

Briefing Note: Hormonal Contraceptives and HIV

Main Message to be conveyed

This is just one study with 13 relevant HIV infections and therefore should not lead us to hasty conclusions. A WHO technical consultation in early 2012 will look at the body of evidence on this topic as a whole and at that point we will be able to say much more.

Background

The Department of Reproductive Health and Research of the World Health Organization (WHO), in collaboration with relevant partners, produces evidence-based guidance on contraceptive use. One of its guidelines, *Medical Eligibility Criteria for Contraceptive Use, 4th Edition 2010 (MEC)*, provides recommendations on the use of various contraceptive methods by women and men with certain health conditions. The Department carefully monitors the publication of new research evidence in order to keep these guidelines constantly up-to-date with the state of knowledge in the field.

As part of this effort, the WHO MEC provides guidance regarding the safety of using hormonal contraceptives for women at risk of HIV infection, women who are infected with HIV or diagnosed with AIDS. Findings from a prospective cohort study among 3790 heterosexual HIV sero-discordant couples from Heffron and colleagues published on 4 October 2011 in *The Lancet Infectious Diseases*¹, suggest that use of hormonal contraception may increase the risk of acquiring HIV infection two-fold. Additionally, the study reports that HIV-infected women who used hormonal contraception were two-fold more likely to transmit their infection to their un-infected partner compared with HIV+ women who did not use hormonal contraception. Hormonal methods used by women in this analysis were primarily progestin-only injectables, with a smaller number using combined oral contraceptive pills.

Talking Points

- Results of this study provide additional information to the published body of evidence on hormonal contraception and HIV, and offer data regarding HIV acquisition and transmission risk among HIV sero-discordant couples.
- However, like previously published studies, these findings were derived from observational data, which may be biased by self-selection.
- Users of hormonal contraception may differ in important ways from non-users (for example, with regards to sexual behaviour and condom use), and even with statistical adjustment, investigators may not be able to account fully for such differences. Additionally, information on contraceptive use was collected through self-report, and overall, few women actually reported using hormonal contraception during the study

¹ Heffron R, Donnell D, Rees H, Celum C, Mugo N, Were E, de Bruyn G, Nakku-Joloba E, Ngure K, Kiarie J, Coombs RW, Baeten JM, for the Partners in Prevention HSV/HIV Transmission Study Team. Use of hormonal contraceptives and risk of HIV-1 transmission: a prospective cohort study. *The Lancet Infectious Diseases* 2011; published online Oct 4, 2011. DOI:10.1016/S1473-3099(11)70247-X

period. Furthermore, few HIV infections were recorded among contraceptive users (10 among injectable users and 3 among oral contraceptive users).

- These methodological issues and limitations underscore the need to thoroughly evaluate the body of evidence on the topic in its entirety, so as to weigh the risks and benefits of hormonal contraceptive use for women at risk of HIV and those who are HIV infected.
- Currently, systematic reviews conclude that the weight of evidence does not indicate that use of hormonal contraception increases the risk of HIV acquisition, transmission or disease progression among the general population, but may have an impact on women at high risk of HIV infection, such as sex workers.
- Given the crucial role of contraception in helping women with, or at risk of, HIV infection to prevent unintended pregnancies and prevent perinatal transmission of HIV to their infants, as well as the adverse social and health consequences of unwanted pregnancy, WHO and partners have urged for more research to resolve key gaps in our understanding of the topic.
- In light of the study by Heffron and colleagues, as well as the public health concerns it raises, WHO is convening a Technical Consultation on 31 January - 1 February 2012 to re-examine the totality of evidence on potential effects of hormonal contraception or IUDs on HIV acquisition, disease progression, and infectivity/transmission to sexual partners.
- The review will build upon the previous meetings of the MEC Guidelines Committee on this subject in 2003 and 2008, as well as the recommendations from a 2007 WHO Technical Consultation² that focused on developing a research agenda of key priorities on these issues. The technical consultation will bring together a multi-disciplinary group of experts to evaluate the available scientific evidence in this area.
- Through a consensus-based process, current WHO recommendations on contraceptive use for women at risk of HIV, women with HIV infection or AIDS, will be assessed to determine whether they remain consistent with the updated body of evidence or whether modifications need to be made.
- Recommendations from the consultation will be applied to WHO's clinical guidance and guide the development of a consensus summary protocol for research in this area.
- WHO will issue a statement on recommendations for contraceptive use in high HIV incidence and prevalence settings. A linked stakeholders meeting (2nd February 2012) will review funding needs arising from the recommendations of the Technical consultation.

² World Health Organization. Review of priorities in research. Hormonal contraception and IUDs and HIV infection. Report of a technical meeting. Geneva, 13-15 March 2007, (http://www.who.int/reproductivehealth/publications/rtis/rhr_10_21/en/index.html, accessed on 24 August 2011).