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Intrauterine Device Use in America: Cultural Barriers Propagated by Fear and Misinformation

Grace R. Wilson
University of Pennsylvania
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Abstract
The intrauterine device (IUD) is the most popular form of reversible contraception in the world. The United States, however, has extremely low usage rates due to negative beliefs about the safety of its use. This article explores the reason for these false beliefs and why they are only found within the litigious culture of the United States. It seeks to quash the rumors of the danger of infertility by refuting evidence from several studies, including an assessment of the actual risks of using an IUD.
The intrauterine device (IUD) is a highly effective form of contraception that has been in use for over half a century. It has been shown to be extremely effective and it has a user satisfaction rate of 95% (Hatcher et al., 2002). Across the globe, the IUD is the most popular form of reversible contraceptive, used by over 160 million women (Peterson & Curtis, 2005). North America has a significantly lower usage rate at 1.5% compared to other geographic regions of similar socioeconomic and health status such as Australia and New Zealand (5.2%), Europe and the former USSR (7.2%) and Scandinavia (18.2%) (Johnson & Morgan, 2005). A major cause of this disparity was the Dalkon Shield litigation in the 1970's leading to a popular belief that all types of IUDs cause an increase in the rate of pelvic inflammatory disease (PID) which can cause infertility. The primary users of the Dalkon Shield were nulliparas who became infertile due to PID. Since that time, the risk of infertility has been falsely tied with the use of other IUD brands and types. Because the Dalkon Shield was only marketed in the United States, the fear of infertility is centered in there. In 1970, when the Dalkon Shield was introduced, nearly 10% of US contraception users had an IUD. After reports of infections began to arise and investigations tied to lawsuits ensued, a panic spread through the population causing a drop in IUD usage in the US to today's level. The United States, as one large cultural group, tends to react to medical scandals with intense media coverage leading to a lasting stain on the product's reputation accompanied by widespread panic of users of the product. The litigious nature of Americans coupled with the large amounts of media attention given to class action lawsuits against pharmaceutical companies discouraged the populace from using a proven effective medical device.

For many women, the IUD represents a form of contraception that is private, easy to use, extremely effective and completely reversible. In the United States, however, it has been recommended that IUDs not be used by nulliparous women and women who might want to conceive in the future because of the supposed risk of infertility. This limits their options to monthly or daily contraceptives. For some women, the use of shorter term contraceptives is unacceptable or impossible due to forgetfulness or the lack of local pharmacies. Also, certain IUDs provide women who cannot take hormonal contraceptives with a much more effective method compared to barriers, such as condoms and diaphragms, and spermicide.

Misinformation

The IUD has been subject to misleading interpretations of study results, stemming from the preconceived notion that its use can cause infertility. Grimes (2001) reexamined various IUD studies and found that a bias existed due to differences in participants and misreading of the results. The study he analyzed showed a significant delay of childbirth after discontinuing birth control for nulliparous IUD users contrasted against oral contraceptive and barrier method users. From these results, it was determined that nulliparous women should not use an IUD due to the risk of infertility, also speculating that PID-related infertility was the cause of delay of childbirth.
Grimes argued that the study was flawed because of a selection bias. He states, “Women who chose to use IUDs differed in important respects from those who chose oral contraceptives; on enrollment, nearly twice as many reported not wanting children... Those who opted for an IUD also were older, heavier, and more likely to be cigarette smokers” (p. 6). These factors present valid reasons for a delay of child birth that were not cited by the study as possible causes.

Grimes also researched the prevalence of PID in IUD users. The theory that IUDs cause tubal infertility relies on a woman becoming infected with the sexually transmitted infections (STI) such as chlamydia or gonorrhea which can lead to PID, in turn causing tubal infertility. He reported that there is no significant statistical correlation between the use of an IUD, including long term use, and tubal infertility.

Outdated regulations lead to reduction in use

The shadow cast over the American populace by the Dalkon Shield incident highlighted the lack of regulation for contraceptive devices. The Food and Drug Administration (FDA) responded by enacting excessively limiting guidelines for contraindications for the IUD, including nulliparity. The American Journal of Public Health recently published a study on the barriers to contraceptive use due to regulations such as these (Grossman et al, 2006). Their primary focus on IUD use was in regard to recent practice guideline changes, such as the World Health Organization (WHO) announcing that the benefits of IUDs outweigh any theoretical or proven risks for nulliparas. The journal’s study suggested that many doctors in the United States are still reluctant to insert an IUD for a nullipara because of the historical cases of infertility caused by the Dalkon Shield. Despite the claims of respected entities, such as the WHO, doctors are still unwilling to risk causing infertility to a woman who has not already had a child, even if that woman eventually desires never to conceive. As a result, many women are denied the opportunity to have an IUD inserted, and many are misled into believing that they cannot use an IUD at all.

Grossman et al (2006) proposed that another barrier to the use of an IUD is the exclusion of nurses from inserting it. They suggested that in order to increase the availability, nurses and other mid-level practitioners could be trained and licensed to insert the IUD. The journal argued that the insertion of an IUD is not a complicated procedure and is it not necessary to have it performed solely by doctors. If nurses were allowed to insert IUDs, it could further reduce the cost of insertion, which is another barrier to access.

Debunking the myth of IUD use

Possible Risks

There is some actual risk to using an IUD that can possibly lead to infertility or other problems with conceiving, but these risks are only slightly elevated over those women without an IUD face. One serious risk associated with the use of an IUD is PID caused by the contraction of gonococcal or chlamydial STIs, either before or after insertion (Peterson & Curtis, 2005). Researchers claim that the actual rate of PID among IUD users is not significantly higher than that of non-users. Johnson & Morgan (2005) claim that the risk of PID is the same for users and non-users. According to their research, the infection rate for PID after the insertion of an IUD is concentrated in the first 20 days because the cervix has been subjected to trauma and is therefore more susceptible to infiltration of STIs. The IUD is strongly recommended for young women who are seeking tubal ligation because it allows for long-term, easy and effective contraception without the risks of a major surgery and the irreversibility of sterilization.

Impact on Healthcare

For every single copper IUD inserted in the US, the healthcare systems save $14,133 on the cost of unplanned pregnancies and monthly contraceptives. If half of the 11 million women in the United States switched to the IUD, the healthcare system would save approximately $77 billion dollars over the course of 10 years. While the savings are a rather good reason to encourage the use of IUDs, other factors should be taken into account. It has the highest satisfaction rate of all birth control methods. With the hormonal type, 97% of women experience a reduction in vaginal bleeding and cramps during menses. There is nothing more effective that is also reversible. But, despite all the positive research findings, women in the United States still fear the possibility of infertility and of infection.
In order to foster the growth of IUD usage among women in the United States, doctors, nurses and other healthcare providers must encourage the spread of correct information, not only to possible consumers, but to themselves as well. Many healthcare professionals who act as primary care providers and contraception advisors are unaware of the new research and the new guidelines associated with IUD use. A survey of female gynecologists and obstetricians found that almost 25% of them use an IUD, which was well above the average American rate (ACOG, 2004). This shows that the women most likely to be well informed about the risks and benefits of the IUD chose it more often. Therefore, with more education to the general public, a larger percentage of women will be prepared to discuss the possibility of using an IUD with their healthcare provider. It is the responsibility of the healthcare providers to become more up-to-date with their information, and they need to be willing to insert IUDs on nulliparous women. The IUD has gotten an unfair reputation due to one pharmaceutical company’s mistake. The only way to rectify the bad information present in the United States is to spread the correct information.

References

*Author Highlight
Grace Wilson is a senior undergraduate nursing student at the University of Pennsylvania.