

University of Pennsylvania **ScholarlyCommons**

Undergraduate Humanities Forum 2018-2019: Stuff

Penn Humanities Forum Undergraduate Research **Fellows**

5-2019

From Icon to Bygone: The Rise and Fall of the Diaphragm in Twentieth-Century America

Lea Eisenstein University of Pennsylvania

Follow this and additional works at: https://repository.upenn.edu/uhf 2019



Part of the <u>Arts and Humanities Commons</u>

Eisenstein, Lea, "From Icon to Bygone: The Rise and Fall of the Diaphragm in Twentieth-Century America" (2019). Undergraduate Humanities Forum 2018-2019: Stuff. 5. https://repository.upenn.edu/uhf_2019/5

This paper was part of the 2018-2019 Penn Humanities Forum on Stuff. Find out more at http://wolfhumanities.upenn.edu/annual-topics/stuff.

This paper is posted at Scholarly Commons. https://repository.upenn.edu/uhf 2019/5 For more information, please contact repository@pobox.upenn.edu.

From Icon to Bygone: The Rise and Fall of the Diaphragm in Twentieth-Century America

Disciplines

Arts and Humanities

Comments

This paper was part of the 2018-2019 Penn Humanities Forum on Stuff. Find out more at http://wolfhumanities.upenn.edu/annual-topics/stuff.

From Icon to Bygone: The Rise and Fall of the Diaphragm in Twentieth-Century America

Lea Eisenstein
2018–2019 Wolf Humanities Center Undergraduate Research Fellow
University of Pennsylvania

Senior Honors Thesis in Health and Societies

Advised by Professor Beth Linker and Professor Meghan Crnic

Spring 2019

Table of Contents

Acknowledgments	3
Introduction	5
Chapter I: Placing the Pessary	
Chapter II: Fitting the Diaphragm into Medical Practice	33
Chapter III: Too Complex, Too Simple	57
Chapter IV: The Diaphragm in a Post-Pill World	79
Chapter V: The Diaphragm as a Plot Device	102
Conclusion and Epilogue	116
Bibliography	121

Acknowledgments

I am indebted to an entire community of people who encouraged, helped, advised, and supported me throughout the first extended independent research and writing project of my academic career.

The research for this project was generously funded by the Wolf Humanities Center Fellowship, the LGBTQ & Gender Studies Undergraduate Student Research Grant, and the Jumpstart for Juniors Grant; and I would like to thank the Wolf Humanities Center, the Gender, Sexuality, & Women's Studies Department, and the Center for Undergraduate Research & Fellowships, respectively, for their financial support.

My research would not have been complete without the archival materials at the Countway Library Center for the History of Medicine and the Schlesinger Library on the History of Women in America and the help I received from the skillful archivists and librarians at both places. I am also grateful to Dr. Nick Okrent at Van Pelt Library for always making time to meet with me and providing leads to sources I would have never found otherwise.

I wish to also thank a host of friends and colleagues who read and commented on my writing, helped me locate research materials, and aided in countless other ways, including Isabelle Tersio, Kristina Brüning, Devon Christeleit, Colin Lodewick, Alisa Feldman, Sara Ray, Courtney Brennan, Dr. Ann Vernon-Grey, and my colleagues in the Senior Research Seminar in Health and Societies.

I must also express my gratitude to Professor Susan Lindee, Professor David Barnes, and Professor Anne Norton Greene in the Department of History and Sociology of Science, all of whom offered their advice and encouragement as seasoned scholars and generous academic advisors.

This thesis would not have been possible without my brilliant advisors, Professor Beth Linker and Professor Meghan Crnic. Professor Linker opened my eyes to the field of the history of women's health, and inspired in me a love of historical research that has sustained me throughout my undergraduate career. She has championed and guided this project from its very inception, when I first got the idea to study the diaphragm in my sophomore year. Despite some personal obstacles and limitations—including a planned sabbatical during the 2018-2019 academic year—she enthusiastically agreed to advise my thesis and consistently went out of her way to make herself available to me as an advisor and mentor. Professor Crnic eased me into the independent research process, helped me craft proposals, provided indispensable comments on my chapter drafts, and helped me dig myself out of every small moment of crisis I encountered while writing (of which there were many).

Lastly, I would like to thank my friends and family for listening to me endlessly wax poetic about the diaphragm, of all things, for asking questions, and for cheering me on throughout it all. Above all, I have to thank my parents for trusting me to study what I love.

Introduction

"The pill brought on a sexual revolution," narrates Meryl Streep in the second episode of HBO's documentary *Makers: Women Who Make America*. Sandwiched between segments about changing gender roles within marriage and the passage of *Roe v. Wade*, the 2013 documentary presents the oral contraceptive pill as a panacea—the defining moment in the history of gender, sex, and sexuality. "The pill," echoes *Ms. Magazine* co-founder Letty Cottin Pogrebin, "was our liberation."

It is a narrative uttered so often it has nearly become a matter of fact: the birth control pill paved the way for a sexual revolution that would forever change the status of women and relations between the sexes. The little round tablet was the hand that undid the shackles of biology, liberating heterosexual women both romantically and socially. Before then, the fates of sexually active women were predetermined by their fertility. As author Judy Blume contends in the documentary, "fear of getting pregnant kept most of us virgins."

The problem with this grand narrative is that it is an oversimplification. It fails to capture the very real contraceptive options men and women used to prevent pregnancy before the oral contraceptive pill became a pharmaceutical mononym. To be sure, the pill did increase access to birth control and improve its social acceptability in significant ways.² And yet, what gets lost in the dominant history is that a parallel, first-wave feminist revolution—centering around a

⁻

¹ "Part Two: Changing the World," *Makers: Women Who Make America*, directed by Barak Goodman, PBS, February 26, 2013.

² For more on the history of the oral contraceptive pill, see: Elaine Tyler May, *America and the Pill: A History of Promise, Peril, and Liberation* (New York: Basic Books, 2010); Elizabeth Siegel Watkins, *On the Pill: A Social History of Oral Contraceptives, 1950-1970* (Baltimore: Johns Hopkins University Press, 1998); Lara Marks, *Sexual Chemistry: A History of the Contraceptive Pill* (New Haven: Yale University Press, 2001); Jonathan Eig, *The Birth of the Pill: How Four Crusaders Reinvented Sex and Launched a Revolution* (New York: W. W. Norton, 2014); and Holly Grigg-Spall, *Sweetening the Pill: Or how we Got Hooked on Hormonal Birth Control* (Alresford: Zero Books, 2013).

different paradigm shift in birth control technology—took place a half-century earlier.³ In the 1910s and 1920s, first-wave feminist leader Margaret Sanger upheld a different contraceptive as an icon of all that could be possible for women if they could only control their fertility: economic security, bodily autonomy, political involvement, and free love. That contraceptive was the vaginal diaphragm.

Cheap to manufacture, simple to instruct, effective, and free of side effects, the diaphragm is a small rubber disc inserted into the vaginal canal that prevents pregnancy by obstructing the cervical opening and preventing the introduction of sperm into the uterus. When used in combination with spermicide, as is generally recommended, it provides a chemical contraceptive effect as well. A century ago, Sanger and her allies distributed these devices illegally in women's health clinics, doctors' offices, and drug stores as they fought to legalize contraceptive materials and information—both of which were federally banned in the United States between 1873 and 1936 under the Comstock Act. Women who wanted to control their fertility and medical providers who believed in family planning relied on the diaphragm for decades prior to the birth control pill's release in 1960. It remained a popular choice later in the century, too, with 17.1% of all contraceptive users reporting to have used it in 1980.4

.

³ For more on first-wave feminism, Margaret Sanger, and the birth control movement of the early twentieth century, see: Carole R. McCann, *Birth Control Politics in the United States, 1916 - 1945* (Ithaca: Cornell Univ. Press, 1999); Nancy Cott, *The Grounding of Modern Feminism* (New Haven: Yale University Press, 1987); Linda Gordon, *The Moral Property of Women: A History of Birth Control Politics in America* (Urbana: University of Illinois Press, 2002); James Reed, *The Birth Control Movement and American Society: From Private Vice to Public Virtue* (Princeton: Princeton University Press, 2014); Rosemarie Petra Holz, *The Birth Control Clinic in a Marketplace World* (Rochester: University of Rochester Press, 2012); Peter Engelman, *A History of the Birth Control Movement in America* (Santa Barbara: Praeger, 2011); Ellen Chesler, *Woman of Valor: Margaret Sanger and the Birth Control Movement in America* (New York: Simon & Schuster, 1992); and Joan Marie Johnson, *Funding Feminism: Monied Women, Philanthropy, and the Women's Movement, 1870-1967* (Chapel Hill: University of North Carolina Press, 2017).

⁴ Kimberly Daniels and William D. Mosher, "Contraceptive Methods Women Have Ever Used: United States, 1982-2010." *National Health Statistics Reports* no. 62 (Feb 14, 2013):11.

How, then, did the diaphragm's legacy get buried in our cultural narrative? Perhaps it has something to do with our collective understanding of contraception today. By the dawn of the twenty-first century, diaphragm use had plummeted dramatically. According to the Centers for Disease Control and Prevention, only 3.1% of women had ever used the diaphragm between 2006 and 2010.⁵ Since the most popular diaphragm on the market, the Ortho All-Flex, was discontinued in 2013, only one pharmaceutical company producing the device remains. As the word "birth control" becomes ever more synonymous with hormonal pills, injections, patches, rings, and intrauterine devices (IUDs), the diaphragm has become virtually inaccessible to those wary of biology-altering contraception.⁶ I and most people my age reached young adulthood without ever being taught what a diaphragm is and how it is used.

The question of what happened to the diaphragm and why it has been all but forgotten formed the genesis of my project. It has taken me back over 150 years in time, when the modern, rubberized version of the device first emerged in the United States in the mid-nineteenth century. I worked forward through decades of socialist struggle, eugenic medicine, feminist uprising, and public health crises over the course of the twentieth century to better understand why most young adults who came of age in the twenty-first century have never encountered this once-essential piece of the contraceptive puzzle.⁷

⁵ Daniels and Mosher, "Contraceptive Methods Women Have Ever Used," 11.

⁶ For recent journalism about narrowing access to the diaphragm, see: "Bad News for Diaphragm Lovers," Bedsider, April 30, 2014; Emily Shire, "What Caused the Death of the Diaphragm?" The Daily Beast, July 3, 2017; Elise Pillion, "It's Way Harder than it should be to Get a Diaphragm," The Cut, September 22, 2016; Elizabeth Kissling, "Where'd the Diaphragm Disappear to?" Ms. Magazine Blog, June 24, 2010; and A. J. O'Connell, "The Rise and Fall of the Diaphragm." AlterNet, March 24, 2016.

⁷ For more on the intersections between first-wave feminism and socialist movements in the early twentieth century, see: Engelman, A History of the Birth Control Movement in America; McCann, Birth Control Politics in the United States; Gordon, Woman's Body, Woman's Right; Reed, From Private Vice to Public Virtue; and Joan M. Jensen, "The Evolution of Margaret Sanger's 'Family Limitation' Pamphlet, 1914-1921," Signs 6, no. 3 (April 1, 1981): 548-567. For more on eugenic medicine, see: Daniel J. Kevles, In the Name of Eugenics: Genetics and the Uses of Human Heredity (Berkeley: University of California Press, 1986); Diane B. Paul, Controlling Human Heredity: May 2019, Wolf Humanities Center Undergraduate Research Fellowship 7 Lea Eisenstein, College of Arts & Sciences, 2019

But as I dug deeper into the history, the question that really mattered most was not how or why it disappeared, but rather what it represented to those who made, distributed, and used the technology, and what they lost in its absence. This line of inquiry steered me into a project that performs both a material and social history of the diaphragm, analyzing an object with a history that tells a story about our society and how it evolved.

On one level, I examine the technology for what it is, describing the producers, dispensers, and users of the product. I consider how the device physically changed—or really, resisted change—over a period of more than a century from the angle of material culture. The historical continuity of the diaphragm's design, I argue, was the very element that ultimately comprised its downfall. Clever manufacturers, resolute medical researchers, and discerning women have always sought out contraception that was better—something easier to use, or more effective at preventing pregnancy, or less invasive, or cheaper—than what preceded it. Even though it generally worked as a form of birth control, preventing pregnancies with few side effects, the diaphragm stood still in the face of everything that represented progress. Whereas contraceptive-using Americans in the early years of the twentieth century understood the stability of the diaphragm's design as an emblem of its reliability—why fix what's not broken?—this attitude gave way to the widespread cultural belief during the 1940s, '50s, and '60s that same material stability was more symptomatic of stagnation. To doctors, pharmaceutical companies, and women alike, the technology seemed frozen in time, a physical token of arrested development in the science of birth control.

¹⁸⁶⁵ to the Present (Atlantic Highlands: Humanities Press, 1995); and Rebecca M. Kluchin, Fit to be Tied, (New Brunswick: Rutgers University Press, 2009). For a discussion of the women's health movement during the secondwave feminist movement, see: Wendy Kline, Bodies of Knowledge: Sexuality, Reproduction, and Women's Health in the Second Wave (Chicago: University of Chicago Press, 2010).

On another level, I consider the diaphragm as not just a material object, but a social and cultural artifact. I use the technology as a lens through which to glimpse the nation's attitudes towards reproduction, sexuality, gender, race, class, and above all, power. Implicated in the question of what happened to the diaphragm are inquiries about the control over reproduction, at the level of both the individual and the American population. The history of the diaphragm reveals both silent and overt truths about who was trusted with the power of contraceptive knowledge and materials in different contexts and at different points in time. Because the device was inherently female-controlled, the institutions of American law and medicine simultaneously supported its use when birth control facilitated the national agenda, and placed barriers to its availability when it did not. Legal restrictions on the manufacture, sale, and use of diaphragms under the Comstock Act of 1873 sought to wrest power from the laymen and women whose practice of contraception threatened the growth and flourishment of the still-expanding nation; but even after the device became fully legal to make and use in 1936, it did so only on the condition that doctors had control over who got a prescription to buy one. But regardless of the channels that took it from maker to user, no middle man—no matter how much authority he (and it certainly was almost always men) held—there would never be a way to control how, when, where, with whom, for what purpose, and whether a woman used it. Unlike any other form of birth control, female agency was baked directly into the diaphragm's design, a quality which could be either a virtue or a detriment in the eye of the beholder.

This project, moreover, aims to shift the focus of the history of contraception, placing emphasis on a method that has been largely overlooked. Previous scholarship on the history of sexuality and contraception presents the diaphragm as a primitive technology that women used only sparingly and grudgingly in the first half of the twentieth century. The diaphragm's role in May 2019, Wolf Humanities Center Undergraduate Research Fellowship

May 2019, Wolf Humanities Center Undergraduate Research Fe Lea Eisenstein, College of Arts & Sciences, 2019 University of Pennsylvania Margaret Sanger's fight to place birth control into the hands of physicians in order to legalize contraception is well-documented, as is its precipitous fall from the good graces of both doctors and women in the shadow of higher-tech hormonal interventions like the oral contraceptive pill.

But precisely what happened to the diaphragm's popularity after 1960 has not been studied in great detail, and the device's role in the women's health movement of the 1970s has been all but neglected. Moreover, historians of birth control have not examined the diaphragm's significance in popular culture. Even after its usage rates began to wane in the 1990s with the rise of the AIDS panic, the device remained firmly lodged in the cultural conscious, making its mark on the storylines of pop-culture touchstones like *Seinfeld* and *Sex and the City*.

Technologically-oriented historians of birth control have tended to gravitate towards more invasive, high-tech contraceptive subjects, such as the pill, IUD, injection, and sterilization. These histories are important ones, to be sure, but they tell only a partial history of contraception and women's agency.

.

⁸ While Andrea Tone's *Devices and Desires*, James Reed's *From Private Vice to Public Virtue*, Linda Gordon's *Woman's Body, Woman's Right*, and Janet Farrell Brodie's *Contraception and Abortion in Nineteenth-Century America* all discuss diaphragm advertisements in popular print media of the late nineteenth and early twentieth century, none address depictions of the diaphragm later in the twentieth century in literature, women's magazines, films, and on television. In the cases of Reed and Gordon, this is partly due to the fact that their books were published in the mid-1970s, before film and television media began to mention the diaphragm in the 1980s and 1990s. One notable exception is Beth Widmaier Capo's *Textual Contraception*, which includes some analysis of American literature that features diaphragms and diaphragm insertion in depictions of sex. Also see: Beth Widmaier Capo, "Inserting the Diaphragm in(to) Modern American Fiction: Mary McCarthy, Philip Roth, and the Literature of Contraception," *The Journal of American Culture* 26, no. 1 (March, 2003): 111-123.

⁹ For more on the history of the oral contraceptive pill, see footnote 2. For a discussion of Depo-Provera, see: Wendy Kline, "Bodies of Evidence: Depo-Provera and the Public Board of Inquiry," in Kline, *Bodies of Knowledge*. For the history of sterilization, see: Kluchin, *Fit to be Tied*; and Joanna Schoen, *Choice and Coercion: Birth Control, Sterilization, and Abortion in Public Health and Welfare* (Chapel Hill: The University of North Carolina Press, 2005). For a history of the infamous Dalkon Shield IUD and subsequent controversy, see: Karen M. Hicks, *Surviving the Dalkon Shield IUD: Women V. the Pharmaceutical Industry*, (New York: Teachers College Press, 1994).

I take a different approach, positioning the diaphragm at the center of my analysis. By doing so, I argue for not only the diaphragm's relevance to the historiography of sexuality and contraceptive technologies, but its significance as an object of critical inquiry in its own right.

This thesis tells a story about people who had a stake in the availability and use of the diaphragm—whether that stake was personal, political, or financial. It analyzes the technology from the perspectives of three major interest groups: manufacturers, distributors, and users. 10 Importantly, these categories of historical actors were never stable or sharply defined. In the late nineteenth century, while the contraceptive technologies were illegal, manufacturers were primarily entrepreneurial laymen and medical doctors working outside of accepted practice. By the mid-1920s, after Margaret Sanger helped to set up the first diaphragm manufacturing company on American soil, production of the technology was irreversibly placed into the hands of the pharmaceutical industry. Control over the distribution of the device changed hands from black-market peddlers in the late nineteenth century to feminist activist groups in the 1910s, '20s, and '30s; after the fall of the Comstock Act in 1936, pharmaceutical companies were the exclusive diaphragm manufacturers, and physicians became its gatekeepers with fitting and prescription protocols.

At times, however, the roles of the producer-distributor-consumer matrix blurred as each party struggled for control over the device. Even as physicians maintained authority over who

-

¹⁰ For more historical analyses of gender in relation to manual technologies, see, for example: Margarete Sandelowski, *Devices and Desires: Gender, Technology, and American Nursing* (Chapel Hill: University of North Carolina Press, 2000); Ruth Schwartz Cowan, *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave* (New York: Basic Books, 1983); Ruth Oldenziel, *Making Technology Masculine: Men, Women and Modern Machines in America, 1870-1945* (Amsterdam: Amsterdam University Press, 1999); Nina Lerman, Ruth Oldenziel, and Arwen P. Mohun, *Gender and Technology: A Reader* (Baltimore: Johns Hopkins University Press, 2003); and Andrea Tone, "Making Room for Rubbers: Gender, Technology, and Birth Control before the Pill," *History and Technology* 18, no. 1 (Jan 1, 2002): 51-76. For more on medical technologies, see: Joel D. Howell, *Technology in the Hospital: Transforming Patient Care in the Early Twentieth Century* (Baltimore: Johns Hopkins University Press, 1995).

was able to obtain a prescription, non-medical professionals in the pharmaceutical industry produced knowledge about when, how, and on whom the device could be used. At the same time, lay women users questioned and resisted the medical establishment's claims to contraceptive expertise, insisting on their ability to fit and use their diaphragms all on their own.

I argue, therefore, that the diaphragm was not simply an inert object used to prevent pregnancy in another era. Instead, it was a technology with a dynamic past, a technology made and remade to fit the ideals of those who believed it would benefit them, whether directly or indirectly. Here, the diaphragm fitting process serves as a serendipitous metaphor for the overarching theme I address. Just as a physician fitted the successively sized disc to the individual patient, each assemblage of actors recast the device's qualities in a light befitting of their objectives. In other words, while the material qualities of the device remained relatively static, the diaphragm's value to different interest groups ebbed and flowed throughout time, acting almost like a blank screen onto which beliefs about expertise and agency could be projected.

This project follows the diaphragm's historical trajectory in the United States chronologically, beginning with its modern conception in the mid-nineteenth century and ending at the close of the twentieth century. Chapter I describes how the diaphragm evolved from the popular gynecological pessary, a non-contraceptive tool used by physicians to treat uterine displacements. The small technical change that turned a medically-sanctioned device into an illicit contraceptive set a precedent for appropriating and adapting the technology to fit its manufacturer's, distributor's, or user's agenda. Chapter II demonstrates the salience of the diaphragm in the American birth control movement of the 1910s, '20s, and '30s, led by Margaret Sanger. I reveal that Sanger and her feminist allies actively and strategically made the device into 12 a medical technology, a move which simultaneously fortified the authority of physicians and achieved the feminist goal of legalizing birth control.

In Chapter III, I argue that as scientists and physicians gained increasing authority over human reproduction in the 1940s and 1950s, they came to see the diaphragm as a contradictory technology that was at once too simple for modern medical standards and too complex for poor, disabled, uneducated, non-white, or otherwise marginalized women to reliably use. Chapter IV examines the diaphragm's renaissance as an icon of the women's health movement in the 1970s after newer "sophisticated" contraceptives came under fire for their dangerous side effects. Chapter V traces the diaphragm's demise at the end of the twentieth century, and explains its curious afterlife as an icon of young, autonomous womanhood in 1990s television.

The narrative I advance is, in truth, not a story of the diaphragm's disappearance per se. Rather, it is an account of acceptance, neglect, and reclamation of a technology at the hands of its producers, distributors, and consumers. The project therefore does not provide a definitive, concrete answer to the question of why the diaphragm disappeared in the twenty-first century. There is no big reveal or Hollywood ending, no Eureka moments or even panacea pills. Rather, the social history of the diaphragm dispels the myth that medicine, technology, and society are linear and progressive. In the diaphragm we find an example of a now-medical device that is both timeless and intensely context-dependent, highly resilient and entirely subject to its temporal and spatial environment. It is a puzzling case study of how material simplicity and continuity of design has allowed this contraceptive technology to "fit" in so many different times, places, and hands, while failing to do so in other contexts. It is a technology that has created opportunities for people to wield agency, expertise, and control and renegotiate the very meanings of these categories.

Chapter I: Placing the Pessary

Introduction

When news outlets reported on the FDA approval of a newly designed contraceptive diaphragm, Caya, in 2015, many expressed surprise that such an old, outdated birth control method might be revisited and produced anew in the twenty-first century. "A vintage birth control method is back," proclaimed one headline, noting in the article below that Caya is a good choice "if you're into the old-school." Another article called it "a hormone-free blast from the past," a true "dinosaur of contraceptive methods" that seems "positively retro" to the modern woman. 12

Indeed the diaphragm, more so than any other birth control method still existing in the twenty-first century, seems tethered to the midcentury zeitgeist. However, the history of the diaphragm stretches back much further than the 1950s, '60s, and '70s. It is in fact one of the oldest contraceptive methods described in recorded history. Women have mechanically prevented conception by inserting occlusive devices into their vaginas prior to sex for millennia. Historians of sexuality and contraception enthusiastically cite Casanova's colorful tale of using a hollowed-out lemon half as a diaphragm-like apparatus in the eighteenth century, while others note that ancient Egyptians practiced a similar method using crocodile dung centuries earlier.¹³

The contraceptive diaphragm as we know it today emerged as a best-selling commercial product in the United States in the mid-to-late nineteenth century, alongside major revolutions in

¹¹ Marie Lodi, "A Vintage Birth Control Method is Back," *Jezebel*, July 8, 2015.

¹² Zahra Barnes, "Diaphragms are Back in Style—Here's Why You might Want to Try One," *Self*, November 2, 2016

¹³ See, in particular, Norman E. Himes, *The Medical History of Contraception* (New York: Schocken Books, 1970). Himes was the first American expert on the history of contraception, and his book outlined these early iterations of the diaphragm, which subsequent histories have cited.

industrialization and mass-production of cheap materials. And yet, while scholars have written extensively on these historical developments to explain why the contraceptive trade exploded in the last quarter of the nineteenth century, equally important was the rise of gynecology and its role in medicalizing vaginal instruments called pessaries. ¹⁴ This chapter situates the diaphragm in a broader material history of the evolution of vaginal technologies. I explain how the diaphragm entered mass-production and gave rise to a contraceptive black market under the Comstock Act in nineteenth-century America. Moreover, I contend that the fledgling medical specialty of gynecology helped to popularize vaginal devices beginning in the 1860s, thereby providing non-medical experts the opportunity to subversively appropriate and tweak non-contraceptive medical technologies to create illegal contraceptive diaphragms.

The Diaphragm: Early Origins

Scholars trace the invention of the modern diaphragm—the commercial one we recognize today—back to a German physician in private practice named Peter Johannes Wilhelm Mensinga, who published writings about his invention under the pseudonym C. Hasse. So the story goes, he was the first person to mold the device from vulcanized rubber in 1882, making it flexible enough to be comfortable, and durable enough to remain intact for an extended period of time, and provide it as a contraceptive technique to his clients.¹⁵

⁻

¹⁴ Brodie's *Contraception and Abortion in Nineteenth-Century America* is one of the few works on the history of contraception that notes the extent to which non-contraceptive gynecological pessaries were used by women in the nineteenth century. See, in particular, pages 219-222.

¹⁵ Vern L. Bullough, "A Brief Note on Rubber Technology and Contraception: The Diaphragm and the Condom," *Technology and Culture* 22, no. 1 (1981): 105. Bullough incorrectly dates Mensinga's invention as 1842. This date is repeated in *Devices and Desires* and other published works that cite the Bullough, though Mensinga's publications under the name C. Hasse and other records of his birth and death, in combination with the invention date of vulcanized rubber in 1843, reveal that this periodization is impossible, and was most likely a typographical or clerical error. The error may have added to confusion about the true inventor.

The device and its basic disc-like design would eventually take Mensinga's name as it became a popular import to the United States in the early twentieth century. Some scholars, however, note that earlier recorded iterations of the technology make the question of who truly invented the diaphragm a complicated one. For example, many point to Friedrich Adolphe Wilde, another German doctor, and his written descriptions of a similar contraceptive instrument in 1836, which more closely resembled a cervical cap. In the United States, a general physician named Edward Blisse Foote published writing about his "womb veil" invention, available via mail-order request, as early as 1864.¹⁶

Beers' Hoop

A discussion of why the commercial birth control market surfaced and subsequently

inflated in the mid-nineteenth century
would be incomplete without noting
the profound reorganization of the
American economy and social structure
brought on by the Industrial
Revolution. Interestingly, the
American birth rate had begun to
descend even before the Industrial
Revolution truly took hold. Some
scholars thus assert that the trend
toward smaller families and the
concomitant demand for contraception
was brought on by the widespread
belief that humans possessed the ability to

manipulate and control their environment.

I.B.Beers, Prerenting Conception. IV 94,729. Patented Aug. 28,1846



Figure 1: John B. Beers, Preventing Conception, U.S. Patent 4729, issued August 28, 1846.

Industrialization and the desire to limit family sizes were two results of this cultural ideology.¹⁷ The decline in fertility occurred primarily among white couples, and most notably those in the middle and upper classes, thanks to heightened awareness of fertility control methods through popular marriage, hygiene, and domestic care literature.¹⁸ In terms of technological developments, the decisive moment in the history of contraception is Charles Goodyear's

¹⁷ Reed. From Private Vice to Public Virtue, 5.

 ¹⁸ Brodie, Contraception and Abortion in Nineteenth-Century America, 5-6, 79, 86.
 May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019
 University of Pennsylvania

invention of vulcanized rubber in 1844. This was the material catalyst that set the foundation for the emergence of the mechanical contraceptive trade by allowing for cheaper and easier mass-production of rubber goods.¹⁹

However, what remains to be explained is the fact that Americans were indeed making, using, and selling diaphragms that looked remarkably similar to modern iterations prior to the invention of vulcanized rubber. A patent filed by John B. Beers of Rochester, New York in 1846, for instance, reveals that the technological principles of the modern diaphragm—a hoop covered with an impermeable veil that covers the cervix—were already in use prior to the explosion of the vulcanized rubber market. Beers fashioned his "wife's protector" from wire hoop "covered with oil-silk, or some other thin membranous substance," and attached the disc to a handle to assist insertion and removal.²⁰ Notably, Beers asserted that his instrument was designed solely for the purpose of "preventing conception," and although he did not claim to be a medical expert, he knew that his device worked by "[covering] the os uteri, thus entirely preventing the semen from entering the uterus."²¹ That he thought to apply for a patent shows that there was a market in the United States for devices like his, and he intended to not only make and use them himself, to but sell them to others.

The Rise of Gynecology

^{1 (}

¹⁹ Tone, *Devices and Desires*, 57.

²⁰ John B. Beers, Preventing Conception, U.S. Patent 4729, issued August 28, 1846.

²¹ Beers, Preventing Conception. Church records show that Beers may have practiced medicine or dentistry, but this is not mentioned at all in the patent he submitted for the Wife's Protector. Moreover, medical licensing and accreditation systems underwent vast changes later in the nineteenth century. During Beers' lifetime, medical practitioners still struggled for financial stability and professional prestige, meaning that Beers' profession in the medical field did not necessarily distinguish him with the kind of social authority practitioners receive today. For more on changes in medical schooling, practice, and prestige throughout the 19th century, see Starr, *The Social Transformation of American Medicine*, 30-59.

Beers' patent is proof that a contraceptive trade existed in the first half of the nineteenth century, but this sector became a more prominent—and controversial—one after 1860. The economic and social changes precipitated by the industrial revolution in the United States, as well as the availability of materials that allowed for mass production of rubber goods, while important, are only part of the context that gave rise to the diaphragm's advent. Equally critical to the diaphragm's origin story was the rise of the gynecological medical specialty and its role in medicalizing vaginal instruments, like the pessary. In the nineteenth century, physicians used the term "pessary" to denote any object that was placed in the vagina, generally for the purpose of supporting the uterus.

Historians of medicine tend to gloss over the role of the pessary in nineteenth-century medical practice, and in most histories of birth control, mention of the device occupies little more than a footnote.²² But it is difficult to overstate just how deeply embedded in the foundation of gynecological medicine the device was, and how profoundly this institutional endorsement of the technology affected its intellectual and material accessibility to non-medical populations. As the gynecological specialty rose to prominence through the establishment of women's hospitals and focused medical journals in the 1860s, mechanical vaginal technologies saw both a greater acceptance and higher demand because gynecological practice nearly entirely depended on them.²³

_

²² See, for example: Deborah Kuhn McGregor, From Midwives to Medicine: The Birth of American Gynecology (New Brunswick: Rutgers University Press, 1998); Deborah Kuhn McGregor, Sexual Surgery and the Origins of Gynecology: J. Marion Sims, His Hospital, and His Patients (New York: Garland, 1989); and Deirdre Cooper Owens, Medical Bondage: Race, Gender, and the Origins of American Gynecology (Athens: The University of Georgia Press, 2017).

²³ McGregor, From Midwives to Medicine, 126.

Before widespread availability of anesthesia and asepsis allowed them to safely access the internal female organs, obstetrician-gynecologists could do little to radically or permanently "fix" the majority of the problems they diagnosed. At the time, accepted medical theory supported the idea that the uterus was the predominant organ in the female body, and that imbalances in other body systems could be traced back to disturbances in the womb.²⁴ As a result, physicians ascribed most female complaints in the physical and psychological (or "nervous") realm to a diseased, displaced, or dysfunctional uterus.²⁵ Dr. Hugh Lenox Hodge, a pioneering practitioner and professor of American gynecology, held representative views of the female body in the mid-nineteenth century. In his book *On Diseases Peculiar to Women:*Including Displacements of the Uterus, Hodge asserted that "far too often, has attention been riveted on organs, as primarily and essentially diseased, which are remote from the real source of mischief. Very often have diseases of the uterus been referred to the ovaries, to the kidneys, to the liver, heart, lungs, spinal marrow, and even to the brain!"²⁶

Although their treatment options were limited, OB/GYNs' financial security and place in the medical profession nevertheless depended on the continuous presentation of these faulty wombs. In order to treat many, if not most, gynecological complaints, they turned to a non-invasive intervention: the vaginal pessary. While the pessary and the basic principle behind it had been used throughout history as something of a folk remedy to mitigate feelings of pressure

_

²⁴ McGregor, From Midwives to Medicine, 137

²⁵ For example, a doctor in 1870 described a female patient suffering from both melancholia and uterine displacement, "in whom the melancholia disappeared when the uterus was returned to its proper place." He also described two other cases "in which melancholia was cured by the use of a pessary, the depression returning in them whenever the pessary was removed." In Henry Maudsley, "Bulstonian Lectures on the Relations between Body and Mind, and between Mental and Other Disorders of the Nervous System," *The Lancet* 95, no. 2439 (May 28, 1870): 761-762. Also see: "Society Reports: Report on Obstetrics and Diseases of Women," *Medical Examiner* (April 1, 1873): 88.

²⁶ Hugh Lenox Hodge, *On Diseases Peculiar to Women: Including Displacements of the Uterus*, Second edition (Philadelphia: Henry C. Lea, 1868), 101.

and pain associated with weakened pelvic floor muscles, OB/GYNs seized the therapy as the virtual hallmark of their profession.

The vaginal pessary provided a fast, reversible, and relatively safe way to address the most commonly diagnosed illnesses among women, like "prolapsed," "retroverted," "anteverted," "fallen," or "wandering" uterus. In fact, Hodge owed much of his status as one of the founding fathers of American gynecology to his endorsement of these devices, having invented an eponymous model of the instrument that quickly became one of the most popular pessary designs. As the field of obstetrics and gynecology grew in size and authority, so too did the popularity of its chief therapeutic technology. One general practitioner and critic of the gynecological specialty incredulously noted in an editorial that "the Transactions of the National Medical Association for 1864, has figured one hundred and twenty-three different kinds of pessaries." He added, "pessaries, I suppose, are sometimes useful, but there are more than there is any necessity for."²⁷

It almost goes without saying that women were quite probably diagnosed with and treated for uterine diseases with far more frequency than they actually suffered from them. Pessaries were almost certainly introduced into bodies that did not need them, sometimes with the effect of causing more harm than good. For example, a medical report from 1881 presented a case in which a 39-year-old Irish immigrant woman died after a neglected pessary had become implanted into her upper vaginal wall over a period of ten years and caused a septic infection.²⁸

²⁷ "Raid on the Uterus," Journal of Materia Medica 6, no. 11 (Nov 1, 1867): 323.

²⁸ T. E. Satterthwaite, "Reports of Societies," *Medical Record* 20, no. 26 (Dec 24, 1881): 717. Another doctor in 1892 reportedly "said he often found rubber pessaries in the vagina, where they had remained a long time, but he had never [until now] met with a case in which a hollow glass ball ... had remained in for twenty-five years." In Egbert H. Grandin, "Transactions of the New York Academy of Medicine: Section on Obstetrics and Gynecology," *The American Journal of Obstetrics and Diseases of Women and Children* 25, no. 1 (January 1, 1892): 89.

This was far from uncommon. Medical journals from the mid-to-late-nineteenth century abound with case studies of seriously ill female patients who are later found to have had a pessary embedded in their flesh after years of neglect.

This kind of bad press, even alongside glowing reviews from physicians who performed miracle cures with the simple device, had a lasting effect on the pessary's reputation in the medical community. It did not help that providers often used the term "pessary" imprecisely, sometimes lending the name to devices that more closely resembled dangerous prototypes of the IUD, called "wishbone pessaries" because of their forking shape. Another such instrument that was commonly yet speciously labeled as a pessary was the "uterine sound," a slim rod designed to be forcibly pushed through the cervical opening and partly or fully inserted into the uterus, a procedure with a high risk of perforation or infection. Many victims of this malpractice were poor, non-white, and immigrant women who saw unlicensed or inexperienced "quack doctors" because they could not afford a specialist's fee, or were otherwise treated as human guinea pigs for experimental gynecological treatments.²⁹

Physicians were met with cases of life-threatening illnesses and injuries due to the misuse of these supposedly safe and reversible mechanical interventions with alarming frequency, prompting dozens of impassioned calls to action in medical journals across the United States.

According to one New Hampshire physician in 1866, the medical obsession with pessaries was tantamount to a "raid on the uterus." Criticizing OB/GYNs for "[making] the abnormal conditions of the uterus a specialty," he quipped, "I do think that this filling the vagina with

-

²⁹ For more on the maltreatment of black, enslaved, Irish, and immigrant women by gynecologists, see: Owens, *Medical Bondage*; and Deirdre Cooper Owens, "Perfecting the Degraded Body: Slavery, Irish-Immigration and American Gynaecology," in *Power in History: From Medieval Ireland to the Post-Modern World*, edited by Anthony McElligott, Liam Chambers, Ciara Breathnach, and Catherine Lawless (Dublin: Irish Academic Press, 2011).

traps, making a Chinese toy shop of it, is outrageous."³⁰ A quarter-century later, another physician reflected back on the early days of the specialty, describing it as a period marked by the "pessary craze."³¹

And yet, medical case studies from the period suggest that a significant number of patients who were given pessaries to alleviate physical discomfort were satisfied with their treatment. For example, in a hospital report published in the *Medical and Surgical Reporter* in 1863, one OB/GYN practicing in Philadelphia made note of three recent cases he had seen. Two were described as Irish widows, and one simply "married." In every single case, the treatment centered around the placement of a "ring" pessary. "The patient returned a week later," the physician wrote regarding Case 1, "to report herself entirely relieved." Case 2, who suffered from the appearance of a tumor and her own uterus descending into her vagina and appearing externally between her legs, "returned to say that the bloody discharge has ceased, and to express herself delighted with the change in her condition." Three months after begin given a pessary for back pain due to a prolapsed uterus, Case 3 described her condition to the doctor as "complete relief." 32

Women were not simply passive receivers of the device. In fact, much to the chagrin of pessary critics, many patients approached their doctors specifically requesting the insertion of a pessary, or otherwise complaining of a uterine ailment that would warrant the treatment. As one New York physician put it in 1870, "Nothing is more common than for patients to complain of falling of the womb and of cancer, when they do not exist." Some opponents of the instrument

³⁰ "Raid on the Uterus," 323.

³¹ C. D. Palmer, "The Present Status of Obstetrics and Gynaecology," *Medical and Surgical Reporter* 66, no. 25 (June 18, 1892): 966.

³² J. H. Sherk, "Hospital Reports: Procidentia Uteri," *Medical and Surgical Reporter* 10, no. 11 (July 11, 1863): 159.

³³ T. G. Thomas, "Diseases of Women," *Medical and Surgical Reporter* 23, no. 23 (December 3, 1870): 451.

may have even believed that patients' interest in this kind of treatment was the chief cause of its overrepresentation. For example, in an article published in *The Cincinnati Lancet and Clinic* in 1891, a physician and critic of Hugh Lenox Hodge's uterine-centric theory of gynecology lamented "that this pessary craze still has a firm hold, not only upon women, but clings tenaciously to the majority of the profession."³⁴

Tinkering with Technology

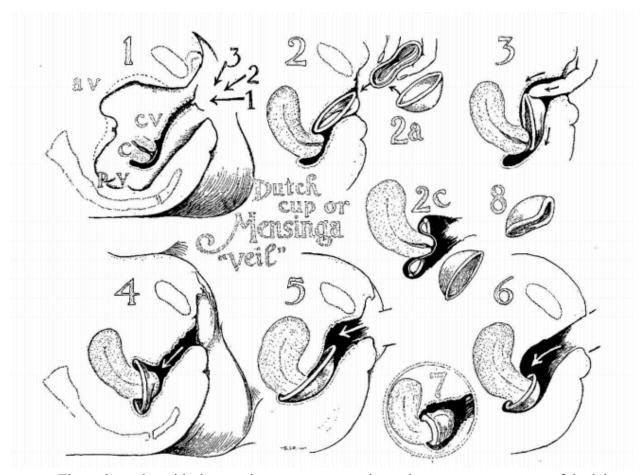
Regardless of whether it was hated or championed by doctors, the fact was that by the 1860s, the pessary had earned a place in medical discourse and practice. Indeed, "few subjects," Hodge maintained in 1862, "have occupied professional attention more than these instruments." The pessary's explosion into not only medicine but popular knowledge in the 1860s was a critical development for the small, private, and decentralized contraceptive trade because it provided the perfect opportunity to envelop a condemned object within an approved one—both materially and intellectually. In other words, the ready availability and knowledge of medical pessaries created both a space on the market where diaphragms could hide in plain sight, as well as the technological infrastructure for entrepreneurs to manufacture their own contraceptives for public consumption. Just as the word "pessary" could be used by physicians to refer to either a vaginal instrument or an intrauterine device, the term carried the same ambiguity when used in public discourse.

Both legitimate, anti-contraceptive medical providers and non-medical diaphragm makers and sellers could equally claim the title of "pessary" to describe their technologies; indeed, they were nearly indistinguishable. The only quality that set a diaphragm apart from any other pessary

³⁴ "Some Fallacies in Gynecology," *The Cincinnati Lancet and Clinic* 27, no. 1 (July 4, 1891): 18.

³⁵ Hodge, On Diseases Peculiar to Women, 384.

was that it had to include a sheath over the general form that covered the cervix. Those interested in making the contraceptive nature of their device known might have called their product an "occlusive pessary," "womb veil," or "diaphragm pessary." To coin one's product a "Mensingastyle pessary" would afford the product name recognition as a high-quality style of diaphragm popularized in Germany and Holland.³⁶



Throughout the mid-nineteenth century, men and, to a lesser extent, women, of the laity

Figure 2: Illustration by Robert L. Dickinson, "Contraception: A Medical Review of the Situation." *American Journal of Obstetrics and Gynecology* 8, no. 5 (1924).

were making, using, and selling diaphragms for the explicit purpose of preventing conception. It

³⁶ Bullough, "A Brief Note on Rubber Technology and Contraception," 105.
May 2019, Wolf Humanities Center Undergraduate Research Fellowship
Lea Eisenstein, College of Arts & Sciences, 2019
University of Pennsylvania

is difficult to ascertain just how many couples used birth control methods of any kind in the nineteenth century, much less how many used diaphragm pessaries specifically. Most of the historical evidence pointing to criminal sales and purchases of womb veils and female protectors is concentrated in major cities like New York, where Anthony Comstock's "vice suppressors" roamed on high alert. However, documented instances of women discussing their contraceptive practices reveal that occlusive pessaries were available even in far flung areas of the expanding Western United States. For example, in a correspondence from 1885, a woman living in the Dakota Territory advised her curious friend in Ohio to obtain a rubber pessary.

You want to know of a sure prevenative [sic] ... Well now the thing we [use] (when I say we I mean us girls) ... are called a Pessairre [sic] or female prevenative if you don't want to ask for a "pisser" just ask for a female prevenative. They cost one collar [sic] when Sis got hers it was before any of us even went to Dak. She paid five dollars for it. The Directions are with it.³⁷

Not only did the letter's writer have immediate access to the device in the Dakota Territory, she also knew that her friend would find one just as easily in Ohio if she only knew what to ask for. Moreover, the correspondence implies that there were numerous contraceptive options of variable quality to choose from, and it was not easy to determine which would be "a sure prevenative." The Dakota woman's network of female friends and family—"us girls"—navigated a complex and inconsistent market by establishing the best and worst methods among themselves from experience.

Prior to the passage of the Comstock Act of 1873, customers would have likely procured their diaphragms from someone like hobbyist inventor John Beers, who submitted his patent for the "wife's protector" under the heading "Preventing Conception," and most likely peddled the

³⁷ Lisa Grunwald and Stephen J. Adler, eds., *Women's Letters: America from the Revolutionary War to the Present.* New York: Dial Press, 2005), 399.

product using equally obvious language.³⁸ Although such items were produced and advertised freely, they were still, to be sure, clandestine objects, lacking official approval by any authoritative institution, such as churches, organized medicine, and the law. Yet there were no explicit laws, statutes, or regulations in place to stop manufacturers like Beers or his clients from sustaining their relatively local, independent, and contained contraceptive markets. Transactions that occurred privately between entrepreneurs and local customers who had heard about the products via friends and family would have no reason to be disciplined, as the very existence of the contraceptive market would have likely been unknown to anyone who was not actively seeking contraceptive goods and services.

It was only with the rise of local newspapers and mail-order catalogues across the expanding United States in the mid-nineteenth century that contraception became a true commercial industry. With new print venues in which to advertise their goods and services, contraceptive entrepreneurs began to expand their businesses beyond their local communities. By the 1860s, ads for devices with names like "uterine elevators" were circulating through major cities and small towns alike across America.³⁹ Women seeking to prevent unwanted pregnancy needed only to open her local newspaper to discover where to send for a pessary or marriage hygiene manual that would arrive to her home by mail in just a few weeks. Alongside such advertisements appeared promotions for other goods and services that, until that point, had existed almost exclusively in urban underbellies.

It was this highly visible proliferation of commercialized sex—and the abortion and fertility control markets that opened up in consequence—that caused social reformers to take

_

³⁸ Beers, Preventing Conception.

³⁹ "Robinson's Improved Pessary," *Cambridge Chronicle,* February 14, 1850. May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019 University of Pennsylvania

action against what they perceived as the commodification of obscenity. ⁴⁰ The most passionate of these reformers was Anthony Comstock, a United States Postal Inspector who founded the New York Society for the Suppression of Vice in 1873 to combat social ills ranging from drinking and gambling to prostitution and pornography. That same year, he lobbied for an expansion of existing federal obscenity regulations, which for the first time included a long list of specific vices that provided grounds for federal prosecution. Contraception was one of the list items. The Comstock Act, passed in March of 1873, officially outlawed the dissemination of "obscene" materials, including all literature or objects that could be used to prevent conception or induce abortion. ⁴¹

Charles Goodyear, the American inventor of the rubber vulcanization process, knew how essential pessaries had become to medical professionals, and listed "pessary" in the chapter of medical and surgical applications for his invention in a promotional catalogue he published in 1852.⁴² What Goodyear may not have realized was that once he had provided the idea of using his material to produce pessaries, it would set into motion a new era of contraceptive technology. It was not long before birth control entrepreneurs began to manufacture womb veils in the same manner; one needed only a supply of cheap rubber and a press to shape it into the desired disc. The combination of cheap new materials and novel, widely-circulating marketing venues created a new incentive for entrepreneurial laymen, physicians, and rubber goods manufacturers to enter the illicit contraceptive business in spite of the looming threat of the Comstock laws. Comstock did not institute the statutes simply to make a point; throughout the rest his life, until his death in

-

⁴⁰ Tone, Devices and Desires, 13.

⁴¹ Janice Wood, "Physicians and Obscenity: A Struggle for Free Speech, 1872-1915," *Journalism History* 36, no. 1 (Mar 22, 2010): 36.

⁴² Charles Goodyear, *Applications and Uses of Vulcanized Gum-Elastic*, Volume II (New Haven: Self-published, 1853), 174

1915, he made a veritable livelihood out of tracking, baiting, trapping, and prosecuting its violators.⁴³

While the imprecision of the term "pessary" created disagreements and confusion in the medical community, the very same quality did wonders for savvy entrepreneurs in the business of contraceptives, particularly as the law changed. Although Comstock and his acolytes combed carefully through printed materials to sniff out obscenities, advertisements for diaphragms continued to litter the pages of newspapers and catalogues. That is because vendors cleverly capitalized on the dual-purpose definition of the word "pessary," realizing that, while consumers determined to procure contraception would know that the pessary was of the occlusive sort, a vice reporter would be hard-pressed to prove that the instrument was of a nefarious nature, rather than a therapeutic medical device sanctioned by licensed physicians. For example, an ad for a "Mizpah pessary" that ran in the *Philadelphia Inquirer* in March of 1899 billed the product as "an unexcelled uterine supporter" with no other discussion of its functional purpose. 44 Women who had been referred to the device by a friend in-the-know would immediately recognize the

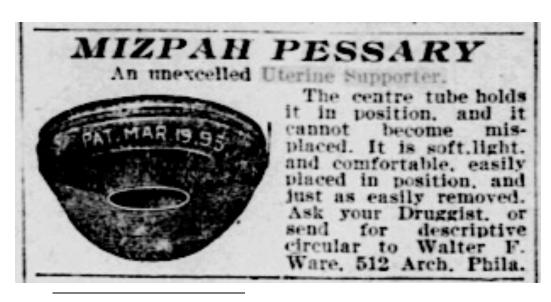


Figure 3: "Mizpah Pessary Advertisement," *Philadelphia Inquirer*, March 2, 1899.

⁴³ Andrea Tone, *Devices and Desires*, p.32-40.

 ^{44 &}quot;Mizpah Pessary Advertisement," *Philadelphia Inquirer*, March 2, 1899.
 May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019
 University of Pennsylvania

"Mizpah" name as a popular brand of occlusive pessary that fit tightly over the cervix. Women who were unfamiliar with the coded nomenclature, on the other hand, would discern from the picture of the pessary that it was of the "closed ring," or contraceptive, kind.

Importantly, though, nothing about the ad explicitly noted that the device was a contraceptive and not a legitimate medical device to support a prolapsed uterus. After all, there was no prohibition on the manufacture and sale of medical devices, even if they related to the health of sexual organs. Thus, while John B. Beers was able to patent his Wife's Protector for the express purpose of preventing conception in 1842, inventors after the passage of the Comstock Act were forced to patent their contraceptive devices creatively, taking care to use medical language and coded phrases to blur the line between medical technology and contraceptive technology.

For instance, a pessary patent issued in 1902 described the proposed device to be "adapted for various uses in the medicinal and surgical arts ... applicable in connection with the treatment of uterine disorders and ailments." The attached design drawings clearly indicated that the device, when placed, would entirely occlude the cervical opening, giving it a contraceptive effect. The inventor never addressed this possibility in his description of the product. However, he deliberately covered his tracks by remarking that "the appliance may be used as a tampon to suppress uterine hemorrhage," almost like a modern-day menstrual cup, or otherwise "for the application of medicines in cases of diseases of the [cervical] os or cervix uteri." Fortunately for the entrepreneurial inventor, the inherently multipurpose nature of the pessary—whether as a medical or contraceptive technology—created the perfect conditions for him to break the law

-

 ⁴⁵ Dayve Boris De Waltoff, Pessary, United States patent 705,392 filed January 5, 1901, and issued July 22, 1902.
 May 2019, Wolf Humanities Center Undergraduate Research Fellowship
 Lea Eisenstein, College of Arts & Sciences, 2019
 University of Pennsylvania

without fear of repercussion. Where a doctor might see a therapy for prolapsed uterus or diseased cervix, an aspiring mogul might see the scaffolding of a money-making contraceptive diaphragm.

Conclusion

Industrialization and the rubber vulcanization process were critical developments that made possible the invention, popularization, and commercialization of the modern contraceptive diaphragm in the mid-nineteenth century. However, it is also important to examine the intellectual ancestry of modern diaphragm technology, which begins with the non-contraceptive gynecological pessary. The simple vaginal instrument in many ways helped to beget the specialty of gynecology by providing a technology around which physicians could solidify their expertise. They popularized the device as a cure-all medical therapy, and in doing so, unknowingly created opportunities for the laity to appropriate it, tinker with it, and use it for their own ends as a contraceptive in disguise under repressive obscenity laws. The ambiguous, multipurpose nature of the pessary would prove to be its most significant quality for years to come, allowing its producers, consumers, and distributors to adapt it to any agenda they saw fit.

Chapter II: Fitting the Diaphragm into Medical Practice

Introduction

Once the diaphragm pessary was well established on the contraceptive black market, a growing faction of radical feminists set their sights on making the device and information on how to use it legal and accessible to all women. To do this, they would have to come face to face with the repressive Comstock Act, which framed contraceptive materials and knowledge as obscene and immoral. In the 1910s, they organized into the "birth control movement," and under the leadership of a shrewdly determined Margaret Sanger, they championed the diaphragm as a technology of social uplift, female control, and feminist liberation. To meet their political goals, however, Sanger and her allies collaborated with the medical profession, a tactic that required significant compromise. They ceded control over the diaphragm to physicians in an effort to reposition the object as a life-saving medical device and respectable technology that required the expertise of physicians.

Ironically, the technical knowledge concerning the diaphragm—which doctors claimed as medical expertise—was actually largely possessed by non-medical interest groups with a stake in the device's legalization: namely, radical feminists, progressive academics, and diaphragm manufacturers. In the fight for legal contraception, these networks of actors within and outside of the institution of medicine pooled their knowledge and resources to rebrand the diaphragm as a medical technology, and position the revered physician as the sole authority on when, how, and on whom it should be used.

This chapter will follow the changing hands of technical expertise on the vaginal diaphragm during the birth control movement, from radical activists in the 1910s to respected physicians after the demise of the Comstock Act in 1936. Just as entrepreneurs leveraged the May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019

blurred line between the medical pessary and contraceptive diaphragm to sell products in the nineteenth century, I argue that the diaphragm's adaptability was essential in the birth control movement because it allowed activists to successfully adapt it from a tool of radical feminist resistance to a legitimate, physician-controlled therapy.

Seizing the Means of Reproduction: Radical Beginnings

As I explained in Chapter I, American men and women worked in opposition to the mandates of the Comstock Act of 1873—which banned all contraceptive materials and literature—by discreetly making, selling, purchasing, and using diaphragms under the guise of a medical pessary trade. Beginning at the turn of the twentieth century, however, certain blocs of radical activists began to rise up more directly against Comstock's anti-obscenity laws. In the 1910s, existing groups of socialists, suffragists, and anarchists, mostly based in New York City, where Comstock reigned his greatest terror, united and organized to form a cohesive resistance against the Comstock Act that focused primarily on the goal of legalizing contraception. They called their crusade "the birth control movement," and women comprised its most outspoken leaders and central base. Margaret Sanger, a young obstetrical nurse and ardent socialist feminist, effectively took the lead of the group, and she was willing to go to great lengths to see the dream of birth control realized. Having witnessed the plight of countless impoverished or overworked mothers who had too many children to handle in the clinics of New York City, Sanger had "renounced [the] palliative work" of nursing and "resolved that women should have knowledge of contraception." Women, she contended, "have every right to know about their own bodies."46

-

⁴⁶ Margaret Sanger, *My Fight for Birth Control* (New York: Farrar & Rinehart, 1931), 57. May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019 University of Pennsylvania

Beginning in 1914, Sanger and her allies in the movement, which included socialist hero Emma Goldman, were known for employing fearless tactics that often resulted in jail time, fines, and exile. They promoted their political agenda chiefly through propaganda campaigns, publishing their own periodicals and pamphlets and distributing them directly to women and other leftist activists. Borrowing ideals from socialism and first-wave feminism, the radical movement promoted birth control as an essential means of not only exercising one's own freedom to enjoy sex without becoming pregnant, but to resist political and economic oppression. For Sanger, Goldman, and their supporters, the explicit goal of the movement was to "to inject into the working woman a class independence which says to the Master produce your own slaves, keep your religion, your ethics and your morality for yourselves ... we refuse to be longer enslaved by it."47 The only foolproof path to socioeconomic liberation, they believed, was to make information on methods of contraception freely accessible in legal, monetary, and intellectual terms—in other words, to democratize it. "I have tried to give the knowledge of the best French and Dutch physicians," Sanger wrote in the introduction of the 1917 edition of her informational Family Limitation pamphlet, "translated into the simplest of English, that all may easily understand."48

Although the movement supported women in seeking out and using any kind of birth control available to them, they were also mindful that the various existing methods varied widely in safety, efficacy, accessibility, and price. Throughout the Comstock Era, Americans accessed contraception exclusively on the black market. The most common methods included the condom, the sponge, coitus interruptus, the safe period (now known as the rhythm method), the

⁴⁷ Sanger quoted in Joan M. Jensen, "The Evolution of Margaret Sanger's 'Family Limitation' Pamphlet, 1914-1921," *Signs* 6, no. 3 (April 1, 1981): 550.

⁴⁸ Margaret Sanger, *Family Limitation*, sixth edition (New York: Self-published, 1917), 2. May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019 University of Pennsylvania

suppository, the douche, and the closely related cervical cap and diaphragm. Early literature from the birth control movement provided information on all of these methods, carefully weighing the pros and cons of each. However, even at this early stage, one method rose above the rest: the diaphragm, which was not only known among the women to be effective, but also fairly easy to use, cheap, imperceptible to the partner when placed, and, most importantly, entirely controlled by the woman. In the technical sense, the diaphragm was a perfect fit for the socialist and feminist goals of the movement.

At the time, the device was still known commonly by its more elusive name, the occlusive pessary, and it came in a number of structural styles. ⁴⁹ The most common kinds of contraceptive pessaries were Mensinga pessaries, which were modeled after the ones used in European clinics and most closely resemble the modern-day diaphragm, and French pessaries (also called Mizpah or cap pessaries), which were smaller and fit more like a cervical cap. ⁵⁰ As I explained in the Chapter I, the various kinds of pessaries were not easily distinguishable by name, and that was by design. Under the Comstock Act, the contraceptive market was entirely illicit and therefore highly unregulated. Any variety of rubber vaginal device that mechanically prevented insemination was considered a pessary, making the distinctions between what is now known as the separate cervical cap and diaphragm blurry or nonexistent. Any manufacturer in the rubber industry or lay entrepreneur with access to a rubber press could and did stamp out

-

⁴⁹ As discussed in Chapter I, pessaries could be either contraceptive or non-contraceptive. Occlusive pessaries comprised the former type, as they "occluded" or blocked the cervical opening.

⁵⁰ The major difference between a cervical cap and diaphragm is size. Cervical caps fit snugly over the mouth of the cervix, while diaphragms occlude the cervix by lying flat across a larger portion of vaginal wall. At this time, chemical contraceptives like spermicidal cream or jelly were not yet commercially developed for simultaneous use with the diaphragm or cap. However, sperm's ability to survive for several hours in the vaginal canal was understood, and "antiseptic" creams, pastes, and douches made of weak acids or quinine were strongly recommended after the removal of the device several hours post-coitus. For early examples of suggested diaphragm technique, see: Sanger, *Family Limitation* (sixth ed., 1917), 11-14, and Antoinette Konikow, *Voluntary Motherhood*, first edition (Boston: Privately published, 1923), 18-25.

numerous models of the devices—albeit of inconsistent quality—with ease. Feminist birth control crusaders warned their audiences to pay attention to the make and source of diaphragm and cervical cap goods on the market in lieu of industry regulations and quality control standards.

Even despite its inconsistent quality on the black market, Sanger especially favored the occlusive pessary, which she first encountered on a reconnaissance trip to Holland in 1915.

While there, she became acquainted with Dr. Johannes Rutgers, a socialist medical doctor who prescribed contraception in his practice. He recommended the Mensinga pessary to Sanger, who was inspired by the operation Rutgers had set up to distribute the device to as many women as possible. Rutgers not only provided pessaries and contraceptive instruction to his own patients at his city practice in The Hague, but he also trained non-physician midwives and nurses to do the same, giving them each the knowledge and skills necessary "to [start] a centre in the outskirts of The Hague." In fact, "there were already over fifty such centres, which Dr. Rutgers called 'clinics,'" providing contraceptive information and services "mainly for the benefit of the poor and the very poor."⁵¹

In a nation where "contraception was looked upon as no more unusual than we in America look upon the purchase of a toothbrush," Sanger saw the role of the Dutch gynecologist not as a technical expert with the exclusive knowledge and authority to distribute the pessary, but rather as a means of adding legitimacy to contraceptive technique and practice. ⁵² In fact, she noted, Holland's birth and mortality rates had begun to fall long before Rutgers and his acolytes began their organized clinical practices, indicating that women had successfully obtained and

-

⁵¹ Sanger, My Fight, 107, 108.

⁵² Sanger, My Fight, 108.

used pessaries and other methods without the skill of a gynecologist. But the value of the medical practitioner, in Sanger's eyes, was that their records offered "the great opportunity of giving to the world case histories or mass facts ... upon which scientific data could be based" to demonstrate the benefits of contraception.⁵³

Invigorated by what she saw in Holland, Sanger brought these new ideas back to the States and printed them in her own publications, heralding the pessary as a veritable icon of not only the practice of birth control, but socialist-feminist ideology as a whole. "In my estimation," she wrote in the 1917 edition of her informational *Family Limitation* pamphlet, "a well fitted

pessary is the surest method of absolutely preventing conception."⁵⁴ Not only was it highly effective at preventing pregnancy, but it was also "the most convenient, the cheapest, and the safest."⁵⁵ Throughout



French Pessary-slightly different from the American.

Figure 4: Illustration of Margaret Sanger's preferred contraceptive method in her $Family\ Limitation$ pamphlets

the 1910s, as the birth control movement began to gain steam, the price of a high-quality pessary dropped precipitously. By 1917, Sanger reported in her pamphlet that one of the best pessaries available "costs one dollar and a half at any reliable drug store," or about \$30 in today's money. However, unlike other existing mechanical methods that were safe to use, such as the condom (or "sheath" as it was called), the sponge, and suppositories, the pessary was reusable

⁵³ Sanger, My Fight, 108.

⁵⁴ Sanger, Family Limitation (sixth ed., 1917), 11.

⁵⁵ Sanger, Family Limitation (sixth ed., 1917), 11.

⁵⁶ Sanger, Family Limitation (sixth ed., 1917), 11.

for as long as it was intact. Moreover, as a simple, mechanical device, it was easy to democratize knowledge of what it was, how it worked, and how to use it. As Rutgers' Dutch clinic operation demonstrated, "any nurse or doctor will teach one how to adjust it; then women can teach each other." In these ways, the diaphragm was custom-fit to the socialist-feminist birth control movement's bottom-up, grassroots approach to liberating working class women.

Centering the Movement

However, the socialist utopian dream of distributing pessaries directly to women would prove to be short-lived. By the early 1920s, the political strategy of the birth control movement had dramatically transformed. The organized radical socialist wing of the greater women's rights movement had all but disintegrated due to wartime crackdowns by police, leaving moderate liberal birth control crusaders to strategize a way forward.⁵⁸ Margaret Sanger, who had traveled around Europe to gather information, supplies, and important contacts in countries with a thriving clinic culture, adapted quickly to the changing political landscape. If she wanted to continue to fight for the legalization of contraception, she would need to take the path of least resistance: a more centrist politics of birth control that could appeal to an audience beyond the working class and radical activists. Later editions of the once-militant *Family Limitations* pamphlet began to exhibit softened language that presented contraception as a pragmatic solution to a glaring social problem.

Whereas she once depended on grassroots organizing, word-of-mouth communication with the masses, and free distribution of literature, Sanger now turned to wealthy financiers to jumpstart her projects, and persuaded willing professionals and well-connected feminist

⁵⁷ Sanger, Family Limitation (sixth ed., 1917), 13.

⁵⁸ Jensen, "The Evolution of Margaret Sanger's 'Family Limitation' Pamphlet," 549.
May 2019, Wolf Humanities Center Undergraduate Research Fellowship
Lea Eisenstein, College of Arts & Sciences, 2019
University of Pennsylvania

socialites to distribute her literature.⁵⁹ She knew, however, that "the people of the United States would never be fully aroused to the needs of birth control until ... a clinic," made in the image of those she had seen in Holland, England, and Germany, "was also established here." On October 16, 1917, Sanger's dream was realized. She opened the doors of the illegally-operating American Birth Control League clinic in Brownsville, New York, "where contraceptive information could be obtained for all over-burdened mothers who wanted it." Sanger's turn towards the clinical space ultimately proved to be the defining moment of the birth control movement, marking a shift from radical tactics to centrist compromise. Sanger reimagined the clinic as the locus of the contraceptive revolution where birth control could be reframed as medical care. Recognizing the growing status of the male-dominated medical profession, Sanger knew that the most effective way to make contraception legal would be to transform it into a form of accepted medical care by placing it under the exclusive purview of physicians.

By 1922, Sanger had changed the text in her *Family Limitation* pamphlet to reflect a top-down approach to the acceptance and eventual legalization of birth control, taking a sharp turn away from the strategy of working-class self-empowerment she had promoted on the same pages just five years earlier. She assured readers—who by now comprised mostly progressive, middle-and upper-class married women and men—that the "general practice [of family planning] among married persons will shortly win full acceptance and sanction by public authorities, who will encourage the practice among the diseased and unfit and help to direct the movement into its proper channels." Moreover, she articulated her intention of the pamphlet and wider birth control

_

⁵⁹ Jensen, "The Evolution of Margaret Sanger's 'Family Limitation' Pamphlet," 554. For more on the development of first-wave feminism in the early twentieth century, see: Cott, *The Grounding of Modern Feminism*.

⁶⁰ Margaret Sanger, "Clinics, Courts and Jails," Birth Control Review 2, no. 3 (April 1918): 3.

⁶¹ Sanger, "Clinics, Courts and Jails," 3.

propaganda campaign as an effort "to conserve the lives of mothers and to prevent the birth of diseased or defective children," rather than to wrest power from bourgeois oppressors by exercising bodily autonomy.⁶² She had also removed rhetoric that promoted the pessary as a technology accessible to the masses, which laywomen users could learn and instruct as easily as a physician or nurse. Rather, the new *Family Limitation* advised, simply, "any nurse or doctor will teach one how to adjust it."⁶³

Unlike her previous grassroots advocacy through education and propaganda, Sanger's new approach was decidedly top-down. She and her followers strove to incorporate progressive ideals into existing societal institutions, rather than bringing about a revolution by handing the technologies of liberation directly to the masses. Although her writing had always positioned working-class families as the primary benefactors of legal birth control by reducing the financial strain of unwanted children, her arguments after 1920 were no longer aimed at working-class people themselves, but at the white upper and middle classes who held more social, political, economic, and cultural influence.⁶⁴ With a new audience came a new articulation of her goals. What Sanger once promoted as a technology of self-determination intended to help women lift themselves out of poverty and overwork she now recast as a technology that would subdue the proliferation of impoverished families. In other words, she presented the distribution of diaphragm as being in the best interest of the upper classes if they wanted to quell the breeding of the classes beneath them. The diaphragm remained "the surest [method] of preventing conception" in Sanger's estimation, though not as a class weapon.⁶⁵ In the new birth control

_

⁶² Sanger, Family Limitation (18th ed., 1922), 3.

⁶³ Sanger, Family Limitation (18th ed., 1922), 17.

⁶⁴ For more on Sanger's turn to upper-class women as philanthropic funding sources, see: Johnson, *Funding Eministry*

⁶⁵ Jensen, "The Evolution of Margaret Sanger's 'Family Limitation' Pamphlet," 551.

movement of the 1920s, the diaphragm was no longer just a tool for female control—it was a strategy of population control.

There were countless personal and political reasons for this tone shift, but the changing legal landscape was the most immediate. In August of 1920, the feminist movement had finally clinched the right to vote, and in the shadow of such a landmark victory, birth control crusaders were likely attuned to the possibility that their political struggle could run out of steam if they did not revitalize their campaign. But fortunately, advocates of contraception had seen a small victory of their own the previous year. Convicted of distributing contraceptive materials in violation of the Comstock Laws through her Brownsville, New York clinic, Margaret Sanger sought to overturn the charges by appealing her case. While the New York State Court of Appeals denied the appeal and upheld Sanger's charges, they expanded the wording of the law and ruled that contraception could be legally indicated by medical doctors exclusively "for the cure and prevention of disease."

With the choice of the open-ended word "disease"—which could theoretically denote any change in physiology or vital function—the Court considerably broadened the scope of acceptable medical applications of contraceptives. 66 Sanger quickly took advantage of the relaxed law. In 1921, Sanger established the American Birth Control League, a national organization to promote the creation of birth control clinics across the country. In 1923, she opened her first legal, physician-directed birth control clinic in New York, and in doing so, would begin to transform the diaphragm into a legitimate medical device. 67 At the same time, however, taking advantage of this loophole and getting diaphragms into the hands of more

_

⁶⁶ McCann, Birth Control Politics in the United States, 63-64.

⁶⁷ Tone, Devices and Desires, 58.

women required that physicians recast women's bodies as inherently weak and pathological, illequipped in many cases to handle the physical demands of pregnancy and childbirth.

Making the Diaphragm Medical

For Sanger and her middle- and upper-class supporters, the diaphragm—which was becoming more and more available in U.S. clinics by the day—represented new possibilities to increase birth control access that differed from the previously radical emphasis on female control. After years of fruitless activism, Sanger recognized that birth control could not reach the masses if it remained illegal; and leftist birth control activists could never convince lawmakers or judges of the need to legalize contraception with socialist or eugenic appeals alone. Here again, she saw in the diaphragm the potential to realize a different strategy. Already closely resembling the medical pessary, the diaphragm could be easily integrated into medical practice, as Sanger's visit to Dr. Rutgers' network of Dutch clinics had shown. If a medical authority constituted the source of knowledge on contraceptive technique and the distributor of contraceptive devices, then birth control could be rebranded as a medical intervention, rather than a prurient technology of feminist empowerment or population control.

After the 1919 court decision and a few false starts, Sanger opened the Clinical Research Bureau in New York City in 1923, and, being a nurse herself, reoriented her focus toward the institution of medicine. After searching in vain for a gynecologist to head the clinic, she hired Dr. Dorothy Bocker, a female physician specializing in physical education, as director. They served 1,208 women in their first year, and collected records for systematic research on the most effective contraceptive methods, as Dr. Rutgers did in Holland.⁶⁸ She funneled funding from

43

 $^{^{68}}$ Reed, The Birth Control Movement and American Society, 114.

progressive philanthropists and her own millionaire husband, Noah Slee, to Herbert Simonds, an engineer and friend of the couple, and put him in charge of the first American pharmaceutical company to manufacture diaphragms and spermicidal jelly—the combination of which Bocker's research proved to be the most effective contraceptive method.⁶⁹ In 1925, the Holland-Rantos Company went into production, providing Mensinga-style diaphragms and lactic acid jelly to birth control clinics across the United States, which were multiplying rapidly.

Remaking the diaphragm into a medical technology would not, however, prove to be an easy feat. Even after she gathered the resources to open the clinic, Sanger had few supporters within the medical community. Progressive medical practitioners were reluctant to take any stance on divisive issues regarding sexual morals for fear of losing public support. The medical profession, while holding tremendous influence in American society, was still at the mercy of public opinion and support. At the same time, physicians knew they could not control the spread of information—especially on methods like withdrawal and the safe period, or worst of all, makeshift or black-market devices—if they ignored the issue of contraception altogether.

Physicians could, however, control the quality and kind of information available to women, using their technical knowledge and social authority to give weight to certain methods, indications, and consequences of birth control use, while denigrating others by pronouncing them scientifically unfounded. In a 1923 issue of the *Journal of the American Medical Association*, three male physicians, writing on the behalf of the Chicago Gynecological Society, published the society's "unanimously approved" conclusions on how the profession should handle patients

⁶⁹ Tone, *Devices and Desires*, 127-129.

⁷⁰ James Reed, "Doctors, Birth Control, and Social Values: 1830–1970," in *The Therapeutic Revolution: Essays in the Social History of American Medicine*, edited by Vogel, Morris J. and Charles E. Rosenberg (Philadelphia: University of Pennsylvania Press, 1979), 112.

who desire information or materials for "the prevention of conception." They acknowledged that birth control literature, by law, should not be circulated among the general public without regulation. But they agreed that acceptable information could be given solely "by physicians, either privately or in existing clinics and dispensaries," and carefully noted that neither "special clinics" nor "nursing organizations" could be counted among reputable scientific sources. They also opposed "[a]ll mechanical devices used by the wife" wholesale—including the diaphragm. Thus, while they discouraged the indiscriminate spreading of information and any assisted, mechanical modes of preventing conception, these prominent gynecologists nevertheless considered themselves the only legitimate gatekeepers of information on contraception.

Although a substantial population of medical professionals were still apprehensive about accepting the diaphragm as a medical device, Sanger and her team eventually found a key ally in Dr. Robert Latou Dickinson, an esteemed New York-based gynecologist, who sought to bring medical contraception fully under the purview of trained, licensed physicians. He found common ground with Sanger in the desire to popularize the diaphragm through medicalization, and in 1924, published a comprehensive review of the available literature on the efficacy of various birth control methods. In this review, appearing in the *American Journal of Obstetrics and Gynecology*, Dickinson insisted that the Mensinga pessary, "fitted by a doctor, used for the occasion [of intercourse], and in proper cases, (best combined with a medicated jelly) claims minimal failures." In the diaphragm, Dickinson saw an opportunity not only to help women plan or prevent pregnancy, but to prove that, using expert knowledge of the body and ability to

7

⁷¹ Rudolph W. Holmes, Joseph L. Baer, and N. Sproat Heaney, "The Prevention of Conception," *Journal of the American Medical Association* 80, no. 8 (February 24, 1923): 573.

⁷² Robert L. Dickinson, "Contraception: A Medical Review of the Situation," *American Journal of Obstetrics and Gynecology* 8, no. 5 (1924): 602.

fit the device to each patient, "the medical profession alone" could ensure that the subject of contraception was "handl[ed] as a clean science, with dignity, decency and directness." With Dickinson's persistent encouragement, in 1937—one year after the dissolution of the Comstock Act—the American Medical Association recognized that contraception should be included in medical school curriculums.

Manufacturing Medical Expertise

On the evening of February 8, 1928, Dr. Antoinette Konikow, a graduate of Tufts Medical School and early member of the Birth Control League of Massachusetts, was arrested by the Boston Police Department, charged with "exhibiting articles used for the prevention of conception." The police alleged that Konikow had violated Massachusetts' interpretation of the Comstock Act by showing a "wishbone pessary," a device that acted as a hybrid cervical cap and intrauterine device, during her lecture entitled, "The Annual Course of Sex Hygiene and Sex Problems – For Women Only." Konikow, an active member of both feminist and communist organizations, had presented the device as an example of fraudulent black-market birth control; it was billed as a pessary, but was actually an IUD that was known to cause dangerous pelvic infections. Nevertheless, Comstock's "vice suppressors" apprehended her for displaying the materials.

_

⁷³ Dickinson, "Contraception: A Medical Review of the Situation," 584, 603.

Planche Ames, "Lawyers Seen in Re Dr. Konikow," February 20, 1928, box 1, folder K, Records of the Birth Control League of Massachusetts, 1916-1934, Schlesinger Library, Radcliffe Institute, Harvard University.
 Pre-trial materials, likely from meeting at Konikow's home between her arrest and trial in February 1928, box 1,

folder K, Records of the Birth Control League of Massachusetts, 1916-1934, Schlesinger Library, Radcliffe Institute, Harvard University.

Immediately after her arrest, Konikow used her feminist network to rally as many birth control crusaders as she could—feminists, community leaders, other physicians, and legal advisors—to support her. Blanche Ames, Konikow's friend and the first president of the Birth Control League of Massachusetts, was quick to realize that the legal case represented more than just Konikow's freedom as one feminist physician. Rather, Ames understood that a favorable outcome could change the legal status of birth control and give physicians the power to inform patients about contraceptive materials and technique. In order to gain the support of the Massachusetts medical community, Ames wrote prominent local physician and former president of the Massachusetts Medical Association, James Stone, on behalf of the defense committee supporting Konikow. She reasoned that,

Everyone knows that contraceptive articles are sold over the counter in drug stores. There is no regulation of restriction in this traffic which exploits the ignorance of men and women, whereas a physician warning patients against the harm of using them is arrested. The Committee was formed for the immediate purpose of helping Dr. Konikow in her serious predicament. It is not for propaganda of any sort ... It is organised to protect the right of a man or woman to consult a physician on sex problems and to protect the physician in giving advice and help.⁷⁶

With this argument, Ames leveraged Konikow's prosecution as a metaphor for the distrust of the entire medical profession. Thus, it would be in physicians' best interest to defend not only their right to learn and provide information regarding the human body and its processes as they see fit. Doctors, she implied, should have authority over reproductive knowledge and instruction, not politicians or law enforcers.

Thus, in order to protect the liberty of his profession in and show lawmakers that they cannot infringe on medical authority, Ames had one simple request: "Will the Medical

⁻

Association inaugurate the necessary change in the law, taking full responsibility?" It was the Boston Medical Association alone, she argued, that could successfully change the law, for it was necessary to "remove from this matter the influence of untrained reformers, who with the best intentions must be comparatively ineffective, and may make mistakes and alienate people who might be interested." Ames, an "untrained" feminist reformer herself, adopted Sanger's modus operandi, which assumed that the law could not be changed without doctors leading the way—even if it meant disassociating the case at hand from the larger birth control movement. But, as the very existence of Konikow's defense committee shows, this disassociation was only substantiated in appearance. Even as the strength of the organized birth control movement carried the case, Ames, Konikow, and their allies knew that it would have to do so silently in the shadow of physicians. Konikow's case is illustrative of a larger change in strategy across the birth control movement throughout the 1920s and 1930s: mobilizing key non-physician players in the movement to lend their expertise in service of legalizing a medical model of contraception.

By the late 1920s, the medical profession was slowly beginning to accept the diaphragm as a technology of both medical treatment and professional development. But those who decided to offer contraceptive services did not become experts on the device in their own right. Outside of the few physicians who supervised clinics and had dealt directly with diaphragm fitting, consultation, education, and prescription, most physicians in private practice across the United States knew little about the field of contraception beyond the immediate understanding of how the most effective methods worked. As late as 1936, consumer advocate Rachel Lynn Palmer and Dr. Sarah K. Greenberg noted that because most medical schools did not include

contraception in their curricula, "many women ... could give most doctors pointers as to the contraceptive technique."

Nearly all of the knowledge of diaphragm use was contained in written accounts and reports of European clinics and Sanger's Clinical Research Bureau, where data on contraceptive distribution, patient history, failure and success rates of different methods, and protocols and standards was recorded diligently. But before the American Medical Association deemed birth control a suitable topic for medical education in 1937, this information was not distributed to doctors through institutional channels. Medical schools did not teach the subject, and the most widely read professional journals refused to publish clinical studies of contraception, only occasionally allowing pharmaceutical companies to advertise their diaphragms and jellies on their pages.⁷⁸ The only true overlap between physicians and people with experience and research-based knowledge on diaphragm distribution was clinic supervisors, a miniscule population overwhelmingly composed of the few female doctors in the United States.

The preeminent diaphragm manufacturers in the pharmaceutical industry, therefore, for the most part did not turn to doctors with their questions about the contraceptive efficacy and patient experience of their products. Rather, they relied on the knowledge of silent figures driving the birth control movement beyond the clinic's doors. When the Holland-Rantos Company, the best-known pharmaceutical manufacturer of diaphragms in the United States, sought advice on how to market and design their products, they reached out to Norman Himes, a professor of economics, birth control enthusiast, and historian of contraception, as their expert

⁷⁷ Rachel L. Palmer and Sarah K. Greenberg, *Facts and Frauds in Woman's Hygiene* (New York: Vanguard Press, 1936), 225.

⁷⁸ Holland-Rantos, Co. began advertising their diaphragms and spermicide products in the *American Journal of Obstetrics and Gynecology* as early as 1935. For example, see: "Index to Advertisers," *American Journal of Obstetrics and Gynecology* 30, no. 4 (October, 1935).

consultant. Sanger, whose husband founded Holland-Rantos, and feminist birth control clinicians, meanwhile, had consciously dissociated from all pharmaceutical brands from the beginning. Knowing that her endorsement of any particular company would muddy its name with propagandistic associations, Sanger advocated for a highly rational, institutional approach to the birth control business, wherein pharmaceutical manufacturers would produce devices domestically, and distribute them directly and exclusively to physicians.

Acutely aware that the major weakness of the birth control movement was the gaps in knowledge of contraceptive technique among pharmaceutical companies, clinics, and private (mostly male) physicians, Himes acted as a liaison transmitting knowledge across these groups. He shared the goal of positioning physicians—who held the most social power—as the primary stakeholders and technical experts in the fight for legal birth control. What few outside the movement knew, however, was that while Holland-Rantos manufactured diaphragms and doctors vouched for their therapeutic utility, Himes worked behind the scenes to manufacture the notion that medical professionals possessed specialized expertise on how to most effectively and favorably wield diaphragm and jelly technology.

Himes saw an opportunity to advance the birth control movement's agenda by using the Holland-Rantos Company as a conduit through which he could promote knowledge of the diaphragm directly to a new cohort of medical students. Because contraception had yet to be incorporated into the educational and informational infrastructure of the medical institution, "the present clinics haven't a ghost of a chance of reaching these eager young men." He proposed to Simonds that Holland-Rantos distribute informational branded pamphlets—to which Himes

⁷⁹ Correspondence from Norman E. Himes to Herbert Simonds, January 13, 1930, box 29, folder 317, Norman E. Himes Papers, 1918-1956, Center for the History of Medicine, Francis A. Countway Library of Medicine, Harvard University.

contributed research, writing, and editorial advice—to newly-minted medical doctors, who had come of age in a cultural milieu that was more accepting of birth control than the cohort of male physicians who dictated medical curricula. The problem, in Himes' eyes, was that Holland-Rantos was "now reaching professional men thru the medical journals to a limited extent. But medical students ... seldom get much time to look at the current journals. And it is the young men who are particularly receptive to the idea of doing something about contraception." 80

Himes also recognized that Holland-Rantos and their competitors in the pharmaceutical industry had much to gain by making physicians into experts on diaphragm use. He therefore sought to communicate his knowledge of the research to doctors through Holland-Rantos' publications in the most digestible manner. When providing feedback on a draft of a promotional and informational booklet, Himes suggested that "a short table of rules for patients might very well be drawn up for physicians as an aid in their instructions to patients." That physicians understood how to most effectively use a diaphragm and instruct their patients was important to the success of both Holland-Rantos and the greater birth control movement, as they "would get in return ... the increased reliability of your goods because an increased number of patients would follow instructions."

In certain instances, Holland-Rantos doubted the knowledge of the physicians with whom they collaborated, favoring Himes' advice on how to appeal to and educate physicians. For example, while producing a booklet on the diaphragm intended for physician use, Anne Kennedy, Holland-Rantos' secretary, confided in Himes that the company "had some doubts in

0.0

⁸⁰ Correspondence from Norman E. Himes to Herbert Simonds, January 13, 1930.

⁸¹ Correspondence from Norman E. Himes to Herbert Simonds, April 11, 1929, box 29, folder 316, Norman E. Himes Papers, 1918-1956, Center for the History of Medicine, Francis A. Countway Library of Medicine, Harvard University.

regard to the explanation of the technique in relation to the use of the diaphragm. Percy Clark [the company's resident physician, who published under the name Le Mon Clark] insists that the constrictor cunni muscle must be identified for a proper fitting." Instead of asking a second opinion from another physician or clinic supervisor, Holland-Rantos wrote directly to Himes, asking, "Will you please let us have your view on this point."

Thus, while physicians lent the appearance of medical legitimacy to the contraceptive diaphragm at a time when the propriety of legal birth control hung in the balance, medical education alone had little to do with the reality of prescribing and using vaginal diaphragms.

That is why Himes, an economist by trade with no medical training but extensive knowledge of the research on contraceptive clinics, was recognized by pharmaceutical manufacturers as the final authority on diaphragm expertise. His personal interest in making contraception legal, as well as his vast understanding of the operations of clinics, physicians, manufacturers, activists, legislators, and other academics within the greater birth control movement, motivated him to transfer his technical expertise to doctors efficiently through pharmaceutical company literature.

Survival of the Fittest

While birth control crusaders were using the medical establishment to bring their goals of legal birth control to fruition, physicians themselves also had much to gain in establishing authority over contraception. In the aftermath of the publication of the *Flexner Report* in 1910—a survey of American medical institutions that found the quality of medical education and practice to be wildly inconsistent—medical specialists felt pressured to prove their legitimacy in

⁸² Correspondence from Anne Kennedy to Norman E. Himes, April 2, 1929, box 29, folder 316, Norman E. Himes Papers, 1918-1956, Center for the History of Medicine, Francis A. Countway Library of Medicine, Harvard University.

the shadow of general practitioners.⁸³ What's more, physicians' wages had sharply increased during and after the Great War, making the profession more exclusive and prestigious.⁸⁴ Thus, obstetrician-gynecologists and family physicians gradually began to understand contraception not as a threat to the integrity of their medical specialty, but rather as a site for professional growth. Women who learned about contraception from their friends and family or through illegal advertisements in popular newspapers and "marriage hygiene" manuals would ask their local doctors about family planning if they were not in the vicinity of a city clinic. Those who did not know whether they could trust their provider with such sensitive requests might call or write to the American Birth Control League directly, where secretaries and writers would refer callers to a known diaphragm provider in their network of physicians across the country. In 1927 alone, League staffers answered 8,510 such letters "from mothers who were in need of birth control information because of poverty or ill-health." At the same time, the League received "the names of 1311 doctors who have expressed interest in our work or promised co-operation."

Demand within private offices grew, but physicians and clinicians were aware that women would avoid the potentially embarrassing, invasive—and, if it took place in a private practice, expensive—fitting and consultation if given the option. Many women still opted to purchase one of the numerous one-size-fits-all diaphragms sold over the counter at pharmacies or in catalogues, even well into the 1940s.⁸⁷ In order to get women into their offices, then, doctors

_

⁸³ Lawton R. Burns, Charles E. Rosenberg, and Rosemary Stevens, *History and Health Policy in the United States: Putting the Past Back In* (Piscataway: Rutgers University Press, 2006), 53-54.

⁸⁴ Starr, The Social Transformation of American Medicine, 260

⁸⁵ "What did the American Birth Control League Accomplish in 1927?" pamphlet, box 4, folder 45, Norman E. Himes Papers, 1918-1956, Center for the History of Medicine, Francis A. Countway Library of Medicine, Harvard University.

⁸⁶ "What did the American Birth Control League Accomplish in 1927?"

⁸⁷ Tone, Devices and Desires, 154.

needed to claim a superior product. What set physicians apart from any other diaphragm provider was their ability to fit the device specifically to the patient, taking into account her unique anatomy and idea of comfort. Moreover, they could walk the patient through the intimate and sometimes daunting process of insertion and removal step-by-step, making themselves available for questions and tips on technique.

Birth control manuals written by and for physicians throughout the 1930s reveal that the highly individualized nature of the doctor-fitted diaphragm made it the gold standard of contraception in the medical community. Dr. Bessie Moses, in her 1936 book Contraception as a Therapeutic Measure, described the operation of the Bureau of Contraceptive Advice in Baltimore, and credited much of its success to its rigorous clinical procedure—which, more often than not, took the form of a vaginal diaphragm fitting and consultation. Physicians budgeted "a half-hour to an hour ... to each new patient," and had them return for a second appointment one week later; if the patient seemed unsure or hesitant of her ability to place the diaphragm independently, "a third or occasionally a fourth [appointment] was required." Moses stressed that the clinical encounter needed to be involved, intimate, and rigorous, since "patience and thoroughness in teaching is an important factor in the type of results one gets in this sort of work."88 Moreover, for each patient, a "careful medical, social, and sex history was taken," and "questions were couched in language which the patient could easily understand." These practices, Moses explained, "made for a much better understanding and relationship between patient and physician than is usually possible."89

-

⁸⁸ Bessie L. Moses, Contraception as a Therapeutic Measure (The Williams & Wilkins Company: Baltimore, 1936),

⁸⁹ Moses, Contraception as a Therapeutic Measure, 4-5.

Dr. Le Mon Clark, a physician, consultant to the Holland-Rantos Company, and author of the 1939 book *The Vaginal Diaphragm: Its Fitting and Use in Contraceptive Technique*, additionally underscored the import of emotions in a successful clinical encounter. Recognizing that the vast majority of OB/GYNs performing the fitting and instruction procedure would be men, Clark emphasized that the patient "should always be properly draped so that only the vulva is exposed," as a matter of respect. He explained that the physician must be skilled in knowing how to teach the patient and when to recommend the device, "but above all, he must have a real sympathy towards the emotional rather than the purely physical or physiological problems of his patients." With such an empathetic approach, the clinical encounter served as an opportunity not only to provide therapeutic care to the patient, but also to reinforce her trust. "Remember!" Clark remarked, "The aim is to make birth control simple, easy, esthetically acceptable.

Conclusion

The material aspects of diaphragm technology made the device highly adaptable to the agendas of its many interest groups. Where radical feminists saw the potential for female control and self-determined socioeconomic uplift, centrist birth control crusaders later saw an opportunity for dignified family planning and population control. What made the difference in terms social acceptability and, eventually, legal reform was the fact that physicians succeeded in wielding the diaphragm as a technology of professionalization, allowing them to cement their

⁹⁰ Le Mon Clark, *The Vaginal Diaphragm: Its Fitting and use in Contraceptive Technique* (Chicago: The C.V. Mosby Company, 1939): 59.

⁹¹ Clark, The Vaginal Diaphragm, 14.

⁹² Clark, The Vaginal Diaphragm, 83.

jurisdiction over reproductive medicine. By insisting on the importance of individualized fittings and careful instruction, they solidified their authority over when, how, and on whom the device was used. As I will explain in the following chapter, this strategic move towards medicalization had profound consequences on user access when the culture and objectives of medical birth control changed. Importantly, though, physicians were only able to cultivate this technical knowledge with the help of a network of non-medical experts behind the scenes united by the common goal of legal birth control. And as a result, that path to legalization through medicalization was necessarily forged upon the premise that women's bodies and their processes were intrinsically pathological.

Chapter III: Too Complex, Too Simple

Introduction

Having succeeded in legalizing contraception by transforming the diaphragm into a legitimate technology of medical practice, Sanger and her allied birth control advocates anticipated a new order in which any woman who desired to limit her family could do so safely, easily, and without financial strain. By simply obtaining a diaphragm prescription at one's doctor's office or a local nonprofit clinic, anyone, they thought, could seize control over her reproductive future. And while they certainly regarded the end of Comstock's reign as a massive victory, they had no intentions of putting on the brakes. There were still clinics to establish, research to do, and developments to be made. Birth control advocates did not foresee that the medical institution that now controlled the diaphragm had its own goals and constraints—and not all of those aligned with feminists' original agenda to democratize contraceptive materials and knowledge and facilitate reproductive agency.

This chapter narrates the aftermath of the medicalization of the diaphragm. Once contraception was legalized, physicians championed the prescription-only diaphragm and jelly method as the best and most "scientific" contraceptive as they reaped its financial and professional benefits. And while the medicalization of the device helped expand access for women who could reach a doctor's office or nonprofit clinic, it simultaneously introduced more barriers to entry for others. On one hand, physicians facing pressure to intervene in a sensationalized "population boom" began to perceive the diaphragm and jelly as too complex for marginalized patients. This resulted in eugenically-minded prescribing biases. On the other hand, in an era of rapid medical and technological advancements, the diaphragm represented a lack of progress. I argue that the diaphragm therefore came to occupy a paradoxical space in 57 reproductive medicine during the Cold War era, setting the conditions for it to be overshadowed by the more "sophisticated" but less user-dependent oral contraceptive pill in later years.

A Brief Golden Age

After the fall of the Comstock Act in 1936, the diaphragm was officially inaugurated into medical practice. Despite material shortages during the Second World War, the device went into mass production as pharmaceutical companies jumped at the chance to profit off the newly licit birth control market. Under Sanger's leadership, a national network of academics, nurses, philanthropists, and feminist community leaders irrevocably imbued the diaphragm and spermicidal jelly duo with medical authority. The new standard in medical birth control was a distribution process that included a consultation, fitting, demonstration, and prescription, all given by a licensed physician, either in a private office or family planning clinic.

This era—the time between the legalization of birth control and the advent of the oral contraceptive pill—proved to be the height of the diaphragm's popularity. A diaphragm fitting and prescription was something of a rite-of-passage for young, white (and usually, but not always, married) women of reproductive age. The gynecologist, as the ceremonial leader, was tasked with inaugurating them into the world of sexual activity and personal responsibility. A diaphragm fitting appointment comprises a memorable scene in Sylvia Plath's famous novel, *The Bell Jar*, which chronicles a young, single woman's rocky transition from college to young adulthood in the 1950s. As she emerges from inpatient psychiatric treatment following a suicide attempt, the protagonist marks her newfound independence by using her benefactor's scholarship money to pay for a diaphragm and fitting at a doctor's office, which costs five dollars. With the intent of losing her virginity in the near future, the doctor's visit served as a liberating initiation

into womanhood. As the protagonist narrates, "I climbed up on the examination table, thinking: 'I am climbing to freedom.'"⁹³

Physicians in the 1930s and '40s also accepted the diaphragm with open arms, as the prescription diaphragm and jelly was by far the most lucrative contraceptive method for private practices. Unlike over-the-counter spermicidal solutions, douches, and condoms, prescribing a diaphragm ensured at least one preliminary appointment for consultation and fitting, and potentially even more if the provider insisted on follow-up appointments to ensure that the patient was using the device correctly. Physicians actively advocated for repeated checkups, and maintained that the efficacy of the contraceptive method was directly correlated to the intimacy and frequency of clinical encounters. For example, one OB/GYN writing in a 1943 issue of *The* Western Journal of Surgery, Obstetrics and Gynecology advocated for a standardized diaphragm fitting procedure that entailed three separate trips to the gynecologist's office. At the first appointment, patients would be given a pelvic examination, a consultation on the device, and a preliminary fitting. Then, they would be asked to return twice more within "two weeks, occasionally in as short a time as two days."94 Only during the third visit would the patient be given a physical diaphragm or prescription for the correct size—but not before the physician conducted multiple rounds of pelvic examinations, demonstrations, and tests to see whether the patient could correctly insert the instrument herself.

Privately practicing physicians had few restraints on their billing protocol, which made contraceptive distribution a remarkably attractive option. Until President Lyndon Johnson signed Medicaid and Medicare into law in 1965, health insurance was fairly uncommon in the United

-

⁹³ Sylvia Plath, *The Bell Jar* (Portsmouth: Heinemann, 1963), chapter 17.

⁹⁴ Nadina R. Kavinoky and Elizabeth U. Brown, "The Necessity of Repeated Examinations in the Fitting of Contraceptive Diaphragms," *Western Journal of Surgery, Obstetrics, and Gynecology* 51, (April, 1943): 140. May 2019, Wolf Humanities Center Undergraduate Research Fellowship

States, and almost nonexistent among the working poor. Americans paid out-of-pocket for most medical services and procedures, and visits to the gynecologist or family physician were no exception. Not only could doctors charge whatever met the market demand for repeated consultation, instruction, and fitting appointments, they could also turn a profit on the product itself. Doctors commonly purchased diaphragms in bulk from pharmaceutical companies and charged patients for their correct size at a steep markup. A report from 1937 revealed that physicians often increased the price of their diaphragms by anywhere from \$0.75 to \$3.50 (or between about \$13 and \$60 today).

But physicians also realized that repeated doctor visits were too costly and time-intensive for many poor and working women. Birth control clinics, like Sanger's Clinical Research Bureau and others supported by the American Birth Control League, served as cheaper and more efficient alternatives to the privately practicing physician for working-class women. In the same 1938 article in *The Western Journal of Surgery, Obstetrics and Gynecology* that advocated for a standardized three-visit fitting and prescription process in private medical practices, the author also noted that clinics must make "every effort ... to keep the maximum fee lower than the fees charged by private physicians trained to give this same service in the locality of the clinic." As such, "the fee to be paid [in the clinic] is determined according to the patient's income, [and] this amount covers all further examinations and instructions which may be required for the period of

-

 ⁹⁵ Starr, The Social Transformation of American Medicine, 333-334. Also see: Thomas Bodenheimer and Kevin Grumbach, Understanding Health Policy: A Clinical Approach (New York: McGraw-Hill Education, 2016).
 96 Tone, Devices and Desires, 132.

⁹⁷ Kavinoky and Brown, "The Necessity of Repeated Examinations," 140. Most physicians and clinics recommended at least one to two follow-up visits in addition to the original fitting and consultation appointment. For example, Cincinnati physician Regine Stix wrote in 1939 that patients were advised to come in one week after their initial fitting to ascertain how well she had mastered the technique, and then follow up every six months. See: Regine K. Stix, "Birth Control in a Midwestern City: A Study of the Clinics of the Cincinnati Committee on Maternal Health," *The Milbank Memorial Fund Quarterly* 17, no. 4 (Oct 1, 1939): 393.

a year."98 As Sanger had imagined with the opening of her first New York City clinic, affordable diaphragm fittings and consultations in clinics would ideally make the most effective contraceptive accessible to women of all socioeconomic classes.

And while clinic coverage of the entire country was spotty, services were gradually expanding. Within just two years of the 1936 *U.S. v. One Package* decision, there were 357 birth control clinics across the United States. In that year, Sanger's Clinical Research Bureau in New York City alone saw 15,000 cases, the vast majority of which were sent home with low-cost, clinician-fitted diaphragms and spermicide. ⁹⁹ Although the clinics were not immensely profitable for the physicians who worked there, manufacturers managed to make money by selling to both the high and low ends of the market. For example, Holland-Rantos Co., the diaphragm manufacturer established by Sanger's husband, baked birth control clinics' pricing protocol directly into their company design. The outfit sold their trusted diaphragms to physicians at a price high enough to subsidize the thousands more they gave away for free to American Birth Control League clinics, and to make a hefty profit at that. ¹⁰⁰

Pharmaceutical companies also benefitted from the new role of doctors as effective purveyors of their diaphragms in the medical marketplace. In medical journals in the early 1940s, an advertisement taken out by Federal Physician's Supply, Co., a Denver-based pharmaceutical company that manufactured the Arc brand diaphragm, reveals the financial incentives of both pharmaceutical companies and physicians to embraced the diaphragm in its early years as a licit medical device. The advertisement, disguised as an unsigned editorial titled "What Many Doctors Never Learn About Contraception," touted the diaphragm as a uniquely "ethical" means

98 Kavinoky and Brown, "The Necessity of Repeated Examinations," 140.

^{99 &}quot;The Accident of Birth." Fortune 17, no. 2 (February, 1938): 85.

¹⁰⁰ Tone, Devices and Desires, 131.

of drumming up business to a private medical practice. The anonymous editorialist quoted a nameless "Gynecologist and Obstetrician of commanding professional attainments" to make the point:

Suppose ... I perform for some patient a bang-up Ovariectomy. Suppose she goes so far as to praise me to a wide circle of her influential friends. The point is, *how many of her friends are ever going to need an Ovariectomy?* You see?

Now note the contrast. For another patient, I merely prescribe a diaphragm and spermacide [sic] but—and mark this well—I teach the patient so carefully, so thoroughly that she feels glowingly possessed of a knowledge and understanding that few of her friends can boast ... And when she talks, how many of her friends do you suppose will be calling my office for appointments? You could be—and I always am—surprised!¹⁰¹

Although the Arc brand appeared nowhere on the advertisement, its author subconsciously positioned diaphragm technology as a practical stand-in for all "Contraceptive Technique." The phrase implied that the method stood apart from all others by virtue of the technical knowledge required for its use that could be transmitted from doctor to patient. Indeed, it was the only method that ensured users would have face-to-face contact with a physician—the only method that depended not just on the technology, but also the technique. The advertisement was careful to note this special advantage of the diaphragm, reminding physician readers that "contraception *may* or may *not* be prescribed. The *important* point is this:—in a substantial percentage of cases the necessary examination and questioning will *uncover conditions definitely requiring correction*." The diaphragm was thus not only a money-maker in its own right, but practically a surefire way to get patients in the door and establish a loyal, returning client base.

¹⁰¹ "What Many Doctors Never Learn About Contraception: An Editorial," box 77, folder 13, MS Planned Parenthood Federation of America Records, 1918-1974, Sophia Smith Collection, Smith College Library. Emphasis original.

 ^{102 &}quot;What Many Doctors Never Learn About Contraception."
 May 2019, Wolf Humanities Center Undergraduate Research Fellowship
 Lea Eisenstein, College of Arts & Sciences, 2019
 University of Pennsylvania

Some diaphragm manufacturers, on the other hand, aimed at a different form of distribution, selling directly to consumers rather than through the approved medical channels of the private office or clinic. One of the most successful of these outfits was Lanteen Laboratories, a company based out of Chicago that surreptitiously sold different diaphragm and jelly products to both medical professionals and the lay public. They sold both a line of fitted Mensinga-style diaphragms with five-millimeter size intervals to physicians and clinics, and also various kits with one-size-fits-all cervical caps, diaphragms, and spermicidal jelly priced at three dollars (about \$50 in today's money) directly to women through mail-order catalogues. 103 It was illegal to sell materials as birth control outside of the clinical setting, but companies like Lanteen circumvented the law by printing product disclaimers like, "This Mensinga type diaphragm requires initial fitting by a physician," even while taking orders for the devices directly from women without proof of a prescription. Although Lanteen's mail-order process required no interaction with a physician or clinic, advertisements still leveraged the medically-backed appeal of the diaphragm and jelly, stating that "the scientific and dependable method of Marriage Hygiene, now almost universally prescribed by physicians, clinics and hospitals, is the combination diaphragm and jelly method."104

Thus, despite the widespread availability of medical-grade, pharmaceutical-made diaphragms for low or no cost in clinics, women outside the middle class continued to turn to non-medical contraceptive vendors on the free market. Non-medical manufacturers like Lanteen, in turn, capitalized on the scientific legitimacy of the diaphragm, even though their appeal was the direct-to-consumer model. Whether due to a dearth of affordable clinics in their area, lack of

_

¹⁰³ Abraham Stone and Clarence J. Gamble, "Commercially Available Mechanical Devices for use in Contraception," *Human Fertility* 10, (1945): 66; and Tone, *Devices and Desires*, 166-167.

¹⁰⁴ Directions for use of Lanteen Products for Marriage Hygiene (Chicago: Lanteen Laboratories, Inc., 1937). May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019

time necessary to visit a doctor or clinic, distrust of the medical profession, or preference not to be vaginally examined by a (probably) male doctor, many consumers opted to purchase devices straight from druggists or through the post, thereby evading the recommended fitting and inperson instruction. One company called Dilex even sold one-size-fits-all diaphragms, spermicidal jelly, and douching kits door-to-door in New York City. 105

Physicians and birth control advocates alike were perplexed and disturbed by women's continued preference for non-medical diaphragms and spermicides despite repeated insistence that physicians' expert fitting skills were critical to the method's efficacy. The persistence of an unregulated, direct-to-consumer black market for diaphragms and spermicide is a testament to the lengths certain groups of women would go to evade the medical institution—even in the form of an affordable, female-staffed birth control clinic. For poor, non-white, uneducated, or otherwise vulnerable populations of women, buying commercial contraceptive goods from a convincing catalogue or a saleswoman ultimately seemed to be a safer, easier, and more attractive option than encountering a medical professional, regardless of the difference in product quality and efficacy. This was an effect of placing the diaphragm into physicians' hands

Margaret Sanger and her mostly white, middle-class backers never could have foreseen. But, as I explain in the next section, it would continue to shape the future of the doctor-patient relationship in contraceptive care for years to come.

Nevertheless, by the 1940s, the diaphragm reigned supreme as the top choice of physicians. A survey of 3,381 gynecologists and general practitioners conducted by renowned obstetrician-gynecologist Dr. Alan Guttmacher in 1947 found that "the diaphragm with jelly"

¹⁰⁵ Tone, Devices and Desires, 165-166.

was favored among the lot, with the condom as an "undisputed second choice." Other methods, like the "rhythm" method, the IUD, and the sponge, barely made the cut. The diaphragm was also fairly popular among contraceptive users. In 1955, 36% of white birth control users and 30% of non-white birth control users had ever used the diaphragm. It was exceeded only by the condom, available over-the-counter, which had ever been used by 43% of respondents. This era would prove to be the diaphragm's heyday as a medical device; it would not see this level of popularity—among manufacturers, physician prescribers, and users—again.

Unacceptable Methods, Unreliable Users

As Margaret Sanger's political strategy and rhetoric in the early birth control movement demonstrates, eugenic ideology had always had a place in pro-birth control advocacy. For authorities who were not convinced of contraception's value by feminist reasoning—as a tool of bodily autonomy or even socioeconomic uplift—the idea of using contraception as population control was a powerful one. The case for population control was only heightened in the years surrounding World War II, when social scientists, and later, mainstream media sources, began to publicize the existence of a "population boom" that would spell the end of organized civilization as the number of earth's inhabitants began to dwarf available food and resources. Between 1900 and 1960, the world's population nearly doubled. Thanks to advances in medicine, public health, and welfare programs that dramatically decreased mortality rates, social scientists observed similar trends in the United States. Many physicians felt that it was the duty of the medical profession, which had by now solidified its authority over human reproduction, to intervene in

¹⁰⁶ Alan F. Guttmacher, "Conception Control and the Medical Profession," *Human Fertility* 12, no. 1 (1947): 824.

¹⁰⁷ Charles F. Westoff and Norman B. Ryder, "United States: Methods of Fertility Control, 1955, 1960 & 1965," *Studies in Family Planning* 17, (1967): 3.

¹⁰⁸ May, America and the Pill, 36; and Kluchin, Fit to Be Tied, 33.

the so-called "population problem."¹⁰⁹ Here, physicians saw their opportunity to utilize medical contraception for population control, rather than just family limitation.

The idea that birth control could and should be used principally for the control of the "unfit" extended beyond the social sciences and medicine and into the law. The landmark Supreme Court case *Buck v. Bell* in 1927 declared compulsory sterilization of the "unfit" or disabled constitutional, thereby putting the interests of the population's overall "fitness" over an individual's bodily autonomy. The case, which was brought before the Virginia court, proved the strength of the Virginia's eugenics statutes, and eventually became a model for 30 other states' eugenics laws over the following decades. So widespread was eugenic ideology throughout American institutions that it even permeated middle-class lay discourse. According to a report by *Good Housekeeping* that collected public opinions on birth control in 1938, after maintaining financial security with small family size, "decreasing the number of the feeble-minded takes second place on the list of reasons for approving birth control." Nearly a quarter of all women interviewed felt that limiting "the birth of defectives" was the most important reason to favor birth control, though tellingly, the author pointed out that this sentiment was less common among lower-income respondents "than the more prosperous women."

Even some members of the social groups eugenics was aimed at regulating saw birth control as a viable means of improving their own populations. Just as early socialist revolutionaries of the birth control movement upheld the diaphragm pessary as a technology of social uplift through its potential to limit poor families, middle-class black Americans supported

100 TZ1

¹⁰⁹ Kluchin, Fit to Be Tied, 32.

¹¹⁰ Kluchin, Fit to Be Tied, 16-17.

¹¹¹ Henry F. Pringle, "What do the Women of America Think: About Birth Control?" *Ladies' Home Journal* (March, 1938): 15.

¹¹² Pringle "What do the Women of America Think," 15.

birth control for similar reasons. In order to convince white America of the need for racial equality, some blacks sought to stamp out high rates of poverty and widespread social discrimination by limiting families of color to a manageable size. Those with the goal of assimilating into middle-class society saw in the device the potential to control their own population, thereby dispelling stereotypes of black men and women as licentious and animalistic, prone to uncontrolled breeding.¹¹³ An article published in a 1952 issue of the popular African-American magazine *Jet* echoed these ideas. Discussing the introduction of Perceptin Gel, a highly concentrated spermicidal jelly, as well as the general future of birth control, the article ends on a buoyant note. "In new miracle contraceptives is born new hope for the world's underprivileged masses," it read. "Proper control of birth is the key to a healthier race, a sounder economy."

To be sure, not all black Americans agreed with this objective. Because the United States economy was founded upon a system in which the reproduction of black bodies was surveilled and controlled by white slave owners, progressive black Americans a century after emancipation remained wary of the intentions of the mostly white manufacturers and physician providers of contraceptives. An article in a 1959 issue of the *Tri-State Defender*, an African-American magazine based in Memphis, for instance, critiqued the very notion that a "population explosion" existed, and alerted readers to the racial implications of political arguments favoring contraception as a tool of population control. "For the under-developed areas where the

-

¹¹³ For more on perceptions and representations of black people as hypersexual beings in the United States, see: Dorothy Roberts, *Killing the Black Body: Race, Reproduction, and the Meaning of Liberty* (New York, NY: Pantheon Books, 1997); and Patricia Hill Collins, *Black Sexual Politics: African Americans, Gender, and the New Racism*, (New York: Routledge, 2004).

^{114 &}quot;New Miracles in Birth Control." Jet (March 6, 1952): 27.

For more on slavery, reproduction, and medicine, see: Owens, *Medical Bondage*; and Marie Jenkins Schwartz, *Birthing a Slave: Motherhood and Medicine in the Antebellum South* (Cambridge: Harvard University Press, 2006).
 May 2019, Wolf Humanities Center Undergraduate Research Fellowship 67
 Lea Eisenstein, College of Arts & Sciences, 2019
 University of Pennsylvania

'explosion' is taking place," the article read, "are inhabited by black or brown or yellow people ... America is using [birth control] to pare down the already numerically superior population of the non-white world." 116

As eugenics made its way into medical thought and practice, physicians began to consider the efficacy of the diaphragm not just as a measure of how well a method worked when used, but how often people actually used it and the extent to which it really "controlled" undesirable populations. Scientists and physicians were frustrated that the diaphragm method required the will of the female user. This meant that even if researchers perfected both the mechanical and chemical design to be practically failsafe in the laboratory, they would never be able to guarantee that women would retrieve it from the nightstand with every act of intercourse. Clinical records showed that women who were given diaphragms and spermicide very often discontinued using them, sometimes leading to more pregnancies. Physicians, now attuned to the issues of population control in the social sciences, had begun to notice that poor and rural women, especially, abandoned their diaphragms or used them inconsistently due to a range of structural obstacles, such as lack of privacy due to crowded living arrangements, excessive distance from clinics, and busy work schedules.

For poor, rural, non-white, uneducated, or disabled women who did manage to reach the stirrups, it was up to physicians to determine who was deemed an "acceptable" diaphragm user. Although researchers in medicine and the social sciences framed lower rates of diaphragm success or diaphragm use among marginalized women solely as problems of accessibility, competence, and intelligence, the truth was that inaccessibility was reproduced and further

¹¹⁶ "Birth Control as Campaign Issue," *Tri-State Defender*, Dec 12, 1959.

¹¹⁷ Tone, Devices and Desires, 146-147.

¹¹⁸ Stix, "Birth Control in a Midwestern City," 393.

exacerbated by the way these claims affected the physicians' prescribing practices. After reconsidering new measures of "acceptability" for the diaphragm and jelly, physicians began to immediately dismiss women who fit marginalized demographic descriptions, labeling them as "unreliable" users who could not be trusted with the method before they ever had an opportunity to try it. Physicians were expected to understand that "birth control is a most powerful force to be used most wisely and well," and diaphragm fitting manuals from the 1930s reflected strict standards that providers should recognize in suitable patients.¹¹⁹

For example, Dr. Le Mon Clark's manual for medical diaphragm prescribers carefully noted that "brides should be cautioned against postponing pregnancy for too long a period of time" and "urged to plan her family so as to have not less than two and preferably three or four children, spacing them at intervals of two and one-half to three years." In other words, single women and women who did not desire children need not inquire about obtaining a prescription. Moreover, while Clark echoed other medical authorities on the importance of follow-up appointments after the initial consultation, fitting, and education procedure, he conceded that an immediate follow-up "does not seem to be essential if the patient is intelligent enough to grasp the procedure." By invoking "intelligence" as a relevant metric for evaluating patients, Clark employed the coded language of the eugenic sciences, which used words like "intelligence" as a thinly veiled proxy for white, upper- or middle-class women.

And although these medical protocols did not patently discount women of lower "intelligence" from receiving repeated or thorough instruction in how to use the diaphragm, it did suggest a certain image of an ideal user who did not require as much time and effort of the

_

¹¹⁹ Clark, The Vaginal Diaphragm, 104.

¹²⁰ Clark, The Vaginal Diaphragm, 104.

¹²¹ Clark, The Vaginal Diaphragm, 99.

physician—one that was most likely white and middle-class. Physicians were therefore advised and encouraged to make judgment calls about how well each patient could be trusted with a device that they may consider too "complex" for a woman based on how she looked or behaved in the clinic. As a result, physicians' research-based prescribing habits formed institutional biases along racial, ethnic, geographic, educational, and socioeconomic lines; and thus, the cycle of prescribing bias and lower rates of use outside white, middle-class America endured.

Something Simpler

Contraceptive researchers with an interest in population control turned their attention to the demographic groups deemed "unfit" for the diaphragm and jelly method, aiming to find newer, simpler methods more suitable for these "unreliable" users. One of the most prolific researchers of "simple" birth control methods during the 1930s, '40s, and '50s was Clarence Gamble, a physician, supporter of eugenics, birth control advocate, and heir to the Proctor and Gamble company fortune. His research interests ranged from spermicidal jellies, contraceptive "foam powders," and suppositories to be used without a diaphragm, to cervical caps that would be left in the vaginal canal for several weeks at a time. 122 He concentrated his research in areas like North Carolina, Appalachia, and Puerto Rico, where poverty, an agricultural economy, and limited access to medical care created the ideal conditions to simulate how acceptable and effective birth control was when placed in the hands of the populations eugenicists felt needed contraception most.

¹²² Reed, *From Private Vice to Public Virtue*, 248, 254; Correspondence from Clarence Gamble to George Cooper, November 16, 1948, box 28, folder 489, Clarence James Gamble Papers, 1920-1970s, Center for the History of Medicine, Francis A. Countway Library of Medicine, Harvard University; Correspondence from Clarence Gamble to M.T. Foster, December 16, 1948, box 28, folder 489, Clarence James Gamble Papers, 1920-1970s, Center for the History of Medicine, Francis A. Countway Library of Medicine, Harvard University.

In one study funded by Gamble in the 1950s, poor women in Watauga County, North Carolina with limited access to doctors were given contraceptive foam powder at a local birth control clinic instead of the standard diaphragm and jelly. Researchers knew that "simple" methods would never be as effective as the diaphragm, but continued to test them on vulnerable populations because they thought that they were less dependent on users' competence and control. As Christopher Tietze, a physician and demographer active in contraceptive research who frequently collaborated with Gamble, explained:

At that time the notion was that if we only could have a simple method, something that people could use without medical intervention, that they could buy at the drugstore, they would use that so much more consistently and regularly that the overall effect in terms of effectiveness would be superior to the diaphragm although presumably the latter was intrinsically a more effective method. 123

Despite persistent testimonies from subjects in the Watauga study that the foam powder was both ineffective and physically irritating, the study's leaders continued to provide the product and neglected to offer the more "complex" diaphragm, which was already known to be generally safe, comfortable, and effective. In cases where the foam powder failed to prevent pregnancy, the nurses staffing the clinic were advised to record the failure as the fault of the patient, not the method. Exploitative and unethical studies like Gamble's reinforced eugenic associations between poverty and incapacity or unwillingness to use contraception, thereby justifying doctors' reluctance to prescribe the more effective diaphragm and jelly method to demographic groups branded as "unfit" in previous research. 125

¹²³ Christopher Tietze interviewed by James Reed, in Schlesinger-Rockefeller Oral History Project: Interview with Sara Lewit Tietze and Christopher Tietze, M.D., December 1975-January 1976, Schlesinger Library, Radcliffe Institute, Harvard University.

¹²⁴ Johanna Schoen, *Choice and Coercion*, 42.

 ¹²⁵ For more on eugenic family limitation research, policy, and medical practice, see: Kluchin Fit to Be Tied;
 Schoen, Choice and Coercion; Kevles, In the Name of Eugenics; and Paul, Controlling Human Heredity.
 May 2019, Wolf Humanities Center Undergraduate Research Fellowship
 Lea Eisenstein, College of Arts & Sciences, 2019
 University of Pennsylvania

Pharmaceutical companies routinely placed these "simple" but less effective over-thecounter spermicide formulations in popular magazines. Advertisements for diaphragms, on the other hand, were confined to medical journals by virtue of their prescription-only nature. This likely intensified the demographic gaps between diaphragm users. Savvy marketers for "simple methods" like spermicidal foams, jellies, suppositories, and creams targeted certain populations with their advertisements, taking advantage of the fact that a visit to the doctor or clinic for a fitting and prescription was the greatest limiting factor in the sale of diaphragms for socially marginalized or rural populations. Ebony magazine, with its middle-class black readership, for example, regularly ran ads for over-the-counter douching solutions and foams, even as editorial writing suggested that women seek expert advice from clinics. Well into the 1960s and '70s—by which point hormonal birth control was available—the pages of *Ebony* and *Jet* were lined with ads for Emko spermicidal foam, touting it as an easier, simpler kind of contraceptive that required minimal interaction with medical professionals. "No diaphragm needed. At drugstores without prescription," it advertised, revealing the extent to which the diaphragm had become associated with the institution of medicine. 126 That the product rendered the clinical encounter unnecessary was a selling point, suggesting that Emko's advertisers clearly had no qualms about capitalizing on black readers' distrust of the overwhelmingly white medical establishment.

During the same time period, advertisers for spermicidal creams and jellies saw white Americans, too, as potential users of these so-called "simple methods." However, spermicide ads in publications that catered to a white audience provided a more favorable view of the added diaphragm appliance. While *Ebony* and *Jet* advertisements of Emko highlighted the fact that its

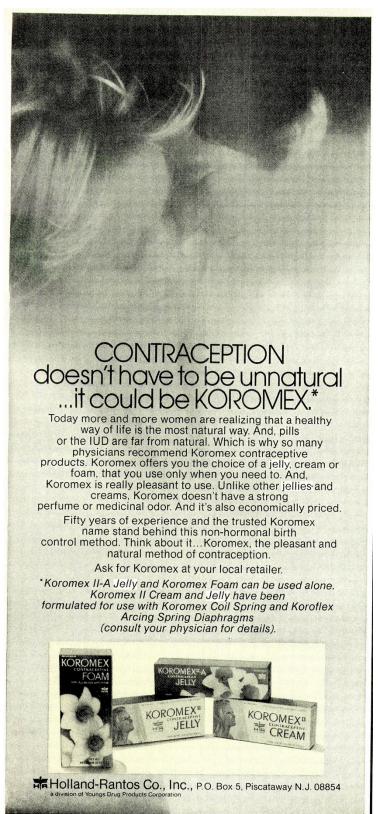
 ^{126 &}quot;Advertisement: Emko Foam." *Jet* (January 28, 1965): 63.
 May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019
 University of Pennsylvania

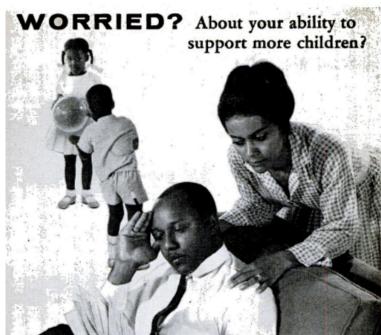
spermicide did not require a medical diaphragm as a selling point, Holland-Rantos' ad for Koromex brand jelly in *Redbook* magazine offered two choices: a jelly strong enough to be used alone, and a jelly recommended to be paired with the matching "Koroflex" diaphragm. 127 While Holland-Rantos could not directly market the prescription device to non-physician consumers, they used their over-the-counter line of products as a wedge into the white, middle-class consumer conscious. The company only advertised douching products in *Ebony*, and did not advertise at all in *Jet*. Advertisers likely believed that the largely white readership of magazines like *Redbook* and *Cosmopolitan*, by contrast, could be trusted as "good" users of their product who probably had access to a clinic or the money for a private physician's fee.

Low-Tech Becomes Lackluster

Although physicians still regarded the diaphragm and spermicide as an acceptable form birth control for the majority of white, middle-class women, the sheen of the tried and tested diaphragm and jelly method had begun to dull. Just a decade earlier, the device helped to lift physicians into the seat of power as experts in reproduction. But in the shadow of headline-grabbing new medical advancements like mass-produced penicillin, the polio vaccine, and organ transplantation, the mechanical diaphragm now represented a lack of progress in contraceptive technology. By now, the diaphragm had shed its nominal association with the medical pessary as physicians consciously attempted to separate and elevate the diaphragm as its own device with novel benefits. But the material similarity between the diaphragms of new and pessaries of old

_





emko iii

FOR SAFE BIRTH CONTROL

There is no safer birth control product.
 Used as directed, EMKO works. It contains the most effective spermicide ever discovered.
 More doctors every day join the thousands who recommend EMKO.
 No diaphragm needed.
 At drug stores without prescription.

For FREE BOOKLET about EMKO write:
THE EMKO COMPANY, 7912 Manchester Avenue, St. Louis, Missouri
Give your Name and Address, and date of your marriage.

Figure 5 (left): Koromex spermicidal jelly ad emphasizing diaphragm use in *Redbook* magazine, April, 1977.

Figure 6 (right): Emko spermicidal foam ad in *Jet* magazine, January 28, 1965. "No diaphragm needed."

May 2019, Wolf Humanities Center Undergraduate Rel Lea Eisenstein, College of Arts & Sciences, 2019 University of Pennsylvania were difficult to ignore; the best contraceptive medicine had to offer was still technically the same as it was when it was first mass-produced in the 1860s.

Thus, while private and state-funded research centers funneled money into clinical studies of oral contraceptives, IUDs, and injections on the high-tech end, and creams, foams, powders, and suppositories on the "simple" end, research into the old-fashioned diaphragm was all but halted. By the end of World War II, physicians who wanted to continue researching the diaphragm and ways to improve it were met with significant hurdles. Many were discouraged from continuing to test methods already proven to be effective, the diaphragm chief among them, and instead received financial backing for more "scientific" methods that were more invasive and utilized highly technical knowledge on the human reproductive system. ¹²⁸ For example, research associates at the Population Council, a Rockefeller-funded contraceptive research institute, reported that, with such high demand to research oral contraceptives at the peak of their popularity, it was impossible to conduct studies on barrier methods due to lack of funding and willing study participants. 129 In fact, physician and demographer Christopher Tietze credited the development of Planned Parenthood's strong research arm in the 1950s to the prospect of more sophisticated, high-tech forms of birth control that would be more useful for the ends of population control than the diaphragm was. Research into hormonal contraceptives and improved IUDs, Tietze said, "involved things that were more interesting to biologists than the mechanical devices that had been used before."130

_

¹²⁸ Adele Clark, *Disciplining Reproduction: Modernity, American Life Sciences, and "the Problems of Sex"* (Berkeley and Los Angeles: University of California Press, 1998), 164.

James Reed, "Doctors, Birth Control, and Social Values: 1830–1970," 126.; and Christopher Tietze interviewed by James Reed, in Schlesinger-Rockefeller Oral History Project.

¹³⁰ Christopher Tietze interviewed by James Reed, in Schlesinger-Rockefeller Oral History Project. For more on Planned Parenthood's discouragement of research into the diaphragm, see also: Marcia Meldrum, "'Simple May 2019, Wolf Humanities Center Undergraduate Research Fellowship

At the same time, women also yearned for a faster, easier, tidier birth control method. As the Cold War-era medical marketplace blossomed with magic bullet therapies and health products, patients came to expect ever-advancing care that demanded less of their time and effort and afforded more privacy. 131 Just as physicians had grown disenchanted with the user-dependent diaphragm, some women, too, were put off by the insertion procedure, sometimes even enough to discontinue the contraceptive altogether. In one study of three clinics located in New York, Cincinnati, and Spartanburg, South Carolina in 1942, among users who gave up the method, "30 per cent of the New York women [who were mostly white and Jewish], 24 per cent of the Spartanburg Negroes and about 20 per cent of [white Spartanburg patients and Cincinnati patients] gave up the diaphragm because it was uncomfortable, difficult to place, esthetically unacceptable or too much trouble to use." 132

Another study by the same doctor found that, regardless of social class, "the most frequent complaints [of the diaphragm and spermicide] concerned the difficulty of finding the time or money to come to the clinic for new supplies or for check-up visits. More than one-third of all the women who gave up using the clinic prescription did so for these reasons." Although physicians' research interests and biased prescribing practices certainly drove some potential users away from the diaphragm and jelly method, many women were themselves complicit in establishing associations between diaphragm technology and all that was antiquated, fussy, and backwards. Some women would have very much to lose when denied access to a form of

Methods' and 'Determined Contraceptors': The Statistical Evaluation of Fertility Control, 1957-1968," *Bulletin of the History of Medicine* 70, no. 2 (June 1, 1996): 266-295.

¹³¹ Tomes, *Remaking the American Patient*, 321-359.

¹³² Regine K. Stix, "A Comparative Appraisal of Three Contraceptive Services." *Journal of the American Medical Association* 118, no. 4 (Jan 24, 1942): 287

¹³³ Stix, "Birth Control in a Midwestern City," 404.

reversible, female-controlled contraception; others who had access but did not want it were happy to see it go.

By the mid-1940s, even the diaphragm's greatest champion, Margaret Sanger, had expressed a need for something better. Realizing that the medicalization she once fought for had inadvertently put the device out of reach for some, she wrote to a friend in 1946, "I saw and realized more than ever the inadequacy of the diaphragm for reaching millions of women who need and should have something as simple as a birth control pill." Less than five years later, she would begin to realize this dream by teaming up with feminist philanthropist Katharine McCormack to fund a team of researchers working to develop a hormonal pill.

Conclusion

For a brief moment, the diaphragm saw its golden age as the top physician-recommended birth control method. Paired with spermicide, it represented the best and most scientific contraception option medicine had to offer. But as the objective of contraceptive sciences shifted from birth control to "population control," the device no longer accommodated the stakes of the game. So even while private physicians and manufacturers continued to profit off of diaphragm and jelly prescriptions, they disparaged it for being at once too complex to entrust to just any woman, and too simple for the ever-advancing field of medical science. They spent their research dollars looking higher and lower than the reliable, yet unglamorous medium the diaphragm had come to represent, helping to develop ineffective but "simple to use" diaphragm-free spermicides, as well as more "sophisticated" but less user-reliant methods. Ultimately, the diaphragm took on this paradoxical characterization because it would never be able to give

¹³⁴ Sanger, quoted in Marks, Sexual Chemistry, 53.

providers the control over its user. In determining what made for a good and reliable contraceptive, they already predetermined that not all users were equal, or equally deserving of control over their own fertility.

Chapter IV: The Diaphragm in a Post-Pill World

Introduction

When medical and scientific researchers turned away from the diaphragm to find something that was both more technically sophisticated but simpler to use than the diaphragm, they found their solution in the oral contraceptive pill, which finally reached the market in 1960. From today's perspective, most people believe that the pill, in a sense, replaced the diaphragm, and unequivocally improved the status, efficacy, and ease of birth control. While this is not patently false, it is a gross oversimplification of the role of the diaphragm in a post-pill world. After the oral contraceptive surpassed all other methods in popularity among birth control users, its legacy as a technology of sexual liberation, bodily autonomy, and medical progress was tarnished by a scandal—a chemical miscalculation that left dozens of American women injured or dead—that fomented an activist uprising against the medical establishment. This left a desire for a contraceptive method that returned to women a sense of control over not just their reproductive futures, but their own biology. Where the pill failed in this respect, the diaphragm reentered as a newly characterized technology of female control.

In previous scholarship on the history of contraception, the diaphragm's life course essentially ends where that of the oral contraceptive begins.¹³⁵ While many histories address the public's loss of trust in high-tech, or "sophisticated," medical birth control through case studies of the birth control pill, Dalkon Shield, and Depo-Provera in the 1970s, they neglect to analyze which contraceptive methods users fell back on when these highly popular options fell from grace.¹³⁶ This chapter relocates the diaphragm in the historiography of contraception in the

¹³⁵ See: Tone, *Devices and Desires*; Gordon, *Woman's Body, Woman's Right*; and Reed, *From Private Vice to Public Virtue*.

¹³⁶ See footnote 2, footnote 9.

second half of the twentieth century. I argue that in a world where the pill represented a complicated portrait of both reproductive autonomy and unnecessary risk—manufactured by the hands of the male-dominated institution of medicine and pharmaceutical industry—the diaphragm re-entered the picture as an icon of female control. While radical feminists wielded it as a technology of self-exploration and a site for the production of experiential knowledge, young, middle-class women saw the device as an obligatory accessory to a successful, cosmopolitan lifestyle.

The Death of the Diaphragm

From the moment the American Medical Association sanctioned the teaching of contraception in medical schools in 1937, the diaphragm represented the most "scientific," medically endorsed birth control method. Not only was the diaphragm and jelly duo the most effective option available, it was the only one that actually required—or at least benefitted from—the expertise of a physician in fitting the appliance to each individual patient.¹³⁷ But the image of the diaphragm as birth control in its most medicalized form faded from view with the groundbreaking release of Enovid, the first hormonal oral contraceptive pill, in 1960. The pill flew off pharmacy shelves immediately following its release. By 1965, it became the most popular form of birth control, with 95% of OB/GYNs prescribing it.¹³⁸

Many in the world of contraception were surprised by how immediately women flocked to their doctors to request a prescription for this new method. Never before did a contraceptive option require a woman's biology to be altered so dramatically. At a conference for the National Committee on Maternal Health in 1958, top authorities in contraception, including the director of

¹³⁷ Watkins, On the Pill, 13.

¹³⁸ Watkins., On the Pill, 34.

Planned Parenthood and the senior consultant to the Population Council, agreed that such a body- and lifestyle-changing method would never be acceptable to users. ¹³⁹ They were wrong. In just five years on the market, the pill had become a part of everyday life for over 6.5 million American women. ¹⁴⁰ That they were choosing to accept this trade-off in such large numbers spoke to the degree of trust women and their sexual partners had placed in medical knowledge and pharmaceutical capabilities.

As the pill succeeded in capturing the fascination of American women, hordes of them ditched their diaphragms throughout the 1960s. In the early decades of the Cold War, Americans still venerated the free market medical enterprise and its success in creating competition for better drugs and therapies. Popular print media, television, and movies painted a rosy picture of what medicine and pharmaceutical "wonder drugs" could do. 141 The sleek contraceptive pill was just another of many drugs Americans had come to expect in an age when quality of life only seemed to be improving. By contrast, the diaphragm and jelly began to represent regressive medicine, a step backwards into a time when contraception required time, forethought, and clunky appliances. Whereas 38% of white contraceptive users and 30% of non-white users relied the diaphragm in 1960, in 1965 those numbers had diminished to 26% and 17%, respectively. 142

A study published in the journal *Contraception* in 1973 found that "the use of diaphragms with spermicidal preparations has declined in favor of oral contraceptives," citing that only 7.7% of

1

¹³⁹ Marcia Meldrum, "Women Making Contraceptive Choices in 20th-Century America." *Lancet* 380, no. 9837 (2012): 102.

¹⁴⁰ Watkins, *On the Pill*, 34. In the first 10 years after the pill's release, data was only collected on the number of married women who were prescribed oral contraceptives. It is unknown how many unmarried users there were. ¹⁴¹ Tomes, *Remaking the American Patient*, 156-159. See also: Bert Hansen, *Picturing Medical Progress from Pasteur to Polio: A History of Mass Media Images and Popular Attitudes in America* (New Brunswick: Rutgers University Press, 2009); and Starr, *The Social Transformation of American Medicine*.

¹⁴² Stephen L. Corson, Richard J. Derman, and Louise B. Tyrer, *Fertility Control*, Second edition (Ontario: Goldin Press, 1995): 212.

white couples and 6.7% of black couples using contraception used the diaphragm. 143 Prominent medical researchers Christopher Tietze and Sarah Lewit Tietze laughingly recounted the phenomenon of "hurting diaphragm syndrome," known well among physicians who prescribed contraceptives. The "illness" presented itself in "women who had been using the diaphragm with no problems suddenly [finding] that it hurt them, their anatomy wasn't suited for it and they had to have the pill." 144 Users' experiences with the daily pill were overwhelmingly positive, and most were eager to do away with the diaphragm's cumbersome jelly application and insertion process.

Physicians, too, had reason to prefer the new pill to the old diaphragm. As early as 1943, one member of the Western Journal of Surgery, Obstetrics and Gynecology's editorial board remarked that "some of us [OB/GYNs] cannot contemplate with utter satisfaction the messy little gadgets, the pastes and creams and jellies" that represented the best doctors had to offer in terms of birth control. Until there was a simpler, cleaner, and more efficient way to deliver contraception, OB/GYNs armed with only diaphragms and spermicide would have to contend with "only one honest conclusion: candid physicians are ashamed of these messy makeshifts in a field where better means should be at hand."145

Less than two decades later, when "better means" came to fruition in the form of the pill, physicians, like women, regarded it as a panacea. For one, they reaped financial rewards of having their patients come back to refill their prescriptions on a monthly basis. 146 The

¹⁴³ Anna L. Southam, "Scale of Use, Safety and Impact of Birth Control Methods," *Contraception* 8, no. 1 (July 1,

¹⁴⁴ Christopher Tietze interviewed by James Reed, in Schlesinger-Rockefeller Oral History Project.

^{145 &}quot;The Teaching of Contraception in Medical Schools," Western Journal of Surgery, Obstetrics and Gynecology 51, (September, 1943): 382, 383.

¹⁴⁶ Watkins, On the Pill, 35.

diaphragm, on the other hand, was built to last, meaning that women would only have to pay the consultation and fitting fees once every two years or so. What's more, the process of writing a simple prescription was understandably easier, faster, and less mentally and emotionally taxing than the intimate diaphragm fitting and instruction procedure with added follow-up appointments. Meanwhile, doctors could—and many did—fill half a years' worth of pill prescriptions at the very first consultation visit, meaning less repeat returns and more room in the schedule for new clients. With the pill, the clinical encounter would be reduced to a quick conversation and the flick of a pen on a prescription pad.

The changes the pill brought to OB/GYNs' offices reflected a broader shift in the standards and expectations of medicine in the United States at midcentury. As I discussed in the previous chapter, the years during and after World War II saw doctors and scientists putting all efforts towards the development of new medical interventions that required less effort for both the patient and the physician. By the 1940s, medicine in the United States had reached the veritable peak of its "golden age"; the advent of penicillin, the polio vaccine, and other one-stop, one-size-fits-all treatments created both a newfound trust in scientists and medical professionals as well as a hunger for more "wonder drugs," among patients and providers alike. Across the medical specialties, the gold standard of medicine took the shape of a simple, swift drug or procedure that could be standardized to fit every patient. Those expectations rendered the diaphragm, whose efficacy relied on the perfect fit, obsolete in the shadow of the prepackaged, once-daily pill—the epitome of "one-size-fits-all" medicine. One gynecologist interviewed for

¹⁴⁷ Barbara Seaman, *The Doctors' Case Against the Pill* (New York: Peter H. Wyden, Inc., 1969), 18.

¹⁴⁸ For more on the "golden age" of medicine, see John C. Burnham, "American Medicine's Golden Age: What Happened to it?" *Science* 215, no. 4539 (1982): 1474-1479; Hansen, *Picturing Medical Progress*; and Tomes, *Remaking the American Patient*.

an article in *Redbook* in 1966 contended that the pill was a blessing to many of their patients. Experience had proven that "all women find the diaphragm awkward, or even unpleasant ... the pill is easier, less anxiety-producing, than the diaphragm by a factor of thousands." ¹⁴⁹

Trouble in Pill Paradise

But in the decade that followed the pill's release, the promise of "one-size-fits-all" hormonal birth control unraveled. Over the course of the 1960s, Americans were generally losing faith in free-market medicine and pharmaceuticals. The cost of medical care and prescription drugs had inflated to unbearable new heights, meaning that the most powerful new therapies and medical interventions were out of reach for most of the middle and lower classes without private insurance. Women pill users in particular, already dissatisfied with the status quo of the medical marketplace, were in for even more disappointment. By 1962, the Food and Drug Administration reported on 26 pill users who developed thromboembolism, a serious blood clot; six cases resulted in death, while another 20 survived. Large-scale epidemiological studies of the pill's side effects began to emerge later in the decade, confirming that oral contraceptives carried serious health risks. Only later would scientists and pharmaceutical companies realize that the hormone concentrations in early iterations of the pill were dangerously high for many women—much higher than necessary to prevent pregnancy.

These reports, which spread like wildfire throughout the media, were all but ignored by providers themselves, causing outrage among women who demanded an explanation and a solution to the problem. In 1969, Barbara Seaman, a popular journalist with weekly columns in magazines like *Redbook* and *Ladies' Home Journal*, brought tensions between contraceptive

¹⁴⁹ Sam Blum, "The Pill." *Redbook* 1, (1966): 74.

¹⁵⁰ Tomes, Remaking the American Patient, 146-148.

¹⁵¹ Meldrum, "'Simple Methods' and 'Determined Contraceptors," 266.

users and physicians to a head with the publication of her book *The Doctor's Case Against the Pill*. The book shattered the popular conceptualization of the pill as a "miracle drug," attempted to hold physicians and drug makers accountable for the unacknowledged harm done by hormonal contraceptives, and set the conditions for what would soon develop into a feminist uprising.

In light of the pill scandal, constituents of the women's liberation movement of the 1960s added a new item to their activist agenda: calling attention to sexism in science and medicine. They organized in small consciousness-raising groups across the United States, all under the banner of what they called "the women's health movement." Seaman's charges reaffirmed what many feminists across the emerging movement were already thinking: that physicians, scientists, and pharmaceutical companies were paternalistic enterprises that had blood on their hands—not just for the oversight of the birth control pill's risks, but for generally discounting women patients' feelings, experiences, and knowledge of their own bodies. In retrospect, Dr. Richard Hausknecht, a male OB/GYN practicing in the mid-twentieth century who later supported the women's health movement, reflected that paternalism and distrust of women was built into the medical curriculum. "That was a time when male gynecologists dominated women patients without question," he intimated in an interview in 2003. "We were father figures, we were taught to be father figures, we were taught never to be questioned." 152

When it came to the oral contraceptive pill, members of the women's health movement asserted that doctors had shirked the duty of adequately informing their patients of the pill's risks and rewards to shave time off the clinical encounter and profit off increased client volumes.

Evidence of the pill's shortcomings, dangers, and side effects, according to Seaman, had "been

American Experience: The Pill, directed by Chana Gazit, PBS.
 May 2019, Wolf Humanities Center Undergraduate Research Fellowship
 Lea Eisenstein, College of Arts & Sciences, 2019
 University of Pennsylvania

buried, in bits and pieces, in technical journals that are not accessible to the public, or even to the typical, well-intentioned pill-prescribing gynecologist and general practitioner."¹⁵³ For Seaman, it was not individual physicians at fault for the deaths of unsuspecting pill-users, but rather a calculating network of pharmaceutical companies, researchers, and doctors that put profit and prestige over their patients' wellbeing. These actions represented an institutional neglect of disclosing risk, thereby treating women's bodies as both interchangeable and disposable.

While consciousness-raising groups of the women's health movement acted locally, Seaman's journalism brought national attention to the problem of paternalistic medicine when *The Doctor's Case Against the Pill* prompted Wisconsin Senator Gaylord Nelson to call for a Senate hearing on the oral contraceptive pill in January of 1970. Both proponents and critics of the pill were called to testify, but notably, all of them were white male physicians and scientists. None were women, and none were pill users. This ignited even further outrage among the already-incensed feminist activists present at the hearings, who were disturbed that women's experiences were not being considered when it was their lives who were at stake. Midway through the televised hearings, Alice Wolfson, a prominent member of the women's health movement who would go on to co-found the National Women's Health Network with Seaman, spoke out:

Wolfson: We are not just going to sit quietly any longer. You are murdering us for your profit and convenience!

Nelson: We are not going to permit the, uh, proceedings to be interrupted in this way... If you ladies would, ah...sit down...

Feminist protestor: Our lives have been disrupted by taking this Pill.

Nelson: We're conducting...

Wolfson: I don't think the hearings are any more important than our lives. 155

¹⁵³ Seaman, The Doctor's Case Against the Pill, 6.

¹⁵⁴ May, America and the Pill, 132.

¹⁵⁵ American Experience: The Pill, directed by Chana Gazit, PBS.

The hearings eventually resulted in new rules for pharmaceutical companies that required informational inserts to be included in all pill packages to ensure informed consent among users, as well as the development of the milder "mini-pill" with lower hormone concentrations. But most importantly, millions of Americans—many of them pill users—watched the televised hearings with rapt attention.

As sensational as the pill was when it was first introduced as a contraceptive panacea, it only made more headlines in its fall from grace. By early February, just one month after the Nelson hearings, the New York Times reported that "nearly one-fifth of the estimated total of eight-and-a-half million American women who have been using birth-control pills have recently stopped."156 The problems with "sophisticated" birth control intensified further in 1974 with the revelation that the Dalkon Shield, a type of IUD released on the United States market 3 years earlier —which, like all IUDs required surgical implantation by a physician—had been involved a litary of accidental pregnancies, miscarriages, pelvic inflammatory disease cases resulting in sterility, and deaths due to septic shock. Many of the roughly 2.2 million users of the IUD had opted for the device after the Nelson hearings, assuming that because it was non-hormonal and newly designed, it would be a safer bet than other options. After causing 18 known deaths, 400 FDA complaints, and countless more injuries and traumatic experiences, the Dalkon Shield ceased production in 1974, but not before stirring up a media frenzy. 157 In combination with the pill's bad press, the Dalkon Shield incident would forever mark the American collective conscious regarding matters of women's health, transforming the pronged plastic intrauterine

_

^{156 &}quot;Poll Finds 18% Dip in Use of Birth Control Pills," New York Times, February 2, 1970.

¹⁵⁷ Tone, Devices and Desires, 276-279.

"shield" into an emblem of the pitfalls of high-tech contraception wrought by the hands of white men.

Taking back control: "Be righteous about using that diaphragm!"

The women's health movement had succeeded in initiating a takedown of overmedicalized birth control, despite the fact that just a two decades earlier, it was the diaphragm that had held the distinction of the most "scientific" contraceptive method available. However, to the leaders of the women's health movement in the 1970s, the qualities of the device flew in the face of everything the paternalistic medical establishment had become. For one, it was effective and yet remained manual and low-tech, making it the perfect counterexample to the notion that more sophisticated, technically complex methods were inherently safer. "The recent 'pill' hearings have unsettled us all," related an article in the first issue of *off our backs*, a radical feminist periodical. "We must turn to other means of birth control until we have more information regarding oral contraceptives. I'll start with the diaphragm." According to this author, the diaphragm was "the safest in terms of the woman's health of all the devices known." 158

The proposition of returning to older forms of medical knowledge and treatments fit easily into feminist ideology of the 1970s, which also supported the reclamation of health practices like natural home birth and midwifery, rather than hospitalization. But for women who were not involved in the women's health movement, the idea that an older form of contraception may be the best choice was jarring. One writer for *Cosmopolitan* magazine in 1976 described her

88

¹⁵⁸ Marlene Wicks, "The Diaphragm." *Off our Backs* 1, no. 1 (February 27, 1970): 12. May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019

doctor's recommendation of the diaphragm as nothing short of bewildering, considering the other high-tech options available:

I certainly didn't ask for a diaphragm. I only told my gynecologist I was looking for a birth-control method with no side effects, something I could use just prior to intercourse, and not necessarily on a daily basis. I was hoping he'd come up with something really revolutionary, but all he said was that I was the perfect candidate for the diaphragm.¹⁵⁹

As this editorial suggests, even for women operating outside the feminist agenda, the demands of "sophisticated" methods on the body had already begun to seem incompatible with modern womanhood. It made little sense to continually manipulate one's hormones at the expense of annoying side effects when sexual intercourse was only one small part of a woman's daily life. The fact that doctors and scientists were still unable to address these flaws in the pill's design was perplexing, and it seemed ironic that a much older and less technically "revolutionary" method was the key to exactly the kind of qualities users wished the pill possessed. "My generation suffered from the conceit that the Pill was the only sophisticated contraceptive," wrote another *Cosmopolitan* editorialist in 1980. "If not the Pill, then withdrawal, a condom, or *nothing*," she continued, "but never a diaphragm." Realizing now that doctors had a valuable, safe, and effective option in their contraceptive arsenal all this time, women felt that they had been misguided—by their doctors, or by American society's generally optimistic attitude towards the shiniest, newest technologies—in their choice of birth control.

Beyond just being safe and effective, though, the diaphragm was uniquely femalecontrolled. The women's health movement largely centered around an "us vs. them" attitude, wherein feminists positioned intuitive, experiential, folk knowledges of the female body as

¹⁵⁹ Ronnie Sue Ebenstein, "The Diaphragm IS BACK IN TOWN," Cosmopolitan 180, no. 6 (June 1, 1976): 148.

¹⁶⁰ Suzanne O'Malley, "Diaphragms Rediscovered," *Cosmopolitan* 192, no. 3 (March 1, 1982): 171. May 2019, Wolf Humanities Center Undergraduate Research Fellowship

diametrically opposed to paternalistic, impersonal, medical knowledges. 161 Within this dichotomy, the diaphragm represented a technology that easily accommodated non-medical, feminine forms of expertise in use—the exact opposite of the pill. Women who recounted their experiences in gynecologists' offices described the consultation process for birth control as equal parts demeaning and demoralizing. According to one woman writing in the Woman Community Women's Newspaper, a local publication circulating around Kalamazoo, Michigan, her male doctor refused to fit her for a diaphragm, opting instead to persuade her into getting an IUD surgically implanted. Although in the end she finally obtained the prescription, she left readers with a word of advice: "If a doctor refuses to fit women for diaphragms as a matter of 'principle,' he is really trying to make a decision for them. This is patronizing and insulting to women."162

For feminist activists, one of the most damning indicators of the diaphragm's virtue as a contraceptive was the mere fact that their male doctors neglected it as an option. Physicians' distrust in users or distaste for an "old-fashioned" mechanical device was met by feminist patients as a challenge; using the diaphragm effectively meant proving the physician's opinion as a technical expert wrong. Even better, once women secured the diaphragm prescription—either by successfully persuading their practitioner or by deferring to a more understanding women's health clinic—they would not have to check back in with their doctors again.

Among those who were able to convince private physicians to prescribe them a diaphragm, many women took issue with the callousness of the clinical encounter, and doubted the worth of their physician's instructions on insertion. In the early years after physicians legally

¹⁶¹ Kline, Bodies of Knowledge, 1-8.

¹⁶² "The Following Conversation Was Recorded to the Best of My Recollection Soon after It Happened," Woman Community Women's Newspaper, July, 1973, sec. 1.

gained full control over diaphragm fittings and prescriptions, medical literature on contraceptive technique emphasized not only the necessity of the technical skills and anatomical knowledge in diaphragm consultation, but also the psychological and emotional dimensions of the clinical encounter. For instance, a book on contraception written for doctors in 1938 by the medical director of the American Birth Control League advised readers that "it must constantly be kept in mind that one is dealing with problems involving not only the physical, but the psychological, aesthetic, and emotional variations in two individuals—husband and wife." Women of reproductive age in the 1960s and '70s, however, had a very different experience in the gynecologist's office. Many felt their fears, anxieties, and questions had been dismissed by their medical providers, who shuffled more patients in and out of their practices than ever before, and treated them more like demanding consumers than patients.¹⁶⁴

In an *off our backs* article from 1970, the writer notes plainly that "most women don't receive adequate instruction or encouragement from their doctor and leave his office insecure about the device itself and about their ability to use it."¹⁶⁵ To fill the void of expert instruction left by apathetic physicians, feminists took it upon themselves to generate their own forms of bodily knowledge. In the spirit of *Our Bodies, Ourselves*—the Boston Women's Health Book Collective's compendium of independent research by laywomen on matters of women's health and the body—articles in feminist periodicals and newsletters counseled women in great detail on how to place the diaphragm, sometimes never mentioning the physician as a factor in the process at all. "Practice unabashedly," urged an *off our backs* writer, for "all alone you are

¹⁶³ Eric Milton Matsner, *The Technique of Contraception: An Outline* (New York: American Birth Control League, 1933): 8.

¹⁶⁴ Starr, *The Social Transformation of American Medicine*, 362. Starr argues that during the mid-twentieth century, the demand for medical services increased rapidly, while the number of private practitioners remained static.

¹⁶⁵ Alison Sand, "Psychology of the Diaphragm," Off our Backs 1, no. 1 (1970): 12.

acquiring a skill that is roughly comparable in difficulty to learning chords on a guitar, knitting, or rolling a joint ... Check out the diagrams. Explore yourself sans guilt or embarrassment."¹⁶⁶ In encouraging women to empower themselves by learning the necessary skills and anatomical knowledge to confidently use the diaphragm, feminists undermined physicians' claims to exclusive contraceptive expertise. The idea echoed Margaret Sanger's original vision of the diaphragm as a democratic contraceptive technology. As she wrote in early editions of her *Family Planning* informational pamphlet: "Any nurse or doctor will teach one how to adjust it; then women can teach each other."¹⁶⁷

For feminists, the diaphragm also served as a technology of radical self-exploration and bodily acceptance. Decades earlier, pharmaceutical companies hawked diaphragms to physicians with the promise that the examination and insertion process would grant a valuable peek through the speculum. A pelvic examination could portend future visits and lucrative treatments depending on whether any pathological signs were found. Women's health activists in the 1970s, by contrast, saw the pelvic examination, self-touching, and intimate knowledge of the anatomy required by the diaphragm as an opportunity to produce experiential knowledge about their own bodies. Beginning in the early 1970s, local cells of radical feminist collectives across the United States began conducting vaginal self-examinations in order to learn about female anatomy. The examinations involved lying on the floor, using a speculum to open the vaginal canal, and holding up a hand mirror to view the cervix. Some groups carried out examinations as part of training to perform safe, illegal abortions prior to the *Roe v. Wade* decision in 1973. But

-

University of Pennsylvania

¹⁶⁶ Sand, "Psychology of the Diaphragm," 12. Emphasis original.

¹⁶⁷ Sanger, Family Limitation (sixth ed., 1917), 13.

¹⁶⁸ "What Many Doctors Never Learn About Contraception." Emphasis original.

others performed the examinations for the express purpose of making women feel more comfortable and intimately engaged with their own bodies.¹⁶⁹

The diaphragm also provided feminists the opportunity to promote and practice sex positivity. One article in a feminist periodical contended that, "when the diaphragm is properly fitted and used as directed, it is almost impossible for a woman to become pregnant. We must get over our shame of 'planning for sex' if we are going to protect ourselves from unwanted pregnancies." According to this writer, the diaphragm incited individual women to claim sexual power in a novel way. Because the diaphragm, unlike the pill or IUD, was necessarily tied to the sexual act—a woman would only insert it if she was expecting to have intercourse—it required her to assert her intentions to engage in non-procreative sex. For many feminists, this was revolutionary.

The pill and IUD, by contrast, were more "invisible" technologies that allowed women to maintain the appearance of passive sexuality. 170 Diaphragm advocates—physicians included—promoting the device in more mainstream circles perceived the link between the device and the sexual act as a stumbling block that prevented the average woman from using it consistently. American social norms dictated that women were supposed to be passive receivers of sex—never initiators. As a result, more mainstream advertisements or representations of the diaphragm appealed to the average middle-class American woman by minimizing its visibility, thereby

¹⁶⁹ For more on pelvic examinations conducted within women's groups during the 1970s, see: Michelle Murphy, "Immodest Witnessing: The Epistemology of Vaginal Self-Examination in the U.S. Feminist Self-Help Movement." *Feminist Studies* 30, no. 1 (Spring, 2004): 115-147; and "Reexamining the Pelvic: The Pelvic Instruction Controversy of the 1970s," in Kline, *Bodies of Knowledge*.

¹⁷⁰ To be sure, many liberal feminists upheld these technologies as emblems of female sexual freedom, and consciously tried to make them more visible by using them as iconography to symbolize free love and the sexual revolution. But for the majority of women, the appeal of the pill and IUD was the fact that they were divorced from the sexual act, and became incorporated into the lifestyle and body, respectively.

erasing the appearance of a sexual intent. As an article in a 1973 issue of *Woman's Day* noted, "only the most confident girls to accept and handle their bodies without self-consciousness.

Those who don't are often clumsy or lax using a diaphragm—or any other method that requires touching their genitals."¹⁷¹

But in the 1970s, alongside movements for Free Love and sex-positivity, a new view of the diaphragm emerged—one that extolled the device's implications of premeditated, recreational sexuality among women. A diaphragm user, by this measure, was not only in control of her fertility. She was also in control of her right to seek sexual pleasure on her own terms, and to dictate the conditions of the sexual encounter. "More important possibly than your confidence in your ability to use a diaphragm as a contraceptive is your matter-of-fact acceptance of your right to use it," argued an *off our backs* writer. "Men should take their cues from you. Be righteous about using that diaphragm!" Thus, the argument that "we must get over our shame of 'planning for sex'" was a radical feminist call to action, an ethical imperative for feminist sex made possible only by the reclamation of the diaphragm.

The Diaphragm's New Reign

As media outlets capitalized on the sensational stories of sophisticated contraceptives causing illness and death in epidemic proportions, the general public became somewhat wary of newer birth control methods. To be sure, outrage over the state of affairs among the general population was far more subdued than in feminist circles. There was, however, still significant fear and distrust of so-called "sophisticated" methods of the pill and IUD. By the mid-1960s, newspapers began reporting on the diaphragm's resurgence, citing figures that revealed the

¹⁷¹ Fredelle Maynard and Rona Maynard, "Birth Control Accidents," Woman's Day (February, 1973): 108.

¹⁷² Sand, "Psychology of the Diaphragm," 12

dramatic extent to which the scandals plaguing the IUD and oral pill had spawned a new generation of enthusiastic diaphragm users. In these articles—mostly written by men—the diaphragm renaissance was framed as a direct consequence of the publicly televised Nelson pill hearings and other such widely accessible accounts of the shortcomings and risks of sophisticated methods. In the immediate aftermath of the Nelson hearings in 1970, *Business Week* reported that, according to one pharmaceutical company president, "There's been almost an hysterical cry for diaphragms during the last two months' ... He adds that five months ago, the company's 120 salesmen sold 3,000 of the products a month, 'but last month we sold 15,000.'"¹⁷³ The boom had lasting power. Six years later, *The Chicago Daily News* dubbed 1976 "the year of the great diaphragm shortage."¹⁷⁴

While women's magazines also took advantage of the pill-scandal angle, they painted the antiquated diaphragm and jelly method more as a deliberate choice, rather than merely a decision made for lack of a better option. "Looking for a birth-control method with absolutely no side effects? Been ruling out the diaphragm as outdated and unreliable? Then you may want to think again!" read the description of a *Cosmopolitan* article in 1976.¹⁷⁵ Unlike in radical feminist periodicals, however, in magazines like *Cosmopolitan* and *Essence*, the physician featured as a prominent and generally benevolent component of the process of obtaining a diaphragm. For example, in one *Cosmopolitan* article published in 1976 titled "The Diaphragm Is Back in Town," the writer expresses her amazement upon hearing her doctor's recommendation of the diaphragm, based on careful consideration of her lifestyle and preferences.¹⁷⁶

¹⁷³ "Fear of the Pill Aids an Industry," Business Week (March 21, 1970): 89.

¹⁷⁴ O'Malley, "Diaphragms Rediscovered," 171.

¹⁷⁵ Ebenstein, "The Diaphragm IS BACK IN TOWN," 148.

¹⁷⁶ Ebenstein, "The Diaphragm IS BACK IN TOWN," 148.

Most regarded the physician simply as a necessary middle man, though *Essence*, a magazine geared towards young, middle-class, black women, firmly reminded readers:

When you get to the gynecologist, please ask questions. Be a pain if you must. Doctors aren't gods; they don't know all the answers. It's up to you to make sure they give up all the knowledge they have and that they hunt down the answers to whatever questions they can't answer.¹⁷⁷

The serious, almost pleading tone suggested that readers might encounter apathy or resistance from their doctors. For black women especially, this was not an unreasonable expectation. As discussed in the previous chapter, black women, more so than their white counterparts, were discouraged from using the diaphragm due to a long history of racist prescribing practices, fueled by the long-standing notion that disenfranchised populations were less intelligent, or else ill-equipped to effectively use the device.

In general, women's magazines sought to reclaim and rebrand the diaphragm as the perfect contraceptive for young, middle-class, educated, professional women. A writer for *Cosmopolitan* figured the diaphragm as a natural part of a stereotypically liberal, middle-class, health-conscious lifestyle. She suggested, "my newly adopted back-to-nature philosophy—bran, brown rice, and yoga replacing Sara Lee and the sedentary life—demanded I search out a 'natural' contraceptive that would put *me* in control of my body."¹⁷⁸ Articles about the diaphragm conjured up images of a woman who was intellectual, independent, and in control of her own sex life. The archetypal diaphragm user was the type to read the news, to keep her own health in check, and to never blindly defer to authority. For those who resembled this ideal, the diaphragm was almost like a fashion accessory. In an *Essence* article from 1979, the writer was sure to

¹⁷⁷ Sandra Gregg, "Taking Control: A Contraception Guide," *Essence* (May 1, 1979): 46.

 ¹⁷⁸ Ebenstein, "The Diaphragm IS BACK IN TOWN," 148
 May 2019, Wolf Humanities Center Undergraduate Research Fellowship
 Lea Eisenstein, College of Arts & Sciences, 2019
 University of Pennsylvania

mention that "the diaphragm also comes in a small compact which, along with a little tube of jelly, even fits into a disco bag. You've no excuse to be without it!"¹⁷⁹ That same year, the style section of the *Washington Post* declared on its annual list of "what's out" and "what's in" that diaphragms were decidedly "in," alongside "brown eyeshadow," "Robin Williams," and "hitech." The pill, on the other hand, was "out."¹⁸⁰

These media depictions of the ideal, in-vogue diaphragm user were symptomatic of actual rates of use, and at the same time perhaps also influenced who was more likely to ask their physicians for one. According to a *New York Times* article from 1977, "the rubber barrier and its accompanying ointments seem particularly popular among young, single, well-educated women." The same was true of college-age women and those on the East Coast. But birth control users removed from the liberal pockets where feminist ideology permeated everyday life were less inclined to give up their pill prescriptions in the name of taking back bodily control. According to a family planning supervisor in an Appalachian clinic, "Our ladies are just happy not getting pregnant ... They don't have the same concept of health priorities as women in Cleveland, where I used to work." A study of contraceptive trends in 1980 found that race was also factored into who was most likely to use a diaphragm. While 19% of white women aged 15-44 had ever used the diaphragm at that time, only 10% of black women had ever relied on the method. Even in an era when women were rearticulating their relationship with the medical

¹⁷⁹ Gregg, "Taking Control: A Contraception Guide," 46.

¹⁸⁰ Nina S. Hyde, "THE LIST," *The Washington Post* (December 29, 1979): C1, C5.

¹⁸¹ George Vecsey, "The Diaphragm is Regaining Acceptance among some Women," *The New York Times,* August 19, 1977

¹⁸² Vecsey, "The Diaphragm is Regaining Acceptance among some Women," *The New York Times,* August 19, 1977.

¹⁸³ W. D. Mosher and C. A. Bachrach, *Contraceptive use, United States, 1980*, Washington, D.C.: Vital and Health Statistics, 1986.

and pharmaceutical establishments, many of the same old racial and class biases in who was considered—and who considered themselves—an ideal diaphragm and jelly user endured.

Physicians Catch Up

The ever-growing population-wide distrust of sophisticated birth control methods—and the medical profession as a whole—echoed in birth control use statistics over the following years. In the late 1970s and early 1980s, medical journals reported on increasing abandonment of the pill due to dissatisfaction and distrust after the Nelson hearings. One article in the journal Contraception reported "a sharp drop in total pill usage beginning in 1974 and an increase in diaphragm usage," from 5.6% of contraceptive users in 1970 to 15.9% in 1976. 184 The rise in the diaphragm's popularity was even more pronounced among college students, who were more likely to be active in the women's health movement. One study from the student health center at a California university concluded that "[t]he proportion of women choosing the pill ... declined sharply over the period—from 89 percent of patients in 1974 to 63 percent in 1978." On the other hand, "choice of the diaphragm rose substantially: In 1978, 33 percent chose it, compared to six percent in 1974." OB/GYNs at the University of Hawaii noted a similar trend in their student health center in a paper for the journal Contraception. Their study comparing contraceptive behavior over the five-year interval between 1974 and 1979 found that pill use declined from 34.8% to 32.6% in that time. Diaphragm use, meanwhile, increased substantially from just 2.8% in 1974 to 10.4% in 1979. 186

^{1.0}

 ¹⁸⁴ Janos Balog, Carol Langhauser, and Inez Rhine, "Recent Trend in Preference of Contraceptive Methods — Pills Down, Diaphragm on Rise: A Retrospective Evaluation," *Contraception* 15, no. 5 (May 1, 1977): 554, 556.
 ¹⁸⁵ S. Marie Harvey, "Trends in Contraceptive use at One University: 1974-1978," *Family Planning Perspectives* 12, no. 6 (Nov 1, 1980): 301.

¹⁸⁶ Ralph W. Hale and Donald F. B. Char, "Sexual Contraceptive Behavior on a College Campus: A Five-Year Follow-Up," *Contraception* 25, no. 2 (February, 1982): 125-134.

Physicians responding to increased demand for the diaphragm in the early 1980s found that there was little empirical data on best practices for its prescription. While the government and private firms funneled funding into clinical studies of oral contraceptives, IUDs, and injections throughout the 1940s, 1950s, and 1960s, research into the old-fashioned diaphragm was all but halted. Physicians who wanted to continue researching the diaphragm and ways to improve it were met with significant hurdles. OB/GYNs were discouraged from researching so-called "simple methods" of birth control—code for barrier devices and traditional spermicides—and instead received financial backing for more "scientific" methods that were more invasive and utilized highly technical knowledge on the human reproductive system. For example, research associates at the Population Council reported that, with such high demand for oral contraceptives at the peak of their popularity, it was impossible to conduct studies on barrier methods due to lack of funding and support. 188

Dr. Eugene Stim, an OB/GYN in New York, reaffirmed these concerns in a 1980 article published in *Advances in Planned Parenthood*. He noted that "the spermicide-diaphragm combination technique of today is based solely on the work of Dr. [Dorothy] Bocker," the medical director of Margaret Sanger's first birth control clinic, who conducted an oft-cited study of various contraceptive methods to determine which ones to recommend in early birth control clinics. The problem, Stim noted, was that Bocker's landmark study was conducted in 1924 and no longer met contemporary standards of the scientific method.¹⁸⁹ Another team of researchers in 1982 examining "the effectiveness of barrier methods of contraception with and without

_

¹⁸⁷ Clark, Disciplining Reproduction, 164.

¹⁸⁸ James Reed, "Doctors, Birth Control, and Social Values: 1830–1970," 126.

¹⁸⁹ Edward M. Stim, "The Nonspermicide Fit-Free Diaphragm: A New Contraceptive Method," *Advances in Planned Parenthood* 15, (1980): 91.

spermicide" similarly noted that the last clinical study of the diaphragm with and without jelly was the very same 1924 study. 190

With such an obvious dearth of up-to-date scientific information on the diaphragm and jelly method, Stim boldly claimed that "[t]he assumptions ... that the diaphragm functions primarily as a receptacle for spermicide and that a tight fit between the pelvic bones is important for contraceptive effectiveness—had never been verified by empiric observations." Based on his own observations in the clinic and his experiences talking to diaphragm users, Stim promoted a new method of prescribing and using diaphragms, which omitted not only the concomitant spermicide, but the very element that made physicians a necessary part of the process: the individualized fit. This was not by coincidence. Under the heading "Advantages," Stim explicitly states that what makes his improved method attractive is the fact that "nonprofessionals can become qualified to instruct [it, so] there would eventually be no need for women to visit a physician's office or clinic." 192

Conclusion

When the oral contraceptive pill became available to women in 1960, it validated the hard work of contraceptive researchers who had set the diaphragm aside to find a birth control option that was at once simpler to use and more technically sophisticated. However, validation soon gave way to outrage, distrust, and skepticism, when the organized women's health movement called attention to the shortcomings and dangers of the promised contraceptive panacea in the 1970s. While the pill, IUD, and other biology-altering contraceptive methods

¹⁹⁰ Sue Craig and Sue Hepburn, "The Effectiveness of Barrier Methods of Contraception with and without Spermicide," *Contraception* 26, no. 4 (1982): 348.

¹⁹¹ Stim, "The Nonspermicide Fit-Free Diaphragm," 93.

¹⁹² Stim, "The Nonspermicide Fit-Free Diaphragm," 97.

represented everything that was wrong with paternalistic science and medicine in the eyes of health feminists, the diaphragm and jelly method stood in opposition. Feminists swiftly reclaimed the diaphragm and spermicide, which not only required little technical knowledge to use, but was also safe and side-effect free. Qualities of the method that women may have previously found distasteful—like self-touching and planning for sex—they now found empowering. And most importantly, once a woman obtained a prescription, the control was entirely in her hands—not her doctors'.

Chapter V: The Diaphragm as a Plot Device

Introduction

In 2016, a writer for *Motherboard*, a popular online science and technology publication, published a think-piece on the topic of a peculiar trope in 1990s television. The article, titled "'90s Sitcoms Were Strangely Obsessed With This Unpopular Form of Birth Control," posed the question of why a host of beloved TV characters of the 1990s, ranging from Carrie Bradshaw on *Sex and the City* to Monica on *Friends*, were diaphragm users when real rates of diaphragm use had been on the decline. "Curiously," the writer noted, "right as the diaphragm was vanishing from use in the general public, it started to gain prominence on TV."¹⁹³

Whether the writers of these TV shows knew it or not, their choice of the diaphragm as opposed to condoms, the pill, or another form of birth control communicated to viewers certain traits about the characters using it onscreen. Especially in the context of the time period, which saw the emergence of the AIDS crisis and the fizzling out of the women's liberation movement, the diaphragm carried cultural weight as a contraceptive method used with intent: to protect against pregnancy only, rather than STDs, and to maintain complete bodily agency by using a female-controlled technology directly linked to the sex act. This chapter examines the diaphragm's lasting power as a cultural icon at the end of the twentieth century through popular television portrayals. I argue that ideas about the ideal diaphragm user inscribed in the technology over the preceding century—ones that reflected white, middle-class, urban, educated, sexually liberated womanhood—rendered the device a valuable narrative technology and cultural touchstone, even as its actual use among women and favorability among physicians waned.

¹⁹³ Kaleigh Rogers, "90s Sitcoms were Strangely Obsessed with this Unpopular Form of Birth Control," *Motherboard*, December 7, 2016.

The Diaphragm's Demise

The 2016 Motherboard article on the prevalence of diaphragms in 1990s television concludes that, regardless of why writers relied on this method as a plot device, "one thing's for sure: the popularity of the diaphragm is one of the most unrealistic tropes of '90s sitcoms' 194 Although the article somewhat deceptively asserts that diaphragm use plummeted continuously since the inception of the oral contraceptive pill, it nevertheless points to real, profound dissonance between birth control statistics and popular media portrayals at the end of the twentieth century. According to a report by the Centers for Disease Control and Prevention, between 1986 and 1995, the percentage of birth control users aged 15-44 who had ever relied on the diaphragm declined from 17.1% to 15.2%. By 2002, that percentage nosedived to just 8.5%. At the same time, however, the diaphragm made guest appearances as the preferred contraceptive method for a host of TV characters on primetime shows like *Felicity, Seinfeld*, *Friends, Sex and the City*, and *The King of Queens*, even as late as 2002. So while the trope may not have exactly been "unrealistic" in the sense that the diaphragm was not yet obsolete at the start of the twenty-first century, it was perhaps overrepresented in popular media.

A number of coinciding historical factors can account for the diaphragm's decline in the final years of the twentieth century. For one, women's enthusiasm about the device dampened. As the feminist fervor behind the women's health movement receded through the 1980s, anxiety about the safety of more sophisticated but riskier treatments declined with it. Newer, lower-dose reincarnations of the pill demonstrated dramatically fewer side effects and health risks, as did

¹⁹⁴ Rogers, "90s Sitcoms were Strangely Obsessed with this Unpopular Form of Birth Control." May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019 University of Pennsylvania

updated IUDs, contraceptive injections, and hormonal patches. The importance of female control and medical skepticism, too, eventually gave way to simple convenience, rendering the diaphragm an anachronistic technology in the shadow of hormonal methods once again.

In contraception guides published after the 1980s, language discussing the criticality of the clinical fitting and prescribing process very much resembled that of the past. In their 1990 book *Contraception: A Guide to Birth Control Methods*, renowned sexologists Bonnie and Vern Bullough reminded the reader that "since the effectiveness of the diaphragm, regardless of type, depends upon a good fit," obtaining one requires "a knowledgeable professional to select the correct size and type." Incidentally, the same facts appear first on the list of disadvantages of the device. "Though [the need for a prescription for each replacement] was enacted to ensure that women get a proper fit each time," the Bulloughs explained, "it does require a visit to one's medical provider or suitably staffed clinic." The requirement of an intimate and repeated clinical encounter and personalized fitting, while in the first half of the twentieth century represented one of the diaphragm's most attractive qualities, was now seen as a hassle. In the 1990s, methods that required little or no action on the part of the woman unquestionably prevailed once again: by 1995, roughly 10.7 million contraceptive users had opted for sterilization, and an estimated 10.4 million relied on the pill. 197

The emergence of the AIDS crisis, moreover, forever changed Americans' calculations of "risk" in regards to sex and contraceptive practice. In June of 1981, doctors began responding to patients—primarily young men—with rapidly progressing, terminal illnesses never before seen

¹⁹⁵ Vern L. Bullough and Bonnie Bullough, *Contraception: A Guide to Birth Control Methods* (Buffalo: Prometheus Books, 1990), 47.

¹⁹⁶ Bullough and Bullough, A Guide to Birth Control Methods, 51.

¹⁹⁷ Linda J. Piccinino and William D. Mosher, "Trends in Contraceptive use in the United States: 1982-1995," *Family Planning Perspectives* 30, no. 1 (Jan 1, 1998): 3.

in previously healthy, young people. Clusters of people with these disease symptoms were largely concentrated in cities with large queer populations, like New York and San Francisco. In medical circles, for lack of more specific information about the pathology, etiology, spread, and treatment of the disease, it was known only as GRID—Gay-Related Immune Deficiency. By 1982, doctors had identified the illness' source as HIV, Human Immunodeficiency Virus, and found that it was most commonly spread through unprotected sex acts. Later that year, the disease caused by the HIV virus was given its name: AIDS, or Acquired Immune Deficiency Syndrome. 198

While HIV/AIDS ravaged the gay male community, the panic surrounding the crisis and the potential for other fatal sexually transmitted epidemics disseminated rather slowly throughout the American conscious. Through the better part of the 1980s, heterosexual Americans primarily perceived HIV infection as a gay man's disease. Except for the rare blood transfusion error, HIV did not receive press as a danger to the "average" heterosexual American. Sexual health specialists and medical professionals largely carried the same biases. It was not until 1987 that the American College of Obstetrics and Gynecology (ACOG) officially recommend that ""women at risk of infection with the AIDS virus ... be educated about the means of preventing infection in themselves, their sexual partners and their offspring," and given counsel by sexual health care providers. ¹⁹⁹

This statement set off a series of parallel statements and recommendations across public and sexual health institutions like the CDC and Planned Parenthood in the following months, as

_

¹⁹⁸ Centers for Disease Control and Prevention, "HIV and AIDS — United States, 1981–2000," *Morbidity and Mortality Weekly Report* 50, no. 21 (June 1, 2001): 429-456.

¹⁹⁹ American College of Obstetrics and Gynecology, quoted in Patricia Donovan, "AIDS and Family Planning Clinics: Confronting the Crisis," *Family Planning Perspectives* 19, no. 3 (1987): 111.

sexual health experts began to take seriously the fact that "the number of [heterosexual transmission] cases [was] expected to increase significantly in the next four years (from 1,100 new cases in 1986 to almost 8,000 new cases in 1991)."²⁰⁰ By specifically highlighting "at-risk women" as the target recipients of HIV/AIDS education, testing, and counseling, however, medical authorities minimized the importance of providing these services to women not perceived to fall into the "at-risk" group. Thus, in sexual health care practices where the majority of the clientele was white and middle-class, risk of HIV infection was thought to be low, and birth control prescribing habits likely changed very little.

Medical and scientific professionals' silence on the issue continued into the 1990s.

Articles in the reproductive medicine journal *Contraception*, for instance, seldom mentioned HIV/AIDS until the mid-1990s, meaning that editors—with expertise ranging from obstetrics and gynecology to biostatistics—either did not receive or did not see fit to publish research on HIV and AIDS until more than a decade after the epidemic surfaced. Research published in *Contraception* instead remained almost entirely focused on clinical trials of different hormonal birth control options. With little research and guidance to suggest that women—or even specific groups of women—were at high risk of acquiring HIV, physicians had little reason to change their prescribing practices, and white, educated women in particular continued to be fitted for diaphragms at relatively high rates.

But gradually, over the course of the late 1990s, medical professionals began to incorporate intravenous drug addicts, people of color, and eventually sexually active heterosexuals into the population of "at-risk" individuals. In this new culture of sexual risk, in

²⁰⁰ Donovan, "AIDS and Family Planning Clinics," 111.

which no one was 100% protected from HIV exposure, birth control needed to prevent against not only pregnancy, but also sexually transmitted pathogens. In these respects, the condom—a method previously dismissed by medical professionals because of its over-the-counter availability and lack of medical oversight—was the form of birth control best fit for the task. After a years-long concerted effort by AIDS prevention organizations to rebrand the condom as the only technology that guaranteed "safe sex," rubbers became the default method for both users and providers concerned about HIV exposure.²⁰¹ By the mid-1990s, then, with fear of HIV transmission mounting, the diaphragm was no longer the safest bet when considering contraceptive technique.

Adult women of the late 1990s who already used the diaphragm and jelly method and perceived themselves to be at low risk of HIV exposure were more likely to hold on to their diaphragms throughout the remainder of the 1990s and early 2000s. In 1995, contraceptive users between the ages of 35 and 44 showed the highest rates of diaphragm use of all other age groups. These were, after all, women born at the dawn of the women's liberation movement, women whose mothers reclaimed the diaphragm and jelly in the 1970s, women who were taught to meet the advice of their doctors with a critical eye. This was not the case for the subsequent generation, among whom diaphragm prescriptions became much less common. Between 1982 and 1995, teenage contraceptive users relying on the diaphragm fell from 6% to almost none. Born in the midst of the AIDS epidemic and raised in a new "safe sex" paradigm, the children of

²⁰¹ Jennifer Brier, *Infectious Ideas: U. S. Political Responses to the AIDS Crisis* (Chapel Hill: University of North Carolina Press, 2009), 46-47.

²⁰² Piccinino and Mosher, "Trends in Contraceptive use in the United States: 1982-1995," 7.

²⁰³ Piccinino and Mosher, "Trends in Contraceptive use in the United States: 1982-1995," 7.

the 1980s and 1990s were taught to see any contraceptive that did not protect against STDs—the diaphragm included—not as a technology of freedom, but of risk.

Diaphragm on TV

It is this generational gap between women raised in the aftershock of the women's health movement and those reared in the "safe sex" paradigm that gave rise to the visibility of the diaphragm in media during a time when demand for the device was on the decline in real life. Women represented on television's most popular series in the 1990s, like *Seinfeld*, *Sex and the City*, and *Friends*, written by screenwriters of the same cohort, were of the former generation. Having reached sexual maturity by the time the diaphragm made its triumphant comeback in the late 1970s and early 1980s, it is not surprising that television writers in the 1990s worked the diaphragm into scripts revolving around sexually active 30-something characters.

Aside from being a relatively mainstream device among the cohort of primetime television writers and consumers, the diaphragm also did symbolic work. By the mere mention of the word, the diaphragm projected characteristics of reproductive autonomy, sexual liberation, intelligence, and white, middle-class cultural values onto the female character who used it. Media studies scholars refer to such characterizations as essential to "postfeminist" media, a term used to describe how depictions of womanhood and femininity suggest that the work of the feminist struggle has already been done, and all modern women have left to do is reap the benefits. The archetypal postfeminist character is presented as an "active, sexual [subject] with desires of [her] own," embodying qualities of "individualism, choice, and empowerment."

²⁰⁴ Elizabeth Aveda Kissling, "Pills, Periods, and Postfeminism," 13, no. 3 (July 1, 2013): 492. May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019

How did the diaphragm come to represent postfeminist ideals? The seeds were planted in stages throughout the preceding decades, as medical authorities with control over the device negotiated and remade the qualities of an ideal, trustworthy user—a user that was white, middle-class, educated, centrally located, and highly motivated. As discussed in Chapter III, eugenic beliefs about race, class, ability, and education colored the ways physicians prescribed birth control to women based on demographic categories throughout the 1930s, '40s, and '50s. Eventually, the diaphragm's association with only certain kinds of women became a self-fulfilling prophecy: doctors prescribed diaphragms to white, educated, middle-class women located in cities or suburbs in greater numbers, and as a result perceived these very same women to be the most typical and reliable kinds of diaphragm users. Thus, associations between the optimal diaphragm user and traits like whiteness, high income, and high education would prove difficult—if not impossible—to break.

These characteristics map cleanly onto postfeminist female archetypes, making the diaphragm a technology of convenient, though subtle, suggestion of a certain kind of lifestyle. Take, for instance, a 1992 episode of *Seinfeld* titled "The Virgin." In it, Elaine barges into Jerry's apartment while his new romantic interest, Marla, who had just divulged to Jerry that she was a virgin, is over. Entering the apartment just after Marla's casual confession, Elaine begins to tell a story about an embarrassing interaction she had the previous night.

I was talking to this guy, you know, and I just happened to throw my purse on the sofa. And my diaphragm goes flying out. So I just froze, you know, ahh! Staring at my diaphragm. You know, it's just lying there. So then, this woman ... she grabbed it before the guy noticed, so. I mean, big deal, right? So I carry around my diaphragm, who doesn't? Yeah, like it's a big, big secret that women carry around their diaphragms. You never know when you're gonna need it, right?²⁰⁵

²⁰⁵ "The Virgin," *Seinfeld*, directed by Tom Cherones, NBC, November 11, 1992. May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019 University of Pennsylvania

Besides providing comedic irony as a plot device, Elaine's discussion of her diaphragm also positions her as a certain type of modern, sexually liberated woman, and casts her as a foil to Marla, who requires no birth control. Of course, what is funny about Elaine's monologue is not simply the fact that she uses a diaphragm; rather, it is the possibility that a man would see that she brought it to the party. Her embarrassment lies within the idea that the device is directly linked to the sexual act. Thus, to see a diaphragm in Elaine's purse would reveal that she was either planning or hoping to meet someone and have casual sex at the party. This assumption is in accordance with postfeminist elements of empowered promiscuity and unapologetic sexuality, exhibited in Elaine to a degree that could easily match those of her male friends.

The monologue moreover suggests that the diaphragm spurred a moment of solidarity between women, perhaps in a way that no other form of contraceptive could replicate. Birth control pills need to be taken at the same time every day, regardless of whether one is expecting to have a sexual encounter, and can be prescribed for a number of different symptoms unrelated to the desire to prevent pregnancy. IUDs are invisible to the naked eye. Condoms, being a male-controlled method, would be instantly recognizable to another man. The diaphragm, however,

functions as a sort of visual cue between the two women, allowing the other to effortlessly identify it and clear it from sight without cluing the male character in to what had happened.



Figure 7: Still from Seinfeld episode "The Virgin."

The diaphragm as a technology of female bonding manifests even more explicitly in an infamous episode of *Sex and the City*, which aired in 1999. In the scene, Carrie, the protagonist, is about to make her core group of friends—Miranda, Charlotte, and Samantha—late to a movie because she won't leave her bathroom. When her friends chide her for taking so long, she admits, "I need help. It's embarrassing, but I got a new diaphragm and it's stuck." She continues, emerging from the bathroom, "Now, listen. I'm either going to have to make an emergency visit to my gynecologist, or one of you is going to have to give me a hand." After Miranda and Charlotte both decline, Samantha takes a large sip of her martini, gestures for Carrie to reenter

²⁰⁶ "The Cheating Curve," Sex and the City, directed by John David Coles, HBO, July 11, 1999. May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019 University of Pennsylvania

the bathroom, and sternly orders, "Go," before following her into the bathroom and shutting the door behind her.

When Miranda asks why she was wearing a diaphragm in the first place, considering that Carrie was not seeing anyone at the time, Carrie is forced to reveal to the group that she had entered back into a previous relationship behind their backs. Just as in *Seinfeld*, the diaphragm in *Sex and the City* serves the dual purpose of a comedy prop and a means of facilitating intimate female friendship. In Carrie's possession, the diaphragm represents both her reproductive control and sexual freedom. Not only is she not squeamish about inserting and removing it herself, but she is comfortable deferring to her equally liberated friends to aid her when she is unable to do so.

Alternative Representations

When using the diaphragm for character development or as a comedically embarrassing trope, as in the cases of *Seinfeld* and *Sex and the City*, screenwriters implied by omission that the character who owned it was a "perfect user." Because pregnancy due to contraceptive failure does not present itself as an issue for these women throughout the series, viewers are left to assume that Carrie and Elaine use the instrument correctly every time. They are not only educated and cultured, but determined to remain independent and untethered to their sex partner of the moment. The diaphragm as opposed to another birth control indicates that they are in control of and comfortable with their sexuality but still highly motivated and intelligent enough to remember to use it correctly, every single time.

Other media depictions of the diaphragm, however, are more subversive. An episode of *The King of Queens* that aired in 2002, for example, opens with a scantily clad Carrie trying to get into her bathroom in the middle of the night. She finds that it is occupied by her father, who May 2019, Wolf Humanities Center Undergraduate Research Fellowship

112
Lea Eisenstein, College of Arts & Sciences, 2019
University of Pennsylvania

is staying with her and her husband in their one-bathroom house. She tells her father, who is enjoying a comically luxurious candlelit bath, that she needs to come in and retrieve something, but does not say what it is. He offers, "Tell me what it is and I'll slide it under the door," but she declines, saying only, "Yeah, won't work." A few scenes later, presumably taking place several weeks after the opening scene, she mentions to her husband, Doug, that she feels inexplicably sick. In trying to determine the cause of her nausea, she flashes back to the moments taking place before the initial bathroom scene. She is shown kissing her husband in bed, then pausing to interject, "Oh, wait a minute, wait. I forgot to put my thingy in. I'll be right back." She then gets out of the bed, and the camera cuts back to the opening scene outside of the bathroom door.²⁰⁷

That this portrayal of diaphragm use revolves around a contraceptive failure suggests circumstances and traits about Carrie that diverge from more explicitly postfeminist media representations, like those in *Sex and the City* and *Seinfeld*. Although Carrie is also white and based in a metropolitan area, *The King of Queens* uniquely represents a working-class, blue-collar couple using a diaphragm. Incidentally, the show presents one of the few instances in which the diaphragm fails because the woman neglects to use it, reinforcing the idea that a middle- or upper-middle-class woman remains the ideal user. After all, a woman of greater means would not find herself in a situation where her personal space was compromised due to financial constraints. With only one bathroom and an intergenerational household, it is no small wonder that Carrie in the *King of Queens* could not manage to use her diaphragm with the same ease that Carrie Bradshaw of *Sex and the City* could.

²⁰⁷ "Pregnant Pause: Part I," *The King of Queens*, directed by Rob Schiller, CBS, May 21, 2001. May 2019, Wolf Humanities Center Undergraduate Research Fellowship Lea Eisenstein, College of Arts & Sciences, 2019 University of Pennsylvania

Even more so than in the late 1990s, the diaphragm is nearly obsolete as a birth control technology today—only 3.1% of all contraceptive users had ever tried it between 2006 and 2010.²⁰⁸ Still, the device continues to appear in popular media, only now for other narrative purposes. In a 2015 episode of Younger, a show about a 40-something woman named Liza who reenters the workforce masquerading as a much younger person to fit more cleanly into a youthful office culture, the diaphragm is used to comedically exaggerate the generational difference between the protagonist and her millennial colleagues. The joke arises when Liza's closest work friend intimates that her menstrual cup is stuck in her vagina. Liza has never heard of the menstrual cup and asks her friend to explain it to her. "Like a diaphragm?" she asks, attempting to make sense of the vaginal technology. This prompts only confusion form her friend, who fires back "What's a diaphragm?" A beat of silence passes as the reality of the generational gap between the two women registers on Liza's face—the diaphragm reference threatening to reveal her true age. The scene ends with a callback to Sex and the City, as the friend begs Liza to enter a bathroom stall at the workplace to retrieve the menstrual cup.²⁰⁹ A full 16 years after the Carrie Bradshaw's famous stuck-diaphragm scene aired, the subplot centered around the menstrual cup on Younger reveals that a degree of continuity lasts across generations, symbolized by the persistence of vaginal technologies and the way they bring women together.

Conclusion

Although women would mostly abandon the diaphragm for good by the end of the decade, the 1990s witnessed a resurgence of the device's cultural currency in television

²⁰⁸ Daniels and Mosher, "Contraceptive Methods Women Have Ever Used," 11.

²⁰⁹ "Girl Code," Younger, directed by Tamra Davis, TV Land, April 21, 2015.

portrayals of postfeminist characters. Without having to explain anything directly, a character's mention of the diaphragm as their contraceptive of choice—and whether or not they succeeded in preventing pregnancy with it—revealed very much about them as people. In other words, the diaphragm in the 1990s and very early 2000s proved to be a cultural touchstone for viewers, connoting a white, middle-class, heterosexual, educated, and sexually liberated urban lifestyle. The characters who used it did not have to worry about the looming AIDS crisis because they ran in social and romantic circles that were not associated with the stigmatizing disease. They were also too smart and motivated to defer to a daily pill or set-and-forget IUD, which would take deliberate choice and sexual intent out of the equation in their sexual escapades. And in some cases, failure to use or recognize the diaphragm connoted different character qualities, like working-class socioeconomic constraints and generational difference, respectively. In each of these representations, the diaphragm meant more than just a form of birth control—it was also a technology of female bonding, a marker of generational difference, and a plot device.

Conclusion and Epilogue

In December of 2017, *The New York Times* published an article titled "Birth Control Pills Still Linked to Breast Cancer, Study Finds." The piece called attention to a dearth of scientific knowledge on the risks and rewards of hormonal contraceptives, even a half-century after the oral contraceptive pill first hit the market in 1960. Dr. Marisa Weiss, an oncologist interviewed for the piece, suggested that concerned Pill users adopt non-hormonal methods "like a diaphragm, an I.U.D. that does not release hormones, or condoms. 'It's not like you don't have a choice,' she said."²¹⁰

But only readers who had already attempted to switch to the diaphragm in recent years would have identified the irony in Weiss' statement. In 2013, Janssen Pharmaceuticals discontinued the most popular contraceptive diaphragm on the United States market, the Ortho All-Flex, leaving just one pharmaceutical company in the country to produce the device. Since that time, women seeking relief from hormonal contraceptive methods in the form of the diaphragm and spermicide method have voiced frustration with their limited access to the product and their doctor's unwillingness to prescribe it.²¹¹ If the diaphragm has become so difficult to obtain in recent years, why, then, would a physician in 2017 suggest it as a viable and accessible contraceptive choice?

Throughout the early 2000s, some medical researchers tried in vain to resurrect the old-fashioned diaphragm, the design of which remained largely unchanged from the original Mensinga model debuted over a century prior. Between 2006 and 2010, just 3.1% of sexually

²¹⁰ Roni Caryn Rabin, "Birth Control Pills Still Linked to Breast Cancer, Study Finds," *New York Times*, December 6, 2017.

²¹¹ For some recent examples, see: Jess Commons, "Yet another Reason to Give Up Your Hormonal Contraception," *Refinery29* (March 12, 2017); Kissling, "Where'd the Diaphragm Disappear to?"; and Pillion, "It's Way Harder than it should be to Get a Diaphragm."

active women using contraception had ever used the diaphragm, and a survey of physicians' knowledge of contraceptive methods found that only 59.1% of physicians in the study knew the failure rate of the diaphragm.²¹² Today, as contraceptive users grow ever more dissatisfied with the expanding menu of hormonal options, OB/GYNs regard the diaphragm and jelly method as generally effective—but always as an alternative to hormonal or implanted methods.

Pharmaceutical companies, doctors and scientists, and contraceptive users have all for the most part come to see the diaphragm as an unsexy form of birth control, more so than technologies like the IUD and pill. The diaphragm's historical trajectory has imbued the technology with a host of negative associations: the idea that it is outdated, unreliable, cumbersome, or unspontaneous. Physicians did much of this work in the mid-twentieth century, as they abandoned and disparaged the diaphragm in favor of more sophisticated methods.

However, the medical profession today is not a monolith, and not all subscribe to the belief that the diaphragm is a useless relic in a contraceptive world becoming ever more high-tech. A precious minority, like Dr. Marisa Weiss, still see the diaphragm as an important option, even if it is not a frontline defense against pregnancy. The virtually collapsed diaphragm market, however, leaves even progressive doctors void of reliable suppliers, and even highly motivated patients without ready access to a non-hormonal, female-controlled barrier device.

Physicians' general reluctance to frame the diaphragm as a viable method in its own right, as well as the introduction of a one-size-fits-all diaphragm in 2015, presents a twist in the narrative of the device: where physicians once fit clinical practice to suit the diaphragm, non-

²¹² Daniels and Mosher, "Contraceptive Methods Women Have Ever Used," 11; D. L. Eisenberg, C. Stika, A. Desai, et al., "Providing Contraception for Women Taking Potentially Teratogenic Medications: A Survey of Internal Medicine Physicians' Knowledge, Attitudes and Barriers," *Journal of General Internal Medicine* 25, no. 4 (2010): 291-297.

medical diaphragm designers now must fit the standards of modern medicine. Caya was designed not by medical doctors, but by a nonprofit public health organization called PATH. The organization ensures that "women participants have been integral codesigners in the formative stages of research and throughout the iterative design and development process."²¹³ In a medical marketplace that is slowly detaching treatments from the physical doctor's office, the device's potential is hinged on convenience and ease of prescription, rather than efficacy or safety.²¹⁴

We see ghosts of the diaphragm resurging in a variety of new non-contraceptive products in the twenty-first century, backed by mostly female entrepreneurs with feminist missions. The menstrual cup, for example, has transformed from a niche product for environmentalists into a mainstream technology with name recognition. A small silicone cup with a stem used for insertion and removal, the menstrual cup is inserted into the vagina and collects menstrual blood, rather than absorbing it like a tampon. Designers of this product—of which there are now many brands, catering to a variety of aesthetic, age-based, sizing, and disability-oriented considerations—count comfort, control over what enters one's body, and minimization of consumer waste among their benefits. Just as first- and second-wave feminists claimed the diaphragm as an technology of resistance against capitalist and patriarchal social structures, so, too do the women of what can arguably described as the third (or fourth) wave of feminism today in their reclamation of reusable, female-controlled intravaginal technologies.²¹⁵

Another specter of the diaphragm appears in the FLEX menstrual disc, a shallower, disposable menstrual cup designed nearly identically to a traditional diaphragm. The product

²¹³ SILCS Diaphragm Design History (Basel: Birkhäuser, 2015).

²¹⁴ Tomes, *Remaking the American Patient*, 321-359.

²¹⁵ For more on the intersections of environmentalism, menstrual advocacy, and feminism in the twenty-first century, see: Bobel, *New Blood*.

went on the market in 2016. It promises to not only act as a reliable, long-acting, chemical-free menstrual cup, but also allow for "mess-free period sex." The creators even note that "FLEX sits just past the vaginal canal in the same place as a diaphragm," and yet maintain that while it was designed to be conducive to sexual intercourse, it "is not a contraceptive." Much like Chapter I's discussion of the vaginal pessary reveals, the basic design of the diaphragm remains adaptable, with endless possibilities for appropriation and tinkering based on the designer's intent.

Previous scholars in the history of contraception have alluded to the inaccessibility of the diaphragm, contending that it failed to ever gain popularity as a viable birth control option because it depended too much on personal motivation, access to medical care, and an invasive consultation process. Others perpetuate the notion that the diaphragm was unacceptable to most women, based on the assumption that users have always found the insertion process distasteful both because it interrupts the sex act and requires self-touching. But both historical record and contemporary reincarnations of the device demonstrate that the story is far more complicated. From the time gynecologists placed pessaries in the 1860s, to the release of the first tampons in the 1930s, to the menstrual cups of today, women have accepted or otherwise demanded access to vaginal technologies. By focusing on a female-controlled barrier device, my analysis puts female user agency at the center, a perspective necessary to any history of reproductive technology.

²¹⁶ FLEX, https://flexfits.com/.

^{217 &}quot;Frequently Asked Questions," FLEX, https://theflexcompany.zendesk.com/hc/en-us.

²¹⁸ See, in particular: Gordon, Woman's Body, Woman's Right, 67; and Tone, Devices and Desires, 153.

²¹⁹ Gordon, Woman's Body, Woman's Right.

A much more arduous obstacle to the diaphragm's popularity was and continues to be the necessity of a doctor's prescription. As far back as the Margaret Sanger's fight, and even more recently during the women's health movement of the 1970s, women have questioned the real utility of the prescription protocol. The release of Caya diaphragm reignited this debate, especially as the new design rendered obsolete the entire fitting process, and thus the need for the clinical encounter. Reader comments on a *Jezebel* report about the FDA approval of the product reveal vibrant controversy over this point. "Why is this by prescription only?" asked one user, adding, "It's not like we haven't been shoving tampons into our hoo-has forever. I'm pretty sure we could figure this out. Sigh." Another echoed this frustration, pointing out the irony in that the device "is practically a modified [menstrual] cup with some spermicide in it. Last I checked you don't need a script for that."²²⁰

If the diaphragm has truly died in the twenty-first century, then why is it still worth talking about? For one, its history animates a bigger picture of power and agency in a society that is ever-evolving, but not necessarily advancing. And it is a history still in the making. The diaphragm lives on as an icon of both the retro feminism of the past and potential new choices in the future. It has shown itself to be both plastic and resilient in the material and figurative sense. Through repressive laws, progress-oriented medicine, technological enthusiasm, and antiestablishment skepticism, the diaphragm has remained—functionally unchanged, but everadaptable to the needs and desires of its makers and users. One can only wonder whether we are poised to witness the opening of a new chapter in the diaphragm's history today.

Reader comments on Lodi, "A Vintage Birth Control Method Is Back."
 May 2019, Wolf Humanities Center Undergraduate Research Fellowship
 Lea Eisenstein, College of Arts & Sciences, 2019
 University of Pennsylvania

Bibliography

Primary

- "Advertisement: Emko Foam." Jet (January 28, 1965): 63.
- "Advertisement: Holland-Rantos Co., Inc." Redbook 148, no. 6 (April, 1977): 206.
- "Bad News for Diaphragm Lovers." April 30, 2014. https://www.bedsider.org/features/333-bad-news-for-diaphragm-lovers.
- "Birth Control as Campaign Issue." *Tri-State Defender*, December 12, 1959.
- "Fear of the Pill Aids an Industry." Business Week (March 21, 1970): 89.
- "Index to Advertisers." *American Journal of Obstetrics and Gynecology* 30, no. 4 (October, 1935).
- "Mizpah Pessary Advertisement." Philadelphia Inquirer, March 2, 1899.
- "New Miracles in Birth Control." Jet (March 6, 1952): 24-27.
- "Poll Finds 18% Dip in use of Birth Control Pills." New York Times, Feb 2, 1970.
- "Raid on the Uterus." Journal of Materia Medica 6, no. 11 (Nov 1, 1867): 323.
- "Robinson's Improved Pessary." *Cambridge Chronicle*, February 14, 1850. https://newspaperarchive.com/cambridge-chronicle-feb-14-1850-p-4/.
- "Society Reports: Report on Obstetrics and Diseases of Women." *Medical Examiner* (April 1, 1873): 88.
- "Some Fallacies in Gynecology." The Cincinnati Lancet and Clinic 27, no. 1 (July 4, 1891): 18.
- "The Accident of Birth." Fortune 17, no. 2 (February, 1938a): 83-83.
- "The Following Conversation was Recorded to the Best of My Recollection Soon After it Happened." *Woman Community Women's Newspaper*, July, 1973, sec. 1.
- "The Teaching of Contraception in Medical Schools." *Western Journal of Surgery, Obstetrics and Gynecology* 51, (September, 1943): 381-383.
- "Girl Code." Younger. Directed by Tamra Davis. TV Land. April 21, 2015.

- "Part Two: Changing the World." *Makers: Women Who Make America*. Directed by Barak Goodman. PBS. February 26, 2013.
- "Pregnant Pause: Part I." The King of Queens. Directed by Rob Schiller. CBS. May 21, 2001.
- "The Cheating Curve." Sex and the City. Directed by John David Coles. HBO. July 11, 1999.
- "The Virgin." Seinfeld. Directed by Tom Cherones. NBC. November 11, 1992.
- "What did the American Birth Control League Accomplish in 1927?" pamphlet. Box 4, folder 45. Norman E. Himes Papers, 1918-1956. Center for the History of Medicine. Francis A. Countway Library of Medicine. Harvard University.
- "What Many Doctors Never Learn About Contraception: An Editorial." Box 77, folder 13. MS Planned Parenthood Federation of America Records, 1918-1974. Sophia Smith Collection. Smith College Library.
- American Experience: The Pill. Documentary film. Directed by Gazit, Chana. PBS, 2003.
- Ames, Blanche. "Lawyers Seen in Re Dr. Konikow." February 20, 1928. Box 1, folder K. Records of the Birth Control League of Massachusetts, 1916-1934. Schlesinger Library. Radcliffe Institute. Harvard University.
- Balog, Janos, Carol Langhauser, and Inez Rhine. "Recent Trend in Preference of Contraceptive Methods Pills Down, Diaphragm on Rise: A Retrospective Evaluation." *Contraception* 15, no. 5 (May 1, 1977): 553-561.
- Barnes, Zahra. "Diaphragms are Back in Style—Here's Why You might Want to Try One." November 2,2016. https://www.self.com/story/diaphragm-birth-control.
- Beers, John B. Preventing Conception. U.S. Patent 4729. Issued August 28, 1846.
- Blum, Sam. "The Pill." Redbook (January, 1966): 80.
- Bullough, Vern L. and Bonnie Bullough. *Contraception : A Guide to Birth Control Methods*. Buffalo: Prometheus Books, 1990.
- Centers for Disease Control and Prevention. "HIV and AIDS United States, 1981—2000." *Morbidity and Mortality Weekly Report* 50, no. 21 (June 1, 2001): 429-456.
- Clark, Le Mon. *The Vaginal Diaphragm: Its Fitting and use in Contraceptive Technique*. Chicago: The C.V. Mosby Company, 1939.

- Commons, Jess. "Yet another Reason to Give Up Your Hormonal Contraception." *Refinery29* (March 12, 2017).
- Correspondence from Anne Kennedy to Norman E. Himes. April 2, 1929. Box 29, folder 316. Norman E. Himes Papers, 1918-1956. Center for the History of Medicine. Francis A. Countway Library of Medicine. Harvard University.
- Correspondence from Blanche Ames to James Stone. February 29, 1928. Box 1, folder K. Records of the Birth Control League of Massachusetts, 1916-1934. Schlesinger Library. Radcliffe Institute. Harvard University.
- Correspondence from Clarence Gamble to George Cooper. November 16, 1948. Box 28, folder 489. Clarence James Gamble Papers, 1920-1970s. Center for the History of Medicine. Francis A. Countway Library of Medicine. Harvard University.
- Correspondence from Clarence Gamble to M.T. Foster, December 16, 1948. Box 28, folder 489. Clarence James Gamble Papers, 1920-1970s. Center for the History of Medicine. Francis A. Countway Library of Medicine. Harvard University.
- Correspondence from Norman E. Himes to Herbert Simonds. April 11, 1929. Box 29, folder 316. Norman E. Himes Papers, 1918-1956. Center for the History of Medicine. Francis A. Countway Library of Medicine. Harvard University.
- Correspondence from Norman E. Himes to Herbert Simonds. January 13, 1930. Box 29, folder 317. Norman E. Himes Papers, 1918-1956. Center for the History of Medicine. Francis A. Countway Library of Medicine. Harvard University.
- Corson, Stephen L., Richard J. Derman, and Louise B. Tyrer. *Fertility Control*. Ontario: Goldin Press, 1995.
- Craig, Sue and Sue Hepburn. "The Effectiveness of Barrier Methods of Contraception with and without Spermicide." *Contraception* 26, no. 4 (1982): 347-359.
- De Waltoff, Dayve Boris. Pessary. United States patent 705,392. Filed January 5, 1901, and issued July 22, 1902.
- Dickinson, Robert L. "Contraception: A Medical Review of the Situation." *American Journal of Obstetrics and Gynecology* 8, no. 5 (1924): 583-604.
- Directions for use of Lanteen Products for Marriage Hygiene. Chicago: Lanteen Laboratories, Inc., 1937.
- Donovan, Patricia. "AIDS and Family Planning Clinics: Confronting the Crisis." *Family Planning Perspectives* 19, no. 3 (1987): 111-138.

- Ebenstein, Ronnie Sue. "The Diaphragm IS BACK IN TOWN." *Cosmopolitan* 180, no. 6 (June 1, 1976): 150.
- Eisenberg, David, Catherine Stika, Ami Desai, David Baker, and Kathleen Yost. "Providing Contraception for Women Taking Potentially Teratogenic Medications: A Survey of Internal Medicine Physicians' Knowledge, Attitudes and Barriers." *Journal of General Internal Medicine* 25, no. 4 (Apr., 2010b): 291-297.
- *FLEX*. https://flexfits.com/.
- Goodyear, Charles. *Applications and Uses of Vulcanized Gum-Elastic*. Volume II. New Haven: Self-published, 1853.
- Grandin, Egbert H. "Transactions of the New York Academy of Medicine: Section on Obstetrics and Gynecology." *The American Journal of Obstetrics and Diseases of Women and Children* 25, no. 1 (January 1, 1892): 89.
- Gregg, Sandra. "Taking Control: A Contraception Guide." Essence 10, (May 1, 1979): 46.
- Grunwald, Lisa and Stephen J. Adler, eds. *Women's Letters: America from the Revolutionary War to the Present*. New York: Dial Press, 2005.
- Guttmacher, Alan F. "Conception Control and the Medical Profession." *Human Fertility* 12, no. 1 (1947).
- Hale, Ralph W. and Donald F. B. Char. "Sexual Contraceptive Behavior on a College Campus: A Five-Year Follow-Up." *Contraception* 25, no. 2 (February, 1982): 125-134.
- Harvey, S. Marie. "Trends in Contraceptive use at One University: 1974-1978." *Family Planning Perspectives* 12, no. 6 (November 1, 1980): 301-304.
- Hodge, Hugh Lenox. *On Diseases Peculiar to Women: Including Displacements of the Uterus*. Philadelphia: Henry C. Lea, 1868.
- Holmes, Rudolph W., Joseph L. Baer, and N. Sproat Heaney. "The Prevention of Conception." *Journal of the American Medical Association* 80, no. 8 (February 24, 1923): 573.
- Hyde, Nina S. "THE LIST," *The Washington Post* (December 29, 1979): C1, C5.
- Kavinoky, Nadina R. and Elizabeth U. Brown. "The Necessity of Repeated Examinations in the Fitting of Contraceptive Diaphragms." *Western Journal of Surgery, Obstetrics, and Gynecology* 51, (April, 1943): 140-142.

- Kissling, Elizabeth. "Where'd the Diaphragm Disappear to?" *Ms. Magazine Blog* (June 24, 2010).
- Konikow, Antoinette. Voluntary Motherhood. 1st ed. Boston: Privately published, 1923.
- Konikow, Antoinette. Voluntary Motherhood. Boston: Buchholz Publishing Company, 1933.
- Lodi, Marie. "A Vintage Birth Control Method is Back." July 8,2015. https://jezebel.com/a-vintage-birth-control-method-is-back-1716684919.
- Matsner, Eric Milton. *The Technique of Contraception: An Outline*. New York: Americal Birth Control League, 1933.
- Maudsley, Henry. "Bulstonian Lectures on the Relations between Body and Mind, and between Mental and Other Disorders of the Nervous System." *The Lancet* 95, no. 2439 (May 28, 1870): 759-762.
- Maynard, Fredelle and Rona Maynard. "Birth Control Accidents." *Woman's Day* (February, 1973): 110.
- Moses, Bessie L. *Contraception as a Therapeutic Measure*. The Williams & Wilkins Company: Baltimore, 1936.
- Mosher, W. D. and C. A. Bachrach. *Contraceptive use, United States, 1980.* Washington, D.C.: Vital and Health Statistics, 1986.
- O'Connell, A. J. "The Rise and Fall of the Diaphragm." *AlterNet* (March 24, 2016).
- O'Malley, Suzanne. "Diaphragms Rediscovered." Cosmopolitan 192, no. 3 (March 1, 1982): 171.
- Palmer, C. D. "The Present Status of Obstetrics and Gynaecology." *Medical and Surgical Reporter* 66, no. 25 (June 18, 1892): 966.
- Palmer, Rachel L. and Sarah K. Greenberg. *Facts and Frauds in Woman's Hygiene*. New York: Vanguard Press, 1936.
- Piccinino, Linda J. and William D. Mosher. "Trends in Contraceptive use in the United States: 1982-1995." *Family Planning Perspectives* 30, no. 1 (Jan 1, 1998): 4-46.
- Pillion, Elise. "It's Way Harder than it should be to Get a Diaphragm." September 22, 2016. https://www.thecut.com/2016/09/why-is-it-so-hard-to-get-a-diaphragm-these-days.html.
- Plath, Sylvia. The Bell Jar. Portsmouth: Heinemann, 1963.

- Pre-trial materials, likely from meeting at Konikow's home between her arrest and trial in February 1928. Box 1, folder K. Records of the Birth Control League of Massachusetts, 1916-1934. Schlesinger Library. Radcliffe Institute. Harvard University.
- Pringle, Henry F. "What do the Women of America Think: About Birth Control?" *Ladies' Home Journal* (March, 1938): 95, 97.
- Rabin, Roni Caryn. "Birth Control Pills Still Linked to Breast Cancer, Study Finds." *New York Times*, December 6, 2017. https://www.nytimes.com/2017/12/06/health/birth-control-breast-cancer-hormones.html.
- Rogers, Kaleigh. "90s Sitcoms were Strangely Obsessed with this Unpopular Form of Birth Control." December 7,2016. https://motherboard.vice.com/en_us/article/jpg9qd/90s-sitcoms-were-strangely-obsessed-with-this-unpopular-form-of-birth-control.
- Sand, Alison. "Psychology of the Diaphragm." Off our Backs 1, no. 1 (1970): 12.
- Sanger, Margaret. "Clinics, Courts and Jails." Birth Control Review 2, no. 3 (April 1918): 3.
- Sanger, Margaret. Family Limitation. 18th ed. New York: Self-published, 1922.
- Sanger, Margaret. Family Limitation. 6th ed. New York: Self-published, 1917.
- Sanger, Margaret. My Fight for Birth Control. New York: Farrar & Rinehart, 1931.
- Satterthwaite, T. E. "Reports of Societies." Medical Record 20, no. 26 (Dec 24, 1881): 717.
- Schlesinger-Rockefeller Oral History Project: Interview with Sara Lewit Tietze and Christopher Tietze, M.D., December 1975-January 1976. Schlesinger Library. Radcliffe Institute. Harvard University.
- Seaman, Barbara. The Doctors' Case Against the Pill. New York: Peter H. Wyden, Inc., 1969.
- Sherk, J. H. "Hospital Reports: Procidentia Uteri." *Medical and Surgical Reporter* 10, no. 11 (July 11, 1863): 159.
- Shire, Emily. "What Caused the Death of the Diaphragm?" July 3, 2017. https://www.thedailybeast.com/what-caused-the-death-of-the-diaphragm.
- SILCS Diaphragm Design History. Basel: Birkhäuser, 2015b.
- Southam, Anna L. "Scale of use, Safety and Impact of Birth Control Methods." *Contraception* 8, no. 1 (July, 1973): 1-11.

- Stim, Edward M. "The Nonspermicide Fit-Free Diaphragm: A New Contraceptive Method." *Advances in Planned Parenthood* 15, (1980): 88-98.
- Stix, Regine K. "A Comparative Appraisal of Three Contraceptive Services." *Journal of the American Medical Association* 118, no. 4 (Jan 24, 1942): 283-290.
- Stix, Regine K. "Birth Control in a Midwestern City: A Study of the Clinics of the Cincinnati Committee on Maternal Health." *The Milbank Memorial Fund Quarterly* 17, no. 4 (Oct 1, 1939): 392-423.
- Stone, Abraham and Clarence J. Gamble. "Commercially Available Mechanical Devices for use in Contraception." *Human Fertility* 10, (1945): 65-73.
- Thomas, T. G. "Diseases of Women." *Medical and Surgical Reporter* 23, no. 23 (December 3, 1870): 451.
- Vecsey, George. "The Diaphragm is Regaining Acceptance among some Women." *The New York Times*, August 19, 1977.
- Westoff, Charles F. and Norman B. Ryder. "United States: Methods of Fertility Control, 1955, 1960 & 1965." *Studies in Family Planning*1, no. 17 (1967): 1-5.
- Wicks, Marlene. "The Diaphragm." Off our Backs 1, no. 1 (Feb 27, 1970): 12.

Secondary

- Bobel, Chris. New Blood: Third-Wave Feminism and the Politics of Menstruation. New Brunswick: Rutgers University Press, 2010.
- Bodemer, Charles W. "Concepts of Reproduction and its Regulation in the History of Western Civilization." *Contraception* 13, no. 4 (April 1, 1976): 427-446.
- Bodenheimer, Thomas and Kevin Grumbach. *Understanding Health Policy: A Clinical Approach*. New York: McGraw-Hill Education, 2016.
- Brier, Jennifer. *Infectious Ideas: U. S. Political Responses to the AIDS Crisis*. Chapel Hill: University of North Carolina Press, 2009.
- Brodie, Janet Farrell. *Contraception and Abortion in Nineteenth-Century America*. Ithaca: Cornell University Press, 1994.
- Bullough, Vern L. "A Brief Note on Rubber Technology and Contraception: The Diaphragm and the Condom." *Technology and Culture*22, no. 1 (1981): 104-111.
- Burnham, John C. "American Medicine's Golden Age: What Happened to it?" *Science* 215, no. 4539 (Mar 19, 1982): 1474-1479.

- Burns, Lawton R., Charles E. Rosenberg, and Rosemary Stevens. *History and Health Policy in the United States: Putting the Past Back In*. New Brunswick: Rutgers University Press, 2006.
- Capo, Beth Widmaier. "Inserting the Diaphragm in(to) Modern American Fiction: Mary McCarthy, Philip Roth, and the Literature of Contraception." *The Journal of American Culture* 26, no. 1 (March, 2003): 111-123.
- Capo, Beth Widmaier. *Textual Contraception: Birth Control and Modern American Fiction*. Columbus: Ohio State University Press, 2007.
- Chesler, Ellen. Woman of Valor: Margaret Sanger and the Birth Control Movement in America. New York: Simon & Schuster, 1992.
- Clarke, Adele E. Disciplining Reproduction: Modernity, American Life Sciences, and the 'Problems of Sex'. Berkeley: University of California Press, 1998.
- Collins, Patricia Hill. *Black Sexual Politics: African Americans, Gender, and the New Racism.* New York: Routledge, 2004.
- Cooper Owens, Deirdre. *Medical Bondage: Race, Gender, and the Origins of American Gynecology.* Athens: The University of Georgia Press, 2017.
- Corson, Stephen L., Richard J. Derman, and Louise B. Tyrer. *Fertility Control*. Ontario: Goldin Press, 1995.
- Cott, Nancy F. The Grounding of Modern Feminism. New Haven: Yale University Press, 1987.
- Cowan, Ruth Schwartz. More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave. New York: Basic Books, 1983.
- Drucker, Donna J. "Materializing Gender through Contraceptive Technology in the United States, 1930s–1940s." *Technology's Stories (Society for the History of Technology)* (December 11, 2016).
- Eig, Jonathan. The Birth of the Pill: How Four Crusaders Reinvented Sex and Launched a Revolution. New York: W. W. Norton, 2014.
- Engelman, Peter. A History of the Birth Control Movement in America. Santa Barbara: Praeger, 2011.
- Gordon, Linda. *The Moral Property of Women: A History of Birth Control Politics in America*. Reviewed and updated ed. Urbana: University of Illinois Press, 2002.
- Gordon, Linda. Woman's Body, Woman's Right: Birth Control in America. New York: Grossman, 1976.
- Grigg-Spall, Holly. Sweetening the Pill: Or how we Got Hooked on Hormonal Birth Control. Alresford: Zero Books, 2013.

- Hansen, Bert. Picturing Medical Progress from Pasteur to Polio: A History of Mass Media Images and Popular Attitudes in America. New Brunswick: Rutgers University Press, 2009.
- Hicks, Karen M. Surviving the Dalkon Shield IUD: Women V. the Pharmaceutical Industry. New York: Teachers College Press, 1994.
- Holz, Rosemarie Petra. *The Birth Control Clinic in a Marketplace World*. Rochester: University of Rochester Press, 2012.
- Howell, Joel D. *Technology in the Hospital: Transforming Patient Care in the Early Twentieth Century*. Baltimore: Johns Hopkins University Press, 1995.
- Jensen, Joan M. "The Evolution of Margaret Sanger's 'Family Limitation' Pamphlet, 1914-1921." *Signs* 6, no. 3 (April 1, 1981): 548-567.
- Johnson, Joan Marie. Funding Feminism: Monied Women, Philanthropy, and the Women's Movement, 1870-1967. Chapel Hill: University of North Carolina Press, 2017.
- Kapsalis, Terri. *Public Privates: Performing Gynecology from both Ends of the Speculum*. Durham: Duke University Press, 1997.
- Kevles, Daniel J. *In the Name of Eugenics: Genetics and the Uses of Human Heredity*. Berkeley: University of California Press, 1986.
- Kissling, Elizabeth Aveda. "Pills, Periods, and Postfeminism." 13, no. 3 (July 1, 2013): 490-504.
- Kline, Wendy. Bodies of Knowledge: Sexuality, Reproduction, and Women's Health in the Second Wave. Chicago: University of Chicago Press, 2010.
- Kluchin, Rebecca M. Fit to be Tied. New Brunswick: Rutgers University Press, 2009.
- Lerman, Nina, Ruth Oldenziel, and Arwen P. Mohun. *Gender and Technology: A Reader*. Baltimore: Johns Hopkins University Press, 2003.
- Marks, Lara. Sexual Chemistry: A History of the Contraceptive Pill. New Haven: Yale University Press, 2001.
- May, Elaine Tyler. *America and the Pill: A History of Promise, Peril, and Liberation*. New York: Basic Books, 2010.
- McCann, Carole R. *Birth Control Politics in the United States*, 1916 1945. Ithaca: Cornell University Press, 1999.
- McGregor, Deborah Kuhn. From Midwives to Medicine: The Birth of American Gynecology. New Brunswick: Rutgers University Press, 1998.
- McGregor, Deborah Kuhn. Sexual Surgery and the Origins of Gynecology: J. Marion Sims, His Hospital, and His Patients. New York: Garland, 1989.

- Meldrum, Marcia. ""Simple Methods" and "Determined Contraceptors": The Statistical Evaluation of Fertility Control, 1957-1968." *Bulletin of the History of Medicine* 70, no. 2 (June 1, 1996): 266-295.
- Meldrum, Marcia. "Women Making Contraceptive Choices in 20th-Century America." *Lancet* 380, no. 9837 (2012): 102-103.
- Murphy, Michelle. "Immodest Witnessing: The Epistemology of Vaginal Self-Examination in the U.S. Feminist Self-Help Movement." *Feminist Studies* 30, no. 1 (Spring, 2004): 115-147.
- Oldenziel, Ruth. Making Technology Masculine: Men, Women and Modern Machines in America, 1870-1945. Amsterdam: Amsterdam University Press, 1999.
- Owens, Deirdre Cooper. *Medical Bondage: Race, Gender, and the Origins of American Gynecology.* Athens: The University of Georgia Press, 2017.
- Owens, Deirdre Cooper. "Perfecting the Degraded Body: Slavery, Irish-Immigration and American Gynaecology." In *Power in History: From Medieval Ireland to the Post-Modern World*, edited by Anthony McElligott, Liam Chambers, Ciara Breathnach, and Catherine Lawless. Dublin: Irish Academic Press, 2011.
- Paul, Diane B. *Controlling Human Heredity: 1865 to the Present*. Atlantic Highlands: Humanities Press, 1995.
- Reed, James. *The Birth Control Movement and American Society: From Private Vice to Public Virtue*. Princeton: Princeton University Press, 2014.
- Reed, James. "Doctors, Birth Control, and Social Values: 1830–1970." In *The Therapeutic Revolution: Essays in the Social History of American Medicine*, edited by Vogel, Morris J. and Charles E. Rosenberg. Philadelphia: University of Pennsylvania Press, 1979.
- Reed, James. From Private Vice to Public Virtue: The Birth Control Movement and American Society since 1830. New York: Basic Books, 1978.
- Roberts, Dorothy E. *Killing the Black Body: Race, Reproduction, and the Meaning of Liberty.* New York: Pantheon Books, 1997.
- Sandelowski, Margarete. *Devices and Desires: Gender, Technology, and American Nursing*. Chapel Hill: University of North Carolina Press, 2000.
- Schoen, Johanna. *Choice and Coercion: Birth Control, Sterilization, and Abortion in Public Health and Welfare*. Chapel Hill: The University of North Carolina Press, 2005.
- Schwartz, Marie Jenkins. *Birthing a Slave: Motherhood and Medicine in the Antebellum South.* Cambridge: Harvard University Press, 2006.
- Starr, Paul. *The Social Transformation of American Medicine*. New York, NY: Basic Books, 1982.
- Tobbell, Dominique A. *Pills, Power, and Policy*. Berkeley: University of California Press, 2012.

 Way 2019, woll numanities Center Undergraduate Research reliowship

 Lea Eisenstein, College of Arts & Sciences, 2019

 University of Pennsylvania

- Tomes, Nancy. Remaking the American Patient: How Madison Avenue and Modern Medicine Turned Patients into Consumers. Chapel Hill: University of North Carolina Press, 2015.
- Tone, Andrea. "Contraceptive Consumers: Gender and the Political Economy of Birth Control in the 1930s." *Journal of Social History* 29, no. 3 (1996): 485-506.
- Tone, Andrea. *Devices and Desires: A History of Contraceptives in America*. New York: Hill and Wang, 2001.
- Tone, Andrea. "From Naughty Goods to Nicole Miller: Medicine and the Marketing of American Contraceptives." *Culture, Medicine and Psychiatry* 30, no. 2 (Jun, 2006): 249-267.
- Tone, Andrea. "Making Room for Rubbers: Gender, Technology, and Birth Control before the Pill." *History and Technology* 18, no. 1 (Jan 1, 2002): 51-76.
- Vaughan, Paul. The Pill on Trial. 1st American Edition ed. New York: Coward-McCann, 1970.
- Watkins, Elizabeth Siegel. *On the Pill : A Social History of Oral Contraceptives, 1950-1970.*Baltimore: Johns Hopkins University Press, 1998.
- Wood, Janice. "Physicians and Obscenity: A Struggle for Free Speech, 1872-1915." *Journalism History* 36, no. 1 (Mar 22, 2010): 36-44.