The Relationship Between Neonates Low Birth Weight (LBW) and Maternal Age and Weight in Varanasi, India

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ABSTRACT

The aim of the study was to see the relationship between low birth weight and maternal age and weight. In total 200 pregnant women with less than 12 weeks gestation were registered from government hospitals in Varanasi and followed up. After excluding multiple and still births, normal birth weight and complicated pregnancies only LBW baby and maternal pairs were studied. At the time of registration maternal age was interviewed and weight were recorded with the help of bathroom scale. Product moment coefficient was computed to enumerate the correlation between (I) Weight and LBW, (II), Age and LBW. The 't' test was applied to see the significance of mean difference of LBW of different maternal age groups. Out of 200 pregnant women, only 29.55% delivered low birth weight babies. Significant positive correlation was found between low birth weight and maternal weight whereas no significant correlation was seen between LBW and maternal age. However, the mean difference of LBW between different age groups was found to be significant.

The birth weight is a major determinant of perinatal illness, disability and death. The weight at birth of less than 2500 grams (5.5 pounds) is known as low birth weight (WHO,1992). It is further classified as very low birth weight (VLBW < 1000G) infants. Babies weighing less than 2500 kg are more likely to suffer from a variety of health and developmental problems including respiratory, gastrointestinal, hearing, sight, immunological, cognitive, behavioural, social, emotional, health and growth. These issues come with considerable emotional and economic cost to their families and have a considerable economic impact on public service. Low birth weight babies also carry a 40 times greater risk of neonatal death (Behrmam and Butter, 2007).

Many factors affect the duration of gestation and of fetal growth, and thus, the birth weight. They relate to the infant, the mother or the physical environment and play an important role in determining the infant's birth weight and future health. Low birth weight thus defines a hetrogenous groups of infants: some are born early, some are born growth restricted and others are born both early and growth restricted.

LBW is the most significant factor contributing to neonatal mortality and morbidity.

Apart from immediate problems, LBW neonates are prone to long term disorders like infections, malnutrition and neurodevelopmental disabilities.

In view of above observations there is need of studies to understand the relationship between mother and fetus in order to make improvement in antenatal mortality.

The aim of the present study was to (i) find out the relationship between maternal age and LBW of babies (ii) to find out the relationship between maternal weight and LBW of babies.

RESEARCH METHODOLOGY

Few Government hospitals were selected on the basis of purposive sampling technique, total of 200 pregnant women with less than 12 weeks of gestation were registered and followed up. After excluding multiple and still births, normal birth weight and complicated pregnancies only LBW baby and mother pairs were studied. At the time of registration maternal age was interviewed and weights were recorded with the help of bathroom scale.

Product moment co-efficient was computed to enumerate the correction between (i) weight and LBW (ii) age and LBW. The 't' test was applied to see the significance of mean