

## **ABSTRACT**

### **A COMPARATIVE STUDY OF PREGNANCY OUTCOME IN ANAEMIC AND NON-ANAEMIC WOMEN ATTENDING GOVERNMENT HEALTH FACILITIES IN ST ANN, JAMAICA**

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Worldwide 50% of pregnant women are reported to be anaemic, with 18.6% and 14.6% anaemic during 1998 in Jamaica and St Ann respectively. A study was designed to describe and compare pregnancy outcome for 176 (1:1 match) women with and without anaemia on first visit to antenatal clinic attending government health facilities in St Ann during 1998, and to assess and compare the physical growth and developmental milestones in 46 (1:1 match) of their offspring at various age intervals. Sources from which data were obtained were secondary (records), primary (community visits) and qualitative (focus group).

The hypotheses proposed were that: (1) anaemic women have poorer pregnancy outcome than non-anaemic women, (2) babies born to anaemic women have slower growth and developmental milestones and (3) the problem of anaemia in pregnancy persist due to poor knowledge, attitude and practices among pregnant women.

Significant differences found between pregnancy outcome of the groups being compared were: mean first visit haemoglobin levels was 8.9 and 11.8 gm/dl for the anaemic and non-anaemic groups respectively ( $p < 0.00$ ). The adverse pregnancy outcome in terms of stillbirths, abortion and perinatal deaths occurs in the non-anaemic group ( $p < 0.01$ ). The mean age at which infants were taken to postnatal clinic was lower for the anaemic group ( $p < 0.01$ ), and less of the babies born to the anaemic group were ill ( $p < 0.01$ ). At age 3 months, the mean weight of babies born to the anaemic group was lower ( $p < 0.03$ ).

Weight of babies assessed was lower for the anaemic group ( $p < 0.01$ ); mom's age for babies assessed in the community were lower for the anaemic group ( $p < 0.02$ ); and babies born to anaemic women were 3.8 times more likely to be stunted i.e. low length for age ( $p < 0.05$ ). Mean age for first pregnancy was lower for the anaemic group ( $p < 0.05$ ).

From the qualitative data it was found that only a few of the pregnant women were knowledgeable about anemia. Most had positive attitudes towards taking iron supplements but did not seem to practice it as expected. These findings have implications for the level of health and nutrition education offered in government health facilities and the educational level of women in the society. Health measures taken in

pregnancy and early life have potential long-term effectiveness and health impact.

Haemoglobin levels of pregnant women need to be assessed at the ANC for each trimesters of pregnancy to ensure appropriate and early interventions. More research is needed to assess impact of anaemia on women during lactation, and also on the later growth, development and academic attainment of children born to anaemic women.