

Abstract

Introduction- Subfertility adversely affects the social and family life. Its effect on life of women; causes stigma, emotional stress, marital disharmony and divorce. Early and clear identification of risk factors, improve the quality of life of woman.

Background -: About 8% of couples experience some form of fertility problem during their reproductive life.

Objective -: To assess the risk factors for primary subfertility among women attending subfertility clinics at Colombo North Teaching Hospital Ragama.

Methodology -: A hospital based unmatched case control study was conducted to assess the socio-demographic, biological, health related and environmental factors which are associated with primary subfertility. For the study 106 primary subfertile women were recruited from the subfertility clinics and 212 primi-para mothers were recruited from the obstetric wards. A convenient sample was taken. These factors were assessed by two self administered questionnaires, interviewer administered questionnaire and a record sheet. Self administered questionnaire (11) was a Modified life event inventory to assess psychosocial stress. Weight and height were measured by using standardized instruments. Univariate and multivariate logistic regression was applied and the results were expressed as odds ratios (OR) and 95% confidence intervals (95%CI).

Results -: After controlling for confounding by multivariate logistic regression it was revealed that age at marriage ≥ 28 years (OR; 2.16, 95%CI; 1.22-3.84, P; 0.008), educational level $\geq A/L$ (OR; 1.76, 95%CI; 1.01-3.06, P; 0.04), pattern of menstrual cycle (<25 or >35 days) (OR; 2.51, 95%CI; 1.42-4.44, P; 0.002), pelvic inflammatory disease (OR; 2.53, 95%CI; 1.43-4.46, P; 0.001), BMI >25 kg/m² (OR; 2.21, 95%CI; 1.12-4.36, P; 0.02), past history of gynaecological surgery (OR; 5.56, 95%CI; 1.23-25.12, P; 0.03), exposure to radiation at work place (OR; 15.41, 95%CI; 1.60-148.20, P; 0.02), and the psychosocial stress (OR; 2.05, 95%CI; 1.19-3.54, P; 0.01) were the main factors affected for primary subfertility.

Current age being >30 years, age at menarche \leq 13 years, being employed, duration of menstrual bleeding <3 or >5 days, having STI, dysmenorrhea, DM, UTI, thyroid disease, having a previous history of abdominal surgery (other than gynaecological surgery), previous drug history, exposure to environmental tobacco smoking and alcohol consumption were not found to be risk factors for primary subfertility among women attending CNTH Ragama

Conclusion-: Age at marriage \geq 28years, educational level \geq A/L, pattern of menstrual cycle <25 or >35 days, pelvic inflammatory disease, BMI>25 kg/m², past history of gynaecological surgery, exposure to radiation at work place, psychosocial stress when exposed to two or more stressful life events were risk factors for primary subfertility.

Keywords – Subfertility, psycho-social stress, case-control study and odds ratio