

Assessment of changes in condom use among female sex workers in a prospective cohort study introducing diaphragm use for disease prevention.

Abstract:

Changes in the rates of condom use and number of sexual partners were evaluated among 140 female sex workers in Kibera, Kenya, participating in a 6-month study of diaphragm safety and acceptability for prevention of sexually transmitted infections conducted in 2004-2005. Analyses were stratified by partner type. Multivariable Tobit regression modeling was used to assess the association between study visit and proportion of acts protected. Participants completed 140 baseline visits and 390 bimonthly follow-up visits. The mean percentage of coital acts reported as protected by a condom increased from 56% at baseline to 68% at the 6-month visit ($P < 0.01$). Similar increases were observed for condom use by all partner types. Additionally, the mean number of sexual partners decreased over the study. Furthermore, consistent (i.e., 100%) diaphragm use during follow-up was associated with a higher proportion of coital acts protected by a condom in analyses adjusted for study visit and coital frequency. These findings suggest that, despite concerns that introduction of the diaphragm would result in more risky sexual behaviors, reported condom use increased and number of partners decreased.