

The Pill and the Pope

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ABSTRACT

This talk outlines the development of the oral contraceptive pill and the roles of the individuals involved. Two formidable women, Margaret Sanger and Katherine McCormick, were the instigators and facilitators; Gregory Pincus, Min Chang, Russell Marker, Carl Djerassi and Frank Colton the scientists and John Rock, Celso Garcia and Edris Rice-Wray the clinicians. Their contribution to the development of the pill and the early evolution of the birth control movement will be outlined.

The pill stimulated the Catholic Church to confront its position on contraception, and in 1963 the Pontifical Commission on Birth Control was established to advise the Pope. The recommendations of the commission and the Pope's response will be discussed.

MARGARET SANGER

Margaret Sanger (1879 – 1966) was the most influential person in the campaign for women's sexual and reproductive freedom in North America during the first half of the 20th century. She was born Margaret Higgins to Irish immigrant parents from



Margaret Sanger

Cork and, as the sixth of eleven children, was raised in modest circumstances in Corning, New York. After training as a nurse she married William Sanger, an architect and artist, had three children and for a time lived as a mother and housewife. This changed in 1911 when the family moved to Greenwich Village,

New York and both she and her husband embraced socialism and women's rights. For two years she was employed as a nurse by the New York Social Welfare Agency, working among the tenements of the very poor, mostly immigrant families. Sanger was struck by the crippling poverty associated with unlimited reproduction and by the total ignorance of all methods of contraception, except for the \$5.00 back street abortion. In 1913 she stopped nursing and committed herself to the promotion of women's sexual and reproductive rights. She visited France and was impressed by the sophistication and the knowledge of sex and contraception of French women. Upon return to New York she started a newsletter, *The Woman Rebel*, in which she coined the term 'birth control' and encouraged women to "*Look the whole world in the face with a go-to-hell look in the eyes*". The monthly newsletter only lasted from March to October 1914 before she was indicted under the Comstock Law.



Anthony Comstock

Anthony Comstock (1844 – 1915) was president of the Society for the Suppression of Vice – a committee of the Young Men's Christian Association (YMCA). In this capacity he collected

available pornographic material and used this to lobby congress to abolish the distribution of such material, including information on contraception, under a new law – which he helped draft. The so-called Comstock Law prohibited “Obscene, lewd or lascivious material. All devices or information preventing conception,” and remained on the books from 1873 to 1971.

Margaret Sanger, realising she did not have the profile or support necessary to fight the charge, fled to Britain via train to Montreal and thence by ship to Liverpool. There she connected with birth control and sexual liberation advocates and practiced the principles of both movements. A year later, in September 1915, she had to return to New York to look after her children when her husband was jailed for distributing some of her birth control leaflets. Due to the intervention of some influential British advocates, including Marie Stopes and HG Wells, the former charges against her were dropped. She focused her efforts on birth control education and helped found the National Birth Control League in the United States – the forerunner of Planned Parenthood. In October 1916 she opened the first birth control clinic in America, in the same poor area of New York in which she had worked as a nurse; there were > 100 patient visits on the first day. Within days, as she anticipated, the clinic was shut down by the police as she once again fell foul of the Comstock Law. Her trial attracted a lot of publicity, she conducted her own defence and was sentenced to 30 days in prison. After this, as she had planned, her public profile was assured and she used this podium to embark upon extensive speaking tours. In particular, she railed against the Catholic church’s position on contraception: “*Church control or birth control.....The dictatorship of celibates*”. In 1920, on her initiative, she divorced William Sanger. She told her sister she needed to find a rich husband to fund her cause. This she did, in the form of James Noah Slee, the founder

and president of Three-in-One oil. This enabled her to fund her activities in the promotion of birth control including her speaking tours, literature, conferences and support for Planned Parenthood. She retained the name Sanger, as this was linked to her public persona.

Like many who fight against accepted dogma Margaret Sanger was egotistical, single-minded and relentless. She sent her young children to boarding schools and focused her efforts entirely on the birth control movement, which she regarded as her cause. Initially she embraced the eugenics movement, but later tried to distance herself from their teachings. She was promiscuous, manipulative and often fought with others – even those who shared her views on birth control. Showing some insight into her own character she once said, *“I am not a fit person for love, home, children, friends or anything which needs attention or consideration.”* Be that as it may, no one in the first half of the 20th century matched her sustained and effective commitment, for more than 50 years, to the cause of women’s freedom over their own sexuality and reproduction – culminating, as we shall see, in the development of the oral contraceptive pill.

KATHERINE McCORMICK

Katherine McCormick (1875 – 1967) was the other main protagonist in the instigation and development of the pill. She was born Katherine Dexter, into a rich and prominent legal family in Chicago. In 1904, she was the first woman to graduate with a science degree (biology) from the Massachusetts Institute of Technology. Shortly after graduation she married Stanley McCormick, the son and heir to the extensive McCormick farm machine business. Sadly, within a year of the marriage, Stanley McCormick descended into dysfunctional madness, said to be a type of schizophrenia, from which he never recovered. Extensive



Suffragists Mrs. Stanley McCormick (Katharine McCormick) and Mrs. Charles Parker, April 22, 1913, holding a banner between them reading “National Woman Suffrage Association.”

private treatment and funding of neuro-psychiatric research was of no avail and he died in 1944. Katherine McCormick ultimately inherited both her family and the McCormick estates, making her exceptionally rich. She helped fund the Woman’s Suffrage movement and participated in their demonstrations. Through her support of Planned Parenthood she came in contact with Margaret Sanger and they forged a friendship based on their common support of women’s reproductive rights.

Gregory Pincus (1903 – 1967) was the son of Russian parents who fled the anti-semitic pogroms in Odessa and settled in New Jersey. He was brought up on a collective farm there and entered Cornell University, gaining degrees in biology. In 1931 he was appointed assistant professor at Harvard University, where he became an expert on mammalian reproduction. This included creating a rabbit embryo by fertilising a rabbit egg and sperm in a petri dish – the forerunner of in vitro fertilisation. Which feat gained him considerable publicity – not all of it favourable. His time at Harvard included a sabbatical leave for one year at Cambridge University. At the end of his seven year appointment at Harvard Pincus was denied tenure. He therefore took up a relatively minor appointment in the department of physiology at Clark University, Worcester – a town some 50 miles west of Boston. In 1944, frustrated by a lack of time and resources for research, Pincus and a former Harvard colleague, Hudson Hoagland, founded the Worcester Foundation for Experimental Biology – based, in fact, in the adjacent town of Shrewsbury. This was an audacious move that involved buying and converting a large house and small estate – in part funded by donations they solicited from local business and citizens. At this time the chemical structure of human hormones was being refined and there was great interest in steroid chemistry in general. In particular, the medical use of sex hormones, cortisone and allied compounds was increasing. As a result government agencies and the pharmaceutical industry required extensive animal testing on various promising compounds. Such contracts enabled Pincus and Hoagland to get their new foundation established. Pincus was very bright, driven and blessed with a photographic memory; his core belief was *“In science everything is possible”*.

By late 1951 both Sanger and McCormick were disillusioned with the direction of Planned Parenthood’s research programmes.

They felt that a new contraceptive was needed; one that the woman controlled and was independent of each act of intercourse. In essence, they wanted a pill that the woman took to render her temporarily sterile. Sanger was familiar with Pincus' work having met him at scientific meetings. She and Katherine McCormick arranged to meet with Pincus at the Worcester Foundation and, after a preliminary tour and pleasantries, they got down to business. McCormick led the discussion: could Pincus develop an oral contraceptive pill? Pincus thought it was feasible. How much funding would he need to concentrate on this work? Pincus replied \$125,000 (> \$1million in current funds). McCormick wrote a cheque for \$40,000 (\$360,000) and told Pincus the remaining \$85,000 (\$765,000) would follow shortly. Over the next eight years, until the pill was approved in 1960, McCormick supported Pincus in the amount of \$2 million (\$15-18 million). No government agency or pharmaceutical company would fund the research because of the many state laws forbidding contraception. At the time of this meeting Sanger was 73 years old and McCormick was 77. Sanger was frail, having had repeated heart attacks. She retired to Arizona and, fueled by champagne and pethidine, withdrew from active participation in the project; other than via correspondence. McCormick moved from California to Boston; periodically arriving at the Foundation in her chauffeur-driven Rolls Royce to receive progress reports and provide encouragement. "*Freezing in Boston for the pill*" as she put it.

Pincus got to work. He employed Min-Chueh Chang (1908-1991) a fellow scientist from China with whom he had worked in Cambridge. At this time the reproductive cycle and control of ovulation was understood. Their previous work and that of others showed that progesterone inhibited ovulation in animals. However, the source of progesterone for study was from

animal ovaries – which was scarce and very expensive; it took 25,000 sow ovaries to produce 1mg progesterone. For this reason laboratories that produced sex hormones were set up beside abattoirs. Fortunately, Russel Marker (1902-1995), by dint of brilliant chemistry and detective work found an abundant plant source of progesterone in the Mexican yam. The other drawback was that progesterone, to be fully active, had to be given by injection. This was solved by two scientists, Carl Djerassi (1923-2015) and Frank Colton (1923-2003) who produced orally active progestins: norethindrone and norethynodrel respectively – the latter was used in the first oral contraceptive pill.

By 1954 Pincus was ready to embark upon human trial and for this he sought the aid of a prominent Boston obstetrician/gynaecologist. John Rock (1890-1984) was the grandson of famine-era immigrants from Armagh, Northern Ireland, Harvard educated and with an interest in infertility. He was also a devout Catholic who attended mass every day. However, in his later years he had become very concerned about population control on a global scale. When Pincus approached him with his proposal for a contraceptive pill Rock said this could not be done in Massachusetts, which had the most restrictive state law against contraception. Rock was however already treating infertile women with progesterone for several months in the hope of getting a rebound fertility effect after stopping the progesterone. All his patients knew they could not get pregnant while they were taking progesterone. He agreed to use the Pincus pill on the same basis and make the required observations. This study confirmed that the progesterone pill did consistently suppress ovulation in humans as it had in animals.

The next step was to organise larger human trials which, because of the restrictive laws, could not be done in the United States.

Working with Rock at that time was the New York trained gynaecologist Celso Ramon Garcia (1922-2004), also a Catholic. He had previously worked in Puerto Rico and suggested it as a suitable setting for a trial, with a fertile Catholic population but no law against contraception. Pincus, Rock and Garcia visited Puerto Rico and were fortunate to find a willing local clinical co-ordinator in Edris Rice-Wray (1904-1990). She was an American trained doctor from Detroit and the Director of the Puerto Rico Family Planning Association. Garcia worked closely with her in conducting the trial. An additional trial was carried out in Haiti, under the supervision of Dr Felix Laraque. A serendipitous finding was that one batch of the progestin pill, subsequently shown to be contaminated with oestrogen, produced fewer side effects in the form of less breakthrough bleeding. Thus, the final pill was comprised of both progestin and a small amount of oestrogen. During the early development of the pill all pharmaceutical companies had refused to participate. G.D. Searle, a small company in Skokie, Illinois had funded some of Pincus' steroid research and they finally agreed to produce and market the pill as Enovid. Ultimately, Enovid was approved by the Food and Drug Administration (FDA) for gynaecological disorders in 1957 and as an oral contraceptive in 1960. The modern pill contains about one eighth the amount of hormones in Enovid.

THE CATHOLIC CHURCH

The position of the Catholic Church vis a vis contraception was straight forward – it was a grave sin. How this came to be is less clear to the outside observer. There was the exhortation in the book of Genesis to 'increase and multiply' and 'fill the earth', and notables such as St Augustine and St Thomas Aquinas condemned contraception as 'unlawful' and 'wicked'. However, within the

church prohibition of contraception was doctrine, rather than written law. Indeed, there was no reference to contraception in the New Testament and the only possible inference in the Old Testament was Onan spilling his seed on the ground; the latter being more an act against Judaic law, with failure to carry on the family name. The first written papal ruling on the matter came in 1930 from Pope Pius XI (1922-39), and his encyclical *Casti Connubii* ('Of Chaste Marriage') in which he described contraception as "An offence against the law of God.....a grave sin.....and intrinsically vicious." This may have been in response to the Protestant church's relaxation of its ban on contraception at the 1930 Lambeth Conference of Bishops. In 1951, his successor, Pope Pius XII (1939-58) declared that "Observance of the natural sterile periods may be lawful from the moral standpoint" and that "The husband and wife may use their matrimonial right even during the days of natural sterility." The days of 'natural sterility' referred to the rhythm or safe period method of contraception – the only one acceptable to the Catholic church. This was the first time that the church acknowledged that sexual intercourse could be undertaken without the aim or likelihood of procreation.

Pope John XXIII (1958-63) established the Pontifical Commission on Population, Family and Birth in 1963 to advise him on birth control - stimulated in part by the development of the pill and its increasing acceptance by Catholic married couples. He also acknowledged the increasing global population – the 'demographic problem' as he put it. In the 50 years after his recognition of the problem, from 1960 to 2010, the world's population increased from 3 billion to 7 billion.

Pope Paul VI (1963-78) was to inherit the commission after the death of John XXIII. Early in his papacy he received a petition from 182 Catholic theological scholars urging him



Pope Paul VI

to give a 'far-reaching reappraisal' of the church's position on contraception. A number of theologians argued in favour of the church changing its position on contraception in view of the widespread use of birth control methods by otherwise devout Catholic parishioners. Most felt it should be a matter of individual conscience. Pope Paul expanded the commission to 58 members and added an executive committee of 16 bishops, to be chaired by Cardinal Alfredo Ottaviani (1890-1979), who was Secretary of the Holy Office. The commission included three lay couples who presented a survey of members of the Christian Family Movement, outlining the impact on married couples of the church's teaching on contraception. The argument of those

in favour of the church sanctioning the pill was that it did not interfere with sexual intercourse and that it acted by extending the 'natural sterile' periods of the woman's cycle. The commission presented its report to the Pope in 1966. The results were to be confidential but were leaked to a Catholic newsletter in the United States. A large majority of the commission's theologian/lay members and a smaller majority of the bishops supported change. The Pope took two years to formulate his response. During this time he was influenced by Cardinal Ottaviani, whose position could be summed up by his personal motto *Semper Idem* ('Always the same'). One of the considerations was that Popes were infallible and spoke eternal truths. Thus, if Pope Paul changed the church's position on contraception, the inference could be that his predecessors were, in fact, fallible and that eternal truths were not so eternal.

On 25 July, 1968 Pope Paul issued his encyclical *Humanae Vitae* ('Of Human Life') which reaffirmed Catholic teachings: "The church.....condemns as always unlawful the use of means which directly prevent conception, even when the reasons given for the latter practice may appear to be upright and serious". In the end the Pope did not take the commission's advice and was more concerned with how change might affect the authority of the church rather than the effect on the church's flock. Even though the Second Vatican Council had reaffirmed, in 1965, that the church was the flock and not the hierarchy. Unsurprisingly, the encyclical was greeted with widespread disbelief and condemnation by laity and priests across Europe, Scandinavia and North America. In general, educated Catholics and many priests continued to ignore this component of the church's teaching. Thus, the credibility and authority of the Pope was undermined – the opposite of Pope Paul's rationale for continuing the church's contraception dogma.

John Rock became the most credible and prominent spokesman for birth control in the years following the pill's launch. He was profoundly disappointed in Pope Paul's encyclical and hoped that a subsequent pope would soften the church's stance on contraception. It was not to be, and the three successors to Pope Paul have only confirmed his 1968 encyclical. Surveys consistently show that the vast majority of the Catholic laity and priests do not believe that contraception is immoral. In a sense the church's authorities have painted themselves into a corner by citing papal infallibility and eternal truths over the past century.

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