HORMONAL CONTRACEPTION AND HIV TECHNICAL UPDATE

July 2017

Purpose of this technical update

To summarize current evidence and the World Health Organization (WHO) revised guidance regarding use of hormonal contraception (HC) by women at high risk of acquiring HIV.

Who are the audiences for this brief?

- U.S. Government family planning and HIV program managers and technical staff working in a global setting
- Ministry of Health and national policy makers responsible for family planning and HIV programming
- HIV and family planning service delivery organizations

Revised WHO guidance

On March 2, 2017, WHO issued revised guidance on the use of progestogen-only injectables *(norethisterone enanthate [NET-EN] and depot medroxyprogesterone acetate [DMPA], in both intramuscular [IM] and subcutaneous [SC] forms)* by women at high risk of HIV acquisition. The recommendation was previously a Category 1 with a clarification, meaning there was no restriction on the use of the progestogen-only injectables, but women at high risk of HIV should be informed that use of those contraceptive methods may or may not increase risk of HIV acquisition. With the revised guidance, progestogen-only injectables are now classified as Category 2 for women at high risk of HIV acquisition.

Overall, this change means that the advantages of using these methods generally outweigh the possible, but unproven, increased risk of HIV acquisition. However, women at high risk of acquiring HIV, who are considering the use of, or continuing to use progestogen-only injectables, should be advised about: (1) concerns that these methods may increase risk of HIV acquisition; (2) the uncertainty over whether there is a causal relationship; and (3) how to minimize their risk of acquiring HIV. Guidance on use of other hormonal contraceptive methods by women at high risk for HIV infection remains unchanged, and these methods can be used without restriction (Category 1).

WHO Guidance for women living with HIV remains the same with regards to use of progestogen-only injectables. There are no restrictions on the use of progestogen-only injectables for women living with HIV.

Evidence update

In 2016, Chelsea Polis et al. (AIDS, 2016) published an update to the 2014 systematic review of the epidemiological evidence on hormonal contraceptive methods and risk of HIV acquisition in women, titled, "Update on hormonal contraceptive methods and risk of HIV acquisition in women: a systematic review of epidemiological evidence, 2016." Ten additional observational studies were included in the updated review, five of which were considered to be of higher quality. Among the studies included in the 2016 review that involved women who used DMPA, some studies found a significant association between DMPA use and increased HIV acquisition, while other studies did not. When data from the higher quality new and previous studies were combined, the hazard ratio for HIV acquisition with use of DMPA compared with non-hormonal or no contraceptive use was 1.40 (95 percent CI 1.23–1.59), indicating a significant association between use of DMPA and HIV acquisition among women *(a hazard ratio of 1.0 indicates no risk; a hazard ratio less than 1.0 indicates reduced risk; and a hazard ratio of more than 1.0 indicates an increased risk; for example, a hazard ratio of 1.40 indicates an overall increased risk of 40 percent above baseline risk)*.

However, due to methodological limitations within all of the studies included in the review, establishing a causal relationship between the use of DMPA and any increase in HIV acquisition based upon the currently available results is not possible. Several biological mechanisms by which individual methods of hormonal contraception could theoretically increase the risk of HIV acquisition have been postulated, but it is unclear which (if any) are clinically relevant.

Data for oral contraceptive pills, more limited data for NET-EN, and progestin-only implants, generally do not suggest an association between use of these methods and increased risk of HIV acquisition. Given the lack of definitive data from observational studies, the benefits of using progestogen-only contraceptives generally outweigh the risks, particularly when considering that in many settings progestogen-only injectables may be one of the few contraceptive methods available, and risks from pregnancy may be high. WHO's new Technical Statement signals that additional efforts to strengthen communication and counseling on the issue as well as provision of HIV prevention strategies are warranted, especially in settings where women have a high risk of acquiring HIV.

Implications of the revised WHO guidance

What does the revised guidance mean for women, healthcare providers, and policymakers?

- **Women at high risk of HIV should not be restricted from using progestogen-only injectables.** All women who are medically eligible to use injectable contraceptives, including progestogen-only injectables (DMPA-IM, DMPA-SC and NET-EN) should have the option to do so. Women at high risk of HIV should not be denied access to injectables, if they chose to use them.

- **All women who choose to use progestogen-only injectables (DMPA-IM, DMPA-SC and NET-EN) should be advised on the potential increased risk of HIV acquisition.** Informed decision-making is a fundamental principle when providing **any** contraceptive information and service. Counselling should help women understand the benefits and potential risks associated with progestogen-only injectables and help them to assess their possible risk for HIV acquisition, so that they are empowered to make an informed choice whether or not to initiate the method. Counseling should be provided free of stigma, discrimination, or coercion and must respect the human rights of women and girls. Counselling tools and guidelines should be updated to align with WHO's new guidance.

- **Women who seek family planning services should receive HIV prevention information and be advised that dual method use (condoms plus an effective contraceptive method) is the best option to prevent both sexually transmitted infection (STI)/HIV acquisition and unintended pregnancy.** All women who choose to use contraceptive methods should be advised that male and female condoms are the only contraceptive method that can prevent STI/HIV transmission. Women at high risk for HIV should also be advised to use other HIV-prevention measures, such as antiretroviral therapy initiation for HIV-positive partners where appropriate and pre-exposure prophylaxis (PrEP), if this measure is available.

- **Every effort should be made to ensure that women and couples have access to a wide range of contraceptive methods through voluntary family planning services and are able to make a free and informed choice of the method that best fits their individual needs and life situation, including their HIV acquisition risk.** The U.S. Agency for International Development's (USAID's) family planning activities are guided by the principles of voluntarism and informed choice. We are committed to ensuring access to high-quality; evidence-based information and services in our family planning and HIV prevention, care, and treatment activities. Progestogen-only injectable contraceptives are very popular in many countries and may be the predominant contraceptive method in some countries, including countries with high HIV prevalence. In these settings, expanding contraceptive availability so that women have a broad range of contraceptive options (long-acting reversible contraceptives such as intrauterine devices [IUDs] and implants; short-acting hormonal contraceptives such as pills, patches, and rings; barrier methods; fertility-awareness-based methods; permanent sterilization; and emergency contraception) from which to choose should be a priority.

Resources

- *The USAID Strategic Communication Framework for Hormonal Contraceptive Methods and Potential HIV-Related Risks* provides suggestions for health providers on discussing hormonal contraception options for women at high risk of HIV. The framework offers guidance on the adaptation and dissemination of information pertaining to hormonal contraception and potential HIV-related risks.

- *The WHO Frequently Asked Questions on hormonal contraceptive eligibility for women at high risk of HIV* is a companion resource to the Technical Statement. It provides additional information on the new guidance on hormonal contraceptive eligibility for women at high risk of HIV.

Future work

1. The U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and USAID will continue to work with WHO, Ministries of Health, U.N. agencies, U.S. Government agencies and non-governmental organization partners to develop and disseminate programmatic resources on the issue of HC-HIV acquisition. PEPFAR and USAID will collaborate with field missions and host country partners to ensure that essential information on this topic is widely disseminated and integrated into family planning and HIV service delivery programs.

2. PEPFAR and USAID continue to follow and support ongoing research to understand this complex issue better and to provide improved technologies for women and couples to protect themselves. Recognizing that there will never be a single perfect contraceptive method, USAID continues to invest in research and development to expand contraceptive options and improve existing technologies for women and couples to protect themselves. USAID continues to support and monitor research on risks and benefits of contraceptive methods including the potential role of DMPA in HIV acquisition and development of multipurpose technologies that simultaneously prevent unintended pregnancy, HIV and/or other STIs.

3. The Evidence for Contraceptive Options and HIV Outcomes (ECHO) Study is designed to help fill the critical knowledge gap around HC and HIV acquisition. The ECHO Study is an open-label randomized clinical trial that will compare three effective, reversible methods of contraception (DMPA, IUD, Implants) to evaluate whether there is a link between use of any of these methods and increased risk of acquiring HIV infection. The study was initiated in December 2015 in 11 sites in 4 countries in southern Africa and 1 site in East Africa. It will enroll 7,800 women and follow them for approximately 18 months, with results anticipated in 2019 (http://echo-consortium.com).

Please send your questions/requests to HCHIVmaillist@usaid.gov.

References

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3. WHO Guidance Statement: Hormonal contraceptive eligibility for women at high risk of HIV. Geneva, World Health Organization, 2017 (http://apps.who.int/iris/bitstream/10665/254662/1/WHO-RHR-17.04-eng.pdf?ua=1, accessed March 3, 2017).

4. USAID. Strategic Communication Framework for Hormonal Contraceptive Methods and Potential HIV-Related Risks, May 2017 (http://healthcommcapacity.org/wp-content/uploads/2017/05/HC-HIV-strategy_May2017_final.pdf, accessed June 29, 2017).

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