Study demonstrates benefits of long-acting reversible contraception compared to short-acting reversible contraception

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New research provides strong scientific evidence that long-acting reversible contraception (LARC) benefits a wider population of potential users than previously thought. Women who tried long-acting methods (intrauterine devices and subdermal implants), despite their general preference for oral contraceptives or injections, found LARC highly satisfying. Moreover, the study showed that the decision to try a long-acting contraceptive prevented unintended pregnancy far better than using a short-acting method. These two discoveries were only achieved because of improved scientific approaches. This major study is published in the *American Journal of Obstetrics and Gynecology*.

LARC techniques such as intrauterine devices (IUDs) and implants under the skin are known to be more effective than short-acting reversible contraception (SARC) such as the contraceptive pill. Once inserted, long-acting devices provide at least three years of continuous pregnancy protection and are more than 99% effective because they are not subject to errors in use that may reduce the effectiveness of short-acting methods. Approximately 48% of unintended pregnancies occur in the month when contraception is used. Until now, the acceptability and success of LARC among women initially seeking a short-acting method had not been measured.

"Unintended pregnancy and abortion are stubborn problems in the United States. In the most recent data from 2011, 2.8 million unintended

pregnancies occurred; this represented 45% of the total number of pregnancies in that year. Moreover, 42% of the unintended pregnancies ended in abortion (totaling over one million procedures). These high levels have not changed much since the mid-1990s," explained lead investigator David Hubacher, PhD, of FHI 360, Durham, NC, who conducted the research in collaboration with Planned Parenthood South Atlantic (PPSAT). "An increase in voluntary uptake of LARC could help avert many unintended pregnancies, thus reducing associated health risks and other negative consequences."

Investigators conducted a partially randomized patient preference trial in North Carolina and recruited women aged 18-29 who were initially seeking a short-acting method of contraception. Women who agreed to randomization were randomly assigned to one of two categories: LARC or SARC. Women who declined randomization but agreed to follow-up chose their own preferred method. Participants who were randomized chose a specific method in the category and received it for free, while participants who chose their preferred method paid for their contraception in their usual fashion. Of the 916 participants, 43% chose randomization and 57% chose the preference option.

Participants were followed prospectively to measure primary outcomes of method continuation and unintended pregnancy at 12 months. Investigators also measured acceptability in terms of satisfaction level with the products. One year after starting the study, women randomized to LARC had high continuation rates and consequently experienced superior protection from unintended pregnancy compared with women using SARC. Satisfaction levels with LARC were high (approximately 78%).

"Our research found scientific evidence that typical users of short-acting reversible contraception can find LARC highly acceptable," said Dr. Hubacher. "However, despite these findings, it certainly bears

acknowledging that not all women want LARC and it is clear that not all women will be satisfied with LARC."

Dr. Hubacher noted that these results provide additional evidence for policy recommendations calling for wider access to LARC to improve reproductive health for adolescent girls and women in the U.S. For example, the American Academy of Pediatrics now recommends LARC as a first-line option for adolescents who choose not to be abstinent. The American College of Obstetricians and Gynecologists has issued similar recommendations.

Noted expert David Turock, MD, MPH, Associate Professor, Department of Obstetrics & Gynecology, University of Utah, Salt Lake City, UT, commented, "Dr. Hubacher and colleagues have completed a unique investigation in contraceptive research. They took a big risk as they did not know if participants would agree to be randomized to such different types of contraception. This study clearly demonstrates that it is the methods (IUDs and implants), and not the type of wome nwho prefer them, that cause low pregnancy rates."

Editor-in-Chief of the *American Journal of Obstetrics and Gynecology*, Ingrid Nygaard, MD, added, "This trial dispels the notion that long-acting contraception works so well mainly because people who take it are different from people who take short-acting contraception, which one might conclude from observational studies."

More information: David Hubacher et al. Long-acting reversible contraceptive acceptability and unintended pregnancy among women presenting for short-acting methods: a randomized patient preference trial, *American Journal of Obstetrics and Gynecology* (2016). DOI: 10.1016/j.ajog.2016.08.033

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