

SUMMARY

The objective of this case control study was to assess the association between maternal psychosocial factors and the risk of delivering Low Birth Weight (LBW) babies. The study was conducted on a sample size of 420 new born babies who were born to uncomplicated primi para mothers, and who delivered the babies at the North Colombo General Hospital Ragama during May and August 1995. A total of 140 cases of LBW new borns were compared with 280 non-LBW controls. Mothers were interviewed face to face to collect information by using a structured questionnaire within 24 hours after delivery. Mothers who experienced ≥ 2 major life events during pregnancy had an odd ratio of 2.94(95% confidence interval 1.38-6.30) compared with mothers who experienced < 2 major life events. The control of maternal age and per capita monthly income by stratification did not change the findings significantly. Mothers whose per capita monthly income was Rs. < 1500 had an odd ratio of 1.68(95% confidence interval 1.08-2.60) compared with mothers whose per capita monthly income ≥ 1500 Rs.. Stratification was used to control for maternal age, maternal height and quality of antenatal care. But the odd ratio did not change significantly. Compared with women who were unemployed during pregnancy, the employed women had an odd ratio of 0.98(95% confidence interval 0.59-1.61). After adjustment for per capita monthly income, the odd ratio was 1.09(95% confidence interval 0.52-2.29). The study also found that a maternal education lower than grade 6 (OR = 2.65) and a maternal height < 150 cm.(OR = 2.45), the number of antenatal clinic visits less than 8 times (OR = 2.04) and antenatal care received by Public Health Midwife (OR = 3.44) were statistically significantly associated with an increased risk of LBW. Exposure to passive cigarette smoking at home (OR = 1.12), poor ventilation of the cooking place(OR = 1.17) maternal age < 20 years (OR = 1.23) , > 30 years (OR = 1.19) and first antenatal clinic visit ≥ 17 weeks of gestation(OR = 1.32) had no significant association with an increased risk of LBW. It can be concluded that maternal psycho-social stress plays a greater role in determining LBW delivery.