

## ABSTRACT

Birth weight is a factor that makes tremendous influence on the health of children. Birth weight is an important socioeconomic and global indicator that reflects the health and nutritional status of pregnant women and the survival probability of the newborn. The objective of the present study is to identify the risk factors associated with low birth weight babies born at Colombo South Teaching Hospital during the period of 1<sup>st</sup> of February 2004 to 29<sup>th</sup> of February 2004.

This was a Hospital based exploratory type of case control study. Cases were uncomplicated mothers, who have completed at least 36 weeks of gestation with baby birth weight less than 2500 grams. Controls were uncomplicated mothers, who have completed at least 36 weeks of gestation with baby birth weight 2500 grams or more. A total of 44 cases and 132 controls were identified in this study. Interviewer administrated structured questionnaire was used to collect information. Data were analyzed using SPSS computer package. Odds ratio (OR) was calculated to estimate the risk. Chi square test was applied to identify the significance level.

The following factors were found to have association with LBW deliveries:- teenage mothers (cases 18.2%, controls 5.3%) , paternal education ( $p < 0.05$ ), family income less than 10000 rupees ( OR=3 , 95% CI (1.21-8.54) ), mothers weight less than 50 kilograms(OR=5, 95%CI (2.3-10.7)) and number of antenatal care given ( $p = 0.05$ ).

Ethnicity, mother's educational level, mother's occupation, passive smoking exposure, stress of the mother, parity or past obstetric history, mother's height, and sex of the baby did not show any association.

Adolescent health, quality of antenatal care and special attention to the low income families should be taken into consideration to improve the birth weight of the babies.