

ABSTRACT

INTRODUCTION- This was a case control study conducted at De Soysa Maternity Hospital, Colombo. Spontaneous abortion is a distressing event for the women who experienced it and to her immediate family members. Spontaneous abortion would lead to various complications which would vary from mild to severe conditions. No case control study was performed previously in Sri Lanka to see the possible risk factors for spontaneous abortion. Managing a case of spontaneous abortion is a burden to health sector especially for a developing country like Sri Lanka. Knowing some of the risk factors for spontaneous abortion may enhance the maternal health of Sri Lanka in the future.

OBJECTIVE -This study was conducted to determine selected socio demographic, pregnancy related and psychological factors associated with spontaneous abortions among Sinhalese mothers managed at De Soysa Maternity Hospital, Colombo.

METHODOLOGY-This was conducted at Gynaecological wards and Ante natal clinics of De Soysa Maternity Hospital from 03.08.2004 to 23.12.2004. This was unmatched hospital based case control study. Cases selected were Sinhalese mothers who had partial or full expulsion of foetus up to 28 weeks of POA and those cases were diagnosed and verified by Consultant Obstetrician and Gynaecologist. Controls selected were Sinhalese attendees who were up to 28 weeks of POA and who were having a viable foetus, up to the point of interview.

Number of cases were 238 and number of controls were 496 and total sample size was 734. Data was analysed by using EPI INFO 6 and SPSS packages. Univariate and multivariate logistic regression was applied and the results were expressed as odds ratios and 95% confidence intervals.

Total sample size was 734 and cases were 238 and controls were 496 in numbers. Presenting sampling method was followed to select the samples of cases and controls. Questionnaire 1 was administered to gather information on selected maternal demographic, social and pregnancy related factors. Questionnaire 2- MLEI was used to collect data on life events. Record sheet was used to record maternal weight at booking visit and to record maternal height at the time of interview. All the questionnaires and record sheet were pretested and pilot study was undertaken and necessary adjustments were done prior to study.

RESULTS -Only eight variables became statistically significant after multivariate logistic regression analysis was done. They were sleeping 8 hours a day (OR 3.919 95% CI 2.718-5.652 p value 0.000), walking 5 hours a day (OR 2.304 95% CI 1.609-3.298 p value 0.000), sitting 5 hours a day (OR 2.445 95% CI 1.690-3.537 p value 0.000), standing 4 hours a day (OR 2.294 95% CI 1.576-3.340 p value 0.000), kitchen smoking (OR 3.135 95% CI 1.621-6.064 p value 0.009), BMI >26kg/m² (OR 2.128 95% CI 1.266-3.578 p value 0.004), drugs taken other than routine Ante natal drugs (OR 2.883 95% CI 1.307-6.358 p value 0.009). Only these variables can be considered risk factors for spontaneous abortion according to the study. Maternal height 153cm is a protective factor (OR 0.5 95% CI 0.343-0.730 p value 0.000).

CONCLUSIONS- Exposure to kitchen smoking (OR=3.135), drug intake other than routine ante natal supplements (OR=2.883), less sleeping, standing, walking and sitting time and maternal BMI >26 kg/m² (OR=2.128) were risk factors for spontaneous abortions according to the study. Maternal height 153cm (OR= 0.5) showed a protective effect on spontaneous abortions.

RECOMMENDATIONS- Adequate rest by way of much sleeping and sitting should be encouraged in pregnancy while standing and walking postures would be adopted in other times at work. Using fire wood in poorly ventilated environments should be discouraged in first and second trimesters. Drug use in pregnancy should be restricted only to essential

instances under medical supervision .Women in fertile age group should be educated on the value of keeping preconception BMI < 26kg/m².

Key words – socio demographic factors, spontaneous abortion, presenting sampling method

