
Tobian and his team of researchers looked at data from two randomised controlled trials, to evaluate whether rates of infection in HIV-negative adolescents and adult men in Uganda would prevent acquisition of HSV-2, HPV and syphilis infections.

Previous clinical trials have shown protection against acquisition of HIV infection in circumcised males.1,2 If circumcision could be shown to have further advantages in protecting against sexually transmitted infections (STIs) of even greater prevalence, this would add to support for circumcision as a beneficial public health intervention for males.

The trials in this study were carried out in parallel with a trial regarding male circumcision and HIV infection in Uganda. The research question in this case was clearly defined with regard to acquisition of HSV-2 or syphilis infection at baseline, 6, 12 and 24 months. A sub-group were evaluated for HPV infection at baseline and 24 months.

The authors were not able to describe how they randomised participants to intervention and control groups. There were no significant differences in the demographics of the two groups; however, there were some differences in sexual practices at baseline that could influence outcomes, namely significantly higher levels of condom use in the intervention group and higher alcohol use associated with sex in the control group. Results were adjusted to account for differences in sexual practice.

The method for selecting the small sub-group (609 of 3393 participants) for HPV testing was not described, although again the numbers appeared equally spread between the intervention and control groups.

In this study it was not possible to blind participants to which arm they were allocated; however, it was not described whether researchers carrying out follow-up questionnaires were blinded. Methodology for obtaining sexual behaviour data is not described, and may be significant for findings in such an intimate area.

Results relating to outcomes were clearly presented with robust statistical analysis. Acquisition of HSV-2, syphilis and HPV were described in terms of ratios and p values calculated both before and after adjustment for characteristics and practices. There was a significant reduction in HSV-2 and HPV infections, but no significant difference for syphilis infections. Confidence intervals were described and were supportive of the conclusions. The large number of participants lends further weight to the small, although initial power calculations were not included in the report.

Overall, this is an important piece of research whose results are significant in the debate surrounding effective interventions to combat the spread of STIs. The population involved here is one composed of young African heterosexual males, and we do not yet know how these findings can be extrapolated to Caucasian populations or to men having sex with men.

There is a postulated biological mechanism for the effectiveness of male circumcision in reducing the incidence of circumcision men involving anatomical and cellular factors, therefore it is possible that this intervention will be more widely effective. This would, however, require further study.

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References


This very interesting and yet alarming article gives us an insight into the health consequences of the still prevalent child marriages in India. Defined as marriage before 18 years of age, child marriage has serious health consequences for both the young women and their children. India has maintained laws against child marriage since 1929. However, the legal age for marriage was increased from 12 to 18 years in 1978.

In this study, participants were selected from the India National Family Health Survey-3 (November 2005–August 2006). A national representative household-based sample was obtained and a uniform sampling design was used across all states. From a staggering sample of 4,385 women, a 95% response was obtained.

The results obtained are eye opening. More than two-tenths of women aged 20–24 years were married before the age of 18 years. Almost half of these women were married before 16 years, of which one-ninth were married before 13 years. Poor, less well-educated girls from the rural areas of Central or Eastern areas of the country were more vulnerable to this practice.

This practice is associated with poor contraceptive uptake and hence increased incidence of unwanted and terminated pregnancies. There is also increased incidence of repeat childbirth within 24 months. A marked association between child marriage and female sterilization has been shown. Sterilization reduces condom use in couples, thereby increasing risk of HIV and other sexually transmitted infections.

The recommendations from this study conclude that through government health care initiatives, India should establish reduction of child marriage as an essential element to build on the existing priorities of family planning, and maternal and child health. However, in drawing their conclusions, the authors admit that since their data were based on self-report, they are vulnerable to social desirability and recall biases.

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