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Popularity Disparity: Attitudes About The IUD in Europe and the United States

By Adam Sonfield

The 1960s introduced to Americans two promising new ways to prevent an unplanned pregnancy. The oral contraceptive—introduced in 1960 and quickly dubbed, simply, "the pill"—was a remarkable and lasting success. Over the decades, a stream of subtle innovations to the method have made it safer and proven to provide a variety of additional health benefits, from fighting acne to preventing ovarian cancer.

In the mid-1960s, another method was introduced to Americans with similar fanfare but has been ultimately far less successful: the intrauterine device, known more commonly by its acronym, the IUD. Based on a concept that has been around for centuries, the modern IUD—a small, plastic or metal device inserted into the uterus that provides extended protection against pregnancy, primarily by interfering with sperm and eggs—was lauded as an easier-to-use alternative to the pill. By the early 1970s, nearly 10% of U.S. women practicing contraception were relying on the IUD.

In 1973, however, congressional hearings highlighted serious health problems with the Dalkon Shield, a new, heavily marketed, plastic IUD that had quickly become the most popular model in the country. By mid-1974, after a spate of deaths from septic miscarriages, the manufacturer had suspended sales in the United States and soon thereafter, worldwide. For a decade, the media trumpeted a series of studies linking the Shield and other IUDs to pelvic inflammatory disease (PID) and subsequent infertility. By the mid-1980s, the Shield's manufacturer, the A.H. Robins Company, had been driven into bankruptcy under the weight of several hundred thousand lawsuits, and other IUD manufacturers, fearing further litigation, had withdrawn from the U.S. markets.

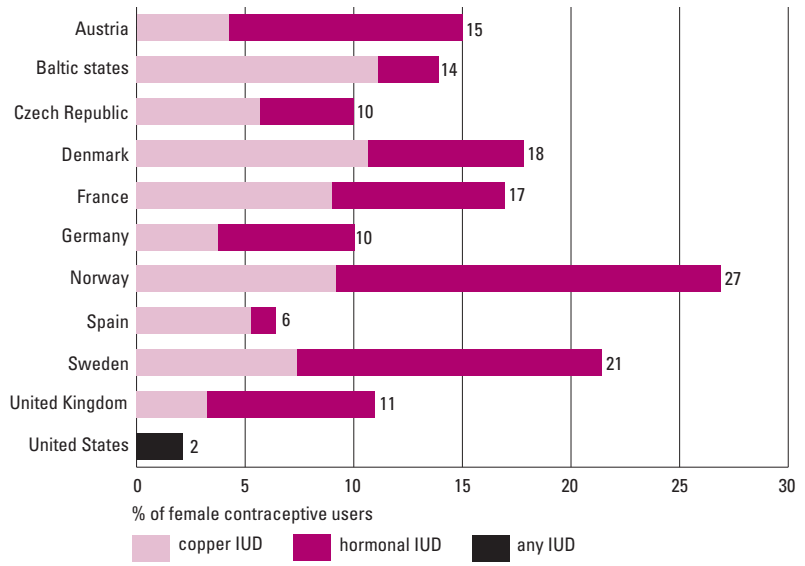
Although better designed models were later introduced, the method has not recovered its status as a major contraceptive option for U.S. women. Today, the copper-releasing IUD known by the brand-name ParaGard and the hormone-releasing IUD called Mirena (introduced in the United States in 1988 and 2001, respectively) together are used by only 2% of U.S. women practicing contraception—roughly 800,000 women—according to the 2002 National Survey of Family Growth.

In other parts of the world, however, the IUD is far more popular. This is the case not only in the developing world but also in European countries that in many ways are similar to the United States. According to a 2006 study conducted by researchers at Bayer Schering Pharma (which manufacturers Mirena, along with other contraceptives) and submitted for publication by David Cibula, president of the European Society of Contraception, the IUD is used by a sizable minority of women even in European countries where oral contraceptives dominate. Use is particularly high in France, several Scandinavian nations and much of the former Soviet bloc, topping out at 27% of female contraceptive users in Norway (see chart, page 20).

In short, the IUD enjoys greater popularity almost everywhere in Europe than it does in the United States, and in some European countries, its popu-

IUD USE

Throughout Europe, use of the IUD is either higher or far higher than in the United States.



Notes: European data are from 2006; U.S. data are from 2002. U.S. data do not distinguish between copper and hormonal IUD users. *Sources:* Bayer Schering Pharma, 2006 Pan EU Study on Female Contraceptives, 2007, and Guttmacher Institute tabulations of the 2002 National Survey of Family Growth, 2007.

larity rivals that of the three major U.S. methods—the pill, condoms and sterilization. Much of this difference appears to be the result of more positive attitudes among European health care providers and contraceptive users about the method's safety, side effects, and other benefits and drawbacks. What, exactly, do so many Europeans see that Americans do not?

Safe, Effective, Convenient

According to several experts interviewed for this article, the Dalkon Shield fiasco did not have nearly the impact in Europe that it had in the United States, largely because the Shield was rarely in use in Europe. Moreover, in contrast to the United States, where the IUD essentially disappeared from the market for an extended period, copper IUDs have been available in Europe without interruption for decades. And the newer, hormonal IUD, which was developed in Scandinavia, has been marketed for a decade or more.

Indeed, the number of IUD models available in Europe has continued to grow steadily as European researchers have worked to improve safety and efficacy and to mitigate side-effects. Today, the scientific consensus is that IUD excels on all three accounts. Viveca Odlind, a medical expert with the Swedish national agency that regulates drugs and devices, suggests that this consensus may be easier to accept in Europe than in the United States because of the difference in experience with the method. "It's a tough journey to go from zero to something, if you have that bad reputation to carry," she says of the United States.

Safety. The Dalkon Shield was plagued by a cluster of negative health effects. Today, that model is widely acknowledged to have had a flawed design, including a multifilament string that served as a channel to a woman's uterus and left her vulnerable to infection. Infection could lead to PID, infertility, and in the worst cases, to the septic miscarriages that first sparked panic. Over the years, the safety of other IUD models has been questioned, not only around those same issues of infection but whether the method increases a woman's chance of having an ectopic pregnancy.

Better studies with proper control groups, along with a better understanding of how the IUD and other contraceptive methods work, have led to the conclusion that copper and hormonal IUDs are generally safe on all counts. Issues with infection have been found to be tied directly to the presence of sexually transmitted infections (STIs), such as chlamydia and gonorrhea, at the time of insertion or soon thereafter; absent such infection, the IUD is not thought to increase one's risk of PID. In regard to ectopic pregnancy, the actual rates are lower among IUD users than among women not practicing contraception; however, in the rare case of method failure, the resulting pregnancies are particularly likely to be ectopic.

Providers in many European countries, such as Finland, consider the IUD "the primary method

for women who have had children," according to Dan Apter, chief physician and director of The Sexual Health Clinic in Helsinki. Moreover, the scientific consensus that the IUD is safe holds even for single women and women who have never given birth (presuming they do not have an active STI at or near the time of insertion), which is a significant change from a decade or two ago. Perhaps the most salient problem is that fitting an IUD can be somewhat more difficult in women who have never given birth. Among such women, the device is more likely to be expelled from the uterus, which can lead to method failure, if undetected.

Efficacy. Use of the IUDs is driven in large part by their substantial benefits and relatively limited drawbacks. The chief benefit, of course, of any contraceptive method is the prevention of pregnancy, and on that note, copper and hormonal IUDs are quite effective. In Britain, for example, the devices are listed in brochures for patients alongside the implant as the most effective and cost-effective available. Most other methods rely on the consistency of a couple's use—daily for the pill, weekly for the patch or at every act of intercourse for the condom. It is the difficulty that many women and men have in maintaining such regimens that creates a large gap between the theoretical "perfect use" rate of a method and its "typical use" rate. With long-term methods such as the IUD, this gap is narrower. For that reason, controlled studies find that well under one in 100 women using the most recent IUD models become pregnant each year. In the real world, women experience somewhat higher rates of failure—albeit rates superior to the pill—possibly because some providers are not perfectly proficient in inserting the IUD.

Advantages and side-effects. IUDs have other key advantages when compared with competing methods. The methods' ease of use—requiring minimal maintenance by the woman and her provider for years at a time—that contributes so greatly to their effectiveness is also a major selling point itself. And unlike sterilization, which is comparable in terms of effectiveness and lack of maintenance, the IUDs are easily and completely reversible—a key advantage, considering that with divorce and remarriage and other life-altering events, some women may come to regret having been surgically sterilized. According to Caroline Moreau, a researcher with France's National Institute of Health and Medical Research (INSERM), sterilization in that country was until recently defined as "harmful to the integrity of the human body" and is still rarely used. The IUD, instead, is the method women and couples choose for permanent contraception, once they have completed their families. This pattern of using IUDs as a substitute for sterilization is not as clear elsewhere in Europe, but is most likely a factor in many countries.

In addition, the copper IUD does not have the usual systemic effects of hormonal contraceptive methods, including the cardiovascular risks that make the pill a poor choice for older women and smokers. The hormonal IUD may have systemic effects, but the hormones are dispensed directly to the uterus and so the effective dose that the rest of a woman's body receives is lower than for other methods. The hormonal IUD also has the unusual advantage of producing lighter periods, in some cases eliminating menstruation altogether. (Some women, however, may see that as unnatural and a drawback.) The differences between the two types of IUDs give women choices even within the IUD class and are why "providers differentiate between the [copper] IUD and IUS from the word 'go'," says Kate Guthrie, clinical director of sexual health services in the city of Hull, England. (Although in some countries, Mirena is known as an intrauterine system, or IUS, rather than an IUD, that distinction is not typically made in the United States.)

Both methods do have negative side-effects as well. For example, women are instructed to check periodically on the placement of the device by feeling for its tail string; yet, the string itself can be a drawback for some couples, as men may report feeling it during sex. Hormonal IUD users often experience irregular bleeding during their initial months. The copper IUD typically leads to heavier and longer periods during the first few months of use, and some women find it increases cramping. (Several newer copper models—approved in Europe in the mid-1990s but not yet

available in the United States—have been designed without the typical T-shaped frame in the hope that a more flexible device will minimize these problems; insertion becomes somewhat more complicated, however, as the provider must use a suture to anchor the frameless device.)

Progress and Inertia

Although IUD use in Europe far outstrips that in the United States, actual medical practice in most European countries is only fitfully catching up to the scientific consensus that the IUD is an appropriate first-line contraceptive for most women. Even in Finland, where both types of IUDs are extensively used, they are considered a second choice for women who have never given birth, when oral contraceptives are contraindicated, according to Apter. The situation is similar in Sweden: Odlind notes that although the recent science has led medical authorities to label the IUD as broadly appropriate for women, it has been difficult to convince some family planning providers to follow that advice. As a result of this inertia, IUD use in Europe is concentrated among older women, who are more likely to have given birth—starting around age 25 in some countries, or around age 30 in others.

Fears and concerns among patients are one factor behind the inertia. According to Hull's Guthrie, because many women do not fully understand their own bodies, the mysteries of how an IUD works can be confusing. If Mirena reduces or even eliminates menstrual bleeding, some women wonder, where does all the blood go? Other experts note that women may have practical concerns about the method, such as the embarrassment of insertion, the perhaps uncomfortable idea of having an object inside one's body or qualms about using a method that can only be removed by a medical professional. That last concern may be amplified among younger women, who are especially likely to want a child or another child before the end of the method's five- or 10-year lifespan.

Providers, too, may have some practical concerns that influence how often and to whom they offer the IUD, including difficulties in inserting a device in women who have never given birth. Yet, provider myths and misconceptions are also influential. Even though the Dalkon Shield had far less impact in Europe than in the United States, some medical providers have long memories. Ann Furedi, chief executive of bpas, a major abortion and family planning provider in Britain, notes that in the context of Britain's "national obsession with chlamydia," and given the link between that STI and PID, "any method linked with [PID] in the past is bound to suffer adversely." (Some British officials and medical professionals are also ambivalent about promoting a method other than condoms, which are at the center of the country's safer-sex message.) In eastern Europe, notably, these types of fears have worked in the opposite direction. According to Woody Carlson, a Florida State University sociologist who has studied contraceptive practices in the region, doctors throughout the former Soviet bloc promoted Soviet-style IUDs, having been taught that hormonal contraceptives—then produced by the rival, capitalist West—had dangerous side effects. Many doctors in the region continue to believe this today and communicate these beliefs to patients (related article, page 2).

Finally, there is the issue of cost. For a woman who does not plan to have a child in the next five or more years, IUDs are immensely cost-effective: After the initial cost of the device and insertion, IUDs require only occasional check-ins and, eventually, removal. Yet, that up-front cost can be a significant hurdle, and even in Europe, the method and its insertion are not always free of charge to the woman. In Finland, for example, national insurance covers acute but not preventive care, and contraceptives are usually paid for out-of-pocket. In Sweden, the copper IUD is free to women, but the hormonal version—categorized as a pharmaceutical—is not.

Lessons for the United States

There are a number of other reasons why the IUD may be more popular in Europe than in the United States, ranging from differences in legal liability for manufacturers and doctors to the advantages of universal health coverage to the belief of some Americans that the IUD is in truth an abortifacient. Ultimately, however, the European picture is one where long familiarity

On This Side of the Pond: A Discussion with U.S. Providers

IUD use is rare in the United States. This holds true even among clients of publicly funded family planning clinics, which have a long tradition of offering a broad choice of contraceptive methods. Only 58% of Title X–supported family planning clinics in 2003 provided the copper IUD and 34%, the hormonal IUD, compared with 97% or more for the male condom, the injectable and the pill. To learn more about U.S. barriers to IUD use, the Guttmacher Institute on June 20 hosted an informal roundtable with directors and managers of seven Title X–supported family planning agencies from across the country. The discussion sketched a picture that in many ways contrasts with the European experience.

The providers were in agreement that the Dalkon Shield fiasco is no longer a direct factor in suppressing IUD use. Most American women know little about the history of the IUD or about the Dalkon Shield specifically. The same appears to be true for providers, especially younger ones. Karrie Galloway, executive director of Planned Parenthood of Utah, described a recent presentation on contraceptive methods to a group of young obstetrician-gynecologists: "I realized that this group knew nothing about the history of IUDs" because such topics are rarely covered in medical school.

Yet, this dark piece of history appears to have a lingering, indirect impact. Because so few American women have used the method over the past two decades, few providers have extensive experience inserting IUDs. Some providers continue to fear lawsuits, which are not much of a factor in less-litigious Europe. And American providers may be even more likely than their European colleagues to restrict their insertion of IUDs to women who have borne children. The American government has been late in acknowledging the method's safety for women who have not given birth: Only in 2005 were federal guidelines revised to that effect for ParaGard, and the product labeling has not been revised for Mirena. At last count, in 2002, 86% of U.S. IUD users had been married, and 93% had borne at least one child.

Unlike the pill, the patch or the ring, the IUD has not been featured in large-scale advertising campaigns on television or in women's magazines, perhaps because manufacturers view it as a niche product or still fear lawsuits. Without much "buzz" around the method, few women come into family planning clinics asking for it, according to Richard Baird, President of Adagio Health in western Pennsylvania.

Yet, women in some population subgroups are far more likely than average to know of and use the IUD, including immigrants from Latin America and China, where the method is more familiar and appreciated for its privacy and convenience. Indeed, Latina women use the IUD at three times the rate of their non-Latina white peers and accounted for more than one-third of all U.S. use in 2002. Nancy Bowen, business and program manager for the Arizona Family Planning Council, reported that as many as 15% of clients were using the IUD in some of the council's member agencies—particularly, but not exclusively, those in Latina communities.

Even where women are demanding the IUD, however, there is another barrier: money. Although hormonal and copper IUDs are extremely cost-effective over their five- or 10-year lives, they have high up-front costs. For clinics, Mirena costs more than $300, and ParaGard nearly $200, plus the cost of insertion. About half of family planning clinic clients are covered by private insurance or, more commonly, Medicaid, and IUDs and related services are covered by the large majority of plans. Yet, because of the method's popularity among Latinas, IUD users are 2.5 times as likely as other contraceptive users to be uninsured and twice as likely to be poor. Publicly funded clinics struggle to subsidize the method for uninsured clients—particularly when clinics can purchase a year's worth of oral contraceptives for five or 10 women for the same price. According to several providers, some of the clinics that have done best in providing the IUD as a viable option for women have done so in part by assisting their clients in making use of another option for reducing costs: manufacturers' patient assistance programs, which provide IUDs to low-income women on a sliding-fee scale.

has bred at least a grudging comfort with the method—a familiarity that simply does not exist in the United States (see box, page 23). And that is undeniably unfortunate: Although they are by no means perfect, the copper and hormonal IUDs may be welcome choices for many women, particularly those for whom the systemic effects of the pill, the patch and the ring are a concern, and those who want to delay having children for many years or think they have completed their family. But how can greater familiarity with the devices be fostered?

In a 2002 article in *Perspectives on Sexual and Reproductive Health,* Family Health International's David Hubacher speculates that a variety of factors could serve as natural catalysts for change. These include off-label use of the hormonal IUD for noncontraceptive purposes (for example, to reduce menstrual bleeding or as part of hormone replacement therapy); the high rates of IUD use among female physicians; and the demand for the method among immigrants from Mexico, China and elsewhere in the developing world where IUDs are common.

Yet, more direct action may also help. Judging by the European experience, increased IUD-insertion training among physicians may be particularly helpful. The long European experience with the IUD is reflected in the fact that training in insertion is a standard part of the medical curriculum in many countries, especially in the north and the east of the continent. In addition, mid-career training for established practitioners is commonly available, reports Olga Loeber, secretary general for the European Society of Contraception. Such training is sponsored variously by nonprofits and contraceptive manufacturers and often designed to educate providers about advances in contraceptive technology.

In contrast, according to a study published in 1997 in *Family Planning Perspectives,* more than four in 10 chief residents at U.S. family practice programs had received no training in IUD insertion and removal, and two-thirds had no clinical experience in the procedures. A 2002 study from *Obstetrics & Gynecology* had more positive findings about U.S. obstetrician-gynecologists: only 13% had not inserted an IUD during their residency. Promoting this type of hands-on experience, along with up-to-date education on the relative advantages and disadvantages of the method, may help ensure that a new generation of health care providers will view the IUD more objectively. And parallel efforts at improving mid-career education about the newest copper and hormonal models may help to change the views of prior generations.

Beyond improvements in training, reproductive health experts may need to work toward improved media coverage of the IUD. This is an always uncertain endeavor, considering the prominent role of the media in first promoting and then tearing down a series of contraceptive methods—from the pill to the implant to the patch. Educating the public directly, through government- and nonprofit-supported campaigns, may be another, albeit expensive, option.

Such an expense may be better seen as investment. Reproductive health advocates can make a legitimate argument that provided they are safe and voluntarily accepted, long-lasting contraceptive methods are not only good for women and couples, but are good for government and society, as well. According to a 2005 report from Britain's National Institute for Health and Clinical Excellence, if fewer than a million women were to switch from the pill to long-acting methods including the hormonal IUD, an additional 73,000 unplanned pregnancies per year would be prevented—pregnancies that would otherwise result in 33,000 unplanned births and 29,000 abortions. This higher level of contraceptive effectiveness would not only improve the lives of the women and their families, it would save roughly $200 million in government health care expenditures each year. About such results, Americans and Europeans can surely see eye to eye.

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