Nearly half of all pregnancies around the world are unintended, according to a report from the United Nations published in March. While some of these pregnancies become a source of joy, more than half of them end in abortion. Other unplanned pregnancies that come to term create a cascade of wide-ranging consequences, including fewer educational opportunities for the women who give birth, reduced participation in the labor market, and risks to mental and physical well-being of mother and child.

In the United States, the unintended pregnancy rate is significantly higher than in many other developed countries, according to the Guttmacher Institute. Those rates are highest among young women, low-income women and women of color.

Despite the more than 120 million unintended pregnancies worldwide, options for male contraception are limited. Male-driven methods include withdrawal, condoms and vasectomy. One in five couples who use withdrawal becomes pregnant. According to the World Health Organization, condoms have a failure rate of
13% and vasectomies are effective but fewer than 3% of couples use it as a form or protection, in part because they are invasive and not reliably reversible.

"Once the pregnancy happens, it becomes the burden of the woman, which is why there's been a focus on female methods," said Heather Vahdat, executive director of Male Contraceptive Initiative, which provides funding and advocacy support for the research and development of male birth control. "Contraception has been inextricably linked with women's empowerment .. but we've also been quietly managing some horrendous side effects. Now women are realizing it's OK to say that this isn't good enough. Yes, we're grateful, but we want better and we should have better, and better not only means methods for us, but it means allowing our partners to be able to contribute to this equation."

**Male birth control pill: Could it work?**

Many men are on board. A 2017 survey of 1,500 men living in the U.S. found 85% of participants wanted to prevent their partner from getting pregnant and taking responsibility for birth control was the key reason for wanting a new male contraceptive method.

"I do a lot of vasectomies, which includes a counseling discussion .. and I think there is a desire on the male side to be able to play a bigger role in family planning," said Dr. Bobby Najari, a physician at NYU Langone Health who specializes in male sexual and reproductive health and is director of the Male Infertility Program.

Research on male contraception began 60 years ago, but while experts say there is promising research on both hormonal and non-hormonal forms, there has been little urgency to bring new male contraceptives to market. Experts blame several factors, including the abundance of existing options for female contraception, cultural attitudes that preclude men from the work of preventing pregnancy, and a lack of funding for research and development, especially among pharmaceutical companies.
Experts are divided on whether a possible overturn of Roe v. Wade would accelerate efforts to develop more effective, affordable and accessible options for male contraception. Some hope this will open up a conversation about the role of male birth control in equitable family planning, others are skeptical. Some constitutional experts have said if the court overturns its landmark Roe decision, other rights could become implicated, including access to contraception.

**Studies on male contraceptives are promising**

A 2017 survey found men are twice as likely to prefer a non-hormonal method to a hormonal method and nearly 90% of men report it’s important for their contraceptive method to be reversible.

Hormonal methods have progressed the furthest in clinical development. Most non-hormonal methods are still in pre-clinical stages (or animal studies).

Najari said there have been many attempts at hormonal contraceptive options, which aim to suppress sperm production. Trials of hormonal methods have demonstrated greater efficacy than condoms and the most common side effects have been "weight gain, acne, slight suppression of serum high-density cholesterol, mood changes and changes in libido," according to a 2020 article in the journal "Focus: Sex & Reproduction."

**Male birth control: Study nixed after men complain of side effects**

"The main reason no hormonal combination has made it to primetime yet, however, is due to an unclear bar on side effects and safety. Regulatory bodies have not given clear guidance on what degree of side effects or safety concerns would be considered 'acceptable,' said Dr. Arthi Thirumalai, an assistant professor of medicine at the University of Washington. "Safety concerns have typically been related to changes in red blood cell mass or cholesterol. However, it is unclear to what extent these need to be reduced or minimized in a product for it to be considered for further drug development."
What's the hold up?

Safety concerns around hormonal methods, a lack of clinical research on non-hormonal methods and a dearth of investment from pharmaceutical companies have created barriers to the development of more forms of male contraception.

Vahdat said for the last 30 years contraceptive product development has largely been managed by the philanthropic and public sector. There has been no big pharmaceutical dollars. Vahdat said the Male Contraceptive Initiative is the second largest funder of male contraception in the U.S. behind the NIH. Vahdat said the organization funds approximately $1.2 to $1.5 million of research per year.

Vahdat said she also suspects risk-benefit analyses may be hindering development.

"A woman weighs the medical burden of an unwanted pregnancy against the possible side effects and safety concerns of a contraceptive regimen. Men don't need to consider the medical risks of a pregnancy for themselves, so this may have a role in overall lower acceptance of side effects and safety concerns from contraceptive regimens," she said.

Najari said if not for the plethora of existing female contraceptive options, there might be wider acceptance of the risk profile of male methods.

"The tolerability and the side effect profile of all these medications that have been investigated on the male side would have been viewed in a completely different way," Najari said. "It might have been deemed appropriate for physicians and men to have that discussion about risks and benefits. I think many males would elect to take on those risks because the benefits of contraception on a couple are so helpful. ... I do think that there's some bias toward a higher safety profile in males, whether that's coming from society or regulators."

The impact of Roe v. Wade on male birth control
Experts are divided on whether a possible overturn of Roe v. Wade could generate urgency on male-directed contraceptive methods. Thirumalai is skeptical and said it's important to enhance contraceptive options regardless of political beliefs or what the high court decides.

"Engaging male partners in the overall effort towards lowering the burden of unwanted pregnancies as a society is our best chance of making reproductive rights and health fair to both members in couples," she said.

Vahdat is hopeful that a conversation around the tenuousness of Roe may bring men into the picture in a way they haven't been before, though she also said there needs to be a generational shift in depoliticizing reproductive health.

When the news about Roe leaked, some women on social media said that even if more options for male birth control existed, they would be suspicious of compliance. Experts say this concern is specific to the dynamics of sexual partners.

Vahdat said compliance isn't either/or, and that's why it's imperative to develop more contraceptive methods.

"If a woman doesn't trust her male partner, then they can both contracept. If a woman is having horrible side effects, her partner can contracept on behalf of both of them. People can take turns. People's interest, demands and desires around contraception change dramatically throughout the course of their reproductive lifespan."

Vahdat also noted the importance of developing non-hormonal options for people who are not gender binary or who are trans, especially if they're undergoing hormone therapy.

Experts say the demand for male contraception is strong, and they're disappointed there isn't more urgency from funding agencies and regulators to meet that demand.
"We are not allowing half of the global population to control their reproductive autonomy," Vahdat said, "and it impacts everyone."