ABSTRACT

Introduction

Subfertility is a condition trending as a public health issue on a global scale including the context of Sri Lanka. Hence knowing the significant risk factors affecting subfertility and treatment preferences are vast, that would be worthwhile to evaluate.

Objective

To determine the risk factors affecting primary subfertility, the preferred treatment options and level of stress among women seeking treatment at subfertility clinics in teaching hospitals in the Colombo district.

Methods

An unmatched case control study at a hospital clinic setting was carried out including 114 cases with primary subfertility and 228 controls who were primi-mothers in the first trimester chosen using a systematic sampling technique. An interviewer-administered questionnaire including validated tools to assess diet, physical activity and level of stress were used. Data analysis evaluated odds ratios and statistical significance using chi square and independent sample t tests followed by logistic regression analysis. Significance was taken as $p < 0.05$.

Results

Mean age (±SD) among cases and controls were 32.35 (±0.539) and 28.27 (±0.38) respectively. Statistically significant socio-demographics factors were age more than 35years and been employed. Significant biological factors were prolong duration of marriage, duration of subfertility and comorbidities such as prior abdominal surgery. Lifestyle factors including having low protein, fat, and fiber diet, low & moderate physical activity, abnormal BMI (< 18.5 or > 25kg/m^2), weight circumference > 80cm and increase total and visceral body fat were significant. Following multivariate regression analysis for controlling of confounding factors, only age more than 35 years (adjusted OR=3.3;95% CI=1.72–6.34,p<0.05), been employed (adjusted OR=2.38; 95% CI=1.36–4.16,p=0.002) and prior abdominal surgery (adjusted OR=3.45;95% CI=1.71–6.95,p=0.001) were significant risk factors for subfertility. Most preferred treatment option was ovulation induction (53.5%).

Socio-economic factors had no significant association with the preference of treatment. The level of stress among cases and controls were not significant (p=0.377).

Conclusions and recommendation

Factors affecting subfertility in our context is contrary to those of some societies, given the socio demographic variations across regions. This denotes further comprehensive studies in order to address this rising issue in a holistic manner using the life cycle approach.

Key words: subfertility, risk factors, treatment options, level of stress