

The "Virgin" HIV Puzzle:

Can misreporting account for the high proportion of HIV cases in self-reported virgins?

Eva Deuchert

Swiss Institute for International Economics and Applied Economic Research (SIAW)
University of St Gallen, Switzerland

(Work in progress)

Summary

The Demographic and Health Surveys from Lesotho, Zimbabwe, and Malawi reveal that a significant proportion of HIV infections in adolescent women occurred in women who claim to be virgin. Two explanations have been proposed: adolescent women misreport sexual status or non-sexual risk is more relevant than previously asserted. This paper uses a nonparametric model to estimate the proportion of HIV infections associated with sexual activity under different assumptions on data accuracy. It shows that there is an inverse relation between data accuracy and importance of sexual HIV transmission. If all adolescent women in the considered sub-sample correctly report sexual activity, 70% of HIV infections cannot be attributed to sexual HIV transmission. The model predicts that more than 95% of HIV infections are due to sexual HIV infections, if a substantial proportion of self-reported virgins misreport sexual status.

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