New contraceptive device for broader access to long-acting contraception in developing countries

June 20 2018, by Hanae Armitage

Paul Blumenthal holds an IUD inserter he helped develop as a means of providing postpartum contraception in developing countries. Credit: Norbert von der Groeben
In the past 10 years, the percentage of women who use intrauterine devices in the United States has leapt from less than 1 percent to nearly 20 percent. But at the international level, those figures are much lower.

Paul Blumenthal, MD, MPH, professor of obstetrics and gynecology at the School of Medicine, focuses much of his work on family planning in developing countries, many of which do not have broad access to long-acting contraception. Blumenthal's latest paper, published in collaboration with Population Services International, describes the implementation of a new device used to insert IUDs in women immediately after they give birth, and he hopes it will help health care professionals in developing countries provide broader access to long-acting contraceptives.

The idea behind Blumenthal's postpartum IUD inserter, which comes with the IUD packaged inside it, is to simplify and streamline the process of providing women with birth control. In a clinical trial with 500 participants, health care providers in India used either Blumenthal's IUD inserter or the traditional forceps method to place the contraceptive, comparing their efficacy, ease and safety.

A paper detailing the clinical trial was published online May 8 in Contraception. Blumenthal is the senior author.

Blumenthal's goal is to bring simple, affordable contraception to the masses—particularly in developing countries. Establishing the inserter's legitimacy in this trial, Blumenthal said, is a step in that direction. Recently, he spoke with science writer Hanae Armitage about the details of this work, the drivers behind it and how he hopes to see it pan out on an international scale.

**Q: What motivated your team to create this device? Why opt to support IUD usage as opposed to a**
different contraceptive option?

Blumenthal: IUDs are an excellent method of contraception, and that's increasingly recognized by both providers and patients around the world. They're extremely effective. They're a "forgettable" form of contraception—that is, they're inserted and they don't need tending to or replacement for somewhere between five and 12 years, which also makes them very cost-effective.

In a postpartum setting, there are actually a lot of serendipities that make it an optimal time for IUD insertion. Since the woman has just delivered her baby, both she and her provider are already in the same place at the same time; no one has to make a special trip to have the IUD inserted. Studies have shown that, among women who want an IUD for contraception, the number of individuals who have an IUD one year after delivering a baby are higher if the woman gets the IUD postpartum, rather than if they wait to have it inserted later.

So, we thought if we can make this convenient, simple and intuitive, then maybe we could reduce barriers for providers, who could then have better access to providing postpartum IUDs. Furthermore, in some developing countries, the special forceps often recommended to insert IUDs right after birth can be hard to come by. With the dedicated inserter, the IUD is already packaged in the instrument, and it's just a "grab-and-go" process.

Q: Why did you decide to conduct this study in India and how did the health care providers react to your new device?

Blumenthal: India has one of the most well-developed programs for postpartum IUDs. For example, in obstetrics and gynecology, physicians
are required to learn how to insert IUDs postpartum because the Indian government and the community of OB-GYNs in India feel that it's an important part of provision of contraception. So, we thought, "OK, if you're going to do a lot of something, then why wouldn't you have something specifically designed to do it?" One analogy we often use is, if you're going press garlic, you don't smash it with a hammer, you want to use a garlic press. It's the same idea here: We want to make it precise, and we want to simplify the process.

When we introduced the inserter, in general the feedback was very positive. Most who used the inserter said that it was easy to use. Now, they also said that it was easy to use the traditional forceps—but that doesn't take away from the success of the inserter. This study is a win for broad dissemination of the tool in India. And now, it's even been approved by the Drug Controller General of India for broad public and private use.

**Q: With the Drug Controller General of India approval for commercial use, how will you scale up the process in India, and do you plan to bring this option to women in other developing countries as well?**

Blumenthal: We're working with a third-party company called Pregna International. They're based in India, and they manufacture IUDs used in programs worldwide. Now with commercial approval, Pregna can market this inserter to the public and private sector in India and reach potentially millions of women. At the same time, other nongovernmental organizations that are working in the family planning area can also recommend this to their programs in India, and that will likely enhance the public-sector programs as well. Currently, the IUD inserter is under review by the United Nations Family Planning Assistance Program, and
we hope that this publication will serve to help the UNFPA in its deliberation. Hopefully, that will allow for prequalification of the device, so that it can be used in UNFPA publicly-funded programs that reach other developing countries in sub-Saharan Africa and South Asia.

**Q: Do you have plans to integrate the device into developed countries like the United States, too?**

Blumenthal: We don't have plans at present, specifically because Pregna doesn't market its IUDs in the U.S. For a company like Pregna, it's likely too costly to have their device approved by the Food and Drug Administration, which requires a significant amount of capital to achieve. However, I'm sure that Pregna would be open to working with a U.S. company or any other company to adapt the technology of this relatively simple inserter to IUDs that are very similar.

**Q: Are you working on other projects that likewise empower contraceptive options?**

Blumenthal: We're always working on these kinds of projects. One of our family planning fellows is looking at a unique combination of an emergency contraceptive product and another available drug in the U.S. to see if it's possible to make an "on-demand" contraception. So for example, if a woman has intercourse infrequently, she may not feel like she needs to take a pill every day, or might not need to have an IUD, but she may want to have a contraception method she can use when she wants. So, theoretically, a woman could take this pill once during the course of a cycle, at any time during the cycle, and that would effectively act as contraception. Our tagline here could really be "simplicity and precision." We want to empower women with options, access and the ability to choose what's right for their lives and body, at the exact time that they want it.

Provided by Stanford University Medical Center


This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.