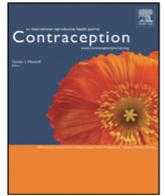


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Contraception

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Editorial

The 6th International IUD Symposium



Worldwide prevalence of IUD use is 13% (approximately 250 million women), making this technology the most widely used form of reversible fertility control [1]. Use patterns vary considerably by country/region: Sub-Saharan Africa (1%), India (1.5%), Latin America/Caribbean (6%), Asia (excluding China, 6%), United States (8.6%) [2], Europe (11%). In China, 41% of women use IUDs (approximately 141 million users); this high prevalence in the world's most populated country drives global statistics. Excluding China, global prevalence of IUD use is approximately 6%.

Regrettably, worldwide IUD use data may not result from true contraceptive choice. In some countries, women have few options other than IUDs, while in other countries, the IUD is scarcely available. Extreme dominance or scarcity of the IUD is likely a result of health systems that facilitate or limit access/uptake, relative to other options. In rare, perhaps mythical, settings where the playing field for contraceptives is truly level, it is hoped that user preferences and not provider bias determine prevalence of use. Universal rejection of the IUD (or any contraceptive for that matter), has never been demonstrated in any country/setting. Ensuring choice of a wide range of contraceptive methods, including IUDs, can help to support reproductive justice.

Where choice is available, women select intrauterine contraception over other technologies for many reasons: highly effective, no user-actions required once initiated, long-lasting, non-contraceptive benefits, among others. Some women have a choice of either a non-hormonal IUD (containing copper) or a hormonal (levonorgestrel-releasing) product; this major distinction often influences many of the contraceptive decisions that women make.

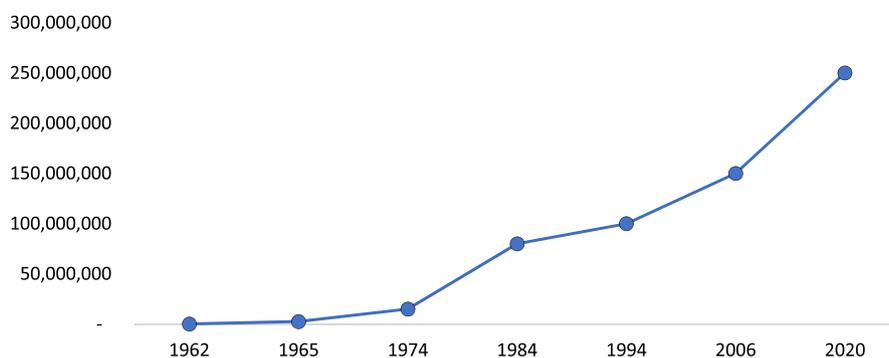
Intrauterine contraception has a long history of product development, second only to condoms in terms of modern technologies. Since the 1960s, product development went hand-in-hand with medical science to measure safety, efficacy, and side effects. Most novel IUDs were never marketed and only a small proportion became commercially important. Technological innovation and comparative research have resulted in new products replacing old ones. Among today's products, clinical research has unequivocally demonstrated that the health benefits of modern IUDs significantly outweigh the health risks in using them. The goal of new product development is to maintain high efficacy and safety, while simultaneously reducing side effects to improve overall user satisfaction; IUD side effects can lead to early removal and uptake of less effective contraception.

The history of medical research on IUD technologies is well documented in a series of five international conferences dating back to 1962 and sponsored by the Population Council.

1. 1962: First conference, New York City, NY, USA [3]

Forty-eight participants attended this first meeting, which featured 18 original contributions. Numerous products were discussed: flexible oval rings made of silkworm gut, silver or stainless steel, Marguiles polyethylene Perma-Spiral IUD, and the Lippes Loop. Foundational statistical approaches to studying intrauterine contraception were discussed by Dr. Christopher Tietze. Other topics included radiographic techniques for imaging products in the uterus and bacteriologic studies of the endometrium and cervix.

Worldwide IUD Use at Time of Symposiums, 1962 to 2020



2. 1964: Second conference, New York City, NY, USA [4]

The Second conference attracted over 400 participants from 38 countries (a dramatic increase from the First conference, confirming the success of the First conference in stimulating interest in the method), with 27 papers presented and an additional 47 papers published in the official proceedings. Topics included IUD usage in India, Korea, and Taiwan; numerous studies on the effects of IUD usage on the menstrual cycle, the endometrium, genital tract infections, and other areas. Discussion sessions focused on IUD acceptance, clinical problems, training of practitioners, placement, size, and design of IUDs, pathology, and mechanism of action.

3. 1974: Third conference, Cairo, Egypt [5]

The preface to the proceedings from the Third conference stated that 15 million women worldwide were using IUDs (up from “several million” ten years earlier) and that nearly 20 different devices were being produced commercially. The published proceedings featured 52 original contributions under three headings: Assessing the IUD Experience, Clinical Trials of Newer IUDs, Local and Systemic Effects. The new products since the previous conference included copper T devices, the Cu-7, the Dalkon Shield, and the first-ever progesterone-releasing IUD. IUD mechanism of action, menstrual bleeding changes, IUD expulsions, and pelvic inflammatory disease were other key topics at this meeting.

4. 1984: Interim IUD Conference,² Chicago, IL, USA [6]

In 1984, an IUD conference was held in Chicago. Eighty-seven presenters covered 57 different topics, ranging from new devices to health risks. Clinical performance of three European products (Multiload, Nova T, and the new LNG IUS) and three varieties of the copper T device (USA) were discussed. Governmental regulatory issues for IUDs were compared across countries and many foundational clinical results were shared: endometrial changes, bleeding, measurements of the uterine cavity, copper loss from products, ectopic pregnancy, pelvic inflammatory disease, and more.

5. 1994: Fourth conference: New York City, NY, USA [7]

Estimated worldwide IUD use was stated as “over 100 million” in the introductory paper to the Fourth conference. Thirty-one other papers in the published volume from this meeting covered topics titled Performance of IUDs, Understanding IUDs, IUDs in the United States, Factors Limiting IUD Use, Medical Problems and Their Prevention, Special Issues, Designing IUD Services, and Individual IUDs. A radically new frameless product was discussed at the meeting: the Cu-Fix (later known as Gynefix) which consists of copper sleeves threaded on a standard IUD string, which is anchored into the myometrium. In terms of medical controversies and debate, one paper at this conference summarized the concerns of that time: “Until better data is available, we should only recommend IUDs to women living in stable relationships or who have given birth”.

6. 2006: Fifth conference: New York City, NY, USA [8]

Twenty-seven presentations were made at the Fifth conference in 2006. Over half addressed different subtopics around the

levonorgestrel intrauterine system (first approved in Finland in 1990 and in the USA in 2000): use in nulliparous women, mechanism of action, endometrial effects, effect on uterine leiomyomas, menorrhagia, alternative to hysterectomy, peri- and post-menopausal use, long-term use, and other subtopics. This conference highlighted the lack of IUD uptake in the United States and the possible barriers to use. For the first time in IUD conference history, no clinical studies of truly novel technologies (outside of China) were discussed, indicative of the lack of European/USA investment in research and development.

7. 2020: Sixth conference: May 27–28, San Francisco, CA, USA

In 2020, scientists will convene the Sixth International Symposium on Intrauterine Devices and Systems for Women’s Health. 2020 is a time of unprecedented growth and worldwide usage of IUDs. The meeting is intended to offer up-to-date scientific and clinical information on many IUD topics, including emerging products under development and successes and challenges in providing access to IUDs.

Papers from the first four conferences were published as monographs [3–7]. The papers from the fifth conference appeared in a dedicated issue of *Contraception* in 2007 [8]. The papers from the forthcoming sixth conference will also appear in *Contraception*. Notably, 2020 marks the 50th anniversary of the first issue [9] of the journal *Contraception*, created by founding editor, Daniel R. Mishell, Jr., M.D. Mishell’s seminal contributions to IUD knowledge and his support for IUD research are legendary. The field would not have progressed as far without him.

With this background, we invite you to attend the upcoming meeting in San Francisco.

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² This meeting was not sponsored by the Population Council.

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