GENEVA, 13 June 2019: A large clinical research study conducted in four African countries found no significant difference in risk of HIV infection among women using one of three highly effective, reversible contraceptive methods.

Published today in the *Lancet*, the study showed that each method had high levels of safety and effectiveness in preventing pregnancy, with all methods well-accepted by the women using them.

The three methods investigated in the trial known as the Evidence for Contraceptive Options and HIV Outcomes (ECHO) study were:

- DMPA - intramuscular (DMPA-IM), a three monthly, progestogen-only, reversible injectable contraceptive;
- Levonorgestrel implant, a progestogen-only implant inserted under the skin in the upper arm that can be used for up to five years;
- A copper-bearing IUD, a device inserted into the uterus that can be used for up to 10-12 years.

"These results support making available to women and girls a broad choice of effective contraceptive methods that empower them to make informed decisions about their own bodies - including if and when to have children," said Dr James Kiarie, from the Department of Reproductive Health and Research at the World Health Organization. "Better access to contraception and quality reproductive health services would have a dramatic impact in improving the lives of millions of women and their families."

The study found, however, that incidence of HIV infections among all of the women participants was high – an average of 3.8% per year- indicating that HIV remains a significant personal risk and public health challenge for many women in these countries.

"The study highlights the need to step up HIV prevention efforts in these high-burden countries - particularly for young women," said Dr Rachel Baggaley from WHO's HIV and Hepatitis Department. "These should include providing HIV testing and a range of HIV prevention choices within contraceptive service programmes."

About the study

Over the past 25 years, as the HIV epidemic took hold in many countries, a number of observational research studies suggested a possible increased risk of HIV acquisition for

women using progestogen-only injectables, particularly DMPA-IM. Because of limitations in the design of these studies, however, it was not possible to determine whether HIV infections were due to the type of contraceptive method used or other factors. The results of the ECHO trial are the most robust to date that address these concerns.

The ECHO Study was carried out in four countries with settings of high HIV incidence Eswatini, Kenya, South Africa and Zambia. A total of 7829 sexually active HIV-negative women aged 16 to 35 years who wanted to use a modern method of contraception were enrolled and were randomly assigned to one of the three methods.

All women who participated in the study received ongoing health services, including counselling on HIV prevention and care, screening and treatment for sexually transmitted infections.

“After decades of uncertainty, we finally have robust scientific evidence about the potential relationship between hormonal contraception and the risk of HIV from a rigorous randomized clinical trial,” said Professor Helen Rees, Executive Director of Wits Reproductive Health and HIV Institute at the University of Witwatersrand in Johannesburg, South Africa, and a member of the five-person ECHO Management Committee that leads the ECHO Study. “The results on this question are reassuring, but our findings are also sobering, because they confirm unacceptably high HIV incidence among young African women.”

ECHO Consortium

Results

Among the 7829 women who took part in the study, 397 HIV infections occurred. There was no statistical difference in the rate of acquisition of HIV among the women.ÂÂ 143 infections were in women who used DMPA-IM, 138 were in women who used a copper-bearing IUD and 116 in women who used a levonorgesterel implant.

The rate of HIV infection was higher for women aged less than 25 years irrespective of the method of contraception used. This high rate of HIV infection among women, and especially younger women, reinforces the need to strengthen HIV prevention integration within contraceptive and other sexual and reproductive health services. These may include HIV testing and linkage to antiretroviral therapy for those testing HIV-positive, partner testing, condom promotion, and pre-exposure prophylaxis (PrEP). The high incidence of HIV reported is above the WHO suggested threshold for offering PrEP, which should now be considered in countries where the incidence of HIV is above 3%, as appropriate.

Currently 214 million women in developing countries want to avoid pregnancy but do not use a modern contraceptive method. High-quality and integrated services that are designed in consultation with women and that respect the human rights of women and girls, protect their privacy, and are provided free of stigma, discrimination, violence or coercion are essential.

“Regardless of the data from the ECHO trial, the limited choice of contraceptives that women

have is not OK. We hope that this result will prompt action and put women first. Women want more options beyond DMPA," said Yvette Raphael, member of the Global Community Advisory Group for the ECHO Study.

Expanding quality-assured contraceptive options is critical in reducing the current unmet need. Providing a wide choice of acceptable and effective contraceptive methods empowers girls and women to make their own decisions about whether and when they wish to become pregnant as well as how many children they wish to have. Enabling women and girls to make informed decisions is a fundamental principle when providing contraceptive information and services. The study findings support continued access to all the methods studied by all women including those at high risk of HIV infection.

Next steps

Following its standard practice when important new research findings are published relating to contraceptive safety, WHO will convene a Guideline Development Group to review its existing recommendations concerning women's eligibility for using various contraceptive methods if they are at high risk of HIV. Updated recommendations will be issued by the end of August 2019. This timeline reflects WHO's established practice to ensure a timely, robust and inclusive review process.ÂÂ

WHO will support countries with high HIV incidence rates, including the four countries in which the study was conducted, to develop plans to provide integrated family planning and HIV and STI services as recommended in the Call to Action on Sexual and Reproductive Health and Rights(SRHR)-HIV Linkages.

The World Health Organization and the Human Reproduction Programme would like to acknowledge and thank the 7829 women and their communities for their participation in the ECHO study without which our understanding of the safety of three highly-effective contraceptive methods would not be what it is today.

The ECHO study was carried out by a consortium led by FHI 360, University of Washington, Wits Reproductive Health and HIV Institute, and the Human Reproduction Programme (HRP) at the World Health Organization.

Related Links

More information about hormonal contraception and HIV outcomes
https://www.who.int/reproductivehealth/hc-hiv/en/

More information about the ECHO study
http://echo-consortium.com/about-echo/