Relationship between Unexplained Infertility and Sedentary Lifestyle among Women in the Urban City of Colombo; Infertile Female vs. Fertile Female

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Infertility is defined as the absence of conception after 12 months of regular, unprotected intercourse. The objective of this study was to identify the relationship between unexplained infertility and sedentary lifestyle behaviour among the young female population in the urban city of Colombo. A case-control study was conducted among 250 women (125-fertile group/125- infertile group) in the age group of 18 – 32, who were clinically diagnosed with infertility and fulfilled the inclusion criteria at Infertility clinics and Gynaecology wards at 3 hospitals in the Colombo district. A convenient sampling method was used to recruit cases and controls upon completion of clinical diagnosis by the Visiting Obstetrician and Gynaecologist. The study tools and measurement tools were an interview-administered female infertility questionnaire form, International Physical Activity Questionnaire (IPAQ), Body Mass Index (BMI), and Skin Fold Thickness (SFT). Significant positive associations (P<0.05) were explored between the obesity category and female infertility. There was a significant influence of over fat (30.4%) level measured using SFT for female infertility. A significant positive correlation (P<0.01) was emphasized between the low level of IPAQ score (36.4%) and female infertility. Women aged ≥28 years, sedentary occupations, and age at menarche were found to be associated with infertility (P<0.01). Sedentary lifestyle behaviour among women of reproductive age, living in the urban city of Colombo was found to be associated with female infertility.

Keywords: unexplained infertility, international physical activity questionnaire, BMI (Body Mass Index)