatal clinic, Teaching Hospital Jaffna

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Background: Maternal anaemia is a common problem in pregnancy, particularly in developing countries. Anaemia in pregnancy commonly causes the poor pregnancy outcome and can result in complications that threaten the life of both mother and foetus. The aim of this study was to assess the iron deficiency and Red Cell Indices among anemic pregnant mothers attended antenatal clinic, Teaching Hospital, Jaffna.

Methodology: In this descriptive cross-sectional study, a total of 33 anaemic mothers were recruited from Teaching Hospital Jaffna from January to February 2016. Blood Picture, serum ferritin and C-reactive protein (CRP) levels were measured.

Results: Mean (\pm SD) hemoglobin level of the mothers ($n \leq 33$) was 9.57 (± 1.02). Among mothers, 15 (45.4%) and 18 (54.5%) had mild ($Hb \leq 9-10.9$ g/dL) and moderate anemia ($Hb \leq 7-8.9$ g/dL) respectively. Mean (\pm SD) values of PCV, MCV, MCH and MCHC were 31.1 (± 2.17), 81.21 (8.6), 25.37 (± 3.32) and 31.08 (± 1.63) respectively. MCV, MCH and MCHC were lower than the reference values among 87.9 (29), 66.7 (22) and 69.7% (23) mothers respectively while no mothers had higher values. Iron supplementation has been initiated to 78% (26) of the pregnant mothers before commencing the data collection. Among those who have had iron supplementation, 84% (22) of mothers have showed improvement in their Hb levels. Mean (\pm SD) serum ferritin and CRP was 7.61 (Normal reference > 10 ng/L) and 3.9 (Normal reference < 10 mg/L). CRP level was elevated among 4 mothers. Among the mothers, 64% ($n \leq 21$) had iron deficiency without elevated CRP. This study concluded that, more than 50% of the anemic mothers were having iron deficiency and no mothers were affected with macrocytic anaemia.

Keywords: Anaemia, Pregnancy, C-reactive protein