Evidence-based answers from the Family Physicians Inquiries Network

CLINICAL INQUIRIES



Q/Can unintended pregnancies be reduced by dispensing a year's worth of hormonal contraception?

EVIDENCE-BASED ANSWER

PROBABLY, although studies that looked directly at this outcome are limited. A systematic review showed that women who received a larger number of pills at one time were more likely to continue using combined hormonal contraception 7 to 15 months later (strength of recommendation [SOR]: **A**, consistent evidence from 2 cohort studies and 1 randomized, controlled trial),

Evidence summary

A 2013 systematic review studied the effect of dispensing a larger amount of pills on pregnancy rate, abortion rate, and overall cost to the health care system.¹ Three of the 4 studies analyzed found lower rates of pregnancy and abortion, as well as lower cost despite increased pill wastage, in the groups that received more medication. The 1 study that didn't show a significant difference between groups compared only short durations (1 vs 4 months).

The systematic review included a large retrospective cohort study from 2011 that examined public insurance data from more than 84,000 patients to compare pregnancy rates in women who were given a 1-year supply of oral contraceptives (12 or 13 packs) vs those given 1 or 3 packs at a time.² The study found pregnancy rates of 2.9%, 3.3%, and 1.2% for 1, 3, and 12 or 13 months, respectively (P < .05; absolute risk reduction [ARR] = 1.7%; number needed to treat [NNT] = 59; relative risk reduction = 41%).

More pills lead to longer use of contraception

The systematic review also included a 2011 tri-

which might be extrapolated to indicate lower unintended pregnancy rates.

One of the large retrospective cohort studies included in the review demonstrated a significantly lower rate of pregnancy among women who received 12 or 13 packs of oral contraceptives at an office visit compared with 1 or 3 packs (SOR: **B**, large retrospective cohort study).

al of 700 women starting oral contraceptives.³ It randomized them to receive a 7- or 3-month supply at their initial visit, then evaluated use of oral contraception at 6 months. All women were invited back for a 3-month follow-up visit, at which time the 3-month supply group would receive additional medication.

Fifty-one percent of the 7-month group were still using oral contraceptives at 6 months compared with 35% of the 3-month group (P < .001; NNT = 7). The contrast was starker for women younger than 18 years (49% vs 12%; NNT = 3). Notably, of the women who stopped using contraception, more in the 3-month group stopped because they ran out of medication (P = .02). Subjects in the 7-month group were more likely to have given birth and more likely to have 2 or more children.

A 2017 case study examined proposed legislation in California that required health plans to cover a 12-month supply of combined hormonal contraceptives.⁴ The California Health Benefits Review Program surveyed health insurers and reviewed contraception usage patterns. They found that, if the legisla-

Nellie Wirsing, MD; Carrie Pierce, MD

Cascades East Family Medicine Residency, Oregon Health and Science University, Portland

Joan Nashelsky, MLS Family Physicians Inquiries Network, Columbia, Mo

DEPUTY EDITOR

Rick Guthmann, MD, MPH Advocate Illinois Masonic Family Medicine Residency, Chicago tion passed, the state could expect a 30% reduction in unintended pregnancy (ARR = 2%; NNT = 50), resulting in 6000 fewer live births and 7000 fewer abortions per year.

Recommendations

The Centers for Disease Control and Prevention (CDC)'s Selected Practice Recommendations for Contraceptive Use recommend prescribing or providing as much as a 1-year supply of combined hormonal contraceptives at the initial visit and each return visit.⁵

The American College of Obstetricians and Gynecologists (ACOG) supports overthe-counter access to oral contraceptives, effectively allowing an unlimited supply.⁶

Editor's takeaway

Adequate evidence of benefits and strong support from the CDC and ACOG should

encourage us to offer 1-year supplies of combined oral contraceptives. Even though the higher-quality studies reviewed also showed a cost savings, up-front patient expense may remain a challenge. JFP

References

- Steenland MW, Rodriguez MI, Marchbanks PA, et al. How does the number of oral contraceptive pill packs dispensed or prescribed affect continuation and other measures of consistent and correct use? A systematic review. *Contraception*. 2013;87:605-610.
- Foster DG, Hulett D, Bradsberry M, et al. Number of oral contraceptive pill packages dispensed and subsequent unintended pregnancies. Obstet Gynecol. 2011;117:566-572.
- 3. White KO, Westhoff C. The effect of pack supply on oral contraceptive pill continuation: a randomized controlled trial. *Obstet Gynecol.* 2011;118:615-622.
- McMenamin SB, Charles SA, Tabatabaeepour N, et al. Implications of dispensing self-administered hormonal contraceptives in a 1-year supply: a California case study. *Contraception*. 2017;95:449-451.
- Curtis KM, Jatlaoui TC, Tepper NK, et al. U.S. Selected Practice Recommendations for Contraceptive Use, 2016. MMWR Recomm Rep. 2016;65:1-66.
- Committee on Gynecologic Practice, American College of Obstetricians and Gynecologists. Committee Opinion No. 544: Over-the-counter access to oral contraceptives. *Obstet Gynecol*. 2012;120:1527-1531.