Fertility status of Sri Lankan men as reflected by seminal fluid analysis

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The objective of this study was to evaluate the current fertility status of males among Sri Lankan couples seeking infertility treatment. Volunteer male partners of 1100 couples attending a tertiary infertility clinic and 37 male partners of currently pregnant women (control group) were investigated. Collection of semen, analysis and interpretation of results as normal or abnormal were done as per WHO criteria. Of the study population 37.1% (n=418) were normozoospermic (all the sperm parameters were normal) and the others (62.9%; n=692) had either a single or combination of sperm abnormalities. Further analysis of abnormal group showed that 5.2% (n =36) were azoospermic (no spermatozoa seen in seminal fluid).

Prevalence of isolated abnormalities among the abnormal group were: reduced semen volume in 16.3% (n=113), reduced sperm counts in 52.3% (n=362), reduced sperm motility in 73.2% (n=507), reduced viability in 26.7% (n=185) and reduced normal morphology in 24.1% (n=167). The most prevalent combination of abnormalities was oligoasthenozoospermia (reduced sperm count and motility) found in 39.6% (n= 274) of the males. Majority of sperm categorized as immotile were in fact viable. With regard to mean sperm parameters, abnormal group showed a marginal reduction in sperm viability and a marked reduction in sperm motility compared to WHO norms. Further, all the mean sperm parameters of the abnormal group were significantly lower ($p<0.05$) than those of normal and control groups. The mean sperm parameters of normozoospermic men and control groups were within the normal range but motility in both these groups just satisfied the WHO criteria. In conclusion, male factor contribution as reflected by sperm abnormalities among couples seeking infertility treatment in Sri Lanka is high.

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