Abstract (English)

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MATERNAL RISK FACTORS ASSOCIATED WITH TERM LOW BIRTH WEIGHT INFANTS , - A CASE-CONTROL STUDY
By

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Background**:** Low birth weight (LBW), which is defined as birth weight less than 2500 g, has a complex aetiology and may be a result of premature interruption of pregnancy or intrauterine growth restriction. The term low birth weights are more predominant in developing countries of Asia. The objective of this study was to explore on maternal risk factors associated with delivering term LBW infants among the pregnant women who had antenatal care at government health clinics in Ipoh.

Methods: A case-control study was conducted in Ipoh city, Perak state, Malaysia. The study population consisted of 2 groups which are 45 cases and 90 controls respectively. The case group are mothers who delivered infants with weight < 2500 g. and control group are mothers who delivered infants with weight ≥ 2500 g. Data from pregnant women who delivered between January to December 2017 were extracted from government health clinics in Ipoh with using simple random sampling method. The variables collected include maternal socio-demographic characteristics, maternal obstetric risk factors and health risk behaviour.

Data were analysed by using SPSS version 23. The analytical tests applied were descriptive statistics, Pearson chi-square, Fisher Test, independent T-test, Mann Whitney U test and Binomial Logistic Regression with $p < 0.05$ was considered statistically significant.

Results: The total number of records eligible for the study was 3357 from the 9 government clinics in Ipoh. There were 266 cases and 3091 controls eligible for the study. Eventually, the selected as stipulated by sample calculation method as 45 cases and 90 controls. The infants constituted of 72 (53.3%) males and 63 (46.7%) females.

The two significant variables which were associated with LBW were history of previous low birth weight infants OR; 2.912, (95% CI; 1.106, 7.664), $p < 0.05$ and the maternal education level OR; 4.649, (95% CI; 1.318, 16.398), $p < 0.05$.

Conclusion: The two predictors are modifiable which are maternal education and history of low birth infants. The previous history of low birth infant is multifactorial. Hence; to ascertain the actual cause more researches are needed to explore such as; what are actually the causes

which increase the risk to incur in the subsequent pregnancy, how to prevent and control that definite cause and what are strategies or best approaches.

The education components need a strong national policy to make sure all women empowered at least with a minimum secondary level of education.