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The Birth Control Riddle

Fifty Years After the Pill's Debut, Almost Half of Pregnancies in the U.S. Are Unplanned

By Melinda Beck

Next month marks the 50th anniversary of the birth-control pill in the U.S. The dawn of dependable contraception not only ended the post-war baby boom, it also ignited the sexual revolution and helped millions of women to enter the work force.

Nowadays, women can choose from a bevy of birth-control options, including pills, patches and rings that allow them to have as few periods as they like, even none. Implants and intrauterine devices (IUDs) can prevent pregnancy for years at a time and eliminate the need to refill and remember. Morning-after pills that can decrease the risk from unprotected sex are available without a prescription even to teenagers. Women who want to end their fertility permanently can do so in a doctor's office without undergoing surgery. Abstinence is still taught in many schools and homes as being 100% effective if followed diligently.

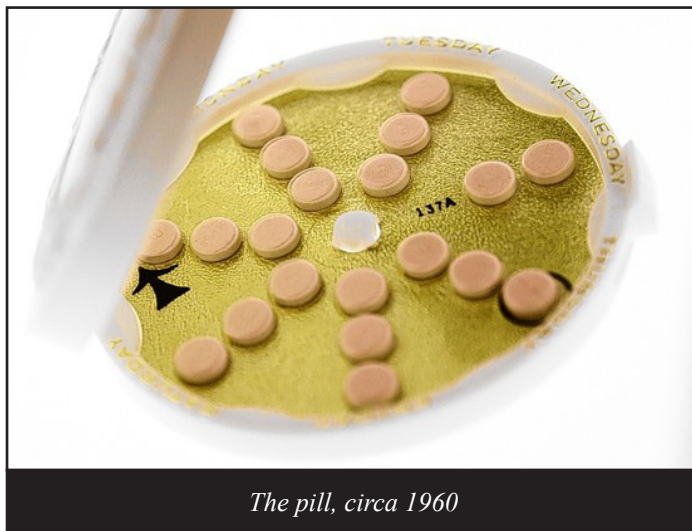
On the 50th anniversary of the pill, WSJ's Melinda Beck tells Simon Constable on the News Hub what's new in birth control. There are more options than ever, but despite all the choices, some three million U.S. women have an unplanned pregnancy every year.

Yet despite all these options, the rates of unplanned pregnancies remain high: Almost half of all pregnancies in the U.S.—some 3.1 million a year—are unintended, according to the most recent government survey, from 2001. One out of every two American women aged 15 to 44 has at least one unplanned pregnancy in her lifetime. Among unmarried women in their 20s, seven out of 10 pregnancies are unplanned.

An updated version of those numbers from the 2006 National Survey of Family Growth is expected to be released next month. But population experts don't anticipate much change; the rate of unplanned pregnancy was the same in 1994, and smaller studies have found that even newer birth-control methods haven't made much of a dent.

Why are the numbers so high?

The answer is a complex tangle of cultural, religious, behavioral, educational and economic factors. Many of those unplanned pregnancies become wanted babies. About a million are aborted each year and others are miscarried.



The pill, circa 1960

Almost half (48%) of unintended pregnancies involve contraceptive failures. In 52% of the cases, couples used no birth control at all. Cost is a factor for some of them. Even though most insurers now cover contraceptives, co-pays and deductibles can still present obstacles.

And many young people are in “the fog zone” in which their beliefs about pregnancy don't match their behaviors, according to a 2009 report by the National Campaign to End Teen and Unplanned Pregnancy. In a survey conducted by the Guttmacher Institute of 1,800 single men and women aged 18 to 29, more than 80% of both sexes said it was important to them to avoid pregnancy right now, yet 43% of those who are sexually active said they used no contraception or used it inconsistently.

Some population experts say the rates of unintended pregnancy would be far lower if more women used IUDs and implants that prevent pregnancy for years at a time. Only about 3% of American women currently do.

“There are terrible misperceptions about these methods— and about all forms of contraception,” says James Trussell, director of the Office of Population Research at Princeton University.

Many traditional forms of contraception have been updated in recent years. Here's a look at the latest developments:

The New IUDs

The IUD got a bad name in the 1970s due to the Dalkon Shield, whose design turned out to make it easy for bacteria and STDs from the vagina to ascend into the uterus and fallopian tubes, causing pelvic-inflammatory disease (PID) and infertility. After hundreds of lawsuits and several deaths, the shield was discontinued in 1974, and doctors were urged to remove them from women in 1980.

IUDs available in the U.S. now are much safer. The ParaGard is made with copper that is toxic to sperm, lasts up to 12 years and doesn't affect a woman's hormone levels. Mirena releases a small amount of progestin that blocks ovulation, and lasts up to five years. Both are more than 99% effective at preventing pregnancy.

Jeffrey Peipert, a top researcher at Washington University in St. Louis, notes that about 18% of female ob/gyns have opted for IUDs. "The most educated consumers are using the most effective methods at high rates," he says.

Cost: \$175 to \$700 for years of protection.

Downsides: IUDs do not protect against STDs. The ParaGard may increase cramping. In rare cases, IUDs can slip out or push through the uterine lining.

The Implant

Another long-acting contraceptive is Implanon, a rod a doctor inserts in a woman's arm. It prevents pregnancy for up to three years.

A previous implant called Norplant was beset by lawsuits over side effects and scarring and withdrawn from the U.S. market in 2002.

Doctors are required to undergo special training to insert and remove Implanon, which is also 99% effective at preventing pregnancy.

Cost: \$400 to \$800 for up to three years' protection.

Downsides: Irregular bleeding, possible headaches, sore breasts, nausea, pain at the insertion site. No STD protection.

Hormone Pills, Patches, and Rings

The first birth-control pills had very high doses of hormones, and side effects including mood swings, weight gain and blood clots were common.

Dosages have since dropped to about one-tenth of their original strength. There are far fewer side effects and a host of benefits, including regularized periods and reduced acne, bloating, premenstrual syndrome and less bleeding due to uterine fibroids. What's more, the longer a woman uses the pill, the lower her risk of ovarian and endometrial cancer.

Still, some women remain wary. "For some reason, it has a really bad rap," says Rachel Bernstein, an ob/gyn in Fort Lauderdale, Fla., who says she has to explain that these days, the benefits outweigh the risks.

Today, there are about 40 different brands of birth-control pills, most of which contain a combination of estrogen and progestin.

Other versions work the same way, including the NuvaRing, a flexible ring that is inserted in the vagina every month and worn for three weeks, then removed for one week, and the Ortho-Evra patch, which is replaced every week for three weeks, followed by a patch-free week.

Newer pills, like Seasonale, allow women to have only four periods a year; Lybrel, approved in 2007, is designed to be taken for 365 days straight with no period. Experts say there is no health reason that women need to have a period if they are not ovulating or building up uterine lining each month. The traditional pills were designed to include a monthly period in part so that women would be reassured that they weren't pregnant.

Hormonal birth control is 99% effective at preventing pregnancy if used correctly, but in average use, with some forgetfulness, it's only 92% effective.

Cost: \$15 to \$50 per month

Downsides: Women who have breast cancer should not take estrogen, but the pill does not seem to increase the risk of getting it. It can cause blood clots in rare cases. But, says Vanessa Cullins, vice president for medical affairs of Planned Parenthood Federation: "We have to keep these things in perspective. A woman's risk for those problems is substantially higher during pregnancy."

A more long-lasting form, the Depo-Provera injection, releases progestin only and prevents pregnancy for 12 weeks. It can be used by women who can't take estrogen and by those who are breast-feeding.

Cost: Each injection costs \$35 to \$75

Downsides: Possible weight gain, depression, blood clots and bone thinning; usually recommended only for women who can't use other forms.

Condoms, Caps, and Sponges

Using a receptacle to contain sperm during sex literally goes back to caveman days: It's depicted on the wall of a cave in France from 12,000 B.C. Over the millennia, condoms have been made of paper, animal intestines, leather and linen (a favorite of womanizer Giacomo Casanova in 18th century Italy). Charles Goodyear paved the way for mass production of "rubbers" when he patented the vulcanization of rubber in 1843, and they were a mainstay of birth-control efforts until the pill emerged as more dependable and convenient.

The popularity of condoms soared in the 1980s, when the AIDS epidemic alerted public-health officials to the need for protection against STDs as well as pregnancy. Nowadays, condoms come in a variety of sizes, colors, materials and even flavors. Most are made of latex, but polyurethane and lamb-skin condoms are also available.

Cost: generally \$1 each, but sometimes free; available without a prescription.

Effectiveness is still an issue. Roughly two of every 100 women whose partners use condoms correctly become pregnant each year, as do 15 of 100 women whose partners don't use them correctly.

Female condoms, plastic pouches inserted in the vagina before intercourse, are less effective. About five in 100 women who always use them correctly become pregnant each year, as do 21 out of 100 women who don't always use them correctly. They cost about \$4 each and are sold without a prescription.

Other "barrier" birth-control methods include the Today Sponge, an updated version of the brand made famous on "Seinfeld," that involves a spermicide-containing foam disc that covers the cervix and blocks sperm from entering; the FemCap, a reusable silicon cup filled with spermicide that covers the cervix, and the diaphragm, a much older rubber bowl filled with spermicide. Although all three are inexpensive, don't involve hormones and have few side effects, they are inconvenient, don't protect against STDs and are not very effective. Even with careful use, as many as 20 out of 100 women using them each become pregnant.

Even combined, they make up a very small percentage of birth-control users today. "There's a whole generation of women who didn't pick them up," says Mr. Trussell.

Emergency Contraception

Versions of "the morning-after pill"—a combination of hormones that abruptly halts ovulation—have been around quietly since the 1970s. In 1999, the FDA approved Plan B, a progestin-only pill that does the same, preventing pregnancy up to five days after unprotected sex or in case of a condom break or forgotten pill. It's currently available in three brands, Plan B, Plan B One-Step and Next Choice. Plan B and Next Choice are 89% effective if used within 72 hours after intercourse.

But emergency contraception is only effective if it is used every time after unprotected sex. "If you don't use it every time, then you are eventually going to get pregnant," says Mr. Trussell, who runs a Web site called Not-2-late.com with information on emergency contraceptives.

Cost: From \$10 to \$70, without a prescription for teens 17 and older

Downsides: They may cause temporary nausea, headaches and irregular bleeding; no STD protection.

Permanent Birth Control

Every year, about 700,000 U.S. women who no longer want children have a tubal ligation, a surgical procedure in which the fallopian tubes are cut and tied off. It's an outpatient procedure, but still requires a hospital stay and a cost of \$5,000 or more.

A less-invasive version called Essure can be performed in a doctor's office. Using a hysteroscope, the doctor inserts a tiny titanium coil into each tube via the uterus. The woman's own tissue then grows around the coils, forming a natural but permanent barrier.

It's caught on slowly in the U.S., in part because doctors require additional training. Women must also have a follow-up test in three months to make sure a seal has formed, and to use other birth control in the meantime. But it's over 99% effective, without surgery or hormones.

A competing version, called Adiana that uses a smaller implant and radio-frequency energy, was approved by the FDA last year.

Cost: about \$2,000

Downsides: The procedure may cause mild cramping, does not protect against STDs and is not reversible.

Vasectomy Variations

On the male side, there are new variations as well. Traditionally, a doctor makes an incision in the scrotum and cuts the two vas deferens, the tubes that carry sperm out of the testicles, and ties, stitches or seals them closed. The procedure takes about 30 minutes and is done in a doctor's office or clinic.

In one newer version, the doctor pokes a clamp through the skin instead of using a scalpel; there's less bleeding and fewer complications. In another, the vas deferens are locked closed with a clip, though some studies have shown that may not be as effective as other methods.

In general, vasectomies are nearly 100% effective—but since some sperm may remain in the blocked tubes, couples must use another form of birth control for three months. In very rare cases, the tubes may grow back together and permit the passage of sperm again.

Cost: \$350 to \$1000, covered by insurers and Medicaid.

Downsides: There's some minor pain, swelling and numbness for several days after the procedure, but most men can resume sexual activities within a week. Vasectomies theoretically can be reversed, but they are often not effective. Men should consider them permanent.

Birth Control Methods

See a breakdown of birth control methods and the percentages of women in the U.S. who use them.



Sources: Planned Parenthood, Guttmacher Institute (usage figures from 2002) *Combined IUD usage is 3%. Photos: Getty Images (pill, patch); Custom Medical Stock Photo (sponge); Alamy (Norplant implant); Museum for Contraception and Abortion (Dalkon Shield); Bryan Derballa for The Wall Street Journal (all others)