Background

Secondary infertility is a common, preventable but neglected reproductive health problem in resource-poor countries. This study examines the association of past sexually transmitted infections (STIs) including HIV, bacterial vaginosis, and factors in the obstetric history with secondary infertility and their relative contributions to secondary infertility.

Methods

Between November 2007 and May 2009 a research infertility clinic was set up at the Kigali University Teaching Hospital in Rwanda. Cases were defined as sexually active women aged 21-45 years presenting with secondary infertility (n = 177), and controls as multiparous women in the same age groups who recently delivered (n = 219). Participants were interviewed about socio-demographic characteristics and obstetric history using structured questionnaires, and were tested for HIV and reproductive tract infections (RTIs).

Results

Risk factors in the obstetric history for secondary infertility were lack of prenatal care in the last pregnancy, the first pregnancy before the age of 21 years, a history of unwanted pregnancy, a pregnancy with other than current partner, an adverse pregnancy outcome, stillbirth, postpartum infection and curettage. Presence of HIV, herpes simplex virus type 2 (HSV-2), or Treponema pallidum antibodies, and bacterial vaginosis were significantly more
common in women in secondary infertile relationships than those in fertile relationships. The population attributable fractions (PAF%) for obstetric events, HIV, other (STIs), and bacterial vaginosis were 25%, 30%, 27%, and 14% respectively.

Conclusions

The main finding of this study is that obstetric events, HIV and other STIs contribute approximately equally to secondary infertility in Rwanda. Scaling up of HIV/STI prevention, increased access to family planning services, improvement of prenatal and obstetric care, and reduction of stillbirth and infant mortality rates are all likely to decrease secondary infertility in sub-Saharan Africa.


Links: