Abstract

Effective contraception reduces unintended pregnancies and is a central strategy to reduce vertical HIV-1 transmission for HIV-1-infected women. METHODS: Among 2269 HIV-1-seropositive and 1085-seronegative women from seven African countries who were members of HIV-1-serodiscordant heterosexual partnerships and who were participating in an HIV-1 prevention clinical trial, we assessed pregnancy incidence according to contraceptive method using multivariate Andersen-Gill analysis.

RESULTS: Compared with women using no contraceptive method, pregnancy incidence was significantly reduced among HIV-1-seropositive and HIV-1-seronegative women using injectable contraception (adjusted hazard ratio (aHR) 0.24, P = 0.001 and aHR 0.25, P < 0.001, respectively). Oral contraceptives significantly reduced pregnancy risk only among HIV-1-seropositive women (aHR 0.51, P = 0.004) but not seronegative women (aHR 0.64, P = 0.3), and, for both seropositive and seronegative women, oral contraceptive pill users were more likely to become pregnant than injectable contraceptive users (aHR 2.22, P = 0.01 for HIV-1-seropositive women and aHR 2.65, P = 0.09 for HIV-1-seronegative women). Condoms, when reported as being used as the primary contraceptive method, marginally reduced pregnancy incidence (aHR 0.85, P = 0.1 for seropositive women and aHR 0.67, P = 0.02 for seronegative women). There were no pregnancies among women using intrauterine devices, implantable methods or who had undergone surgical sterilization, although these methods were used relatively infrequently.

CONCLUSION: Family planning programs and HIV-1 prevention trials need innovative ways to motivate uptake and sustained use of longer acting, less user-dependent contraception for women who do not desire pregnancy.