Major Study Finds 3 Birth Control Methods Don’t Differ on HIV Risk

Previous studies had claimed that certain birth control methods increased the risk of contracting the virus.

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An important randomized controlled trial has refuted previous studies that have suggested that certain birth control methods increase the risk of HIV among women. On the contrary, the new study found that among women living in various African nations who were randomized to take one of three birth control methods, their HIV acquisition rate did not differ based on their assigned contraception type.

In particular, previous observational and laboratory studies have suggested that some hormonal contraceptive methods, in particular Depo-Provera (intramuscular depot medroxyprogesterone acetate, or DMPA-IM), might increase women’s risk of contracting HIV.

Publishing their findings in The Lancet, researchers conducted a randomized, multicenter open-label trial in 12 research sites in Eswatini, Kenya, South Africa and Zambia. Between December 2015 and September 2017, they enrolled 7,830 women between 16 and 35 years old. The woman were all seeking contraception, did not have any medical reasons why they could not take any of the trial’s birth control methods, agreed to use the method to which they were randomized for 18 months and reported not using injectable, intrauterine or implantable contraception during the previous six months.

A total of 7,829 women were randomly assigned to receive an injection of Depo-Provera every three months (2,609 women), a copper intrauterine device (IUD) (2,607 women) or a levonorgestrel (LNG) implant (2,613 women) of various sizes (the sizes were also randomized).

A total of 7,715 (99%) of the women were included in the final analysis, including 2,588 in the Depo-Provera group, 2,571 in the copper IUD group and 2,588 in the LNG implant group.

The women used the contraception method that they had been assigned during 9,567 (92%) of 10,409 cumulative years of follow-up. During this time, 397 of the women contracted HIV, for an overall acquisition rate of 3.81 new cases per 100 cumulative years of follow-up. This included 143 cases in the Depo-Provera group, 138 cases in the copper IUD group and 116 cases in the LNG implant group, for HIV acquisition rates per 100 cumulative years of follow-up of 4.19 cases, 3.94

cases and 3.31 cases in each group, respectively.

The differences between these HIV acquisition rates were not statistically significant, meaning any difference was likely driven by chance. In other words, the study found no evidence that the difference in contraception method affected the risk of contracting the virus.

Twelve women died during the study, including six in the Depo-Provera group, five in the copper IUD group and one in the LNG implant group. A respective 2%, 4% and 3% of the women in each of the groups experienced serious adverse health events. A respective 4%, 8% and 9% of the women experienced adverse events that led them to discontinue their assigned contraceptive method; the differences between these rates were not statistically significant.

The women experienced 255 pregnancies, including 61 (24% of all pregnancies) in the Depo-Provera group, 116 (45%) in the copper IUD group and 78 (31%) in the LNG implant group. A total of 181 (71%) of the pregnancies occurred after women discontinued their assigned contraception method.

“These results underscore the importance of continued and increased access to these three contraceptive methods, as well as expanded contraceptive choices, complemented by high-quality HIV and STI prevention services,” study coauthor, Helen Rees, MSc, OBE, of the Wits Reproductive Health and HIV Institute in South Africa, said in a press release. “Women’s informed choice in sexual and reproductive health services is essential. This evidence will enhance women’s contraceptive decision making and assist providers and policymakers in delivering high-quality, rights-based contraceptive care.”

To read the study abstract, click here.
