The history of contraception is complicated and contested. Fertility and its control—the prevention and termination of pregnancy—are central to some of the twentieth century’s major stories of social and technological change, not only in the affluent West, but also in the Global South. Though patterns of use have varied enormously in time and space, even between otherwise apparently similar nations, most accounts focus on a single technology, or a single nation, or both. Furthermore, the material dimensions of manufacture, testing, and distribution are often black-boxed in accounts that emphasize the fraught social, cultural, political, legal, moral, and religious ramifications of contraception and abortion. Historians still lack an integrated approach that would consider the production and consumption, supply and demand—from both men and women—of multiple technologies across national boundaries in the same analysis.

Having recently celebrated its fiftieth anniversary, the oral contraceptive pill dominates and to some extent distorts how we remember the relationship between technology and social change. Recent obituaries for the Austrian-American chemist, and “father of the Pill,” Carl Djerassi (1923–2015), have generally reinforced the impression that oral contraception uniquely empowered women by separating birth control from sexual intercourse—“sex for recreation” from “sex for procreation” (Hayman 2015). And yet, as historical demographers have long known, women and men had already been relying on a variety of methods to effectively limit family size well before the first pills were marketed as contraceptives in the US in 1960. Moreover, the Pill did not sweep away alternatives. On the contrary, sterilization and the IUD (intrauterine devices) are today the world’s leading methods of birth control.

How did some technologies invented in the West end up being used routinely on a far greater scale in other parts of the world and why did some innovations succeed where others failed? To answer such questions, this chapter adopts the use-centered approach to history of technology advanced in David Edgerton’s The Shock of the Old (2006). From animal experimentation to international development programs, jungle laboratories to global markets, the production and consumption of contraceptive technologies has touched nearly every part of the world. And yet, despite the popular liberal rhetoric of agency and choice, availability remains highly uneven. By focusing on changing patterns in time and space, this
chapter will emphasize not only the diversity of the tools and techniques that have been deployed in the name of eugenics, feminism, neo-Malthusianism, family planning, population control, reproductive rights, and consumerism, but also the inequalities that are often amplified by technological change.

Today’s global market for contraceptive technologies did not appear out of nowhere. Rather, it built on an already diverse range of fertility-control cultures that included the widespread practices of abstinence, withdrawal (coitus interruptus), menstrual regulation, and the rhythm method (“Catholic roulette”). Some men used condoms (“sheaths”)—made from vulcanized rubber in the 1840s, latex in the 1920s (Gamson 1990; Tone 2002)—but withdrawal was especially popular and surprisingly effective, at least in Britain (Fisher 2006; Szreter and Fisher 2010) (see Source 1). Although abortion was criminalized in most Western countries in the nineteenth century, many women continued to take widely advertised “female pills” to bring on menstruation and often interpreted a late period not as an early sign of pregnancy, but as a “menstrual blockage” (Brown 1977; Knight 1977). The (middle-class) public perception of the previously taboo subjects of sex, reproduction, and contraception began to change in the 1920s and 1930s with the rise of the birth-control, sex-education, and abortion-law-reform movements (Chesler 1992; Grossmann 1995; Geppert 1998; Brooke 2001). British pioneer Marie Stopes (1880–1956) and her American counterpart Margaret Sanger (1879–1966) established networks of clinics and promoted the use of modern female-controlled barrier methods such as the cervical cap or “pessary” (Neushul 1998; Hajo 2010) (see Source 2).

Though legally distributed in Britain since the late nineteenth century (Jones 2015), the 1873 Comstock Act categorized mechanical and chemical contraceptives as “obscene” and effectively outlawed their circulation by post in the US. The law, however, merely drove underground the flourishing market for condoms, caps, and douches. Small-timers, often immigrants, started out by making condoms from animal intestines in backrooms and circumvented their illegality with euphemistic labeling to become “condom kings” of a multi-million-dollar industry. Along the way, condoms acquired new legitimacy in the military and public-health context of prophylaxis (protection against disease). The only Allied troops not to be supplied with condoms during the First World War, the US Army spent tens of millions treating American soldiers for syphilis and gonorrhea. Two years after Sanger was arrested for opening the nation’s first birth-control clinic in Brooklyn in 1916, a New York judge ruled that the use of contraceptives “for the cure or prevention of disease” was not “indecent or immoral” (Tone 2002, 65).

Between 1920 and 1960, the range of available options proliferated as major companies manufactured and marketed spermicidal jellies, creams, powders, and foams as “chemical contraceptives.” Though unmentionable products, some brands were openly sold in pharmacies alongside respectable drugs. Some were packaged as “disinfectants,” as protection from venereal disease (VD), or euphemistically labeled as “female hygiene” products (most notoriously, the cleaning product Lysol), but others were explicitly intended to prevent conception. Birth-control activists were invariably disappointed when women failed to renew
their prescription for smelly, sticky products, so the search for the ideal scientific method continued in the 1930s and 1940s with the financial backing of the Rockefeller Foundation and Procter and Gamble. Chemists in the US and the UK tested, compared, and standardized the spermicidal activity of commercial products on guinea-pig and human semen in test tubes. Difficulties obtaining consistent results in clinical trials were, however, blamed on irresponsible human research subjects whose sexual practices proved less easy to standardize than in vitro chemical reactions (Löwy 2011; 2012).

A combination of mass production, government regulation, and the use of latex, a milky liquid harvested from rubber trees in South America, India, and Indonesia, centralized the condom industry in the 1930s and gave rise to leading brands such as Trojan, Ramses, and Sheik. The Second World War further boosted sales on both sides of the Atlantic. In the UK, condom sales increased from around 43 million in the late 1940s to 150 million in the late 1960s (Edgerton 2006, 23) (see Source 3). Sales fell in the 1960s and 1970s, following the marketing of the Pill, but increased rapidly during the 1980s AIDS crisis, which coincided with renewed concerns that long-term exposure to even low doses of hormones could cause cancer. World production capacity increased from around 5 billion in 1981 to 12 billion annually in the mid 1990s. Far from unchanging, latex condoms were first marketed as anatomically shaped in 1969, and lubricated with spermicide in 1974; in 2004, the Durex brand celebrated “75 years of great sex” (Edgerton 2006, 25). The history of condom use has not been static or linear, but includes surprising reversals, twists, and turns. In the 1990s, for example, steamy ads for KamaSutra condoms first successfully targeted India’s rising urban middle class (Mazzarella 2003), whereas the promotion of condoms for AIDS prevention in Malawi aroused suspicions of population control by other means (Kaler 2004).

One difficulty with integrating production and consumption in the same narrative is that they often occur in very different and only distantly connected worlds. Biochemists, hidden from public view behind closed doors in the industrial laboratory, synthesized hormones from an impressive variety of sources: cows’ ovaries, pregnant mares’ urine, the urine of postmenopausal Roman Catholic nuns, and wild yams (barbasco) cheaply harvested by peasants in the jungles of Mexico (Soto Laveaga 2009). On the consumption side of the story, by contrast, we find highly visible advertising campaigns (targeting doctors and patients), news coverage, and publicity—especially in the case of the Pill.

Of all contraceptive technologies, the Pill has attracted the most historical attention, including publications timed to commemorate its fiftieth anniversary in 2010 (Marks 2010; May 2010). In a century of massive technological and social change, the 1960s is often singled out as an especially significant “permissive moment,” triggered in part by oral contraception (Cook 2005). And yet, despite the persistence of triumphalist narratives, recent revisionist histories have forcefully questioned the revolutionary nature of the contraceptive pill and the very idea of a “sexual revolution,” which “initially left many people behind” (Weeks 2012, 321).

The Pill’s 1950s origin story was and still is dominated by a small cast of mainly American characters: alongside the aforementioned Sanger and Djerassi,
we have wealthy philanthropist Katherine Dexter McCormack (1903–67), marginalized biologist Gregory Pincus (1903–67), and Catholic gynecologist and infertility specialist John Rock (1890–1984). Together, as the story goes, they led the effort to develop, test, and bring to market Searle’s Enovid, a combination of synthetic equivalents to progesterone and estrogen, previously prescribed for menstrual irregularities, but first approved for use as a contraceptive by the US Food and Drug Administration (FDA) in 1960 (Eig 2014).

The initial optimism that greeted the Pill faded, however, as medical concerns mounted over potentially fatal side effects, including thrombosis and cancer. Books such as The Doctor’s Case against the Pill (1969), written by feminist journalist and founder of the women’s health movement Barbara Seaman (1935–2008), and the Nelson Pill Hearings in 1970, galvanized public debate, and epidemiological surveys conducted by the FDA and the UK Medical Research Council (MRC) recommended low-dosage pills. As a result, high-dosage compounds were taken off the market in the UK in 1969, but not in the US, where they continued to be prescribed with an informational pamphlet in every packet (Watkins 1998, chapter 4; Marks 2010, chapters 6–7).

Oral contraception was rapidly and widely adopted by white, middle-class women in the affluent West (Watkins 1998), but different nations produced different “national pills” and contraceptive cultures to go with them (see Source 4). In West Germany in the 1970s, around a third of women of reproductive age took the “anti-baby pill” (die Antibabypille) (Silies 2010), their counterparts in the GDR the “wanted baby pill” (die Wunschkindpille) (Schwarz 1996). Although contraception and abortion were banned in Franco’s Catholic-conservative dictatorship, gynecologists partly met increasing demand by prescribing “anovulatory drugs” for a variety of medical and social indications (Ignaciuk et al. 2014). And despite Pope Paul VI’s 1968 encyclical Humanae Vitae, the Catholic Church of Peru encouraged the use of oral contraception in line with liberation theology and within an educational framework that promoted responsible parenting (Lopez 2008). In communist China, the development of a less expensive and safer low-dose paper-based “pill,” pioneered by the female gynecologist Xiao Bilian in the 1960s, was framed less in terms of individual choice than of collective responsibility (Yang 2014).

By the early 1990s, nine pharmaceutical companies were marketing hundreds of brands of contraceptive pill worldwide (Marks 2010, 77), not to mention the hundreds of related compounds indicated for menstrual regulation and pregnancy diagnosis (e.g. Primodos), emergency contraception (the “morning-after pill”), and abortion (Mifepristone or RU-486), that came before and went after Enovid (Clarke and Montini 1993; Prescott 2011; Olszynko-Gryn 2014b, 188–203). In the West, the Pill went on to become not only a highly successful contraceptive product, but also, in the 1990s and 2000s, a “lifestyle drug” for treating acne, moodiness, or menstrual cramps (Watkins 2012). And yet it failed to become the efficient technology of world population control envisioned by those who initially brought Enovid to market.

As Margaret Sanger put it in 1950: “the world and almost our civilization for the next 25 years is going to depend upon a simple, cheap, safe contraceptive to be used
in poverty stricken slums, jungles, and among the most ignorant people” (quoted in Oudshoorn 1994, 126). In the mid 1950s, field trials of the Pill transformed Puerto Rico, a poor, densely populated, and conveniently located former colony of the US, into an island laboratory and microcosm of world population control (Briggs 2002, chapter 4; Marks 2010, chapter 4). It was not the Pill, however, but the irreversible surgical procedure of female sterilization (tubal ligation) that would become the predominant technology of population control (Gaudillière 2003, 412).

Since the population-control movement’s heyday in the late 1960s and early 1970s, millions of women have been sterilized by laparoscopy or mini-laparotomy, making tubal ligation the most prevalent form of contraception worldwide (Clark 2012). Mirroring the familiarity of the Pill in rich countries, tubal ligation is known simply as “the operation” in India and “la operación” in Puerto Rico. Laparoscopy and mini-laparotomy are forms of endoscopy, minimally invasive (key-hole) surgery performed through a small incision in the abdomen allowing the patient’s interior body to be explored and manipulated without the trauma of open abdominal surgery or laparotomy (van Dijck 2001). Although more invasive and traumatic than vasectomy (see Source 5), the application of minimally invasive techniques to gynecology made tubal ligation less expensive and more acceptable (to women and to doctors) by removing the need for general anesthesia and lengthy hospitalization (see Source 6).

As laparoscopy travelled from US clinics to field trials in Nepal in the early 1970s, and on to mass deployment with repeated allegations of abuse in India and China, the technology of sterilization progressed towards faster speed, smaller size, lighter weight, and lower cost, but with disturbing trade-offs along the way. By funding the development of inexpensive, portable sterilization kits for hard travelling and use in rural camps, the United States Agency for International Development (USAID) and other organizations had, by the late 1970s, made laparoscopy into a technology of population control, imbued with the pressure to meet quotas, the obsession with efficiency, and the urgency to defuse India’s population bomb (Olszynko-Gryn 2014a). During the Emergency period (June 1975–March 1977) in India, however, notoriously coercive and excessive vasectomy drives sterilized tens of thousands of men, including boys and the elderly. Although the free-market “cafeteria approach” to contraception applies to middle-class consumers in the affluent West, the more coercive “one-size-fits-all” pattern continues to predominate in the Global South (Oudshoorn 1999), occasionally with tragic, even fatal, consequences (Burke 2014).

In the West, sterilization has a similarly checkered past, often associated with negative eugenics and compulsory sterilization in Nazi Germany (Bock 1983). More recently, however, historical attention has turned to North America, where several US states (notably California, Indiana, and North Carolina) and two Canadian provinces (Alberta and British Columbia) enacted eugenics-based compulsory sterilization laws, some of which remained operative until the 1970s (Schoen 2005; Stern 2011; Dyke 2013). In the same decade, many middle-aged, middle-class women opted for the convenience and permanence of tubal ligation (Kluchin 2009) and many dutiful husbands chose to go under the knife. In the
heyday of “vasectomania” (Wolfers and Wolfers 1973), some vasectomized men proudly wore pins and neckties displaying the male “Mars” symbol, a circle with an arrow projecting out from it, but with the circle broken to indicate the operation they had chosen to undergo (Shropshire 2014). Men interviewed in Oaxaca City, Mexico, in the early 2000s, revealed that they had chosen vasectomy for a variety of reasons ranging from relieving their partners of the burden of hormonal contraception to more easily getting away with infidelity (Gutmann 2007, chapter 6).

Though most technologies travel from rich to poor countries, where they are often reinvented in “a distinctive world with its own technology of poverty” (Edgerton 2006, 39), this is not always the case. Two of the most significant innovations in fertility control in the second half of the twentieth century originated in China: vacuum aspiration abortion and no-scalpel vasectomy. In the late 1950s, China’s state-sponsored “planned births” program (jihua shengyu) pioneered a new method of abortion for use in rural China: a “negative pressure” method that involved heating a glass bottle with a match to create a vacuum and so did not require electricity to create suction (Murphy 2012, 155) (see Source 7). Vacuum aspiration was adopted by Japan, Russia, and Eastern Europe in the 1950s and, by the early 1970s, had largely supplanted the surgical scraping technique of dilation and curettage in Western hospitals (Tunc 2008; Murphy 2012, 215). In no-scalpel vasectomy, instead of a “hypermasculine” surgical knife, “metaphorically feminine” scissors are used to tear the skin, a clamp inserted to pull out the vas deferens, and a small bandage used instead of stitches to patch up the tear. The choice of instrument has less to do with any technical advantage than with attracting more men to the operation “by removing the dread of incision” (Gutmann 2007, 157). Pioneered in China in the late 1970s, surgeons rapidly adopted no-scalpel vasectomy in North America, Thailand, and India, where it has become a “gold standard” (Wu and Huang 2000; Kaza 2006).

Japan diverged from most other industrialized countries by decriminalizing abortion in 1948, but not permitting oral contraception until 1999. Abortion, not birth control, played a decisive role in Japan’s rapid fertility decline in the 1950s (Norgren 2001). Although USAID dominated spending on population control in the 1970s, many other organizations were involved in the development, testing, and distribution of new contraceptive technologies as well as training programs for overseas doctors (Weisz and Olszynko-Gryn 2010). The US-based Population Council, established by John D. Rockefeller III in 1952, pioneered long-term contraceptive implants in the 1960s (Watkins 2011). By the mid 1970s, more than 650 scientists in 60 countries were involved in World Health Organization (WHO) studies on contraceptive pills and injections for women and men, intrauterine devices (IUDs) (see Source 8), sterilization, abortion, and controversial anti-fertility vaccines (Oudshoorn 1997; van Kammen 1999).

Despite research since the 1960s, there is still no male pill and the only two technologies of male contraception are the condom and vasectomy (Oudshoorn 2003). The female condom and “sponge” failed to take off, and long-term hormonal implants (Norplant) and injections (Depo Provera) in the 1970s became embroiled in controversies over the alleged coercion of poor, black women (Roberts 1997; Tone 2001, 286; Kline 2010) (see Sources 9 and 10). In colonial
Rhodesia, contraceptive pills and injections disrupted marital relations and became embroiled in nationalist struggles between African communities and a white colonial state intent on “cutting down the nation.” African women secretly visited clinics without permission from husbands or in-laws to receive regular injections from sympathetic nurses, until 1981, when the newly independent government of Zimbabwe banned Depo Provera, rumored to be a genocidal instrument of family planning (Kaler 2003). More recently, the pharmaceutical giant Pfizer and the Bill and Malinda Gates Foundation have collaboratively produced the latest generation of injectable contraception: Sayana Press, a disposable syringe for simplified intramuscular injection, similar to insulin, that can be administered by minimally trained health workers and perhaps, eventually, by the user herself (Thomas 2014).

This chapter has discussed some of the twentieth century’s more significant contraceptive technologies. Methodologically, it has followed the techniques and technologies, from idea and design to market and routine use. With the notable exception of Andrea Tone’s US-focused Devices and Desires (2001), most of the accounts drawn on here focus on a single technology. Most have a national focus, too, but even transatlantic and “global” histories only ever examine one technology at a time. Though individual men and women will likely use multiple methods over a lifetime, or even in the course of a single relationship, we still lack an integrated approach that would consider the production and consumption of multiple techniques and technologies across national boundaries in the same analysis. Contraceptive pills, latex condoms, IUDs, tubal ligation, no-scalpel vasectomy, and vacuum aspiration are all part of the same material world and they all crossed borders. So too did essential raw materials such as Mexican wild yams and latex from rubber trees. It is somewhat artificial, though obviously practical, to deal with each technology separately and within the boundaries of any given nation. And yet, only by more fully exploring the globalized and localized worlds of fertility control and engaging more directly with its materiality, will historians be able to tell not just the same old stories about the liberating or oppressive legacy of this or that singular technology, but new ones about how a multiplicity of tools and practices became central to the twentieth century’s key intellectual and public debates over heredity, demographic change, individual agency, and reproductive rights.

1. Withdrawal

Shrouded in discretion and euphemism, the intimate details of private sexual lives and contraceptive cultures are notoriously difficult to recover. Historians are often forced to read between the lines or, better, to supplement the standard paper trail with different kinds of evidence. Using the UK as the case study, recent oral-history projects have encouraged scholars to rethink married love, sex, and birth control in the period between the end of the First World War and the 1960s. Based on extensive interviews, Kate Fisher and Simon Szreter have added a missing and richly textured human dimension to the story of how fertility decline was driven less by married women’s adoption of female barrier methods than by
husbands sharing responsibility for contraception by using condoms as well as dutifully practicing abstinence and, especially, withdrawal (Fisher 2006; Szreter and Fisher 2010). Although Marie Stopes and her allies advocated “modern” devices, oral testimony provides an important new line of evidence of actual use with which to move beyond the interpretation of birth-control propaganda. The following excerpt is from Kate Fisher’s interview with Jane, one of eighty-nine oral histories collected between 1998 and 2001 that formed the empirical basis for Szreter and Fisher’s Sex before the Sexual Revolution (2010). Jane was born in 1925, in the textile mill town of Blackburn, Lancashire; her mother was a weaver, her father a clerk in the city hall. She had two children of her own, in 1958 and 1959.

Source 1: Excerpt from oral history interview (Jane msf/kfliht/#32), copyright Kate Fisher.¹

KATE So what contraception did you use over the course of your life?

JANE Well, various things because I used to go in and [???] used to go to the clinic there and er I had um… Dick we used, Dick used the the the condoms but then I had um, what are they called? A diaphragm?

KATE Hmm-hmm.

JANE Yeah. And then I stopped using that and didn’t like that. And then we were, well after I stopped using it we [laughs] but we I got pregnant, I had a miscarriage first and then the year after I was pregnant

KATE Yeah.

JANE The following year I was pregnant again so um…

KATE And then after that?

JANE Well, after that er, I suppose I don’t know I suppose we resumed, I can’t remember, it’s a long time since then. [laughs] Er, I suppose we still carried on, er well we did, didn’t we? With er, contraception but er…

KATE And do you remember which method you used then?

JANE Well, it was just the the sheaths again I think.

KATE And who got those?

JANE I suppose Dick, I suppose you must’ve, [???] another clinic or er, do you know I can’t remember.

KATE Were there any other methods you knew about?

JANE Err, no, not particularly, no. Um, I was never on the Pill.

KATE Uh-hmm.

JANE My daughter was for a while at the doctor’s suggestion.

KATE Did you ever consider going on the Pill?

JANE No, no I don’t think I did. Um, I don’t think I ever liked the idea really.

KATE Tell me more about this clinic you went to.

JANE Yeah, um… the the mother and and baby clinic er, I I know and [?] then I I know they used to um, check on on the the um, diaphragm from time
to time, you know. Er, you forget about all these things. It’s such a long time ago. Er...

**KATE** Where did you first find out about this clinic?

**JANE** Well, it was, it was near to where we lived... I suppose I found out about the er for meself [?] taking him to the clinic to begin with, you know when when he was first a baby. Used to take them quite regularly er... but they they used to, [?] used to check from time to time and er, make sure that everything was all right, yeah.

**KATE** And you say you didn’t like [?] the diaphragm they gave you.

**JANE** No, I didn’t find it er... I know I used to have to keep it um, in had a special little box to keep it in. [?] this powder, was it Fuller’s Earth or something, [?] something like that, used to use to um, to keep it in. We used to manage to you know manage to do it but er, somehow I... I don’t know, I didn’t like using it it just wasn’t comfortable. Er, just stopped, just stopped using it then, didn’t I? I never, I never used, I never liked using contraceptives because it always so, I don’t know, it always seemed so messy. Um, had this er er the sheaths and this special cream er, that you’d to use er, and it was I don’t know, the idea of, I don’t know, the interruption I suppose, you go into the bathroom and doing this when you thought it was necessary. Er, yeah... can’t remember, can’t remember when we stopped using them.

[...]

**KATE** And what about withdrawal, was that a method of contraception you ever used?

**JANE** Well, I suppose er, yes, yes. Er, er I think that’s what used to happen really after w.we stopped using any particular contraceptives.

**KATE** So of the of the strategies that you used you had caps and you had condoms and you have withdrawal, which would you say you used most and which would [you] say you liked best?

**JANE** Well, I say, I don’t know, I suppose the withdrawal was the simplest easiest from my point of view anyway.

2. **Pessaries**

Self-help manuals, women’s magazines, and even fictional sources such as soap operas, romantic comedies, and novels can provide frank and often humorous treatments of how pregnancy, contraception, and abortion are intimately experienced by women and men. Though often inventive and dramatized, fictional narratives are windows into private lives that would otherwise remain inaccessible to historians. Public debates about oral contraception and the so-called sexual revolution compelled writers to introduce previously taboo subjects into their works. Originally published in New York in the *Partisan Review* (1954), a revised version of Mary McCarthy’s short story “Dottie Makes an Honest Woman of Herself” later appeared in her controversial bestseller *The Group* in 1963. According to her biographer, Frances Kiernan, “the story of Dottie’s getting herself fitted for a diaphragm created a sensation” (quoted in Capo 2003, 112). Set in the 1930s, the
heyday of Margaret Sanger’s birth-control movement, McCarthy’s novel about a group of Vassar graduates was published shortly after the FDA approved the contraceptive pill. At a time when information about contraception was not widely available, fiction could be educational. As one reader put it, “Most of us learned about all this [contraception] from the novelists, not from any health care clinic. And our mothers were hopelessly uninformed and afraid” (quoted in Capo 2007, 10).

The following excerpt from The Group finds Dottie in a doctor’s office, waiting to be fitted for a pessary.


[...] Dottie’s heart was humming happily as she sat, three days later, beside Kay Petersen, in the woman’s doctor’s office suite. Actions spoke louder than words, and whatever Dick might say, the fact remained that he had sent her here, to be wedded, as it were, by proxy, with the “ring” or diaphragm pessary that the woman doctor dispensed. With her hair freshly waved and her complexion glowing from a facial, she wore a look of quiet assurance, the look of a contented matron, almost like Mother and her friends. Knowledge was responsible for her composure. Kay would hardly believe it, but Dottie, all by herself, had visited a birth-control bureau and received a doctor’s name and a sheaf of pamphlets that described a myriad of devices—tampons, sponges, collar-button, wishbone, and butterfly pessaries, thimbles, silk rings, and coils—and the virtues and drawbacks of each. The new device recommended to Dottie by the bureau had the backing of the whole US medical profession; it had been found by Margaret Sanger in Holland and was now for the first time being imported in quantity into the USA, where our own manufacturers could copy it. It combined the maximum of protection with the minimum of inconvenience and could be used by any woman of average or better intelligence, following the instructions of a qualified physician.

This article, a rubber cap mounted on a coil spring, came in a range of sizes and would be tried out in Dottie’s vagina, for fit, wearing comfort, and so on, in the same way that various lenses were tried out for the eyes. The woman doctor would insert it, and having made sure of the proper size, she would teach Dottie how to put it in, how to smear it with contraceptive jelly and put a dab in the middle, how to crouch in a squatting position, fold the pessary between thumb and forefinger of the right hand, while parting the labia majora with the left hand, and edge the pessary in, so that it would snap into place, shielding the cervix, and finally how to follow it with the right middle finger, locate the cervix or soft neck of the uterus and make certain it was covered by the rubber. When this process had been rehearsed several times, to the watching doctor’s satisfaction, Dottie would be taught how and when to douche, how much water to use, the proper height for the douche bag, and how to hold the labia firmly around the lubricated nozzle in order to get the best results. As she was leaving the office, the nurse would present her with a Manila envelope containing a tube of vaginal jelly and a small flat box with Dottie’s personalized contraceptive in it. The nurse would instruct her how to care for the pessary: to wash it after each use, dry it carefully, and dust it with talcum before returning it to its box.
3. Latex condoms

The advent of the Pill posed a serious challenge to the popularity of the condom. Oral contraception not only offered to leave passion uninterrupted and sensation undiminished, but set a new standard of reliability. In the UK, in 1963, the Consumers’ Association concluded that not one of 27 tested condom brands were as reliable as an oral contraceptive if used without spermicidal jelly. Following the 1967 National Health Service (Family Planning) Act, which made contraception available to unmarried women for the first time, the British Code of Advertising Practice sanctioned publicity for contraceptives in the press and pharmacists permitted counter displays. London Rubber ran its first large-scale advertising campaign for Durex brands in 1969. A 1980 advertising campaign promoted the Durex Nu-Form Extra Safe for married women “coming off the pill.” HIV/AIDS public-awareness campaigns breathed new life into the condom from 1986. The first advertisements for Durex and Mates aired on UK television in 1987 and sales increased from 140 million in 1988 to 152 million in 1993. Condoms were made widely available, not only in pharmacies, but also vending machines, supermarkets, and by mail order (Jobling 1997a; 1997b). The following pages, taken from the Consumers’ Association’s 1963 booklet on contraception, shows how manufacturers tested condoms for leakage and material strength.
Test for holes

We filled each condom with 300 ml of water (about ½ pint), hung it up for at least 3 minutes, then inspected it to see if any water had leaked through. This could be seen as a small drop, a trickle, or (in the worst instances) as a jet of water. Holes were often very small—too small to be seen, but quite large enough for sperm to get through. A total of 27,600 condoms were tested in this way.

The average number of failures in every 100 condoms is given in the Table. Results are shown separately for the first series of tests—on 500 samples bought between May 1962 and July 1963—and for the second series of tests—on 300 samples bought late in August 1963.

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Figure 7.1 Contraceptives: A Which? Supplement (Continued)
No brand would have passed the present draft British Standard, which is aimed at accepting brands with a failure rate of 1 per cent. Under the supervision of BSI, samples would be tested over a period of time, and the results accumulated. To give manufacturers the benefit of statistical doubt, 17 failures (just over 2 per cent) would be allowed in the first 800 samples tested to the Standard. In the proposed BS tests, samples will be tested in the factory. We, however, have tested condoms bought in the ordinary way—in the condition the user gets them, after all the hazards of packing, transport and storage.

**Test for strength**

We carried out further tests on at least 100 condoms of each brand, taken from the first 500 tested. This was to blow them up with a large amount of water (3 litres—about 5 pints). The condom failed
4. Oral contraception

As a technology of fertility control, oral contraception is not only a combination of synthetic hormones in tablet form, but also a package designed to maximize “patient compliance” and minimize “patient failure,” or forgetfulness. In 1960, Searle’s Enovid was packaged as twenty white tablets in a brown bottle, and Planned Parenthood instructed women to use a calendar to keep track of their menstrual cycle and the number of pills they took. In 1964, an Illinois engineer named David Wagner patented the “Dialpack,” a circular dispenser allegedly designed to help his wife keep to her Pill regime for a period of 20 days. Searle copied Wagner’s idea, but then, after being forced to pay royalties for copyright infringement, brought out Enovid-E 21 and Ovulen-21. By adding an extra day, Searle not only slyly circumvented the patent, but also regularized the use of its product according to a regime of three weeks on, one week off (Gossel 2004; Eisert 2014). Withdrawal bleeding, simulating the natural rhythm of menstruation, occurred in the fourth week. Mead Johnson added a week of placebos to Oracon-28 and Schering reissued Anovlar, Europe’s first oral contraceptive, as Anovlar 21. The following brochure, produced in 1966 for the Pakistani branch of Schering Asia GmbH, depicts three smartly dressed male medical doctors discussing the pros and cons of a specially designed “Memo-Pack” of 21 pills (to be taken for three weeks “followed by a tablet-free interval of 7 days”). Citing a review in the prestigious British Medical Journal, the brochure claims the “only failure” associated with Anovlar 21 “is patient failure.”
Summary of a conversation between Dr. P. of Schering AG Berlin, Dr. X. and Dr. Y., both General Practitioners. Although this is an imaginary scene, the dialogue represents a factual explanation of the advantages and properties of the first presentation of oral contraceptive tablets as a 21-day course.

ANOVLAR 21 – THE FIRST ORAL CONTRACEPTIVE WITH 21-TABLET DOSAGE

Figure 7.2 Inside pages of a brochure for Anovlar 21. March 1966
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DR. X: Oral contraceptives all seem to come in 21 tablet courses. Why does Anoviar 21 have a course of 21 tablets?

A: To make oral contraception simpler and, therefore, more reliable. You see, a 21 tablet course involves the patient in all sorts of calculations that can—and sometimes do—go wrong. This obviously is a drawback, because it is vitally important that every tablet should be taken at the correct time. Oral contraception, as a method, is 99.7% reliable, human beings are not, and it is this latter aspect that Anoviar 21 takes care of.

DR. X: How is that?

A: In two ways. First of all, all the 21 tablet course allows for a greatly simplified dosage scheme: the patient takes a pill a day for exactly three weeks, then she stops for exactly one week. This pattern continues without variation, irrespective of when menstruation starts, or in how long it lasts. She always starts her course on the same day of the week, at exactly four weekly intervals.

DR. X: But surely that would be just as easy with a 20-tablet course...

A: Not really. With a 20-tablet course the patient has to wait for the menstrual flow to start, then count until day 5 to begin her next course. Day after day she has to spend time keeping some kind of record in a calendar or diary. With the 21-tablet method a 20-tablet course might be better, because the patient could change without loss of efficacy. Such patients would have to be instructed to change on the 21st day, or at any other time when the bleeding had stopped, and to start on day 1 of the next calendar month.

DR. X: This may be so, but that still does not get rid of the need to wait to take her tablets.

A: This is where the second advantage of the 21-tablet dosage comes in. Since the first tablet is taken at the same time each week, it can be started at any time of the cycle. This is convenient if, for example, a woman has a weekend trip and wants to start her new cycle of tablets on Monday without waiting for menstruation to finish. Indeed, we have the British Medical Journal of August 19th, 1964, which reported the properties of the newer oral contraceptives and what the 21-tablet method and says page 332: “Reasonably because of the change in the pattern of tablet taking patients find it simpler to follow and are less likely to omit them.”

A: That’s interesting, but to get back to Anoviar 21— you say that the dosage scheme of the Mono-Pack is designed to reduce patient error. Have you any proof that this is, in fact, so?

A: Indeed, we have the British Medical Journal of August 1964, which reported the properties of the newer oral contraceptives and the 21-tablet method. In page 332: “Reasonably because of the change in the pattern of tablet taking patients find it simpler to follow and are less likely to omit them.” So, you see, we can justifyably claim that oral contraception with Anoviar 21 is more reliable, because Anoviar 21 removes the only weakness: patient failure. This, of course, is not only important to the patient but also to you as her doctor...

A: Anoviar 21 is. I begin to see certain advantages.

A: Take the case of a woman on an oral contraceptive who complains of menstrual pain. It could be that she is pregnant due to her having forgotten to take some of her tablets. One has to do a pregnancy test, wait for the results, and then act accordingly. This means a lot ofunnecessary time and trouble for both the patient and her doctor.

A: I can see that. One assumes that it is easy to take a tablet per day, but in my own experience, that simply isn’t so. When I have had to take tablets daily myself I just could not remember whether I had taken the morning before that I last took a tablet.

A: Quite so. But with Anoviar 21 none of this is likely to happen. The Mono-Pack fits in with the patient’s own rhythm—whether she has taken the day’s tablet. And there are another advantages: it’s safe. And much more time saving is saved in explaining the simpler 21-tablet scheme to your patients.

A: That’s certainly true. Explaining the 21-tablet course can sometimes be quite a job.

A: What’s more, the 21-tablet scheme even patients who menstruate late, or who forget which is “Day One”, can’t get confused. This eliminates unnecessary questions from worried patients.

A: I wonder, why no one thought of the 21-tablet dosage before?

A: I think this is partly a matter of not seeing the wood for the trees. It took us quite some time to arrive at it ourselves. You know, there was none of the obvious advantages. Another benefit is that the formulation of some oral contraceptives is unsuitable for the 21-tablet scheme because they do not have the properties of Anoviar 21, which produce a very prompt and predictable onset of menstruation in the tablet-free interval of seven days.

A: There’s just one more thing I’d like to ask. Some of my patients have suffered certain side effects. How does Anoviar 21 compare in tolerance with other oral contraceptives?

A: Very favourably indeed, and this has been confirmed by many authorities throughout the world. There are numerous published reports including 6000 women who have taken Anoviar for over 50,000 cycles.

A: Well, thank you very much. Dr. P. It’s all been most interesting. Tell me, how is Anoviar 21 catching on in this country?

A: Exceptionally well. It always takes time to explain and persuade a new world, but fortunately the advantages of Anoviar 21 are so clear and logical that the response has been most encouraging.
Jesse Olsynko-Gryn

? DR. X. Oral contraceptives all seem to come in 20-tablet courses. Why does Anovlar have a course of 21 tablets?

A. DR. P. To make oral contraception simpler and therefore, more reliable. You see, a 20-tablet course involves the patient in all sorts of calculations that can—and sometimes do—go wrong. This is obviously a drawback, because it is vitally important that each tablet should be taken at its correct time. Oral contraception, as a method, is 100% reliable, human beings are not, and it is this latter aspect that Anovlar 21 takes care of.

? DR. Y. How is that?

A. DR. P. In two ways. First of all the 21-tablet course allows for a greatly simplified dosage scheme: the patient takes a pill a day for exactly three weeks, then she stops for exactly one week. This pattern continues without variation. Irrespective of when menstruation starts, or how long it lasts, she always starts her course on the same day of the week at exactly four weekly intervals.

? DR. X. But surely that would be just as easy with a 20-tablet course..?

A. DR. P. Not really. With a 20-tablet course the patient has to wait for the menstrual flow to start, then count until day 5 to begin her next course. Day after day she has to spend time keeping some kind of record in a calendar or diary. With the 21-tablet method, however, there is no need for any calculations and, therefore, obviously less risk of miscalculation.

? DR. Y. This may be so, but that still does not help her remember to take her tablets.

A. DR. P. This is where the second advantage of the 21-tablet dosage comes in. Since the course lasts for exactly three weeks, each tablet can be marked with the day on which it should be taken. It is as simple as this: if one day she cannot remember whether she has taken her tablet, she simply glances at her pack to see whether the tablet for that day is still there. We have called our pack—I think appropriately—the Memo-Pack. A pack like this would never be possible with a 20-tablet dosage pattern.

? DR. Y. I grant you that. But if the 21-tablet course is the optimum dosage, isn’t it extraordinary that most other oral contraceptives still employ a 20-tablet course?

A. DR. P. To give the answer to that question I must go back ten years or more—when progesterone and oestradiol were being used in cases of amenorrhoea. The course of treatment happened to be twenty days long—and remained the same when the contraceptive properties of the pill became apparent.

[...]

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5. Vasectomy

Rivaled only by China’s one-child policy in terms of scale and notoriety, India has one of the oldest and most ambitious family-planning programs in the world. Today, India’s family planning is most famously associated with massive vasectomy drives during the Emergency period (June 1975–March 1977), when civil liberties were controversially suspended in response to crop failures, economic crisis, and the fear that Indira Gandhi’s Congress Party would lose the elections. Most of the 8.26 million sterilizations performed in rural camps in 1976 were vasectomies of poor men. Dramatized in post-Emergency critiques of family planning and immortalized in world-famous historical fiction, the excesses of family planning during the Emergency were generally credited with Indira Gandhi’s electoral defeat in 1977. Women became the primary target of mass sterilization drives only after the Emergency, when the reputation of vasectomy was tarnished and it had come to be regarded as a form of castration. And yet, in the early 1970s, pioneering vasectomy “festivals” in the Ernakulam district of Kerala captured the imagination of family-planning advocates worldwide. The following excerpt is taken from an article written by UK medical doctor and birth-control activist Caroline M. Deys, who argued that vasectomy was “culturally acceptable to those social groups where the male is strongly dominant and has a clearly defined role.”


[...] The success of vasectomy programmes in India is remarkable. An estimated 6 million men have been sterilized and, even allowing for deliberate and accidental inflation of the statistics, there can be no doubt of the scale of the program or of its acceptability to the community. Recently vasectomy has been
made into something verging on a religion. Between the 20th of November and the 20th of December, 1970, a single vasectomy camp at Ernakulam district in Kerala performed 15,000 vasectomies. A second camp for one month in July in another district did 62,900 vasectomies. A recent camp in Gujarat is said to have achieved 50,000 more vasectomy operations than had been planned. Camps of this sort commonly do more operations on the men of a single district than may have been done throughout the whole of an Indian state in the previous year. At the Ernakulam camp the mean age of wives of the men vasectomized was 32.2 and the average number of children 4.1. The one camp sterilized 4.6% of all eligible couples with more than 2 children. A great deal of publicity precedes these camps. Acceptors march from one area to another “chanting family planning slogans to the accompaniment of folk dances and music before marching into the camp side”. Fifty or more operating cubicles are prepared to work simultaneously. There are canteens (the average man gaining 3 lbs. weight during his stay in a camp) and all the ancillary services necessary to look after up to 3,000 men per day. Incentives are given to men (100 rupees—£5.50 sterling) and to the motivator (10 rupees) and lotteries are run. As in developed countries the men accepting vasectomy are those in the lower income groups.

6. Abortion

Access to surgical abortion services has long been unevenly distributed and women have often, by necessity, traveled far and wide to take advantage of regional and national disparities. Women from Ireland, a country with strict anti-abortion laws, traveled to London on the underground “abortion trail” (Rossiter 2009), and Canadian women took advantage of the expansion of commercial airlines and cheaper international flights to travel to Japan, Sweden, and the UK (Sethna et al. 2013). Many affluent white South African women also travelled to the UK (and the Netherlands) for abortions in the 1970s. Demand was sufficiently high to sustain a for-profit service: clients would fly to London for a “holiday,” where they would be greeted at the airport and taken to a clinic by the service’s employees (Hodes 2013, 534). The map below, taken from a survey published on the tenth anniversary of the 1967 Abortion Act, shows that women also traveled within the UK, from regions including Wales, the North of England, East Anglia, and Cornwall—to the metropolitan centers of London and Birmingham.
Source 6 (Figure 7.3): Malcolm Potts et al. 1977. Abortion. Cambridge, Cambridge University Press, 318.

Object of counselling generally is to help the client to a greater awareness of the nature of her difficulties so that she is able to find an acceptable way to resolve them. Provided, that is, she really has difficulties. Many abortion clients are simply careless or even unlucky. They may need some support through a stressful complication in their lives. They may not need much more.

Evaluation

In the eight years since the 1967 Act passed through parliament several important lessons have been learned. The abortion rate for British women appears to have levelled off at approximately two per 1000 of the population per year. In 1973 the number of

Fig. 41. Migration of women seeking legal abortions (mostly in the private and charitable sectors) between regions. (England and Wales 1971, residents of the British Isles only.) (See also Figs. 39 and 40.)

Figure 7.3 Malcolm Potts et al., Abortion
7. Depo Provera

Injected intramuscularly every three months to prevent pregnancy, Depo Provera is one of the late twentieth century’s most controversial contraceptive technologies. Though highly effective, activists suspected health workers of injecting poor, black women without their consent. In Namibia, one doctor claimed that Depo was “simply banged into black and colored women, without discussion, explanation or even permission” (quoted in Kline 2010, 65). Investigative journalism fueled concerns about the racist and neo-imperialist agendas of population-control programs as well as potential health risks and unpleasant side effects, including weight gain, heavy or erratic bleeding, depression, and cancer. In the US, the FDA turned down repeated attempts in the 1970s and 1980s by the pharmaceutical company Upjohn to market Depo as a contraceptive. Though available to thousands of women via clinical trials and off-label use, the FDA only approved Depo in 1992, after a long-term study by the World Health Organization found the risk of cancer to be minimal (Kline 2010). In the UK, the Organisation of Women of African and Asian Descent (OWAAD) launched “Ban the Jab,” a campaign against the administration of Depo Provera—often following a Rubella inoculation—to Black and Asian women (Thomlinson 2014, 113). At a time when the predominantly white and middle-class Women’s Liberation Movement remained focused on safeguarding and expanding access to abortion, the campaign highlighted a major rift in UK feminists’ approach to reproduction. The following leaflet, which outlines the campaign against Depo, is taken from the papers of Stella Dadzie, a leading figure in the Black UK women’s movement.
A Campaign against Depo-Provera has been formed in Britain. Depo-Provera is an injection which lasts 3–6 months. It is given to women to prevent pregnancy. The idea of an injection for birth control may sound very simple and attractive, but this drug has some very nasty side-effects. A doctor who conducted a follow-up survey in Britain on the drug has said:

“Depo-Provera is a very powerful steroid which disturbs the body far more than oral contraceptives and has the disadvantage of lasting at least three months and sometimes nine months after a single injection.”

In Britain Depo is largely being used on black and working-class women. It has and is being used on between 3 and 5 million women throughout the world, mainly in third world countries. We believe that women should have the right to choose whether or not to have children.

The Aims of the Campaign

1. Withdrawal of Depo-Provera.
2. To expose the way in which Depo-Provera has been developed, experimented and used on women, often without the prior knowledge and consent of the women involved.
3. Free, safe and reliable contraception on demand — contraception that does not endanger people’s health.

The Campaign desperately needs money to print leaflets and run the campaign. Please send all donations to: Campaign against Depo-Provera, c/o ICAR, 374 Gray’s Inn Road, London WC1.

P.T.O.

Figure 7.4 “Ban the Jab” leaflet, circa 1978
8. IUDs

Despite its checkered past, the intrauterine device, or IUD, is today’s second most widely used contraceptive technology worldwide, and the single most widely used reversible form of birth control (Dugdale 2000; Takeshita 2012). Today, a popular T-shaped model is made from copper, which has spermicidal properties. But even IUDs made from inert material can be effective, possibly because they create a local low-grade inflammation of the womb that is hostile to sperm and to the implantation of the ovum in the uterine lining; other models are hormone-releasing and so effective for the same reason as contraceptive pills, injections, and implants. The Gräfenberg ring, invented in the 1920s, was made from silkworm gut shaped with silver wire into a ring. Though available in Europe and Japan, American physicians did not trust its safety or reliability (Tone 2001, 263). The Population Council breathed new life into an old technology in the 1960s, when it successfully developed, tested, and promoted the Lippes loop, made from cheap, malleable plastic. IUDs appealed to population-control programs for the same reasons as sterilization: insertions were medically controlled one-off procedures that required minimal patient compliance. But IUDs suffered a major setback in the US, where the Dalkon Shield infected thousands of women, causing several deaths in the mid 1970s (Tone 1999; 2001, 271–83). The following cover and inside pages are from a promotional booklet for Nova-T, a silver-cored copper-wire IUD first marketed in 1981 by Berlex Canada Inc., a subsidiary of Schering AG. The classically blonde woman on the cover is portrayed reclining in a hammock, not a care in the world. Inside, we find schematic illustrations of Nova T and answers to questions posed by an imagined user in the first person singular.
Source 8 (Figure 7.5): Cover and text of a pamphlet for Nova T. Circa 1981. Copyright Schering Archives, Bayer AG.

Figure 7.5 Cover of a pamphlet for Nova T, circa 1981
Who can use Nova T?

Nova T, as with other intrauterine devices (IUDs), provides protection against pregnancy. Most women can have a Nova T inserted by their doctor. It is particularly recommended for women who for medical reasons cannot use hormonal contraceptives, who decline to use them or who cannot take them regularly for one reason or another.

However, in certain instances described in this booklet, insertion of an IUD is not recommended. Nova T, as with other IUDs, only prevents intrauterine pregnancies; it does not prevent extrauterine pregnancies.

Nova T is also suitable for young women and for those who have never had a baby. However, the benefit/risk ratio should be carefully appraised because of high failure rates and complications. For example, surveys suggest that there may be a greater risk of pelvic infection and subsequent infertility in women bearing an intrauterine device and who have never had a baby.

Note: Nova T should only be inserted when the uterus is at its normal size. Therefore, it is recommended to wait 4 to 6 weeks after miscarriage or delivery.

What does Nova T look like?

Nova T is a tiny, delicate “T” shaped plastic object. Its vertical arm is tightly coiled with a thin silver-cored copper wire.

The “T” shape was chosen because it resembles the anatomy of the uterus. As a result it fits well into the uterus is well tolerated. Two polyethylene threads are located at the lower part of the Nova T.

How and when should Nova T be inserted?

Using a small plastic tube, your doctor will insert Nova T by sliding it through the vagina into the uterus.

The best time for insertion is during the last days of menstruation – when the cervix is not tight.

Is the insertion painful?

Insertion of Nova T is hardly ever painful if correctly done by your doctor.

How does Nova T prevent pregnancy?

Once Nova T has been inserted, its copper-wrapped plastic body causes changes in the quality of the uterine mucous membrane and uterine secretions which are thought to prevent the implantation of the egg. While accomplishing this, there is no disturbance of the hormonal imbalance.

How reliable are IUDs in pregnancy prevention?

Next to the “pill” (oral contraceptives), IUDs are among the most effective known contraceptives. Reported pregnancy rates with IUDs are in the order of 0.5 to 3.7 per 100 women during the first year.
When should Nova T definitely not be used?
Nova T must not be used during pregnancy. It should not be used either in the presence or suspicion of:

- Malignant tumors in the area of the reproductive organs.
- Acute, sub-acute or chronic infection in the abdomen (or a history of such infections).
- Congenital or acquired anatomical changes of the uterus or cervix.
- Endometriosis: a condition in which tissues resembling the lining of the uterus occurs in various locations in the pelvic cavity.
- Underdevelopment and/or pronounced change in the position of the uterus.
- Obscure uterine bleeding.
- Blood clotting problems (coagulation).
- Wilson’s disease: rare inherited disorder of copper metabolism.
- Allergy to copper.
- A history of extraterine pregnancy.
- Valvular heart disease: congenital or acquired flaw in heart valve.

Does Nova T cause any discomfort?
At first, after Nova T has been inserted, some light spotting and perhaps a sort of pulling pain in the abdomen or discomfort in the lower back may be experienced.

This type of pain is quite similar to normal menstrual pain and will not last for long. Your doctor may prescribe an antispasmodic medication for you.

Sometimes, your periods may be somewhat heavier and longer than usual.

Does Nova T interfere with sexual intercourse?
No, and your partner will not feel Nova T during sexual intercourse.

May I use tampons?
Yes.

Can Nova T be discharged unnoticed?
During menstruation, the IUD may be discharged through spasms. You should, therefore, check for yourself after each menstruation (better yet every week) to determine that the Nova T is still in the uterus.

By squatting and using your middle finger, you can feel the threads attached to the lower end of the Nova T.

Caution: DO NOT PULL!

The threads hang down from the dimple-like groove of the cone-shaped cervix which extends into the vagina. If you are unable to feel the threads or they appear to be longer than usual, call your doctor since protection against pregnancy is no longer assured.
What happens if I want a baby?

You should go and see your doctor. He or she can remove your Nova T easily, at any time. Upon removal, you can become pregnant.

What happens if I conceive in spite of Nova T?

Should pregnancy occur while you have an IUD in place, you should immediately see your doctor who will remove it. This will reduce the possible risk of secondary symptoms (e.g. abortion, general bacterial infection).

When should I see my doctor?

- If light bleeding or cramps you may have after insertion continue for several days or worsen.
- If there is discomfort during intercourse.
- If you experience abdominal pain combined with irregular bleeding and increased temperature.
- If you no longer feel the treads.
- If the IUD has moved into the cervix and you can feel the tip of the device.
- If you become aware that the device has been expelled.
- If you miss a menstrual period and think you are pregnant.
- If you take anticoagulant medication, you should advise your doctor. This medication may increase your blood flow.
- If you have an unusual vaginal discharge.
- If you wish to become pregnant.

Do I need frequent check-ups?

After the insertion of Nova T, gynecological check-ups are recommended after 1, 3, 6 and 12 months and thereafter once a year.

You should have a Papanicolaou smear (PAP test) taken at least yearly.

To help you remember these important check-ups, your doctor will write down your next appointment.

9. Tubal ligation

Although it is more complicated, riskier, costlier, and has a longer recovery time than vasectomy, by the late 1980s, over 90 percent of surgical sterilizations in India were performed on women. Tubal ligation was also localized by its encounters with new actors in different cultural settings. Indian gynecologist Pravin Mehta first used the laparoscope in a municipal hospital in Bombay at the start of the Emergency period, when compulsory female sterilization seemed inevitable. Compulsion was officially abandoned as a policy, but in 1979 the neighboring state of Gujarat endorsed voluntary laparoscopic sterilization to revitalize a flagging family-planning program. As part of the program, Mehta sterilized over 10,000 women in one year using the Laprocator, a portable device designed for use in remote, rural conditions. Mehta developed a “no exposure” technique to
encourage rural women who resented undressing in his presence to agree to go under the knife. He also developed a “single puncture” technique, which saved time but increased the risk of internal injury to women. It was standard practice to sterilize the surgical equipment between operations but asepsis took time, so Mehta developed a quicker method of cleaning the scope in hot water and swabbing it with alcohol. His performance increased from just over 10,000 operations in 1979 to almost 60,000 in 1981. By the end of the decade he claimed to have sterilized more than 250,000 women, a number that seemed implausibly high to John Guillebaud, the medical director of the Margaret Pyke Centre, a leading family-planning clinic in London, England. Guillebaud was particularly incredulous of Mehta’s “record” of 156 sterilizations in just under two hours. So to verify these extraordinary claims, he journeyed to a rural school near Calcutta to observe Mehta in action, videotaping him to verify his speed. The following excerpts are from Guillebaud’s 1989 report in the British Journal of Obstetrics and Gynaecology.


My first introduction to Dr P. Mehta was when I was asked to comment on an early draft of the article published in this issue (pp. 1024–1034). My initial reaction was one of disbelief: it seemed implausible that a single surgeon could in less than 10 years perform a quarter of a million laparoscopic sterilizations. I was even less inclined (at first) to believe the statement in his curriculum vitae that his “record” on one occasion, with a particularly efficient team, was 156 sterilizations in just under 2 h. I therefore arranged to observe Dr Mehta in action.

On 8 March 1988, Mr R. Bhathena (a Bombay gynaecologist acting as independent local observer) and I attended one of Dr Mehta’s sessions at Belpukur College, a rural school about 3 h drive from Calcutta. Suffice it to say that we observed his operating time to be, indeed, less than 1 min per woman. The women were numbered by small stickers on their foreheads, and then arranged as he describes in two long lines on the school verandah with odd numbers on one side, even numbers on the other. Each line led to one of the operating benches, strapped between the top of a desk and the floor of the classroom to give a 30–40° head-down tilt; 150 operations were performed in about 4 h. I made a video film which is available for colleagues: elapsed time is displayed in each frame as proof of the speed of the surgery. No operative or early postoperative complications were observed.

Therefore, Dr Mehta’s ability to achieve the large numbers of sterilizations reported in his study—with the help of his very small permanent and larger local and temporary team—is not in doubt. We also spoke with Mr Bhattacharya, Joint Secretary of the Department of Health and Family Welfare of the Government in West Bengal, the department which organizes
these sterilization ‘camps’. He believed the numbers to be totally accurate. He remarked that most other medical bodies and individual gynaecologists in India did not approve of Dr Mehta’s methods or rate of surgery, though without having observed them for themselves. During the preceding year, as an independent audit of Dr Mehta, vigorous efforts had been made by his department to identify complications including failures of the surgery or complaints by women or their families in areas where he had operated. These had drawn a blank.

The Joint Secretary also confirmed that the ascertainment of deaths should be complete because the West Bengal Government “makes an ex gratia financial payment of Rs. 10 000 to the spouse and/or dependent children of any patient who dies in consequence of the sterilization operation”. This is well known and hence few if any deaths which could be even tenuously linked with the surgery will not come to light.

If the main criteria of the success of a mass sterilization programme are safety, efficacy and cost-effectiveness then Dr Mehta and his team are to be congratulated.

Reservations

Without detracting from his achievement, and allowing for the Indian context, and the urgency of the population explosion, Mr Bhathena and I had several reservations about aspects of Dr Mehta’s procedures. Perhaps the most important were the apparent paucity of counselling, lack of a human touch during the surgery, and the risk of cross-infection. In our opinion, most of the improvements suggested below (which we have discussed with Dr Mehta) could be introduced without significantly slowing the surgery.

Was the pre-operative counselling adequate? We were told that women were recruited in their villages and the operation “discussed”. We were concerned about the possible adverse influence on unpressured decision-making of gifts and payments made to the women themselves, and performance payments to the motivators and other staff.

A simple well-illustrated information leaflet should be devised, readily understandable by rural women. Even though many acceptors are illiterate, in each area someone could surely be identified (and trained appropriately) to read and explain a leaflet. This should briefly explain what laparoscopic sterilization under local anaesthesia entails, its permanence and poor reversibility, the remote risk of failure, but the lack of any known long-term side-effects. Dr Mehta operates on women with no preliminary pelvic examination. He informed us that his population would reject examination by a man (himself): indeed part of the attraction and obvious success of his programme is attributed to the lack of what is seen as invasion of privacy and the whole ‘no exposure’ approach. However, a (female) nurse could he trained to perform safe bimanual examination—as we regularly demonstrate at the Margaret Pyke Centre.

[...]


**Avoidance of infection/cross-infection**

When we visited the sterilization session, the boiling water used briefly to rinse the trocar and laprocator between cases was not maintained at boiling point and was changed far too infrequently. The main anxiety is the transmission of viruses in blood: principally hepatitis B but also the human immunodeficiency virus (HIV). Realistically, the best option of autoclaving is not available. Perhaps the best compromise would be for the trocars to be thoroughly scrubbed by an assistant in soapy water, preferably containing 1000 ppm of chlorine, and then rinsed and boiled for at least 5 min.

[...]

**Recovery arrangements**

In our opinion it would be more humane for the woman to be laid on a stretcher and carried to the recovery area by two of the many willing assistants, rather than the present system of walking between two helpers. A test dose of the penicillin injection should never be omitted.

**The human touch**

Despite the time constraints, Mr Bhathena and I felt it would be possible to greet each woman by name and give her a reassuring commentary, so that she is treated with gentleness and dignity.

**Conclusion**

Dr Mehta’s dedication to the cause of planned parenthood in his own country is impressive: he is regularly away from his home in Bombay for weeks at a time and has been known to operate continuously for 13 h.

[...]

The deficiencies are real but could readily be remedied, with but a small increase in unit cost per procedure and little effect on the present amazing rate of surgery. It seems unfortunate that, so far, Dr Mehta has had little opportunity to train others, in order to tackle the vast present unmet need for sterilization in India as well as ensuring that his unsurpassed skills are passed on to future surgeons.

**10. Norplant**

In the mid 1960s, the Population Council began research on a new, long-acting form of hormonal contraception that would not depend on a woman’s ability to remember to take a pill every day. Norplant involved the implantation of six silicone rods under the skin of a woman’s arm to gradually release a synthetic form of progesterone over a five-year period. In the mid 1970s, the Council launched field trials in Brazil, Chile, Denmark, Jamaica, and the Dominican Republic, and, by the late 1980s, Norplant had been tested in more than 200,000 women in some thirty countries. In the US, the FDA approved Norplant in 1990, and the pharmaceutical company Wyeth Ayerst became its licensed distributor and
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launched an advertising campaign aimed at middle-class white American women and their gynecologists. But Norplant was expensive and women complained of side effects such as irregular bleeding and infections. Sales dropped dramatically in the mid 1990s after Norplant received negative publicity and about one in five users requested early removal, which required lengthy surgery. Wyeth-Ayerst stopped selling Norplant in the US in the early 2000s after some 50,000 American women joined class-action lawsuits against the company (Watkins, 2010; 2011). The following cover of an information booklet produced in 1997 by Leiras, the Finnish subsidiary of Schering, portrays a geographically diverse group of seemingly middle-class women smiling over coffee in a generically tropical setting, perhaps intended to represent the countries with the highest number of Norplant users at the time: Indonesia, Thailand, the US, Finland, and Sweden (Shivo et al. 1994). The excerpted text highlights concerns about menstrual irregularities and other side effects, which contributed to the decline of Norplant in the US.
Source 10 (Figure 7.6): Cover and text of a Norplant information booklet. 1997. Copyright Schering Archives, Bayer AG.

Figure 7.6 Cover of a Norplant information booklet, 1997
First few days with NORPLANT

After the anaesthetic wears off, you will probably experience some tenderness at the insertion site for a few days. There may also be some swelling, bruising and discoloration.

Keep the insertion area dry for 2–3 days to prevent infection. The protective gauze may be removed after 24 hours and the sterile skin closure as soon as the incision wound has healed, i.e. normally after 3–5 days.

You can resume your normal daily activities immediately following the insertion of NORPLANT. However, you should not lift any heavy objects and try not to bump the insertion site for a few days.

After the incision has healed, you do not have to worry about bumping the area or putting pressure on it. The implants are flexible and cannot break inside the arm. They will stay where they are placed and should not move around. Insertion or removal of the implants leaves a small scar on the arm which is not noticeable in most women.

NORPLANT may affect your periods

NORPLANT may alter your bleeding pattern, although this usually settles during the first year of use. The type of bleeding pattern you may experience with NORPLANT cannot be predicted. Menstrual irregularities vary from woman to woman and many include prolonged bleeding during the first few months of use, untimely bleeding or spotting, no bleeding at all for several months, or a combination of these patterns. Despite the increased frequency of bleeding in some women, the monthly blood loss is usually less than that of normal menstruation. Most women who experience some change in their bleeding pattern are not bothered by it.

If you have regular periods after having implants inserted and these suddenly stop for six weeks or more, you must confirm that you are not pregnant. If you are, NORPLANT implants must be removed immediately.

Is the lack of bleeding harmful?

Sometimes women are concerned about amenorrhea, i.e. no monthly bleeding at all. If you do not have your period, when using NORPLANT implants, it does not harm your health or future fertility.

Other side effects

Most other side effects are rare (occurring in about ten percent of users) and similar to those sometimes found with other progestogen-only methods of contraception, such as the mini-pill. You should be aware of the following conditions even though you may not experience any of them: headache, nervousness, nausea, dizziness, acne, change in appetite, breast tenderness and weight gain.
Ectopic pregnancy (development of a fertilized egg outside the womb) has occurred among users of NORPLANT implants at an average rate of 0.13 per 100 woman years. This is below the risk of ectopic pregnancy for women who do not use any contraceptive.

If you are worried about possible side effects with NORPLANT you should discuss this with your doctor or nurse.

[...] 

When to contact your doctor

You should contact your doctor or clinic right away if you have: severe lower abdominal pain; heavy vaginal bleeding; arm pain; pus or bleeding at the insertion site, indicating infection; expulsion of an implant; episodes of migraine, repeated bad headaches or blurred vision; or delayed menstrual cycle after a long interval of regular cycles. Absence of periods after regular cycles may be a sign of pregnancy.

Notes

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