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A new woman-controlled contraceptive vaginal ring: a global step forward



More than 40 years ago, the development of contraceptive vaginal rings began, based on the fact that the vaginal epithelium can absorb steroid hormones and the capacity of elastomers to release these hormones at almost constant rates.¹ The growing interest in woman-controlled contraceptive methods has supported and accelerated the process.

The main advantages of contraceptive vaginal rings are their effectiveness, ease of use, user control, nearly constant release rate allowing for lower doses of hormones, greater bioavailability, and good cycle control compared with oral contraceptives.² There are two types of contraceptive vaginal ring on the market—Nuvaring (Merck Sharp & Dohme; Kenilworth, NJ, USA), which releases etonogestrel and ethinylestradiol for 1 month, and Progering (Silesia; Santiago, Chile), which is a 3-month progesterone-only ring for use during breastfeeding. Both rings are expensive, require refrigeration, and are not readily available in low-income and middle-income countries (LMICs). Therefore, reducing costs and expanding the availability of contraceptive vaginal rings is important, as is development of those with longer durations that do not need refrigeration, which would increase the contraceptive options for women globally.

In *The Lancet Global Health*, David Archer and colleagues³ report the results of two non-randomised, open-label, single-arm phase 3 trials of a ring-shaped, contraceptive vaginal system developed by the Population Council, which releases a consistent amount of segesterone acetate and ethinylestradiol over 1 year of cyclic use and does not require refrigeration. These trials were done at US and non-US sites and evaluated the efficacy of the contraceptive vaginal system and return to menses or pregnancy after use.³ The results showed the efficacy and safety of this contraceptive system, with an overall Pearl Index of 2.98 (95% CI 2.13–4.06) and a contraceptive efficacy rate of 97.5% on the basis of a life-table analysis. All participants who were followed up reported return to menses or pregnancy within 6 months. As this contraceptive vaginal system is effective for a full year of cyclic use and does not require refrigeration

during periods of non-use, this is likely to facilitate accessibility and help to address a global unmet contraceptive need.³

Gemzel-Danielson and colleagues⁴ reported that the 1-year segesterone acetate 150 µg and ethinylestradiol 13 µg daily contraceptive vaginal system represents a new long-term, user-controlled, and procedure-free contraceptive option with a safety profile similar to other combined hormonal contraceptives.⁴ The new contraceptive vaginal system is a safe and effective combined hormonal contraceptive that is under a woman's control and was considered acceptable by women who participated in the clinical trials.³

Addressing the unmet contraceptive need remains a global high priority, as illustrated by recent reports assessing progress in meeting contraceptive demands since the Family Planning 2020 Summit.^{5,6} Cahill and colleagues⁵ reported that between 2012 and 2017 the number of women of reproductive age who were married or in a union and using modern methods of contraception increased by 28.8 million, with success stories including rapid increases in use in Kenya, Mozambique, Malawi, Lesotho, Sierra Leone, Liberia, and Chad relative to what was expected in 2012. However, they also underlined that global levels of contraceptive prevalence mask the diversity in progress at the country level.⁵ Ahmed and colleagues⁶ showed that annual percentage increases in contraceptive use were above the average of 1.4 percentage points needed to achieve the 2012 Family Planning Summit goal to provide family planning to an additional 120 million women by 2020.^{6,7} However, progress was shown to be slow in several countries where the annual rate of change was lower than 1 percentage point, far below the target needed to achieve the goal.⁶

Multiple factors play a part in contraceptive use and need to be addressed. Availability and affordability of a portfolio of modern contraceptive methods, including this new birth control option, might help address the persistent, unmet, global contraceptive need. This new contraceptive vaginal ring was approved by the US Food and Drug Administration in August, 2018, and thus represents the first ring not requiring refrigeration to

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offer women a whole year of contraceptive protection, contributing to equity and choice.⁸

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I declare no competing interests.

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