

**“A Triumph in Women’s Rights”:
The Development of the Oral Contraceptive Pill**

Sofia Lynch

Senior Division

Historical Paper

Word Count: 2499

The contraceptive pill is arguably one of the greatest scientific achievements of the twentieth century, marking a monumental step in the field of science and women's rights. A historic accomplishment, it is the only medical advancement so significant that it just needs to be called "the pill." Women's rights movements of the mid-twentieth century and the demand for a way for women to avoid repeated unwanted pregnancy led to the development of the first oral contraceptive pill. This revolutionary medicine was pioneered by some of the brightest minds of the twentieth century, and after difficult human trials and struggles with backlash and laws against contraception, the first birth control pill, called Enovid, was finally approved by the Food and Drug Administration, a triumph in women's rights. The contraceptive pill has had a monumental effect on the lives of women all over the world, and the changes that the birth control pill has caused continue to benefit women today.

The modern birth control pill evolved from Enovid, the first oral contraceptive pill approved by the FDA in 1960. Today, there are hundreds of different brands of birth control pills that all work similarly to the original pill.¹ With some exceptions, the pill works by releasing a combination of certain hormones, including progesterone and estrogen. It maintains women's menstrual cycles, keeping them on a consistent twenty-eight day cycle. Women take one pill every day for three weeks. During the fourth week, women take placebo pills, which induce menstruation.² After that, the pill cycle starts over. This convenient contraceptive is over ninety-nine percent effective, and has changed the way women are able to engage in sexual activity without fear of repeated, unwanted pregnancies.³

¹ Camille Bautista, "The Pill's Been Changing Lives For 54 Years."

² "Contraception: Past, Present, and Future Factsheet," www.fpa.org.uk, (December 1, 2016).

³ Tracee Cornforth, *A Brief History of the Birth Control Pill*.

While the modern pill is more convenient and safer than the first pill invented, there are still some side effects of the modern birth control pill, including nausea, headaches, abdominal cramping, breakthrough bleeding, anxiety, and depression.⁴ However, the pill has posed a solution to one very important issue: during the twentieth century, a rampant problem was frequent, unwanted pregnancies that endangered the expectant mother's health. This issue was known too well by feminist Margaret Sanger, who saw the need for a convenient, widely-available contraceptive, and she happened to have the means to do it.

Margaret Sanger was born on September 14th, 1879, before women even had the right to vote. Growing up, she watched her mother waste away under the strain of multiple and frequent pregnancies, eventually dying at a young age. She remembered this in her book, *My Fight for Birth Control*, saying: "Mother bore eleven children; she died at forty-eight...as far back as I can remember, she was always pregnant or nursing a baby."⁵ As a result of her childhood, Sanger grew up to be a fierce advocate for women's rights, and founded many women's health organizations that would evolve into the Planned Parenthood Federation of America.⁶ Before her role as one of the most important feminists of the twentieth century, Sanger worked as a nurse on the lower east side of Manhattan. As a nurse, Sanger treated many women who had experienced the trauma of a back-alley abortion gone wrong.⁷ Seeing these women made Sanger realize the need for an effective and convenient form of contraception, or "birth control," a term that had been coined by Sanger herself.⁸ Unfortunately, Margaret Sanger was not a scientist. She needed a

⁴ Robert Hatcher, *Contraceptive Technology*, (New York, NY: Ayer Company Publishers, 2018), 63.

⁵ Margaret Sanger, *My Fight for Birth Control*, (Place of Publication Not Identified: Pergamon Press, 1969), 4-11.

⁶ "The Birth Control Pill: A History," www.plannedparenthood.org, (June 2015).

⁷ "Margaret Sanger (1879-1966)," www.pbs.org.

⁸ Alexandra Nikolchev, "A Brief History of the Birth Control Pill," www.pbs.org, (2018).

researcher willing to create a contraceptive—meaning they would need to be willing to face the barrage of criticism that would surely follow. Enter Gregory Pincus, an endocrinologist who was already familiar with controversy. In 1934, Pincus caused an uproar when he successfully produced rabbits via in vitro fertilization.⁹ As a result of this experiment, Pincus was referred to as Frankenstein.¹⁰ In 1951, Sanger and Pincus met at a party in New York City.¹¹ Despite being an unpopular scientist, his experience with reproductive science and familiarity with controversy had made him perfect for this unique and controversial project. When Sanger asked if he would work to develop a safe and convenient contraceptive for women, he accepted the challenge. He worked with gynecologist John Rock and chemist Carl Djerassi.¹² The project would be funded by women’s activist and wealthy heiress Katharine Dexter McCormick, who would contribute hundreds of thousands of dollars to the project before it was completed.¹³

The project faced obstacles from the beginning. Although the federal ban on contraception was lifted in 1938 after Margaret Sanger herself fought to overturn it in court, birth control (in any form) was still illegal in most states in 1950.¹⁴ Therefore, it was difficult to conduct trials in the United States, and almost impossible when it would come time for human trials. Even as the project faced hurdles, early research was promising. Some tests in the early stages of the research involved Pincus injecting daily doses of progesterone into rabbits, which stopped ovulation.¹⁵ Pincus and his team decided on an oral contraceptive, as daily injections

⁹ Nikolchev, “A Brief History of the Birth Control Pill.”

¹⁰ Nikolchev, “A Brief History of the Birth Control Pill.”

¹¹ Nikolchev, “A Brief History of the Birth Control Pill.”

¹² Biography.com Editors, “Margaret Sanger.”

¹³ Suzanne White Junod, “FDA’s Approval of the First Oral Contraceptive, Enovid,” www.fda.gov, (1998).

¹⁴ Carolyn Todd, “The History and Evolution of Birth Control in America,” www.allure.com, (July 12, 2018).

¹⁵ Bethy Squires, “The Racist and Sexist History of Keeping Birth Control Side Effects Secret,” broadly.vice.com, (October 17, 2016).

were deemed too inconvenient for the average woman.¹⁶ After testing different doses of progesterone on animals, the scientists were ready to proceed with human trials.

Unfortunately, trials in the United States were impractical. Birth control was still illegal in most states, and the attitude towards contraception was skeptical at best. The public opinion on contraception in the mid-twentieth century was disapproving. Americans, especially Christian Americans, were opposed to a drug that would separate sex from procreation.¹⁷ Trials in the United States were simply not viable, so other options would need to be explored. In the end, Pincus and his team decided to proceed with human trials in Puerto Rico, for a number of reasons. There were no laws against contraception [See Appendix A] or abortion in the territory, and high birth rates, low socio-economic conditions, and close proximity to the United States made it the perfect place for preliminary human trials.¹⁸ Furthermore, the island was populated mostly by uneducated women, which was very important to Pincus:

For Pincus, the island offered a pool of motivated candidates, and a stationary population that could be easily monitored over the course of the trials. Pincus also knew that if he could demonstrate that the poor, uneducated, women of Puerto Rico could follow the pill regimen, then women anywhere in the world could too.¹⁹

The purpose of the trials was aimed at determining the ideal progesterone dosage, as well as to answer a few pressing questions: What would be the consequences of skipping a pill, or several pills? Would women choose pills over other forms of contraception? Would women without a higher education be able to follow the pill schedule? Would there be any serious

¹⁶ Squires, “The Racist and Sexist History of Keeping Birth Control Side Effects Secret.”

¹⁷ Austin Cline, “What Do Religions Say About Birth Control?” www.thoughtco.com, (January 21, 2018).

¹⁸ Göran Samsioe, *The Pill: The Most Misunderstood Drug in the World* (Carnforth, Lancs: Parthenon Publishing Group, 1991), 14.

¹⁹ “The Puerto Rico Pill Trials,” www.pbs.org, (2018).

side-effects, adverse effects on general health and body functions?²⁰ Pincus and his team aimed to find out.

The study was slow at first. In order to combat working with people who struggled with Christian consciences, the initial project was to be billed as a study of the physiology of progesterone in women.²¹ However, as it turned out, this was a mistake: very few women initially signed up. By March of 1955, only twenty-three women were enrolled in the study. Three months later, the number had dropped to thirteen, and for good reason. The trials were vigorous and time-consuming for participants—it required a daily temperature, a daily vaginal smear on a glass slide, monthly urine samples, and monthly biopsy linings of the uterus.²² One of the scientists assisting the project in Puerto Rico, a medical school professor named David Tyler, went so far as to threaten his female medical students with poor grades if they did not enroll in the study.²³ After months of meager participation, the team of scientists decided to tell potential subjects what the study was actually for; it worked like magic: hundreds of women signed up for the Puerto Rico trials.²⁴

After several months of trials, the pill was deemed one hundred percent effective. However, it is widely believed that the pill was not nearly safe enough to be available commercially yet, but many of these concerns were ignored. For example, three women died during the study, and they were not autopsied to determine whether the contraceptive pill caused their death.²⁵ The pill itself actually had ten times the amount of progesterone needed to prevent

²⁰ Leon Speroff, *A Good Man: Gregory Goodwin Pincus* (Portland, OR: Arnica Pub., 2009), 201.

²¹ Speroff, *A Good Man*, 203.

²² Speroff, *A Good Man*, 203.

²³ Speroff, *A Good Man*, 203.

²⁴ “The Puerto Rico Pill Trials,” www.pbs.org, (2018).

²⁵ Squires, “The Racist and Sexist History of Keeping Birth Control Side Effects Secret.”

pregnancy, and the excess hormone was found to increase the risk of ovarian cancer.²⁶ The pill, at least in the form and dosage given to trial participants in Puerto Rico, had too many side effects to be a safe contraceptive drug.²⁷

Despite the flaws in the pill, which would be called Enovid, it would be submitted for approval by the Food and Drug Administration (FDA). Although it was a contraceptive pill, Pincus and Sanger both knew that it would be nearly impossible to have the pill approved as a way to prevent pregnancy. Their solution was to submit the drug to the FDA as a treatment for “severe menstrual disorders and infertility,” not as a contraceptive.²⁸ Enovid was FDA approved in 1957, and was distributed by the G.D. Searle Company of Chicago.²⁹ [See Appendix B] Although the pill was not advertised as contraception, women in America knew what to look for, and the number of women reporting severe menstrual disorders was shockingly high after the approval of the pill.³⁰ The difficulty in acquiring this contraceptive could have actually been the reason that this drug is simply referred to as ‘the pill.’ “‘The Pill,’ the oral contraceptive’s enduring vague nickname . . . is thought to have stemmed from women requesting it from their doctors as discreetly as possible.”³¹ This temporary solution was soon remedied, however, and on May 9th, 1960, the pill was officially approved by the FDA as a method to prevent pregnancy. The day was marked by celebration with Sanger, Pincus, Rock, and McCormick sharing a bottle of champagne.³² By 1965, over seven million women were on the pill.³³

²⁶ Squires, “The Racist and Sexist History of Keeping Birth Control Side Effects Secret.”

²⁷ Squires, “The Racist and Sexist History of Keeping Birth Control Side Effects Secret.”

²⁸ Junod, “FDA’s Approval of the First Oral Contraceptive, Enovid.”

²⁹ History.com Authors, “FDA Approves the Pill,” www.history.com, (August 21, 2018).

³⁰ Nikolchev, “A Brief History of the Birth Control Pill.”

³¹ Gibson, “The Long, Strange History of Birth Control.”

³² Speroff, *A Good Man*, 203.

³³ Speroff, *A Good Man*, 203.

However, despite positive reception from women, some were less than enthused about the contraceptive pill. This was not surprising, considering the cultural norms of the time. Women were still seen as less than men, and sex—especially for women—was considered immoral unless intended for procreation.³⁴ Those opposed to the pill feared “sexual anarchy” as a result of women being able to engage in sex without consequence. Although the federal ban on birth control was lifted in 1938 in a court case fought by Margaret Sanger, some states, like Connecticut, still had laws declaring contraception illegal, for married and unmarried women.³⁵ However, the contraceptive pill created awareness of the backwards laws in some states, and people called for the legalization of all forms of contraception.³⁶ In 1965, after the executive director of Planned Parenthood Connecticut Estelle Griswold was arrested for distributing contraceptives, Griswold appealed to the Supreme Court, and the case of *Griswold vs. Connecticut* fought the 1879 law that stated:

Any person who uses any drug, medicinal article or instrument for the purposes of preventing conception shall be fined not less than forty dollars or imprisoned not less than sixty days . . . any person who assists, abets, counsels, causes, hires or commands another to commit any offense may be prosecuted and punished as if he were the principle offender.³⁷

The United States Supreme Court ruled in favor of Griswold, citing that the ban on contraception violated marital privacy.³⁸ As a result, the oral contraceptive pill was legalized on a national level

³⁴ Raluca Alexander Popescu, “The Roots of the Sexual Revolution in the 1960s United States,” (www.historia.ro).

³⁵ Cline, “What Do Religions Say About Birth Control?”

³⁶ “Griswold vs Connecticut (1965),” www.thirteen.org.

³⁷ “Griswold vs Connecticut (1965),”

³⁸ “Griswold vs Connecticut (1965),” www.thirteen.org.

(however, it was only legal for married couples, and would not be legalized for unmarried women until 1972).³⁹ By 1973, a staggering seventy percent of married women between the ages of fifteen and forty-four were on the pill. Although the pill was now legal, there were still many obstacles it had to face. African American leaders in America condemned the pill on the grounds that it was being “peddled to their community for the purpose of black genocide.”⁴⁰ Public trust of the medication was shattered by the publication of Barbara Seaman’s *The Doctor’s Case Against the Pill*, which publicly outed the scandal of the Puerto Rico trials: that they were conducted without the informed consent of the women involved and the side effects of the pill were hidden from the FDA.⁴¹

Furthermore, in 1968, an encyclical entitled *Humanae Vitae* was published by pope at the time, Pope Paul VI. In this encyclical, he declared the pill a synthetic form of contraception and therefore inherently sinful. Catholic opinion on contraception can be explained best as being: “. . . generally condemned like abortion. . . this is because sex was treated as having no value except for reproduction; therefore, hindering reproduction encouraged sinful uses of sex.”⁴² The Catholic Church’s rejection of the pill was particularly difficult for John Rock, a devout catholic. Dr. Rock fought his entire life to persuade Catholic leaders that the pill was an "adjunct of nature and its use conforms to Catholic theology,⁴³" particularly with his book, *The Time Has Come*. He died in 1984, unsuccessful in his attempts to reconcile his religion with science.⁴⁴

³⁹ Megan Gibson, “The Long, Strange History of Birth Control,”(February 2, 2015).

⁴⁰ Camille Bautista, *The Pill’s Been Changing Lives For 54 Years*.

⁴¹ Pamela Verma Liao, “Half a Century of the Oral Contraceptive Pill,” (December 2012).

⁴² Cline, “What Do Religions Say About Birth Control?”

⁴³ Joseph Berger, “John Rock, Developer of the Pill and Authority on Fertility, Dies,” (December 5, 1984).

⁴⁴ Joseph Berger, “John Rock, Developer of the Pill and Authority on Fertility, Dies,” (December 5, 1984).

Regardless of the backlash created by the pill, it has left a huge impact on the world of science and women's rights. The immediate effect was astounding. In 1960, it is estimated that over one million illegal abortions were performed. In 1972, just over a decade following the approval of the contraceptive pill, that number had dropped to 130,000.⁴⁵ Furthermore, after the approval of the pill, the number of women who died as a result of pregnancy decreased by half, and there was a threefold decline in reported infant deaths.⁴⁶ Today, it is estimated that over seventy-million women are on hundreds of oral contraceptive brands worldwide.⁴⁷ Furthermore, over ninety-nine percent of American women of childbearing age report using some form of contraception at one time or another.⁴⁸ The pill ended laws against contraception, granted women bodily autonomy, and decreased the number of unplanned and unwanted pregnancies. As a result, modern women tend to have children later in life, choosing a more career-focused life. The overall effect of the pill can best be described by journalist Letty Pogrebin:

The impact of the pill was even more radical. It meant sex need not lead to pregnancy. But it wasn't just another form of contraception, it was an equalizer, a liberator, and easy to take. For the first time in human history, a woman could control her sexuality and determine her readiness for reproduction by swallowing a pill smaller than an aspirin. Critics warned that the pill would spawn generations of loose, immoral women; what it spawned was generations of empowered women who are better equipped to make rational choices about their lives.⁴⁹

⁴⁵ Amanda Chatel, "What Getting an Abortion was Like in the 50's, 60's, 70's, and 80's Compared to Now," (January 22, 2018).

⁴⁶ "On 50th Anniversary of the Pill, Poll Shows Eight in 10 Women Say Birth Control Should Be Covered by Insurers" (January 30, 2014).

⁴⁷ Göran Samsioe, *The Pill: The Most Misunderstood Drug in the World*, 14.

⁴⁸ Gibson, "The Long, Strange History of Birth Control."

⁴⁹ Letty Cottin Pogrebin, "What 'The Pill' Did," (May 7, 2010).

The contraceptive pill: a triumph in women's rights. The first oral contraceptive was pioneered by some of the brightest minds of the twentieth century, and after difficult human trials and struggles with backlash and laws against contraception, the first birth control pill, Enovid, was finally approved by the FDA. The contraceptive pill has had a monumental effect on women's lives, and the changes that the birth control pill has caused continue to benefit women today.

Appendix A



Puerto Rican women teaching contraceptive methods.

Walker, Hank. "The Teaching of Birth Control Methods in Puerto Rico, 1960." Digital image.

History.com. Accessed October 24, 2018. [https://www.history.com/.image/](https://www.history.com/.image/c_limit,cs_srgb,q_auto:good,w_686/MTU3ODc4NjAxNjM3ODk3OTUx/)

[c_limit,cs_srgb,q_auto:good,w_686/MTU3ODc4NjAxNjM3ODk3OTUx/](https://www.history.com/.image/c_limit,cs_srgb,q_auto:good,w_686/MTU3ODc4NjAxNjM3ODk3OTUx/)

Image-placeholder-title.webp.

Appendix B



Bottle of Enovid Tablets, circa 1960.

"Bottle of Enovid Tablets, circa 1960." Digital image. History.com. Accessed October 24, 2016.

https://www.history.com/.image/c_limit,cs_srgb,q_auto:good,w_860/

MTU3ODc4NjAyMwOTY3Nzc1/image-placeholder-title.webp.

Annotated Bibliography

Primary Sources:

Berger, Joseph. "John Rock, Developer of the Pill and Authority on Fertility, Dies" The New York Times. Accessed September 25, 2018. <https://www.nytimes.com/1984/12/05/obituaries/john-rock-developer-of-the-pill-and-authority-on-fertility-dies.html>.

This is an obituary published in 1984 after the death of John Rock, a co-developer of the first contraceptive pill. Rock's role in the development of the pill is perhaps the most intriguing, considering his Catholic roots. He struggled with reconciling science with religion, but fought for his invention his entire life even as his own church renounced his findings.

"Bottle of Enovid Tablets, circa 1960." Digital image. History.com. Accessed October 24, 2016. https://www.history.com/.image/c_limit,cs_srgb,q_auto:good,w_860/MTU3ODc4NjAyMwOTY3Nzc1/image-placeholder-title.webp.

This source is a picture of a bottle of Enovid tablets from the 1960s. It was very important to my research because it provided a visual aid. I will definitely include it in my paper as an appendix.

Paul VI, Pope. *Humanae Vitae*. July 25, 1968. Encyclical of Pope Paul VI renouncing the oral contraceptive pill., Vatican City.

This source is an encyclical by the Pope at the time of the approval of the contraceptive pill, Pope Paul VI. The Pope renounces the pill and all forms of unnatural contraceptives. This

source was vital to my research. It helped me understand the attitude and response to the pill from the Catholic Church, which was a less than positive reception.

Pius XI, Pope. *Casti Connubii*. December 31st, 1930. Encyclical of Pope Pius XI on Christian marriage., Vatican City. https://w2.vatican.va/content/pius-xi/en/encyclicals/documents/hf_p-xi_enc_19301231_casti-connubii.html.

This source is an encyclical by the Pope in 1930 regarding his thoughts on Christian marriage. Ultimately, this source, while important to investigate, did not really contribute much to my research. The thoughts of the Pope were exactly as expected. Ideas like mutual fidelity and loyalty, trust, and morality come up frequently in this encyclical.

Pincus, Gregory. *The Control of Fertility: Gregory Pincus*. New York: London, Academic Press, 1968.

This book examines the scientific process and experiment of controlling fertility by approaching it as a biological problem. While this book was ultimately not very relevant to Pincus' work on a contraceptive pill for humans, it was important to investigate this book by Pincus to see if it contained a significant amount of information regarding the development of the oral contraceptive pill.

Sanger, Margaret. *Happiness in Marriage*. S.I.: STELLAR CLASSICS, 2017.

This source is a book written by Sanger offering advice and guidelines for the best way to achieve happiness in a healthy, long term marriage. Originally published in 1926, it was one of the first books sold that offered intimate advice on marriage. While this source was an interesting read, it ultimately did not help my research. It did not contain information on the contraceptive pill; it was published too early to pertain to that aspect of Sanger's career.

Sanger, Margaret. *My Fight for Birth Control*. Place of Publication Not Identified: Pergamon Press,

1969.

This source is a book by Sanger about feminism and birth control (a term she coined). It provides a look on her early life, and why these causes were so important to her. The book gives a perspective on Sanger's life as a child, and why the events in her life drove her to fight for women's right to equality and bodily autonomy. This source was intended to be read by women in order to inspire them, and men in order to sway them to the feminist cause.

Sanger, Margaret. *The Autobiography of Margaret Sanger*. Mineola, NY: Dover Publications, 2004.

This source did not ultimately help too much with my research. While it provided insight to Sanger's early life, it contained information that I had collected in previous sources. It was fascinating to learn, however, how Sanger's early life prompted her career in furthering women's rights.

Sanger, Margaret. *What Every Girl Should Know*. Lexington, KY: A.J. Cornell Publications, 2016.

This was a handbook published by Margaret Sanger in 1913 (early in Sanger's career). It offers advice to women on sex, marriage, and other information. It ultimately did not help with my research. However, this handbook provides context to the treatment and attitude towards women as well as the expectations of women in the twentieth century.

Sanger, Margaret. *Women and the New Race*. New York: Cosimo, 2005.

This source is by Sanger discussing the roles that women must play in order to achieve equal rights. It shows Sanger's opinions on birth control through the perspective of "weeding out the unfit." Sanger was a woman ahead of her time; she was smart and opinionated, even when those opinions were wildly unpopular. This source is intended for those who would discredit Sanger and her work because she is a woman. By using facts and scientific theory like Darwinism to support her arguments, Sanger proves that she is a woman to be respected.

Walker, Hank. "The Teaching of Birth Control Methods in Puerto Rico, 1960." Digital image.

History.com. Accessed October 24, 2018. https://www.history.com/.image/c_limit,cs_srgb,q_auto:good,w_686/MTU3ODc4NjAxNjM3ODk3OTUx/Image-placeholder-title.webp.

This source was a very powerful image regarding the Puerto Rico pill trials. It is integral to my research because it offers a visual of the reality of life for these women involved in the pill trials, and their lives beforehand.

Secondary Sources:

Angier, Natalie. "Why the Oral Contraceptive Is Just Known as "The Pill"." Smithsonian.com.

November 01, 2013. Accessed October 23, 2018. <https://www.smithsonianmag.com/history/why-the-oral-contraceptive-is-just-known-as-the-pill-4337831/>.

This source is very important to my research. It describes the cultural revolution caused by the pill, as well as the drug's impact in general. While I don't know if I'll necessarily need to cite this source, it is crucial to understand the effects of the pill.

Bautista, Camille. "The Pill's Been Changing Lives For 54 Years." Bustle. April 25, 2018.

Accessed

September 21, 2018. [https://www.bustle.com/articles/](https://www.bustle.com/articles/23980-how-has-birth-control-developed-a-brief-history-of-the-pill-by-the-decade)

23980-how-has-birth-control-developed-a-brief-history-of-the-pill-by-the-decade.

This source talks about the barriers to approving the first pill, and reactions to the pill. It also talk about how birth control has developed, from the first pill called enovid to the hundreds of brands that exist today. This source helps me with my topic by providing the reactions and backlash the pill caused, as well as immediate effects like changes in laws regarding contraception. It also talk about the shift from the first brand to hundreds of brands that exist today, which helps explain long term effects of the first pill.

Bellis, Mary. "Oral Contraceptives: The History of Birth Control Pills." ThoughtCo. December 18, 2017. Accessed October 22, 2018. [https://www.thoughtco.com/](https://www.thoughtco.com/history-of-birth-control-pills-4076662)

history-of-birth-control-pills-4076662.

This was a source explaining the timeline of Sanger and Pincus' professional relationship and

how they came to meet. Sanger persuaded Pincus to take on the challenge of developing the first contraceptive pill. This source ultimately did not contribute much to my research that I did not already know.

Biography.com Editors. "Gregory Pincus Biography." Biography.com. April 02, 2014. Accessed September 20, 2018. <https://www.biography.com/people/gregory-pincus-21199819>.

This source gives a detailed explanation of Gregory Pincus' life, and his scientific career. Pincus' life, while not the focus of the paper, is important context to build an argument

and story. This clarifies how his life leading up to his work on the contraceptive pill led to his eventual success in the field of women's health, and obstacles he faced in his career. The contraceptive pill was not the first controversial project that Pincus had pioneered, which helps to explain why he agreed to develop the contraceptive pill in the first place.

Biography.com Editors. "Margaret Sanger." Biography.com. April 28, 2017. Accessed September 23, 2018. <https://www.biography.com/people/margaret-sanger-9471186>.

This source talks about the life of Margaret Sanger, the President of Planned Parenthood and the woman who convinced Pincus to work on creating a birth control pill. This source provides important context for Margaret Sanger's life. She is arguably the mastermind behind the creation of the contraceptive pill. She was an intelligent, determined, and fearless woman who was ahead of her time.

"Birth Control Became Legal 50 Years Ago - And Here Are Our 5 Favorite Things About It."

Planned Parenthood Action Fund. June 3, 2015. Accessed October 24, 2018.

<https://www.plannedparenthoodaction.org/blog/>

Birth-control-became-legal-50-years-ago-and-here-are-our-5-favorite-things-about-it.

This article enhanced the research I already had from Planned Parenthood. It was very important to my research, even though it may not be included in my paper. It detailed the benefits and long term effects of the development of the first oral contraceptive pill, as well as how the pill still affects women today.

Buttar, Aliya, and Sheraden Seward. "Enovid: The First Hormonal Birth Control Pill" The Embryo

Project. September '25, 2013. Accessed October 24, 2018. <https://embryo.asu.edu/pages/enovid-first-hormonal-birth-control-pill>.

This source discusses the first birth control pill developed by Gregory Pincus, called Enovid.

This source further explained the causes and effects of the creation of the pill. However helpful this source was, it was not ultimately important for new information.

Berg, Miriam. "Timeline: 100 Years of Birth Control." Planned Parenthood Action Fund. July 16, 2014. Accessed September 23, 2018. <https://www.plannedparenthoodaction.org/blog/timeline-100-years-birth-control>.

This source is a timeline explaining how contraception has evolved in the last century. This gives background information and context to how contraception has evolved over the last century, and women's fight for birth control and bodily autonomy. This source enhances one of my other sources, "Contraception: Past, Present, and Future Factsheet" by adding extra details and information outside the realm of just oral contraception.

Chatel, Amanda. "Getting An Abortion In The '60s Was Way Different Than It Is Today." Bustle. January 22, 2018. Accessed March 13, 2019. <https://www.bustle.com/p/what-getting-abortion-was-like-in-the-60s-70s-80s-compared-to-now-7977732>.

This source was integral to my research. It was extremely helpful when exploring the effects of the contraceptive pill on the health of women, and it explores how women's rights have evolved since the approval of the contraceptive pill and how the illegal abortion rate decline drastically after the FDA approval of the pill.

Cline, Austin. "What Do Religions Say About Birth Control?" ThoughtCo. January 21, 2018.

Accessed October 22, 2018. <https://www.thoughtco.com/contraception-birth-control-and-world-religions-248029>.

This source gave very important information regarding the religious reactions to birth control.

The Roman Catholic perspective was particularly important, considering they were still a huge institution with some influence over the American population. It also indicated to some primary sources that I ended up using as well, like Pope Pius' encyclical entitled *Casti Connubii*.

"Contraception: Past, Present and Future Factsheet." FPA. December 01, 2016. Accessed September 30, 2018. <https://www.fpa.org.uk/factsheets/contraception-past-present-future>.

This source gives a timeline for all types of contraception. While most of it is information I knew already, it is still relevant and helpful. While this source is fairly broad, it will enhance the understanding of this timeline of the contraceptive pill, and is a good overview of the timeline of the pill.

Cornforth, Tracee. "A Brief History of the Birth Control Pill." Verywell Health. July 30, 2018. Accessed September 24, 2018. <https://www.verywellhealth.com/a-brief-history-on-the-birth-control-pill-3522634>.

This article gives a timeline of birth control over the years and the evolution that led to the commercial oral contraceptive pill. It also explains the effects of the pill in relation to women's sexual liberation in the 1960s. This provides a timeline on all forms of contraception. This is relevant to the context of my paper. It also shows the effects of the contraceptive pill, both long term and short term.

Dhont, Marc. "History of Oral Contraception." *The European Journal of Contraception & Reproductive Health Care*. November 22, 2010. Accessed September 30, 2018.

<https://www.tandfonline.com/doi/full/10.3109/13625187.2010.513071>.

This is a thorough examination of the history of the pill from a scholarly perspective. This source offers a lot of concrete data to support my claims. Ultimately this source explains

the

development of contraception and how the contraceptive pill works.

Gibson, Megan. "The Long, Strange History of Birth Control." *Time*. February 02, 2015.

Accessed

October 23, 2018. <http://time.com/3692001/birth-control-history-djerassi/>.

This source discusses the long history of birth control as well as the short term and long

term

effects of the creation of the pill. It also gives insight into the role that Dr. Carl Djerassi played in the creation of the pill, which had been a little unclear until now. This source is very helpful in my research, and is very reliable, considering it is from Time Magazine.

"Gregory Pincus (1903-1967)." PBS. 2018. Accessed September 21, 2018.

<https://www.pbs.org/wgbh/americanexperience/features/gregory-pincus-1903-1967/>.

This source gives a timeline for all types of contraception. While most of it is information

I knew already, it is still relevant and helpful. This source gives a more in depth look at

Gregory Pincus' path to creating the birth control pill, and the acclaim that resulted from it.

"Griswold vs Connecticut (1965)." Thirteen - Media With Impact. Accessed October 22, 2018.

https://www.thirteen.org/wnet/supremecourt/rights/landmark_griswold.html.

This source documents the case of Griswold versus Connecticut. Estelle Griswold, the head

of Planned Parenthood Connecticut, was arrested for distributing contraceptives, which were illegal in the state at the time. The Supreme Court ruled in favor of Griswold. This source was very important to my research, as it showed one of the largest obstacles for the oral contraceptive pill. It gave the exact wording of the law, as well as the reason the Supreme Court came to the decision of overruling the law preventing married couples from using contraception.

Hatcher, Robert A. *Contraceptive Technology*. New York, NY: Ayer Company Publishers, 2018.

This source lists the side effects of the modern birth control pill. This helps clarify and explain the scientific/medical aspect of the birth control pill. This can be connected to my sources regarding the Puerto Rico Pill trials because it shows how the side-effects and dosage of hormones today are very different than when Enovid was first introduced.

Hilts, Philip J. "Birth Control Backlash." *The New York Times*. Accessed October 23, 2018.

<https://www.nytimes.com/1990/12/16/magazine/birth-control-backlash.html>.

This source was an article originally published in 1990, and it explains some backlash surrounding the creation of the oral contraceptive pill. It gives context as to what happens in

the near future after the creation of the pill. This source is very helpful for my research because it gives me information about the short term effects of the creation of the pill.

History.com Authors. "FDA Approves the Pill." *History.com*. August 21, 2018. Accessed

September 24, 2018. <https://www.history.com/this-day-in-history/fda-approves-the-pill>.

This is a short article that talks about the day that the FDA approved the pill. It is interesting to compare this source to the FDA's record of the day that the pill was approved.

Junod, Suzanne White. "FDA's Approval of the First Oral Contraceptive, Enovid." FDA. 1998.

Accessed September 21, 2018. [https://www.fda.gov/downloads/](https://www.fda.gov/downloads/AboutFDA/WhatWeDo/History/ProductRegulation/UCM593499.pdf)

[AboutFDA/WhatWeDo/History/ProductRegulation/UCM593499.pdf](https://www.fda.gov/downloads/AboutFDA/WhatWeDo/History/ProductRegulation/UCM593499.pdf).

This is a short article that briefly describes the day that the FDA approved the first commercially available oral contraceptive. It was commissioned by Margaret Sanger. This explains the people involved in the creation of the pill, and their titles at the time, which is something I was not aware of beforehand.

Kennedy, David M. *Birth Control in America*. Yale Publication in American Studies, 2001.

This source gives a timeline for the development of the pill. This quote about the different congregations that approved the pill is significant because religion definitely played a part in the backlash of the pill.

Koros, Elaina. "A Reproductive Revolution." U.S. News & World Report. October 23, 2014.

Accessed October 24, 2018. <https://www.usnews.com/opinion/articles/2014/10/23/>

[The-history-of-birth-control-and-where-the-pill-came-from](https://www.usnews.com/opinion/articles/2014/10/23/).

This source talks about the relationship between Sanger, McCormick, Rock, and Pincus. These four people revolutionized science and reproductive health, especially for women. This also explains the long term effects of the pill.

Landau, Meryl Davids. "Contraception, Birth Control, and Women in America | Everyday Health."

EverydayHealth.com. July 06, 2018. Accessed October 23, 2018.

<https://www.everydayhealth.com/birth-control/contraception-birth-control-women-america/>.

This source gives background regarding women's sexual health before the development of the oral contraceptive pill. It was integral to my research, even though I may not cite it in my paper.

Liao, Pamela Verma, and Janet Dollin. "Half a Century of the Oral Contraceptive Pill." NCBI. December 2012. Accessed September 21, 2018.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3520685/>.

This source discusses the history of the birth control pill and its impact on modern medicine and women's rights. It also discusses the medical risks and benefits of the pill. This helps with the research of this topic because it is one of the first sources that is a medical research facility. This is an important perspective to consider when discussing the short term and long term effects of the birth control pill.

"Margaret Sanger (1879-1966)." PBS. 2018. Accessed September 24, 2018. <https://www.pbs.org/wgbh/americanexperience/features/pill-margaret-sanger-1879-1966/>.

This source gives information on Margaret Sanger's life. She was an icon who fought for women's rights her entire life. This source gives biographical information on the

remarkable life of Margaret Sanger. It also gives background information and context for the causes of the creation of the pill.

Marks, Lara. *Sexual Chemistry: A History of the Contraceptive Pill*. New Haven, CT: Yale University Press, 2010.

This source has some quotable information regarding the invention of the pill itself. This is a discussion of the pill through a feminist lens, which gives a different perspective that will help me write my paper.

McLaren, Angus. *A History of Contraception: From Antiquity to the Present Day*. Oxford: Blackwell, 1994.

This book gives a ton of information regarding the short term effects of birth control and how it changed women's lives internationally. This source gives a lot of statistics that are relevant to the topic of my paper.

"Medical Uses of the Birth Control Pill." Center for Young Womens Health. July 19, 2018.

Accessed October 24, 2018. <https://youngwomenshealth.org/2011/10/18/medical-uses-of-the-birth-control-pill/>.

This was an electronic source regarding the effects of the birth control pill, as well as its medical uses outside of preventing pregnancy. This source was important to recognize the long term effects of the revolutionary pill.

Nikolchev, Alexandra. "A Brief History of the Birth Control Pill." PBS. 2018. Accessed

September

21, 2018. <http://www.pbs.org/wnet/need-to-know/health/a-brief-history-of-the-birth-control-pill/480/>.

This is a timeline of the evolution of contraception. It explains everything from ancient Egyptian methods of contraception to modern day oral contraception. This provides context and order to my topic, which is essential to having an organized paper. It is helpful to have a broad overview of my topic.

"Oral Contraceptive Pill." Case Western Reserve University. 2010. Accessed September 20, 2018.

<https://case.edu/affil/skuyhistcontraception/online-2012/pill.html>.

This source gives a detailed explanation of the first birth control pill, called Enovid, developed by Gregory Pincus. It explains how the modern birth control pill works and a little bit of information of the effects of the pill. This is going to help me connecting with the triumph theme of NHD because it explains the effects that the invention of the birth control pill had on the world.

Oreffice, Sonia. "The Contraceptive Pill Was a Revolution for Women and Men." The

Conversation. September 30, 2018. Accessed September 30, 2018.

<http://theconversation.com/>

The-contraceptive-pill-was-a-revolution-for-women-and-men-37193.

This source is about the clinical trials of Enovid in Puerto Rico. This helps me because it has been difficult to find some information regarding the specifics of the Puerto Rico trials.

Parenthood, Planned. "On 50th Anniversary of the Pill, Poll Shows Eight in 10 Women Say Birth

Control Should Be Covered by Insurers." Planned Parenthood. January 30, 2014. Accessed

March 13, 2019. <https://www.plannedparenthood.org/about-us/newsroom/press-releases/>

50th-anniversary-pill-poll-shows-eight-10-women-say-birth-control-should-be-covered-insurers.

This source was added late in the process of my paper. It discusses the effect of the oral contraceptive pill on the lives of women, and offers statistics that show just how important the pill was.

Pogrebin, Letty Cottin. "What 'The Pill' Did." CNN. May 07, 2010. Accessed September 30, 2018. <http://www.cnn.com/2010/OPINION/05/06/pogrebin.pill.roundup/index.html>.

This is a recent source that talks about the effects of the invention of the pill. It discusses it from a feminist perspective that celebrates women's rights and the advancements in women's rights that occurred as a result of the pill.

Popescu, Raluca Alexander. "The Roots of the Sexual Revolution in the 1960s United States." *Historia*. Accessed October 22, 2018. <https://www.historia.ro/sectiune/general/articol/the-roots-of-the-sexual-revolution-in-the-1960s-united-states>.

This source discusses the sexual revolution of the sixties, and the causes and opinions surrounding it. Ultimately, this source was not as helpful as many other sources, but it gave background information and insight into the short-term effects of the pill, because the creation of the oral contraceptive pill is largely the reason for the sexual liberation of women in the sixties.

Samsioe, Göran. *The Pill: The Most Misunderstood Drug in the World*. Carnforth, Lancs:

Parthenon

Publishing Group, 1991.

This source talks about the long term effects of this pill. This source gives some information that I wasn't necessarily looking for, and it will supplement my research.

Speroff, Leon. *A Good Man: Gregory Goodwin Pincus: The Man, His Story, the Birth Control Pill*. Portland, OR: Arnica Pub., 2009.

This source gives a lot of information about the human trials in Puerto Rico, which I hadn't been able to find a lot of information on until now. This source will help me explain in details the effects and results of the human trials in Puerto Rico.

Squires, Bethy. "The Racist and Sexist History of Keeping Birth Control Side Effects Secret."

Broadly. October 17, 2016. Accessed September 25, 2018. https://broadly.vice.com/en_us/article/kzeazz/the-racist-and-sexist-history-of-keeping-birth-control-side-effects-secret.

This source is about the tragedy of keeping the birth control side effects secret, and the racist and sexist reasons why they were kept secret. This source will help me explain in details the effects and results of the human trials in Puerto Rico.

"The Birth Control Pill: A History." Planned Parenthood. June 2015. Accessed September 20, 2018.

https://www.plannedparenthood.org/files/1514/3518/7100/Pill_History_FactSheet.pdf.

This source includes a timeline of the development of the birth control pill as well as important figures in its development. It explains the results of the first pill as well as preliminary trial results. This is one of the most detailed sources on the pill, and it comes from a women's sexual health clinic, meaning they want to be very thorough and correct in their information.

"The Puerto Rico Pill Trials." PBS. 2018. Accessed September 30, 2018. <https://www.pbs.org/>

wgbh/americanexperience/features/pill-puerto-rico-pill-trials/.

This source is about the clinical trials of Enovid in Puerto Rico. This helps me because it has been difficult to find some information regarding the specifics of the Puerto Rico trials.

Todd, Carolyn. "The History and Evolution of Birth Control in America." Allure. July 12, 2018.

Accessed October 14, 2018. <https://www.allure.com/story/history-of-birth-control>.

This is another resource that provides a timeline and information on the development of birth control and how it has evolved and changed since its FDA approval in 1957. This source was important to my research to better understand the timeline and the long term effects of the creation of the oral contraceptive pill.

"Waking Up From the Pill." NYMag.com. Accessed October 24, 2018. <http://nymag.com/news/features/69789/index1.html>.

This source gives the long term effects of the pill. It is very important to my research, as I was having difficulty finding long term effects of the pill. This will definitely be a source I will use.