Global Health
AN ONLINE JOURNAL FOR THE DIGITAL AGE

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AVAILABILITY OF CONTRACEPTION AND ITS IMPACT ON SOCIETY: AMERICA AND CHINA

In 1960, one of the most common birth control forms was introduced to America: "The Pill". Producing an oral contraceptive was a goal of drug manufacturers since roughly 1950 but once successful, it ignited a whirlwind of controversy in the States. Once oral contraception was widely available in the United States it affected many aspects of society including women's health, fertility trends, laws and policies, religion, as well as sexual practices.[1] The first FDA approved progestins (norethindrone and norethynodrel) gained approval in 1957 but only for the use of gynecological disorders.[1] It wasn't until 1960 that the manufacturer of norethynodrel received FDA approval for the contraceptive use of the medication in combination with an estrogen known as mestranol.[1] The delay in application for this indication could be attributed to various reasons as it will require 21 days of continuous administration, would be relatively expensive (about $10) for the times, religious controversy especially in regards to Roman Catholicism, the fact that multiple states did not allow the spread of birth control information and the unknown risk of potential side effects.[1] Norethindrone was later approved for contraceptive use in 1962 in combination with ethinyl estradiol which is the primary estrogen component still today.[1] While many questioned whether oral contraceptive use would be accepted, it's use was very popular from the start. By 1965 3.8 million Americans were using the pill.[1]

While the use of oral contraception was growing, the misperceptions of its use also flourished. One of the biggest concerns in the States was the health concerns surrounding oral contraception being imposed on its citizens. In the field trials, some immediate hormone related side effects such as headache, nausea and dizziness were observed.[1] Within just a few years of these drugs approval, cardiovascular effects including stroke, venous thromboembolism and myocardial infarctions began to show in a small number of patients.[1] In addition to health concerns, many wondered if long-term suppression of ovulation would cause issues if these women later decide they wish to procreate. Another long-term concern was if the use of hormonal contraception would increase cancer risk. The initial field trials did not include mainland American women, but rather women from Puerto Rico, Haiti and Mexico. In addition, many believe the effects of these medications were understudied.[1] Today, these risks are better understood and screening for cancer and cardiovascular risk is evaluated before prescribing. By 1965, drug manufacturers began lowering the doses of both hormonal components in their products to create combined oral contraceptives with as little as 20 micrograms of estrogen by 1974.[1] The progestin-only pill better known as the "mini-pill" was introduced in 1973 to better alleviate estrogen related side effects.[1] In the 1980s combined oral contraceptive pills known as biphasic and triphasic pills were introduced that included varied levels of estrogen and progestin over the course in hopes to better mimic the endogenous release of hormones in hopes that this could alleviate some health concerns.[1]

One of the biggest issues that surrounds

contraception still today is religion. Some religions, especially Roman Catholicism prohibit against any form of contraception. Although barrier methods of contraception were available before the introduction of hormonal contraception, they were less used due to lower efficacy or used discretely by members of the Catholic Church. The availability of barrier methods is not nearly as publicized as hormonal contraceptives even still today. The use of oral contraception was seen as a daily sin in the eyes of the Catholic Church as it must be taken daily. Whereas barrier methods were only used at the time of intercourse. This also posed an ethical dilemma to physicians on whether they should uphold their medical duties or choose their loyalty to their church and to God.[1]

Issues surrounding women's mental health in regards to social standards also persisted. Women could now use the pill as an effective contraception without relying on their sexual partner to use a barrier method and without using such method herself. This allowed women to have control over their fertility and pregnancies and pursue personal goals. More women were enrolling in and graduating college due to contraceptive access.[2] Access to contraception also allowed more women in the workforce and to work more hours since they were delaying childbirth and controlling fertility.[2] The availability of oral contraception has also been linked to the equal rights movements for women in the 60s and 70s.[1,2] Women in the 1970s began having increased career outcomes in the medical and law fields.[2] This resulting in women's earnings increasing, and less women in poverty since they were able to pursue their education and career goals.[2] Among adolescent teens similar challenges in regards to societal standards also existed. When the pill was introduced there was concern that young women would engage in increased amounts of sexual behavior. Although the pill had been around for years, many young women were reluctant to use contraception. Even today, with widespread availability of contraception, this cultural stigma that being on birth control means they are "ready" for sex steers them away from its use.[1] Before hormonal contraception, many women and men would be in agreement over which barrier methods they would be using. Now women could control their fertility without being in agreement with their partner. This poses potential for changes in the relationships between men and women.[1]

When the pill was first approved it was roughly 10 dollars a month which was expensive at the time and many citizens could not afford it.[1,3] In 1970, President Nixon announced a goal of family planning services for everyone who wanted but could not afford contraception.[1] In 1994 Federal and state funding for contraceptive services and supplies totaled $715 million.[1] It has been estimated that without this funding 1.3 million additional unplanned pregnancies would occur annually in America.[1] In 1999 the national budget was passed requiring all Federal Employees Health Benefits health plans to cover the five main reversible forms of contraception: pill, diaphragm, IUD, implant and injectable.[1,3] Although, plans with religious affiliations can exempt themselves and individual providers can refuse on moral grounds. Today, the Trump administration has efforts focused on decreasing state and federal funding for women's contraception.

Out of all the implications on society that the availability of contraception has had on America, it is believed the most important and relevant issue still today is feminism. Two early feminists by the names of Margaret Sanger and Katharine McCormick pushed for the development of a contraceptive pill.[1] They wanted women to be able to control their

fertility and take control of their lives and perhaps reduce the fertility of certain types of women. This fueled some criticism at the time that contraception was being used as discriminatory population-control. In addition, the initial adverse effects that were considered harmful were brought into question especially since the field trials were being carried out in Puerto Rico, Haiti and Mexico as opposed to in the states.[1] Many feminists were against hormonal contraception due to the observed side effects from the early high-dose pills, that it cannot be used by men and it places full responsibility of contraception on women and that it lacks protection against sexually transmitted infections and diseases.[1] Yet, high level of pill use persists and exemplifies its acceptance. In America today, the feminist mission has continued to highlight reproductive rights but has shifted the lens towards abortion rights.

On the other side of the globe in the 1960s, China's population entered its second peak birth period after the founding of the People's Republic of China. From 1962 to 1972 the births in China totaled 300 million.[4] In 1969, China's population exceeded 800 million.[4] During this time, the balance between population and economy, society, resources and environment began to dissolve. This led the government of China to call for family planning and advocated for the use of contraception. At this time, there was a lack of understanding surrounding the population problem and these attempts from the government were ultimately ineffective. In the 1970s the population issue became increasingly more apparent as unfavorable for the economy and social construct and the family planning initiative began to take off. Deng Xiaoping, the chief architect of China's reform highlighted that it was important to take into consideration China's environment.[4] China had a weak foundation with an incredibly large population whose demands could not be met. Deng Xiaoping's observations led to a family planning program with the goal of improving national economic and social development to be incorporated in the Constitution of the People's Republic of China.[4] This program included the one-child policy that was introduced in 1979.[5]

In 1994 the birth rate dropped from 33.43 per thousand in 1970 to 17.7 per thousand due to increased availability of contraception.[4] The natural growth rate decreased from 25.3 per thousand to 11.21 per thousand and the total fertility rate of women from 5.81 to around 2.[4] The introduction of available contraception and the one-child policy led to China's population growth rate to be lower than the average of other developing countries at the time. This has allowed an environment that is developing socioeconomically worldwide while allowing for survival and development of China itself. Before the widespread availability for contraceptive use in China there were many stereotypes surrounding procreation. Such that they should be marrying and reproducing young, that the more children they had the happier they'd be and that many families had to look up to the men to provide and the women did not assist much and were rather looked down on.[4] After the introduction of available contraception, much like the United States, women were getting married and having children later in life. Having control over their fertility allowed women to take charge of their life and attain educational and career goals. This reduced the economic burden on families in two ways: less economic strain with less children and another source of income from working women. This diminishment of family economic burden allowed for Chinese citizens to expand purchasing. From 1978-1994, China's consumer goods market expanded 13.7-fold.[4] Families were able to meet basic needs of living such food, clothes, and housing

and purchase larger goods such as TV sets, refrigerators and washing machines.[4] China also continued to uphold reform and remain open to the outside world to develop the economy. China's gross domestic product (GDP) increased 4.2- fold and the per-capita GDP increased 3.4-fold.[4] Overall, at the time, the availability of contraception provided great benefit to China's developing economy.

The availability of contraception also allowed for education and health of China's citizens to improve. As previously mentioned more women were pursuing educational and career goals due to later marriage and childbirth and ultimately only delivering one child. With lower population and births, the mortality rate for babies dropped and the death rate of expectant and new mothers declined as well.[4] With a smaller population and an expanding economy China was able to improve the healthcare system therefore improving the health of its citizens and form maternity and child care networks.[4] With a declining birth rate, more children were able to obtain the education they needed and illiteracy rates dropped while primary education was made universal in areas with the majority of the country's population.[4] Secondary, vocational and technical education also developed quickly.[4]

Similar to America, availability of contraception has further improved the status of women. As mentioned, more women are able to reach their educational and careers goals than before. Decreasing frequent births and the heavy family burden has made achieving their personal goals more realistic. With decreased fertility, women in China have more opportunity to learn science and general knowledge and take place in economic and social development. The employment rate of women has steadily increased since the introduction of available contraception and family planning program and the areas of employment continue to expand.[4]

While the availability of contraception and its impact on society seem to be similar between China and America when first introduced. The situation in China is currently different. China began to see a problem with the way they introduced contraception. For years in China, after having one child many women would receive an intrauterine device (IUD) for birth control. While this led to all of the benefits on society as mentioned previously, in the early 2010s a different problem arose. Rather than an overpopulation concern, research suggested that in years to come, its shrinking labor force would not be enough to serve its large aging population.[5] The one child policy was relaxed to allow for two children before being ultimately ended in October of 2015 by President Xi Jinping.[5]

From this point forward Chinese women were eligible for free removal of their IUDs in the next three years so they could bear another child. Many women were upset with the failure of the government to accept any culpability and were outraged that they were now encouraging reproduction.[5] For many women, this was too little, too late. The government was promoting removal of these IUDs as a state benefit when they were the ones who initially forced contraception on millions of women. Let alone, the IUDs used on Chinese women were meant to be indefinite with surgery required for removal, unlike the maximum 10 year IUDs in America.[5] Many women who have these IUDs for long periods of time risk having it embedded in the uterine wall making it more difficult to remove.[5]

In these trying times for China it appears that many women are not interested in having a second child, either due to family financial burden or their age. At the time, half of all

Chinese women who were eligible to have a second child were 40 or older.[5] In an attempt to encourage reproduction, China's family planning commission also offered to cover costs of tubal ligation and vasectomy reversals. While research suggests that many women choosing not to have another child will result in economic and social strain on all of China, women want the government to acknowledge that the original policy was inhumane. Chinese women feel as though their safety was not initially considered and that they are viewed as an economic tool. It now appears that the availability of contraceptive education is what is missing in China as many young unmarried women are unaware of the contraceptive available or how to properly use it.[6] In conclusion, initially the availability of contraception impacted many aspects of America and China similarly. Too much government control in family planning has shown to be detrimental as exhibited in China today. Prosperity; individually, nationally, and at the family level, may be the best method of population control.

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