The ‘abortion pill’ could also be birth control — and activists are trying to prove it

Imagine a totally new form of contraception. It’s a pill, but instead of taking it every day at the same time, you only take it once a week — or, potentially, even less frequently. If you’re not having regular sex, you can stop and start this pill as needed or just take it after you’ve had sex since it also works great as a “morning after” pill. It doesn’t contain the hormones estrogen or progesterone, so many of the side effects commonly associated with current birth control pills (including weight gain, mood swings, acne, and decreased libido) aren’t an issue. And if you wind up taking it long term, it thins your uterine lining, eliminating your period. More amazingly, it also has the potential to treat endometriosis and fibroids and maybe even prevent breast cancer.

Sound too good to be true? Here’s the best part: this hypothetical birth control pill already exists, has been extensively researched for both safety and efficacy, and, even better, is an FDA-approved medication. The catch? It’s mifepristone, better known as the “abortion pill” that Republicans around the country are currently trying to ban. At a moment when abortion access feels newly precarious, abortion advocates are hoping that a focus on mifepristone’s contraceptive properties will help tear down the artificial wall between “abortion” and “contraception” in the process — and help secure mifepristone access around the globe.

The same mechanism that makes mifepristone work for abortions could prevent ovulation altogether

Mifepristone's contraceptive properties aren't actually news. Throughout the 1990s and 2000s, researchers like Kristina Gemzell Danielsson, a professor of obstetrics and gynecology at the Karolinska Institutet, examined the compound's efficacy as both emergency contraception and a birth control pill. Though there was some debate over whether mifepristone worked best as a weekly or monthly contraceptive, the general consensus was that it showed great promise as a non-hormonal birth control pill. The same mechanism that it uses to halt fetal development — blocking the release of progesterone — can also be used to prevent ovulation and thin the uterine lining, making pregnancy impossible.

But about a decade ago, research interest in mifepristone seemed to dry up — largely, Gemzell Danielsson thinks, because of abortion stigma. Another compound, ulipristal acetate, held similar promise as an emergency contraceptive and fibroid treatment without the baggage of abortifacient branding. "It was sort of decided that [ulipristal acetate] should be developed more for contraception while mifepristone should be developed for abortion," says Gemzell Danielsson, noting that ulipristal acetate went on to become a common emergency contraceptive (sold as Ella) and fibroids medication (under the brand name Esmya).

But ulipristal acetate has risks mifepristone doesn't. Notably, there have been rare but serious instances of liver damage when taken regularly to treat fibroids. In contrast, mifepristone has largely been found to be safe, even when taken in large doses on a daily basis (Cushing's syndrome patients routinely take 300-1200mg of mifepristone daily, vastly more than the 25-50mg a week required for contraception). Researchers have also found it's a safer alternative to current endometriosis medications as well as a safe and effective fibroids treatment — and though it's still

early in the process, Gemzell Danielsson has been involved in studies that show promise for using mifepristone for breast cancer prevention.

Over two decades after she first studied the possibility of using mifepristone for contraception, Gemzell Danielsson is working with Dr. Rebecca Gomperts – best known as the founder of abortion access organizations Women On Waves, Women on Web, and Aid Access – on a new study aiming to conclusively prove that mifepristone can, and should, be used as a primary contraceptive.

Seven hospitals are on board to participate in a study on the pill's reliability

As a first step, Women on Web has convened a team of medical, scientific, and ethics experts from around the globe to conduct a year-long clinical trial involving nearly 1,000 women in the Netherlands and Moldova, using weekly mifepristone for a year. The study was designed in keeping with FDA and European Medical Agency protocols and has already recruited seven hospitals as participants and secured all the necessary clinical and ethical approvals to begin the study in Moldova. Through it, Women on Web plans to pick up where Gemzell Danielsson's research left off, determining the most effective dosage for contraceptive use, as well as any unforeseen complications and side effects that might arise from weekly use of low-dose mifepristone.

If the study conclusively determines a safe and effective dosing regimen for a prophylactic formulation of mifepristone, Women on Web will register the medication as a contraceptive with the European Medicines Agency. A number of organizations have already committed to distributing the medication as well. The study could also open doors for the FDA to approve a low-dose mifepristone contraceptive pill alongside the 200mg abortion pill and 300mg Cushing's medication.

That distinction could allow mifepristone to be more widely –

and more affordably – distributed. While the Affordable Care Act currently requires insurance companies to cover contraception, abortion is not necessarily covered. Additionally, providers who wish to distribute the abortion formulation of mifepristone are bound by regulations that aren't applied to the Cushing's formulation (and, potentially, the birth control formulation).

"It's a very steep mountain to climb"

That outcome isn't guaranteed. Beverly Winikoff, president of Gynuity Health Projects, is skeptical that the end results of this study will be significantly different from others that came before. "It's a very steep mountain to climb," she says. The FDA's requirements can be incredibly challenging to meet, even in a case where the compound has already been approved for other uses. In the best-case scenario, a contraceptive version of mifepristone would still be years away from market – and there are several hurdles to overcome along the way.

One of those hurdles is funding. Because contraceptives are generally cheap and mifepristone specifically is out of patent, there's no major profit incentive behind this study – so pharmaceutical companies haven't been particularly eager to get on board.

Grants have proven challenging to secure as well. When Women on Web applied for funding through ZonMw's Goed Gebruik Geneesmiddelen (Good Use of Medicines) program, their application received pushback. One response from the application committee was particularly telling. "According to the committee, repeated prescriptions run the risk of saving up and illegal resale to induce an abortion," it said, translated into English. "You are requested to explain how the drug remains within legal abortion practice and how this risk is mitigated."

It was a comment she found bizarre given that abortion is legal in the Netherlands and – at least according to the Dutch

government – readily accessible to all who need it. “If you really analyze those kinds of arguments, it’s not really about the medication – it’s about the mistrust of women,” she says. There are plenty of easily accessible items – including everything from Tylenol to bleach – that can be harmful if used improperly. Why is mifepristone viewed so differently? (Notably, it’s only funders who’ve had this concern: the European Medicines Agency and Dutch Pharmaceutical Agency expressed no such concern when advising on the study. “It just seems that giving money to things is so much more political,” says Dr. Gomperts.)

Mifepristone offers new options that other birth control methods don’t

In the meantime, Women on Web is pursuing a novel funding strategy for a scientific study: crowdfunding. Dr. Gomperts has set up a GoFundMe campaign with a goal of €500,000 – the amount needed to kick off the initial phase of research. It remains to be seen how successful the strategy will be, but Dr. Gomperts is still excited by the idea of putting her study’s funding directly in the hands of the people who could benefit from its findings the most.

This isn’t the first time medical research has turned to the people when traditional funding sources have come up short. About a decade ago, the oncologist and cancer researcher Dr. Jim Olson launched Project Violet, a platform where anyone could kick in cash to support research into projects like Tumor Paint. Although Project Violet did spark some discussion about the ethics of using crowdfunding for medical research, it was also a significantly different premise than what Women on Web is doing. Unlike Dr. Olson, Dr. Gomperts and her team are researching a well-studied, out-of-patent medication that anyone can manufacture and profit from, so there’s little concern about Women on Web enriching itself through research. Their use of GoFundMe is, in some ways, not significantly different from the donation requests used to fund a number of

research organizations.

Should the study prove successful, it’ll hopefully break down some of the stigma around mifepristone and allow it to be seen not just as an abortifacient but as a powerful medication with a range of uses. “There is so much potential in [mifepristone],” Gemzell Danielsson says. “The potential has been known — it’s the connection to abortion that delayed further development.”

https://www.theverge.com/2022/7/23/23274621/mifepristone-abortion-pill-contraception-use-research-history-funding