

SUMMARY

Incidence of Low Birth Weight is an important socio economic indicator that reflects health and nutritional status of the pregnant women and survival probabilities of the new born child. According to the statistics of Family Health Bureau in 1988, the incidence of low birth weight was relatively high in Sri Lanka.

Therefore, a better understanding of some important factors associated with birth weight among Sri Lankan women would help to facilitate taking appropriate preventive measures.

A case control study was carried out in the Base Hospital, Gampaha, during the period of 1st of April 1997 to 30th of August 1997. Babies born to Sinhala Buddhist primipara mothers with uncomplicated obstetric history during such period were selected for the study. Babies who weighed below 2,500 grams at birth were considered as "cases" and those who weighed 2,500 grams or over were considered as "controls". Necessary information was collected by using an interviewer-administered questionnaire and also by using ante natal clinic records and BHTs. The total number of mothers who were interviewed during the study period was 429.

Statistically significant association was found between the incidence of low birth weight and several factors, such as, maternal age below 20 years, occupational factors, like heavy work, long working hours (more than 10 hours per day), long hours of travelling for work, standing posture at work, exposure to noise with high intensity.

Socio economic factors, viz., maternal education (primary or no schooling), family income below Rs.4,000/= per month and strata of social classes (iv) and (v), also showed an increased incidence of low birth weight which was statistically significant.

Increased incidence of LBW, which was statistically significant, was found in mothers who were involved in heavy domestic work, who had resting time of less than two hours excluding sleep, who were exposed to passive smoking of tobacco smoke at home, and also those who had attended ANC clinics less than four times. Statistically significant association was also found between increased incidence of LBW and maternal nutritional factors - Hb level below 11 g/d during 2nd or 3rd trimester, maternal height, pre-pregnancy weight and weight gain during pregnancy.

However, no statistically significant association was found between the incidence of LBW and -

- (a) maternal age over 35 years
- (b) unemployed and employed women during the pregnancy,
- (c) quality of antenatal care received by the mother and
- (d) first ANC attendance before 16 weeks of pregnancy.

The following recommendations were made in accordance with results of the study:-

To increase awareness among the general public about the best age for first child birth and improvement of family planning services.

To take measures to reduce occupational hazards during pregnancy with the collaboration of employers.

To take appropriate steps to increase nutritional status of the pregnant women and adolescent girls.

To provide facilities for early detection of anaemia and regular weighing of pregnant mothers at ante natal clinics.

To inculcate health education more meaningfully, stressing the need to follow all accepted health practices.