PP 13: Relationship between unexplained infertility and sedentary life style among women in urban city of Colombo; infertile female vs. fertile female

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Introduction: Infertility is defined as the absence of conception after 12 months of regular, unprotected intercourse. Unexplained infertility is the infertility; whose cause remains unknown even after investigation. Any waking activity, such as sitting or leaning, with an energy expenditure of 1.5 metabolic equivalent task (MET) or less is considered as sedentary behavior

Objectives: To identify the relationship between unexplained infertility and sedentary life style behavior among young female population in urban city of Colombo.

Methods: A case-control study was conducted among 250 women (125-fertile /125-infertile) in the age group of 18-32 years. infertile women who were clinically diagnosed at Infertility clinics and Gynecology wards were selected. 1st trimester pregnant mothers were recruited as fertile women from 3 hospitals in Colombo district. Demographic details and medical history of the women were collected in an interviewer-administered female infertility questionnaire. International Physical Activity Questionnaire (IPAQ) short form was used to measure physical activity. Anthropometric measurements including Skin Fold Thickness (SFT) were obtained. Data were analysed using Pearson Chi-Square test. SPSS software version 23.0 was used.

Results: The study included 125 infertile females and 125 fertile females aged 18-32 years. (Mean age = 28.67) There was a significant influence of over fat level (30.4%) measured using SFT for female infertility. A low level of IPAQ short form score (36.4%), women aged \geq 28 years (p=0.0486), sedentary occupations (p=0.000) and age at menarche (p=0.044) were found to be associated with infertility [OR= 11.87. [Log (11.87) =1.07]. **Conclusions:** There is a relationship between unexplained infertility and sedentary life style behavior among women in urban city of Colombo infertility.

Keywords: Unexplained Infertility, International Physical Activity Questionnaire, BMI (Body Mass Index)