

OPINION EDITORIAL

Long-Acting Reversible Contraception: A Key Strategy to Prevent Unintended Pregnancy

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Unintended pregnancy remains a public health challenge worldwide. Between 2015 and 2019, there was an average of 121 million annual unintended pregnancies worldwide [1]. The incidence of unintended pregnancy is among the most essential indicators in reproductive health, as it is associated with increased maternal, neonatal and infant morbidity and mortality, as well as wider socioeconomic consequences.

When faced with unintended pregnancies, women are likely to seek abortions. Induced abortions raise particular concern in regions with restrictive legislation, where procedures are mostly unsafe. Despite efforts to achieve the Millennium Development Goals in past decades, the global percentage of maternal deaths due to unsafe abortion remains stable at 13%. Almost all of these deaths (99%) occur in developing countries [2, 3]. In pregnancies that are continued, there seems to be a higher risk of adverse outcomes including premature birth, low birthweight and postpartum depression [4-6], but it is unclear whether this effect is a reflection of demographic and socioeconomic characteristics [7]. Furthermore, unintended pregnancies entail wider impacts on both individual and societal levels, widening income and gender inequality gaps [8]. Not surprisingly, the burden of unintended pregnancy disproportionately affects marginalized women, reinforcing intergenerational cycles of early pregnancies, ill-health and poverty.

This scenario is unlikely to change unless women have access to effective contraceptive methods. Challenges with contraception are the primary cause of unintended pregnancies. Approximately

half of cases result from nonuse of contraceptives, and the remainder are due to inconsistent or incorrect use [9]. Over 200 million women in developing countries have no access to modern methods of contraception [10]. It is estimated that if this unmet contraceptive need was satisfied, 54 million unintended pregnancies and three out of four induced abortions would be averted every year [11].

Even when using contraceptives, the choice of user dependent methods such as oral pills and condoms is vastly predominant, despite their well-established higher failure rates with typical use. Intrauterine devices (IUDs) and implants are the most effective options among reversible contraceptive methods, with failure rates as low as those achieved with sterilization (less than 1%) [12, 13]. These methods, known as long-acting reversible contraceptives (LARC), are associated with the highest user satisfaction and continuation rates, and have demonstrated to be cost-effective in the long-term [14,15]. Since they are independent of user behaviour for effectiveness and require no effort after insertion, LARC can be especially beneficial for teenagers and recent mothers, as these populations tend to have a higher risk for inconsistent use of methods that depend on daily compliance.

The most respected medical societies have issued statements recommending LARC as first-line contraceptive methods, as they have few contraindications and almost all women are eligible [16-19]. Despite the available evidence and expert recommendations, LARC remain largely underutilized in most regions of the world. Between

2006 and 2008, IUDs were used by only 5.5% of American contraceptive users [20]. Usage among adolescents is even lower, with data from 2002 showing that only 0.1% of women ages 15–19 years and 1.1% of women ages 20–24 years were IUD users [21].

The main gaps for uptake of LARC seem to reside in ensuring access and long-term compliance. Patient related factors include insufficient and often biased information, particularly in subgroups of low socioeconomic level and younger age [22]. Survey results with teenagers and young women presenting for family planning at a health clinic of the University of California San Francisco showed that over 50% had never heard of the IUD before their appointment [23]. Cultural and social factors also play an important role in feminine sexuality and contraceptive behaviors. A recent qualitative study conducted in Australia reported that the idea of having an external device inserted in the uterus was considered ‘invasive’ and ‘extreme’ by many interviewees, justifying their overall discomfort with the method [24]. The gendered hierarchy of decision making is also culturally reinforced in some societies, with men having significant control over contraceptive practices [25]. Other issues such as confidentiality concerns and fear of side effects have also been reported [23, 26].

Provider bias can pose an additional challenge to LARC uptake, since contraceptive decisions are largely dependent on the quality of counseling performed by care providers. Professionals with more evidence-based information and proper technical training are more likely to offer LARC to their patients, which is crucial to facilitate uptake. The gap of knowledge is especially pronounced among Family Medicine physicians and nurses, which are the professionals that will provide primary care for most women throughout their life span [27–29].

The financial organization of health care systems also plays a pivotal role in determining women’s contraceptive choices. The higher upfront cost of LARC presents a significant barrier for use, and one that disproportionately affects low-income and

young women. Nevertheless, there is consistent evidence showing that publicly funded provision of LARC is a cost-effective intervention [15]. Programs targeted at teenagers and low-income women entail special benefits, as these demographics are most likely to both face unintended pregnancies and to impose significantly higher social welfare costs [30].

Pilot strategies in the United States have successfully demonstrated that the removal of barriers to access LARC significantly increases their uptake and reduces rates of unintended pregnancy. In 2014, the state of Louisiana implemented a policy change that increased the reimbursement for LARC devices to the wholesale acquisition cost. As a result, there was a 2-fold increase in LARC uptake across all patient subgroups [31]. In the St. Louis region, the CHOICE Study has provided almost 10,000 women with free devices and targeted counselling focused on the safety and superior performance of LARC methods. Following the intervention, 75% of women in the cohort chose LARC, and 84% of them were satisfied with the method after one year [32]. Annual rates of teenage births (19.4 per 1000 adolescents) and abortions (9.7 per 1000) were substantially lower in the study’s cohort, compared to U.S. national data (94 per 1000 and 41.5 per 1000, respectively) [33]. According to the authors, national policy changes applying the principles of the CHOICE Study could prevent up to 70% of annual abortions in the U.S. [34]. In Colorado, another initiative ensuring free access to LARC demonstrated a dramatic increase in use among teenagers, resulting in a 59% decrease in birth rates and 60% decrease in abortion rates among girls aged 15 to 19 years. The number of repeat births to Colorado teens declined 85% between 2009 and 2017 [35].

Empowering women to control their reproductive decisions is key to achieving the United Nations Sustainable Development Goals [36]. Effective family planning not only improves maternal and child health worldwide, but is also crucial in reducing gender inequalities and contributing to individual and societal development. Evidence consistently shows that promoting uptake of LARC methods is an effective approach to tackle unintended

pregnancy and its associated consequences at the public health level. Nevertheless, translation into practice remains remarkably limited. Successful implementation of change requires coordinated efforts that act upon the multiple sources of constraints, both at the individual and at the systemic levels. Targeting women of young age and low-income levels is particularly beneficial, since these are the demographics that face greater challenges with contraception and are disproportionately affected by the burden of unintended pregnancy. Providing access to immediate, effective and free contraception is an essential component of sexual and reproductive health care. Prioritizing this issue is long overdue.

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