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Demographic Background, Family History and Periconceptional Folic Acid Supplementation Associated with Primary Subfertility in Females Attending A Fertility Clinic, Galle, Sri Lanka

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ABSTRACT

Human reproductive health is recognized as a prioritized global health concern that involves many kinds of surveys and research in different aspects. Subfertility stands out among those studies as primary subfertility is identified as a significant problem in many countries. Although the ratios may vary, significant incidences such as one in every four couples have been reported. Being a poorly addressed issue in Sri Lanka, primary subfertility and its associated determinants were investigated in this study under three major categories, namely, socio-demographic, reproductive health factors, and periconceptional folic acid supplementation for a group of selected females attending to the fertility clinic, Teaching Hospital, Mahamodara, Galle. A cross-sectional study with convenient sampling was carried out to screen out data from 98 female subjects of subfertile couples during the period of April-November 2021. Subjects were interviewed by using a reviewed structured questionnaire. Data analysis was carried out by central tendency analysis, frequency analysis, and binary regression analysis to find out the most prevalent strata under each determinant. Regarding socio-demographic factors, mean age and age at marriage were recorded as 31.9 ± 6.2 (years) and 26.7±5.88 (years) respectively. Most females had a healthy BMI value. Behavioral factors like alcohol and tobacco consumption were represented by the minority which is 1% of the sample. The mean cycle length and duration of menstruation were 28.9±2.2 and 3.7±1.1 days respectively. The odds ratio showed that females who suffer from other clinical conditions such as asthma and heart diseases are less likely to be suffering from primary subfertility. The present study was conducted on the treatment-seeking female group, yet 9.2% of females were not receiving any treatment at that time. Inconsistent with previous studies, results showed that periconceptional folic acid consumption and family history of subfertility cases had no positive relationship with primary subfertility as 88.8% of females had a continuous supplement of folic acid, while 92.9% of females had no family history of subfertility. Larger sample size and a detailed questionnaire regarding other relevant aspects will facilitate a clearer interpretation of associated factors in female primary subfertility in Sri Lanka.

Keywords: *Folic acid, female subfertility, Socio-demographic determinants, Reproductive health*