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Increasing Use of Contraceptive Implants and Intrauterine Devices To Reduce Unintended Pregnancy

Committee on Gynecologic Practice

Long-Acting Reversible Contraception Working Group

ABSTRACT: High unintended pregnancy rates in the United States may in part be the result of relatively low use of long-acting reversible contraceptive (LARC) methods, specifically the contraceptive implant and intrauterine devices. Top-tier reversible methods share the characteristic of requiring a single act of motivation for long-term use, eliminating adherence and user-dependence from the effectiveness equation. According to the World Health Organization's evidence-based Medical Eligibility Criteria for contraceptive use, LARC methods have few contraindications, and almost all women are eligible for implants and intrauterine devices. Because of these advantages and the potential to reduce unintended pregnancy rates, LARC methods should be offered as first-line contraceptive methods and encouraged as options for most women. To increase use of LARC methods, barriers such as lack of health care provider knowledge or skills, low patient awareness, and high upfront costs must be addressed.

The American College of Obstetricians and Gynecologists

Women's Health Care Physicians

Unintended pregnancy persists as a major public health problem in the United States. Over the past 20 years, overall rates in the United States have not changed and remain unacceptably high at approximately 50% of all pregnancies (1). Although the rate for unintended pregnancy has decreased somewhat for higher income women, rates have increased for lower income women (1). Unwanted births to women aged 15–24 years nearly doubled between 1995 and 2002 (2).

Many factors, including contraceptive method choice and continuation patterns, contribute to the lack of progress in reducing unintended pregnancies. Combined oral contraceptives and condoms, the predominant reversible contraceptive methods used in the United States, are user dependent, have relatively low continuation rates, and have relatively high failure rates with typical use patterns (3). Interventions such as enhanced counseling and same day start have not consistently improved contraceptive use patterns, continuation rates, or unintended pregnancy rates (4–6). Further, the predicted effect of emergency contraception to reduce unintended pregnancy has not been achieved (7). The United States has higher unintended pregnancy rates than other countries (8).

Long-Acting Reversible Contraception and Unintended Pregnancy

In part, high-unintended pregnancy rates in the United States may be the result of relatively low use of long-acting reversible contraceptive (LARC) methods, specifically the contraceptive implant and intrauterine devices (IUDs). Use of LARC methods is much less common in the United States than in countries such as France, where unintended pregnancy rates are much lower (7). According to the most recent cycle of the National Survey of Family Growth, fewer than 5% of women in the United States reported ever using intrauterine contraception or an implant (9). Increasing use of LARC methods in the United States could lower unintended pregnancy rates (7), and expanding access to LARC for young women has been declared a national priority (10).

Emerging evidence indicates that increasing the use of contraceptive implants and IUDs also could reduce repeat pregnancy among

adolescent mothers and repeat abortions among women seeking induced abortion. In a U.S. study of adolescent mothers, the factor most strongly associated with repeat pregnancy prevention in the first 2 postpartum years was initiation of the six-rod contraceptive implant (11). Other studies have concluded that immediate postabortion initiation of LARC methods is associated with reduced repeat abortion rates. In a retrospective cohort study conducted in the United States, women who received immediate postabortion IUDs for contraception had a significantly lower rate of repeat abortions than women who chose other non-IUD postabortion contraception (34.6 versus 91.3 abortions per 1,000 woman-years of follow-up) (12). Similarly, in a prospective cohort study from Northern Europe, 1,269 women undergoing early medical abortion were monitored for 49 months. Women who chose immediate IUD insertion had the lowest repeat abortion risk, as compared with those who chose other methods or postponed starting a contraceptive method (13).

Long-Acting Reversible Contraceptive Methods

The World Health Organization family planning counseling guide lists all methods in tiers of effectiveness (see Fig. 1). The top-tier reversible methods all share the characteristic of requiring a single act of motivation for long-term use, essentially eliminating adherence and user-dependence from the effectiveness equation. These top-tier methods also share the highest continuation rates of all contraceptive methods, one of the most important factors in contraceptive success (3).

Currently, three LARC methods are available in the United States. The single-rod etonogestrel implant was approved by the U.S. Food and Drug Administration in July 2007 for use up to 3 years. Two IUDs are available, the Copper T380A for use up to 10 years, and the levonorgestrel intrauterine system for use up to 5 years. According to the World Health Organization's evidence-based Medical Eligibility Criteria for contraceptive use, LARC methods have few contraindications, and almost all women are eligible for implants and IUDs (14, 15).

Despite high up-front costs and the need for office visits for insertion and removal, LARC methods share the following advantages over other methods:

- Are independent from coitus and user motivation and adherence
- Have the highest effectiveness, continuation rates, and user satisfaction
- Do not require frequent visits for resupply
- Require no additional funding for consistent use once they have been placed
- Are highly cost-effective
- Are reversible, with a rapid return to fertility after removal

Because of these advantages and the potential to reduce unintended pregnancy rates, LARC methods should be offered as first-line contraceptive methods and encouraged as options for most women.

Barriers to Long-Acting Reversible Contraception

To increase use of LARC methods, barriers such as lack of health care provider knowledge or skills, low patient awareness, and high upfront costs should be addressed.

Increasing familiarity with changes in practice guidelines and improvements associated with the newer LARC devices may address some health care provider reluctance to encourage LARC use. Although health care providers generally have favorable attitudes about IUDs, they may use overly restrictive criteria to identify IUD candidates (16). For example, IUDs may be safely used by nulliparous women and by adolescents (17, 18). Although there is a slight increased risk of infection in the first 20 days after IUD insertion, evidence indicates there is no increased risk of pelvic inflammatory disease or infertility in IUD users (18).

Immediate postpartum and postabortal insertion of an IUD is safe and effective (19, 20). Although expulsion rates may be higher, the convenience of postpartum or postabortal placement may outweigh this disadvantage and increase access and use of effective contraception (19, 20).

The single-rod contraceptive implant is relatively new and many physicians may be unaware of its advantages, including its ease of removal as compared with the older six-rod system. In one study, mean removal time for the single-rod implant was 3.5 minutes (21). In order to procure the single-rod contraceptive implant, health care providers are required by the U.S. Food and Drug Administration to participate in manufacturer-sponsored training.

Lack of experience or comfort with implant or IUD insertion may result in physician reluctance to recommend LARC methods, and overly cumbersome insertion protocols, multiple visits, and unnecessary testing could discourage patient use. The American College of Obstetricians and Gynecologists supports efforts to increase educational and hands-on training opportunities for clinicians in implant and IUD insertion.

Patient barriers include a general lack of awareness of LARC methods and their safety and effectiveness. Women describe the ideal contraceptive as reversible and not needing frequent thought (22). Yet, two recent surveys found that most young women had not heard of the IUD (23, 24). However, young women were likely to report a positive attitude about intrauterine contraception after a brief, 3-minute educational intervention (23).

Cost may present a barrier to LARC method use for many women. Implants and IUDs have high up-front costs that often are not fully covered by insurance. Instead, less effective but initially less expensive methods such as oral contraceptives are more often covered. However, both the implant and IUDs are highly cost-

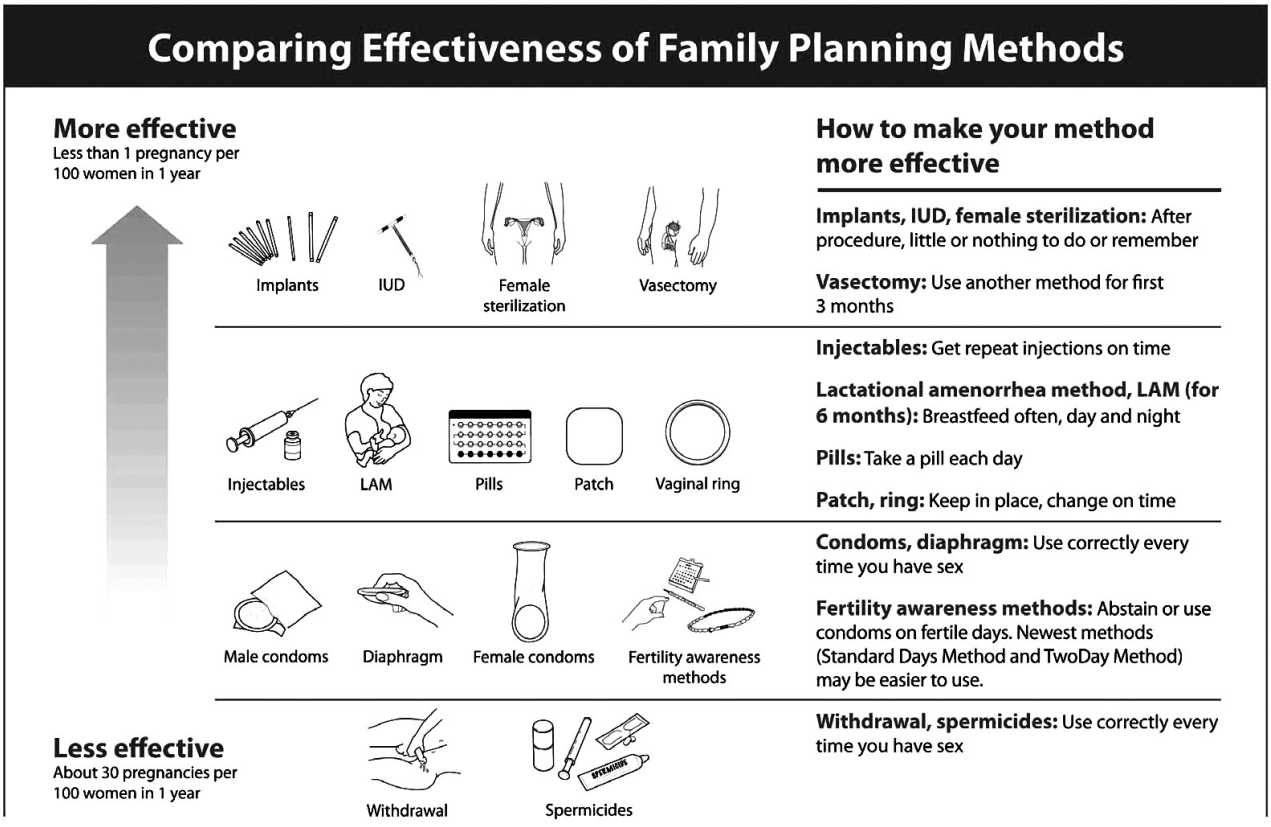

Fig. 1. Abbreviations: IUD, intrauterine device; LAM, lactational amenorrhea method.

effective even with relatively short-term (12–24 months) use (25–27).

Recommendations

Although lowering unintended pregnancy rates requires multiple approaches, individual obstetrician–gynecologists may contribute by increasing access to LARC methods for their patients. The following strategies can reduce barriers and increase use of implants and IUDs:

- Provide counseling on all contraceptive options, including implants and IUDs, even if the patient initially states a preference for a specific contraceptive method.
- Encourage implants and IUDs for all appropriate candidates, including nulliparous women and adolescents.
- Adopt same-day insertion protocols. Screening for chlamydia, gonorrhea, and cervical cancer should not be required before implant or IUD insertion but may be obtained on the day of insertion, if indicated.
- Avoid unnecessary delays, such as waiting to initiate a method until after a postabortion or miscarriage follow-up visit or to time insertion with menses.
- Support efforts to lower the up-front costs of LARC methods.
- Advocate for coverage of all contraceptive methods by all insurance plans, both private and public.
- Become familiar with and support local, state, federal (including Medicaid), and private programs that improve affordability of all contraceptive methods, including implants and IUDs.

Resources

American College of Obstetricians and Gynecologists
Long-Acting Reversible Contraception Program
409 12th Street, SW, PO Box 96920
Washington, DC 20090-6920
800-673-8444 or 202-638-5577
http://www.acog.org/goto/larc

American College of Obstetricians and Gynecologists
Patient Education Pamphlet AP014 (2007)
The intrauterine device
Available at: http://www.acog.org/publications/patient_education/bp014.cfm
Spanish language version (pamphlet SP014) available at: http://www.acog.org/publications/patient_education/sp014.cfm

American College of Obstetricians and Gynecologists
Patient Education Pamphlet AP159 (2007)
Hormonal contraception—Injections, implants, rings, and patches.
Available at: http://www.acog.org/publications/patient_education/bp159.cfm
Spanish language version (pamphlet SP159) available at: http://www.acog.org/publications/patient_education/sp159.cfm

World Health Organization
Promoting family planning
Available at: http://www.who.int/reproductivehealth/topics/family_planning/en/index.html

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