

ABSTRACT

The objectives of the present study were to assess the point prevalence of primary and secondary infertility, identify risk factors associated with primary infertility and describe causes of primary infertility in the district of Colombo.

The study consisted of two phases. A community based cross sectional prevalence study and a cas control study.

The study subjects of the prevalence study were 2000 married women of the reproductive age group (MWRA) selected by a two stage stratified cluster sampling technique from the district of Colombo. All information were collected in respect of the women identified and their spouses. All women who were identified as primary infertile according to the World Health Organization definition were recruited as cases. Double that number of controls were selected randomly, matched for year of marriage from among the currently pregnant women who had passed 24 weeks of gestation, identified in the cross sectional survey. Detailed histories, physical examination and some investigations were carried out on the infertile couples and control couples. Further investigations were carried out on the infertile couples to determine possible causes of infertility.

The point prevalence rate of primary infertility was found to be 4.1% (95% C.L. 3.18-4.91) and that of secondary infertility was 16.1% (95% C.L. 14.39-

17.60) in the district of Colombo. The significant risk factors associated with primary infertility identified by the logistic regression model were woman's current age, younger age at menarche, woman being employed, absence of dysmenorrhoea, irregular menstrual cycles, current smoking in the male partner and a history of mumps orchitis. Among the secondary infertile women, twelve percent gave a history suggestive of post partum sepsis and eight percent of post abortal infections. Investigation of the 81 infertile couples revealed that the proportion of females with diagnosed causes of infertility were higher (35%) than that of males (25%). Three percent of the couples had concurrent causes. There were 44% couples with no demonstrable cause. Even though the transport workers had a higher rate of primary infertility it was not statistically significant. This needs further investigation, as such an association has not been previously reported. The relationship between age at menarche, smoking in the male partner and primary infertility also need further study.

The findings suggest that prevention of post partum sepsis and post abortal sepsis would be an important factor in preventing secondary infertility. Although the prevalence of primary infertility can be considered low in comparison to other reproductive failures, in planning services the relative importance of the problem and the cost effectiveness of the treatment should be considered. Wide spread coverage of basic investigations and a center of excellence where advanced techniques for the diagnosis of infertility are available should be established.