

Sample Brochure to Share Study Results with a Ministry of Health

Messages in this FHI brochure were written for an audience of health professionals and policymakers.

Study of Hormonal Contraception and the Risk of HIV Acquisition

“This large, multi-site study found no overall increased risk of HIV acquisition associated with hormonal contraceptive use.”

– Morrison C, Richardson B, Mmiro F, et al.
Hormonal contraception and the risk of HIV acquisition. *AIDS* 2007;21(1):85-95.

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STUDY SYNOPSIS:
A recent study funded by the U.S. National Institute of Child Health and Human Development (NICHD) has found **no statistically significant overall association between the use of either combined oral contraceptive (COC) pills or depot medroxyprogesterone acetate (DMPA) and HIV acquisition.** A total of some 6,100 HIV-negative women participated in the four-year study, which was led by Family Health International (FHI) in conjunction with seven other institutions, and conducted in Uganda, Zimbabwe, and Thailand. In this prospective, cohort study, women were equally divided among the three groups (users of COCs, users of DMPA, and women not using hormonal contraception). The primary finding of this study provides the best reassurance to date for women in need of highly effective contraception in settings of moderate to high HIV risk.

The study also explored whether sexually transmitted infections (STIs) modified the relationship between hormonal contraceptive use and HIV acquisition. Among STIs included in the analyses were vaginal infections (trichomoniasis, bacterial vaginosis, and candidiasis), cervical infections (chlamydia and gonorrhea), and infection with herpes simplex virus-2 (HSV-2). The African data found only one relationship between hormonal contraceptive use and STIs: Surprisingly, among the approximately half of African study participants testing *negative* for HSV-2 at enrollment, those who used either COCs or DMPA had a statistically significant increased rate of HIV acquisition compared to non-users. This finding was unexpected and has no clear biological mechanism. Thus, as is often the case with unexpected study findings, further research must evaluate this potential association. Of note, the study found that participants who were infected with HSV at the beginning of the study had higher rates of HIV infection than did those women who were HSV-negative at the start.

The results from the study do not indicate that any changes should be made in the provision or use of DMPA or COCs. Neither the World Health Organization nor the International Planned Parenthood Federation, which have reviewed the study results, plans at this time to change its guidelines for hormonal contraceptive use by such women.

Besides no overall increased risk of HIV acquisition associated with hormonal contraceptive use, what else did the study find?

The HIV epidemic is serious and ongoing in Uganda.
Of 3,654 women screened in Uganda, 601 (16.4 percent) were already HIV-infected. This observed HIV prevalence observed was substantially higher than the prevalence of 4.1 percent among all 15- to 49-year-olds in Uganda, reported in 2005 by the United Nations. This may have been because all of the women in this study were sexually active at the time of study enrollment and because women were recruited several years before the UN data were collected.

HIV incidence (new infections during the study) differed substantially in Uganda than in other study sites.
The HIV incidence rate among *all* study participants in Uganda was 1.55 per 100 woman years. (A total of 63 Ugandan women were infected.) This was higher than in Thailand (0.15 per 100 woman years), but lower than Zimbabwe (4.07 per 100 woman years). Despite Uganda's serious and ongoing HIV epidemic, the epidemic is not as severe as in some Southern African countries.

Hormonal contraceptive users in Uganda, and especially DMPA users, when compared to women not using hormonal contraception had a somewhat higher risk of acquiring HIV than did such women in Zimbabwe.
Possible explanations include chance, measurement differences in potential confounders by country, or that the effect of hormonal contraception differs by HIV subtype. In Uganda, the HIV subtypes are predominantly A and D. In Zimbabwe, the predominant subtype is C.

The HIV infection rate was higher for high-risk than low-risk women in Uganda, whether the women used hormonal contraception or not.
The rate of HIV infection was 2.2 times higher for the Ugandan women in the high-risk population than for the women in the general population. That is why sexually-active women who are at risk of HIV should always use condoms, regardless of the form of contraception they are using.