

Who Created the Pill?: Clinical trials of Enovid and other contraceptives in Humacao, Puerto Rico

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Abstract

The first oral contraceptive, G.D. Searle & Co.'s Enovid, gained FDA-approval in June of 1960. Four white, relatively privileged Americans, Margaret Sanger, Katharine McCormick, John Rock, and Gregory Pincus earned the adoration of many for spearheading the development of Enovid. Unbeknownst to many women of the 1960s and current-day scholars, however, the Pill became a reality through the labors of less famous and enfranchised historical actors. For example, one set of the clinical trials of Enovid occurred under the direction of missionary Adaline Pendleton Satterthwaite at Ryder Memorial Hospital in Humacao, Puerto Rico between 1957 and 1967. Once begun, the clinical trials of contraceptives in Humacao grew to include other pills and intrauterine devices (IUDs).

Satterthwaite became involved in the clinical trials of Enovid because of her experiences as the sole obstetrician-gynecologist (OB-GYN) at Ryder in the 1950s and 1960s. By looking to Satterthwaite's work at Ryder, and in turn how this work influences her desire for reversible contraception, we can see how the clinical trials are rooted in ideas of medical and social difference, gender and sexuality, race, and imperialism. Furthermore, a focus on Satterthwaite and, to a degree, the local participants in the clinical trials, begins to challenge the trope of medicine and medical knowledge as exceptional and exclusionary. Rather than the sole product of four extraordinary people, the Pill arrived in part due to the work, knowledge, and agency of a rural clinician and the lay-women for whom she cared.

Keywords

Oral contraception; Enovid; Puerto Rico; Clinical Trials; Ryder Memorial Hospital; Adaline Pendleton Satterthwaite

Introduction

Adaline Pendleton Satterthwaite, or Doctora Penny as her colleagues and patients called her, was an unlikely director for the clinical trials of G.D. Searle & Co.'s Enovid, the first Food and Drug Administration (FDA) approved oral contraceptive. She did not practice in a famous, well-funded research hospital like John Hopkins Hospital, Mount Sinai Hospital, or the Cleveland Clinic. Rather, between 1952 and 1965, Satterthwaite labored as the sole Obstetrician-Gynecologist (OB-GYN) at Ryder Memorial Hospital. During this time, Ryder was a Protestant, mission hospital tasked with providing treatment rather than research to Humacao, Puerto Rico, and its surrounding communities. Neither Satterthwaite nor Ryder Memorial Hospital ring familiar to many outside of the eastern coast of Puerto Rico, and Humacao does not breach the top ten of most populous cities on the island (U.S. Census Bureau, 1960).¹ The existing scholarship about Enovid discusses the hospital and the physician only passingly, giving considerably more attention to better-known activists and medical researchers, such as Margaret Sanger and Gregory Pincus. By centrally focusing on more renowned activists like Sanger and Pincus, the literature constructs oral contraception, and its development, as a primarily continental U.S. product and endeavor. And yet, it was under the guidance of Satterthwaite at Ryder Memorial Hospital between 1957 and 1965 that the first birth control pill—the touted harbinger of the Sexual Revolution in the continental United States—came into fruition. The first Pill, as oral contraception came to be popularly known, gained FDA-approval in June 1960 in large part because of the clinical trials conducted by Satterthwaite at Ryder. Thus, all three—Satterthwaite, the hospital she labored in for thirteen years, and the community that housed both—merit a better defined place in history. Particularly, her daily work with her patients and its significance in her career as a female medical professional deserve careful attention. They

illuminate important, if under-examined, gender and race relationships between Puerto Rico and U.S. mainland that crucially shaped the clinical trial for the Pill.

A glance at Satterthwaite's work at Ryder throughout the 1950s and 1960s reveals the significance of considering her work with patients—female patients in particular—both in the contexts of her biography and of her patients' needs. With a 60 bed capacity facility and a few off-site clinics, Satterthwaite and her colleagues at Ryder provided standard medical services for the 1950s and 1960s. At the main campus, they practiced general, pediatric, obstetrical, gynecological, and surgical medicine. Satterthwaite and her colleagues also could perform X-rays once a week, prescribe and dispense pharmaceuticals through the in-hospital pharmacy, seek the assistance of social workers, and test blood samples in the laboratory. When at outlying clinics, Satterthwaite primarily focused on preventive medicine and pre-natal care for expectant mothers. Clearly, these were services that suited her patients' needs (Ryder Memorial Hospital, n.d.). And yet, Satterthwaite found one of these commonplace services that she offered as the OB-GYN of Ryder to be exceptional and troubling. Specifically, Adaline Pendleton Satterthwaite was uncomfortable with how frequently she sterilized her female patients as a means of contraception. Satterthwaite's concern about the extremely high levels of female sterilization at Ryder, which I argue was shaped equally by humanitarian, racialized, gendered, and imperial logics, ultimately set in motion the advent of the clinical trials of Enovid to Ryder Memorial Hospital in 1957. Satterthwaite's discomfort with sterilization also initiated her own medical research career. After FDA approval of Enovid, Satterthwaite continued trials of Enovid and other pills to investigate their safety, possible other uses, and the effects of long-term use of oral contraception. Along with clinical trials of the Pill, Satterthwaite participated in the development of new intrauterine devices (IUDs), Depot Medroxy Progesterone Acetate

(DMPA/popularly known as Depo-Provera), and foreign aid programs centered on contraception and maternal health. Thus, her more than thirty years of medical research, which contributed to important redefinitions of population studies and the notion of health, had its origin in her concern about female sterilization in Puerto Rico.

Satterthwaite's Move in 1952: Why Ryder Memorial Hospital?

Satterthwaite's narrative began as she pondered her decision to move to Humacao, Puerto Rico, in 1951. At this time, she was working at the Women's Medical College Hospital in Philadelphia, Pennsylvania. She had returned to the States earlier in the year after four years in Northern China where both she and her husband, William Satterthwaite, worked as missionary, medical professionals. Their son, David, also accompanied them to China. William died during their tenure in China, yet Satterthwaite and David did not return to the States until she secured the job in Philadelphia (Satterthwaite, 1990). Though unclear exactly how long they remained in Philadelphia, by December 1951 Satterthwaite had begun plans for she and David to not only move again, but for her to return to missionary medicine outside the continental U.S. She notified her family, most likely her brother Morris and parents in California, of her plans by letter:

Next May, after a year in the U.S. we are going back to Puerto Rico. I was honored that my former colleagues at Presbyterian Hospital in San Juan wanted us to return there. However, I now realize that in the next few years David needs more of my time than I could give him and do that job the way it should be done. So I've accepted the offer of the Ryder Memorial Hospital Staff in Humacao to take a part-time job there. Since this hospital is under the Congregational-Christian Home Board, it will be a rather simple matter to be loaned from the Foreign to the Home Board for a period of three years, after which time we shall reconsider foreign service elsewhere. Furthermore in San Juan there are many well-trained Puerto Rican specialists so the real challenge is to go to the smaller towns and rural areas where the need is greater (Satterthwaite, 1951; 1965c).

From this letter, it is clear that Satterthwaite intentionally chose to become the OB-GYN at Ryder Memorial Hospital in Humacao, Puerto Rico, in 1952. She enjoyed the ability to decide where she lived, worked, and loved her son. Presbyterian Hospital in San Juan certainly

possessed advantages over Ryder Memorial in rural Humacao: more readily accessible amenities, her personal familiarity with the area and facility, and numerous schools (Satterthwaite, 1990). Yet, Satterthwaite chose Ryder as the best fit for her personal and professional needs.

First, Satterthwaite equally valued her jobs as mother and medical professional. In the excess of one hundred letters she wrote to her family during her time in Humacao, every letter equally detailed her routine at Ryder and her time with David. She decidedly embraced motherhood and career. Betty Friedan's *The Feminine Mystique* suggests the exceptional nature of Satterthwaite's lived experience for middle-class, continental U.S. originating, white women of the 1950s. In what today would be labeled as prescribed gender roles, "...the feminine mystique spread, denying women careers or any commitment outside the home, [at the same moment that] the proportion of American women working outside the home increased to one out of three" (Friedan, 2012, 42). In a culture that recognized white, middle-class women's presence in the workplace, but did not accept career-oriented women as the feminine archetype, the positions available to allow development in both were limited in the mainland U.S. Yet, Ryder's offer of a part-time OB-GYN position allowed Satterthwaite to work both as a mother and a professional. Thus, she accepted the job anticipating that she could thrive both as a physician and the sole care-provider to her son in Humacao, a possibility not readily available in most of the mainland.

Second, the final line of Satterthwaite's letter to family points to her desire to be needed by the people to whom she provided medical service. This desire directed her to Ryder in Humacao because of Satterthwaite's assumptions about the municipality and its citizens. Thus, Satterthwaite's aspiration to serve those in need is rife with multiple meanings. On the surface,

the final statements of Satterthwaite's letter seem to point to benevolence. Rather than further inundate an area where she perceived medical service was readily available (San Juan), Satterthwaite simply wanted to provide a needed service to the under-served people of Humacao. However, Satterthwaite's contrasting view of San Juan and Humacao also demonstrates her perception of inherent difference between urban and rural populations. San Juan, about which Satterthwaite did possess familiarity, provided rich resources such as "well-trained Puerto Rican specialists." Humacao, which Clarence Gamble later described as home to one of the "most impressive" slum areas, and its rural population did not have access to such resources according to Satterthwaite (1957, cited in de Arellano, 1983, 117). Thus, Satterthwaite's valuation of a resource impoverished rurality as compared to a resource rich urban center-directed her move to Humacao because it optimized her desire to be necessary to her medical constituency. Of course, material differences did exist between the municipalities, though the two regions also shared much more than she assumed. Nonetheless, Satterthwaite was determined to begin to serve the patients of Ryder Memorial Hospital by mid-1952.

Third, taking the position at Ryder afforded Satterthwaite the opportunity to return to a third type of labor: missionary work. Ryder was a Protestant hospital funded by continental U.S. dollars for mission work on a predominantly Catholic island. The hospital operated in accordance to the mantra *Lealtad a Dios Por Medio Del Servicio a Los Hombres*, and even housed a prominent chapel for worship on its campus (Ryder Memorial Hospital, n.d.).² Devoutly protestant, Satterthwaite viewed Ryder as just the sort of institute that would allow her to fulfill her spiritual and professional needs; she could serve as a beacon of protestant virtue at the hand of her medical expertise.

Thus, Satterthwaite chose to leave Philadelphia in 1952 for a position at Ryder Memorial Hospital because of a combination of personal and professional reasons. Her reasons for moving appear disparate. Ultimately, however, these motivations highlight her connection to post-World War II, U.S. imperialism as an increasingly modernist project, as well as her unique expression of imperialism. Laura Briggs, in her 2002 work *Reproducing Empire*, discusses the relationship between mainland U.S. medical/scientific practitioners and modernization programs in Puerto Rico during the mid-twentieth century. Briggs, specifically, argues that, “In the context of the Third World decolonization and the Cold War, development became an anti-Communist policy, and one of the first places it was tried was in the ‘laboratory’ of Puerto Rico” (2002, 18). Satterthwaite’s desire to “better” Puerto Rico by offering her skills in medicine, reproduction, and female anatomy definitively place her within Briggs’ described imperialist logic. Furthermore, Satterthwaite envisioned that her labor as an OB-GYN aided in the development of Puerto Rico. For Satterthwaite, her work to improve the health of Humacao’s citizenry stabilized the populace to allow for change and increased industrialization. Even Satterthwaite’s protestant faith, a continual undergirding of mainland American policies, can be rationalized under U.S. modernization projects. Indeed, Satterthwaite sought to develop Puerto Rico through modern medicine.

Satterthwaite’s motivations for taking the post at Ryder indicates her familiarity with imperialist, development-driven logics. Yet, neither her motivations for moving to Humacao nor her actions and concerns during her tenure at Ryder are solely examples of mainland U.S. imperialism. To be certain, Satterthwaite’s choice to labor at Ryder encompasses personal, professional, and imperialist goals. Furthermore, Satterthwaite’s concerns about over-population and female sterilization developed as she labored in Humacao, Puerto Rico, not prior. Thus, her

understanding of Puerto Rican women's reproduction requires an examination of Satterthwaite's ground-level, localized, and personal rationale as it matured during her time at Ryder.

Satterthwaite's Gendered View of Her Patients at Ryder

Satterthwaite quickly realized that the demands of her job as the OB-GYN at Ryder far surpassed her notions of part-time work. Despite her early rationalization of the need of part-time work in order to care for her son, the speed, demand, and continuously packed halls of Ryder did not seem to overly bother Satterthwaite. Just one month into her tenure at Ryder, she wrote to her family: "This afternoon we had a difficult case—an adherent ovarian cyst—in one of our very fat hospital cooks! We have an amazing amount of good surgical material here--and if we could only get a competent anesthetist the work would really be a pleasure!" (1952a). Satterthwaite began to worry a bit over "the many changes to [Ryder's] staff" by September 1952, but more demanding of her attention was the population problem. "[It] is concerning us a great deal here," she wrote, "and we are doing a number of post-partum sterilizations for patients who have been having children every year. Along with this program we put a lot of emphasis on our well-baby clinic in trying to do as much health education as we can" (1952b; 1952c).

Satterthwaite believed whole-heartedly in her mission to provide quality care to the female patients of Ryder, especially as it pertained to issues of reproduction. This desire to care for and help her patients in Humacao, however, came from her deduction that Puerto Ricans and their institutes were constitutively poorer and less capable than she and her mainland U.S. compatriots. Writing to mainland donors to Ryder in 1954, Satterthwaite posited, "We must do ALL POSSIBLE to alleviate pain and eradicate disease. But we must avoid assuming so much responsibility for the local health problem that we encourage sloth and indifference on the part of government agencies, institutions, and officials" (1954b). Satterthwaite quickly rationalized that Puerto Rican municipal and insular governments were likely to act haphazardly and without

thought because she believed that Puerto Ricans in general were careless. Collectively, thought Satterthwaite, Puerto Ricans lacked the discipline, self-control, and ethic to act with discretion and with an eye towards the future. Thus, when the insular government passed a new tax on luxury goods as part of Operation Bootstrap, Satterthwaite felt it a prudent, disciplining measure because Puerto Ricans had become, “too materialistic.”³ The tax enforced, according to Satterthwaite, “the importance of choosing between reckless luxury spending and saving for the education of the family...[at the same time] it discourages [them] from turning in the fancy car each year and to encourage the people to take better care of the things which they have” (1957c).

Satterthwaite’s sense of inherent Puerto Rican difference from the U.S. mainland was particularly gendered as well. Puerto Rican men, she felt, did not conform to her ideal of 1950s masculinity. They were not, according to Satterthwaite, the dutiful husband bringing in the family wage. She often wrote to Ryder’s benefactors and her parents of deliveries in which she could not charge the mother much “because her husband has gone off and left her and the three children and I know she can’t pay me anything” (1955a). Married, Puerto Rican men of Humacao also did not respect their wives enough to keep them abreast of their whereabouts as Satterthwaite thought they should. Thus, she often felt, “jolted into reality and again reminded of what it would be like to be married to a Puerto Rican!” This particular reminder of Puerto Rican difference came when a former Ryder Staff member left Humacao for an extended period, and “[The wife] didn’t have any idea how long he would be gone, etc. etc. Can you imagine it? I had thought that he was a more considerate husband. I might say I was sort of disillusioned! But he is a typical P.R. [Puerto Rican] man” (1957b).

Similarly, Satterthwaite imagined Puerto Rican femininity as unsettling and indeed, in need of correcting. For Satterthwaite, Puerto Rican womanhood of the 1950s inextricably

implied motherhood, insecurity and cycles of dependency, and ultimately women's inability to extricate themselves from these cycles. Describing a 35 year old woman positive for tuberculosis and mother to twelve children, Satterthwaite wondered, "how can she rest with such a family and how can she protect the children from infection with such crowding!" (1955b). So engrained was this idea of Puerto Rican womanhood as impoverished motherhood, that Satterthwaite felt it necessary to share this depiction with mainland U.S., protestant children who had donated shoes to Humacao. Written as a thank you letter to these mainland (presumably middle-class), church-going children, Satterthwaite told the story of a young girl Anita, her two older brothers, her baby sibling, and their mother traveling for miles to reach the services of Ryder Memorial Hospital and Doctora Penny. Anita's mother was pregnant, and needed to go to Ryder because she needed an operation once she delivered Anita's new sibling. Anita, according to Satterthwaite, repeatedly asked her mother, "Is that really your dress, mother?" Satterthwaite, in turn, used Anita's query to explain to the mainland children that Anita's mother had worn a new dress to Ryder. Anita's mother donned the unrecognizable dress, Satterthwaite explained, because "To come to the clinic had required a lot of planning because no one would think of going to town in old clothes—and then, too, one had to gather together enough money to pay for the clinic fees and medicines—and [Anita's] father didn't have regular work when the sugar cane was not being cut" (1953). For Satterthwaite, this event with Anita and her family encapsulated the plight of Puerto Rican women: they were always impoverished mothers. Puerto Ricans were so poor that the purchase of a new dress for a mother was unintelligible to her children. They were mothers so poor that to visit a physician meant weeks of saving money and planning by all members of their family.

Satterthwaite further developed her notions of Puerto Rican womanhood as impoverished motherhood and utterly defined by reproduction by keeping track of how many deliveries she performed. From her letters home and the records she maintained of her work in Ryder, she delivered at least one child each month, usually more, while the OB-GYN at Ryder. For example, in January of 1959, she delivered 42 babies (1959b). In February 1959, 47 births she facilitated, and in March of the same year, 40 (1959a). In total, between January 1959 and November 1960, Satterthwaite acted as the obstetrician for 823 births, excluding stillbirths, at Ryder Memorial Hospital (1960). In Satterthwaite's mind, the fact that "obstetrical service continue[d] to boom," at Ryder was evidence enough of the problems of Puerto Rican womanhood (1954a).

Further analysis of Satterthwaite's letters suggests her reasoning for regularly writing to her family members and others in the continental United States about what she perceived to be the issues of Puerto Rican femininity and masculinity. Again, she generally understood Puerto Rican women as impoverished mothers, and she saw Puerto Rican men as inconsistent, irresponsible fathers. She frequently wrote on this topic because she understood the largest problem facing her patients at Ryder to be family size and composition.

Satterthwaite, Puerto Rican Families, and Sterilization

Satterthwaite conceived Puerto Rican womanhood and manhood through, and only through, the lens of family. By constructing Puerto Rican women and men as meaningful only in relation to the family, Satterthwaite participated in and furthered problematic, racialized thinking about Puerto Ricans. For Satterthwaite, Puerto Ricans were members of families, not individuals. The Puerto Rican family was in danger, according to Satterthwaite, because of what she saw to be the excesses of Puerto Rican men and women driving the population problem. Simply, Satterthwaite operated under the premise that Puerto Rican women and men were having too

large a family, too many children. She agreed with Celestina Zalduondo, the Director of the Division of Public Welfare in Puerto Rico, that “the essence of the thing, the action of men and women procreating fools and insane, trying to support two or three homes when they can scarcely maintain one, is the root of all the social evils,” in Puerto Rico. Because the number and size of Puerto Rican families were what most concerned Satterthwaite, she argued that:

It is evident that it is in the field of family relations that the Evangelical Church must continue to be the lead... As I think of the Puerto Rican people; hospitable, kindly, friendly, generous, gay, and fun-loving—I feel that the key to the problem [of family relations] is a lack of discipline. They’d rather have an injection than take medicine every four hours. They’d rather have an operation than use contraceptive methods... We are going to find that there are many points at which we shall have to cut across the mores and try to inject the idea of self-discipline (1955b).

Rather than inject, Satterthwaite encouraged what she saw to be “self-discipline” to the Puerto Rican family by providing female sterilization, specifically tubal ligation, to her female patients.

Satterthwaite’s early letters home point to the prevalence of sterilization at Ryder. She often commented that she continued, “To do a rather large proportion of post-partum ligations” (1952b). Yet, the numbers are even more telling. For example, in December 1958, Satterthwaite performed 45 deliveries of children; that same month she performed 18 tubal ligations (1958). Of the 95 women who entered Ryder for gynecological or obstetric services in January 1959, 25 women received tubal ligations (1959b). February of the same year witnessed Satterthwaite performing 29 tubal ligations. In March, 92 women in total visited Satterthwaite, 42 gave birth, and 25 were sterilized (1959a; 1959c). Of those sterilized between January and March of 1959, the youngest woman was 28 years old and the oldest 43.

Satterthwaite performed tubal ligations and other forms of female sterilization for the entirety of her tenure at Ryder Memorial Hospital. Despite how routine these sterilizations were for Satterthwaite, she often narrated successful stories of female sterilization for her family and colleagues. Satterthwaite’s frequent discussion of the common, at least in Puerto Rico, practice

of sterilization evidences her strong interest in, as well as concern about, sterilization. One such success story she shared dealt with a family of ten children and their cows. The Puerto Rican mother of the ten children had been sterilized for a year. Before the mother's sterilization, every year the father of the ten children had reared two calves—one to sell for money to feed his family, the other to pay “for the fee of the midwife.” Satterthwaite told her family that since the mother's sterilization, however, “the family could face the future without the fear of another mouth to feed.” Furthermore, the father meant to sell the second cow in order to “use that money for the education of [his] children or the improvement of the home” (1952c). Satterthwaite's short stories of sterilization seem to indicate her approval of female sterilization as a means to better familial relations and the population problem in Puerto Rico. However, these narratives of female sterilization simultaneously evidence Satterthwaite's growing concern over the utility of tubal ligation as a solution to familial stability, and ultimately, over-population.

As previously mentioned, Satterthwaite best understood the lives of rural Puerto Rican men and women through their reproductive capacity and their family compositions. Because Satterthwaite conceived of Puerto Rican reproduction as excessive and producing too many new Puerto Ricans, Satterthwaite utterly believed in the necessity of contraception for her patients of Humacao. She initially turned to post-partum sterilization and tubal ligation in general because she felt it to be the most acceptable form of contraception for her patients. This, of course, derived from her perceptions of Puerto Ricans as possessing “a lack of discipline,” but it also derived from her understanding of Puerto Ricans as always already Catholics. A Protestant missionary, Satterthwaite felt that sterilization best fit with her Catholic, female patients because, “in a Catholic country it is easier to get operated on and confess once and for all, than to bother with a method and face the need for confessing each week” (1956b). Thus, sterilization did

initially represent a solution to the population problem in Puerto Rico for Satterthwaite. Sterilization indeed ended all reproductive capability for women. As problematic as post-partum sterilization was, and is, for Puerto Rican women, Satterthwaite's conclusion of its necessity fits with her racialized and gendered understandings of Puerto Rican women's femininity. Sterilization as a contraceptive reaffirms Satterthwaite's notions of a Puerto Rican other because it prevents Puerto Rican women from (in Satterthwaite's mind) furthering over-population, and in turn, increasing conditions of poverty. Indeed, she did not ascribe these sort of conditions—poverty, sterilization, and over-population—to middle-class, white, mainland Americans, only to Puerto Ricans.

Yet, Satterthwaite's missionary ethic—the need to convert and “inject” new social mores and spiritual directions to the people of Humacao—also enabled Satterthwaite to ponder new forms of contraception *other* than sterilization. For Satterthwaite, if her protestant mores and self-discipline could be injected into her patients, then new forms of reversible contraception for Puerto Rican women would also be possible and complete cessation of reproductive capacity for women would become unnecessary. This hope for social and religious conversion in part explains why Satterthwaite dreamt of temporary contraception; she not only wanted reproductive, but also social change. Yet, more importantly, Satterthwaite hoped for reversible birth control because of her understanding of familial structure in Puerto Rico.

Satterthwaite's Clinical Trials of Enovid at Ryder Memorial Hospital

Satterthwaite perceived the familial structure and marriage as endangered in 1950s Humacao and the rest of Puerto Rico. This concern, that the Puerto Rican family was at risk, most drove Satterthwaite's desire for reversible contraception. According to her, Puerto Rican husbands often “ran off” from their wives and children, leaving the Puerto Rican mother and children destitute and without recourse. For Satterthwaite, this predicament represented a

possibility for all Puerto Rican women because she understood Puerto Rican womanhood to always include motherhood. With these images of Puerto Rican womanhood engrained, Satterthwaite shared an *El Mundo*, the major newspaper of Puerto Rico, front-page story with both her family and others in the continental U.S. because she believed it encapsulated the status of the Puerto Rican woman and family. Wrote Satterthwaite:

“*El Mundo*...carried a picture of three women each with a small daughter in her arms, seeking to visit a man in jail who according to each of the women was the father of her daughter...[According to Zalduondo], ‘Young girls must look at themselves [though] this mirror and realize that nothing good comes of haphazardly being led astray by idle men who swam [the] streets looking for victims of their passion and lust’ (1955a).

These sorts of images, of Puerto Rican women with children and no husband to care for them, troubled Satterthwaite. Satterthwaite could not dissociate Puerto Rican womanhood from procreative possibility, and thus did not want to dissociate Puerto Rican womanhood from marriage either. Her 1950s protestant ethic enforced in her the notion that married couples are the best people to have children. Hence, Satterthwaite envisioned Puerto Rican women as destined to always already be mothers, but hoped for motherhood to coincide with marriage.

Marriage, for Satterthwaite, was a procreative bonding. Puerto Rican women and men married for the purposes of procreation. Though Satterthwaite conceded that marriages might end for Puerto Rican couples, Satterthwaite’s association of Puerto Rican womanhood with procreation, and in turn Satterthwaite’s belief that Puerto Rican men only married to procreate their own biological offspring, necessitated a reversible form of birth control if marriage was to prosper. Thus, female sterilization could not fully solve the population problem because it disallowed, in Satterthwaite’s mind, the possibility of marriage and nuclear family formation. Reversible birth control, on the other hand, could curtail reproduction at the same time it allowed for a decreasing population without terminating the hope for future reproductions, stable

families, and respectable womanhood and manhood. As Satterthwaite wrote years after her time at Ryder, “I was interested in having an effective temporary method to offer to women as an alternative to sterilization since marriage in Puerto Rico was unstable” (1985).

By 1955, Satterthwaite was both the interim Head of Staff and sole OB-GYN at Ryder Memorial Hospital (1955a). By then, she was extremely concerned with the prevalence of postpartum sterilization both in Ryder and Puerto Rico writ large during her early years at the hospital for the reasons discussed above. Remembering these years, Satterthwaite later wrote that “female sterilization was...the most popular method, which was widely performed but often abused by private physicians” (1998). Though Satterthwaite herself regularly performed sterilizations on her patients, she still hoped for a better, reversible form of contraception. Because she increasingly disliked the practice of sterilizing women, Satterthwaite attended the 1955 Western Region International Planned Parenthood Federation (IPPF) meeting to investigate means of contraception other than sterilization. There, she met Clarence Gamble, a long time compatriot of the Birth Control Movement and heir to the Proctor & Gamble conglomerate. After this chance meeting with Gamble, Doctora Penny wrote to her family on December 3rd, 1956, explaining, “A week ago I had word from Dr. Clarence Gamble of Boston that Dr. John Rock of Harvard Medical School was looking for another place in which to try out a clinical experiment on an oral contraceptive and they thought that perhaps Ryder would be the place. Dr. Gamble is willing to foot the bills and pay for my trip to Boston to confer with Dr. Rock” (1956a). On Christmas Day of 1956, she notified her family that, “The interview with Dr. Rock was fine... We are to make a field trial set up along the same lines as those being followed at the Río Piedras clinic but using another compound” (1956b). And by January 13, 1957, Satterthwaite could claim that she would direct the only remaining clinical trials of the hoped-for oral

contraceptive in Puerto Rico because Edris Rice-Wray was leaving for Mexico to work with the World Health Organization (Chessler, 1977; Reed, 1987).⁴

Satterthwaite and the larger Ryder community's involvement in the clinical trials of Enovid can easily appear coincidental, a happenstance. If Satterthwaite had for some reason fallen ill or otherwise missed this chance encounter with Gamble at the IPPF conference, she might never have overseen one of the most important and debated medical inventions of the twentieth century. Yet, the inception of the clinical trials of Enovid at Ryder Memorial Hospital under the auspices of Satterthwaite were not solely the product of serendipity. Rather, Satterthwaite feared over-population—the pseudo-social scientific theory that too large a human populace could and would destroy harmony on Earth. Her fear of over-population in Humacao and Puerto Rico derived from her perceptions of racial, reproductive, marital, and socio-economical difference of Puerto Ricans. Puerto Rican women, in particular for Satterthwaite, required access to contraceptive if the crisis of over-population was to be averted. This fear of over-population and its inspirations concomitantly tied Satterthwaite to practices of female sterilization. To decrease the burgeoning population, women's reproductive capacity had to be curtailed through any means. The most easily employed and readily available means at the time, of course, was female sterilization. Yet, these same ideas of Puerto Rican racial and reproductive difference that animated Satterthwaite's interest in over-population paradoxically made her uncomfortable with female sterilization. For Satterthwaite, female sterilization was not the answer to the “over-population problem;” women of Humacao needed an effective and reversible form of contraception if Puerto Rican over-population was to cease and marriage as a cultural practice was to continue. Indeed, Satterthwaite wanted *Puerto Rican* over-population to end and *Puerto Rican* marriage to continue. Rather than a grandiose, blanket-theory, affecting thousands

around the world, Satterthwaite grew in her early years at Ryder to see over-population as a real, tangible, and lived-experience surrounding herself. It was her day-to-day interactions with her patients at Ryder, and in turn her gendered and racialized perceptions of her patients, that made her fear over-population. Thus, Satterthwaite's dual concerns of over-population and female sterilization directed her not only to the IPPF meeting, but also her desire for a reversible, non-permanent form of contraception for the women of Puerto Rico. Satterthwaite's perceptions of over-population and female sterilization, indeed, brought the clinical trials of Enovid to her Ryder Memorial Hospital, and pushed her to become the principle investigator of the clinical trials of Enovid in Humacao. Satterthwaite's ideas of racial and reproductive difference that inspired her fears, in turn, developed and matured as she labored in Humacao.

With these thoughts of Puerto Rican difference, Satterthwaite traveled to the 1955 IPPF conference that introduced her to Gamble. Her gendered, racialized, and imperialist notions of uncontrolled reproduction, marriage instability, and an endangered Puerto Rican family, coupled with her humanitarian concerns and personal drives, directed Satterthwaite to assent to conduct clinical trials of the first FDA-approved oral contraceptive, G.D. Searle & Co.'s Enovid. Ultimately, her involvement in the clinical trials of Enovid derived not from a mainland, U.S. mandate, but her own concerns and morals she developed as the OB-GYN of Ryder Memorial Hospital in the 1950s.

Conclusion

Many years after her time at Ryder, Satterthwaite wrote down her experiences as a clinician and researcher at Ryder. She worried in 1981, "whether the development of the oral contraceptive pills which provided an acceptable, reversible solution for families overburdened with many mouths to feed and educate, may also have resulted in the sexual freedom responsible

for the breakdown of the very family which I sought to defend” (1998). Though she concluded her life debating the role of the Pill in larger contexts, Satterthwaite’s concern of the 1950s about the extremely high levels of female sterilization at Ryder ultimately set in motion the advent of the clinical trials of Enovid to Ryder Memorial Hospital in 1957, as well as her own medical research career. Her experiences and role in bringing the trials of Enovid to Ryder demonstrate the need to further investigate the creation of oral contraception and other mid-twentieth century contraceptives as a local, Puerto Rican history.

The trials of Enovid began at Ryder Memorial Hospital in 1957, and they grew over the next eight years to include new doses of Enovid, Ortho and Wyeth’s contraceptive pills, the Lippes Loop IUD, and the Margulies Spiral IUD. During the majority of these trials, Satterthwaite continued to serve as the OB/GYN of Ryder. She welcomed births, mourned deaths, and performed sterilizations. She spent free time with her friends, son David, and the outlying community. She realized that “human experiences were the ties that bind...lives together” (1965b). The ties that bound her to Ryder Memorial Hospital and Humacao, Puerto Rico, however, ended in 1965 when she left for San Juan to take positions with the University of Puerto Rico Medical School and School of Nurse Midwifery, the Rockefeller Foundation’s Population Council, and the United Nations Population Fund. She left Puerto Rico permanently in 1967 for a position as Medical Advisor for a Population Council program in Karachi, Pakistan. Her relationship both with the United Nations Population Fund and Rockefeller Foundation Population Council continued until her retirement in 1981. Between her retirement and death in 2006, she worked sporadically as an advisor on birth control programs around the world and volunteered at the Bucks County, Pennsylvania, Planned Parenthood.

By looking to Satterthwaite's early career in Puerto Rico between 1952 and 1957, I show that her work in contraceptive research hinged upon her time in and professional endeavors at Ryder Memorial Hospital. I further demonstrate how Humacao, a relatively small and unknown east-coast city in Puerto Rico, figures so largely into not only Satterthwaite's career, but the history of contraception. The other over-arching theme I present is the centrality of gendered and racialized thinking in both Satterthwaite's life, and again, the history of contraception and production of medical technologies. Indeed, Satterthwaite's ideas of difference based on race and gender enabled and brought the trials of Enovid to Ryder Memorial Hospital. Such insights are only possible by critically examining personal, professional, and place-specific histories. Though I have started to demonstrate the essentially local and personal nature of medicine and knowledge production in the case of contraception, more ground-level voice are necessary to give a fuller understanding of the clinical trials. The voices, concerns, and motives of the women and men of Humacao must be integrated into the history of oral contraception. Without a thorough engagement with their voices, the history of the Pill remains glaringly incomplete, and indeed biased towards a mostly white, continental U.S. Once Satterthwaite's voice can be joined by the patients, doctors, and community members surrounding Ryder Memorial Hospital in the 1950s and 1960s, we will begin to see how diverse the ground from which the Pill sprung was.

¹ Slightly over 75% of Humacao municipality's population lived under rural conditions in 1960.

² Translation: Allegiance to God though Service to Men.

³ Known as *Operación Manos a la Obra*, Operation Bootstrap was a series of programs implemented in the 1950s and 1960s to industrialize the Puerto Rican economy.

⁴ Edris Rice-Wray oversaw the first installation of the clinical trials of oral contraception in Río Piedras, Puerto Rico. She left in 1957 to establish the first birth control clinic in Mexico City.

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