What is the most important medical advancement over the last 100 years and why?

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The term medical advancement can be defined as the process of helping medicine progress or succeed¹. One hundred years ago, what we achieve on a daily basis today would simply have been regarded as a mere fantasy. The vaccination against polio, minimally invasive surgery and the development of MRI machines are just some of the advances that have made a vast difference to the health of the human race today. In my opinion, the advancement that has had the most significant effect on medicine today is the development of the contraceptive pill.

The contraceptive pill also known as the birth control pill contains artificial forms of the female hormones, oestrogen and progesterone. The pill prevents the ovaries from releasing an egg, and hence prevents pregnancy. As well as contraception the pill helps to relievepainful periods, heavy periods, premenstrual syndrome and endometriosis, which is a condition in which the endometrium in the uterus lining is found outside the womb². Approved by the FDA for severe menstrual disorders in 1957 and then for contraceptive use in 1960³, the pill can be over 99% effective in preventing pregnancy when used correctly.

Throughout history, contraception has been a controversial issue, dating back to antiquity when ancient Egyptian women used a blend of cotton, dates, honey and acacia as contraception. In 1952, the chemist Carl Djerassi worked to develop the world's first oral contraceptive. Djerassi believed in individual freedom and viewed birth control and access to abortion as a part of it. In the 2014 New York *Review of Books*, Djerassi stated that "sex became separated from its reproductive consequences" and "changed the realities of human reproduction" after the invention of the contraceptive pill⁴. Today an astonishing 99% of American Women have reported using some form of contraception at one point or another.

The pill has completely reintroduced the idea of sex. Before, sex use to be only about having children although people still tried to find the successful method in avoiding an unwanted pregnancy. Jonathan Eig wrote in his book *The Birth of the Pill: How Four Crusaders Reinvented Sex and Launched a Revolution,* "For as long as men and women have been making babies, they've been trying not to."Today,sex is completely isolated from its effects in society.Nowadays, more and more teens are using the pill, which is found to be much more effective than condoms, when used correctly⁵. Without birth control, the teen pregnancy rate would be at an all time high. This will not only affect the health of millions of teens, but also their futures. In 1966, the Time wrote, "No previous medical phenomenon has ever quite matched the headlong U.S. rush to use the oral contraceptives now universally known as 'the pills'".

Gender Equality is a key area affected by the introduction of the contraceptive pill.Women have been able to have a lot more control over their own fertility with this type of contraception. Before, when condoms were the most common type of contraception, it was usually the man's role to provide the contraception and make sure that it works effectively. Now, both men and women have an equal opportunity when contraception is concerned.

Access to the contraceptive pill still remains to be an issue in developing countries. Without use of contraception, the women living in poverty continue to get pregnant. With so many mouths to feed large families struggle a lot economically. Access to birth control has also shown to increase a woman's employment and wage rates. With legal access, women in poverty have the opportunity of continuing their education, and gaining better work experience; thus lifting an economic weight off of their backs.

According to a 2012 study by Washington University, 'if no-cost contraception were made available throughout the United States, it could lower abortion rates by up to 78%' ⁶. Abortion remains to be a serious issue throughout the world. However, it can be argued that the contraceptive pill does more harm than good. The pill has some serious side effects such as increasing the risk of heart attack and stroke. There is even some controversy concerning the chance of the birth control pill somewhat increasing the risk of developing breast cancer. ⁷ Nonetheless it is important to know that these risks are very low, and it will be very difficult to find a drug with absolutely no side effects as highly effective as the contraceptive pill.

In conclusion, 'the pill' has revolutionized our society and the way we view sex, as well as providing multiple health-related advantages for women from providing more control over period regularity to fighting acne. Without the contraceptive pill the world would be very different today - teen pregnancies would shoot up, poverty would continue to rise and abortion would become an even bigger problem. Nevertheless, there remains to be a lot of legal issues at hand concerning the pill. We must continue tweaking in order to make the contraceptive pill an even greater medical achievement. References

¹<u>http://www.oxfordlearnersdictionaries.com</u>

²<u>www.nhs.uk</u>

³<u>www.pbs.org</u> - *A brief history of the birth control pill (2010)*

⁴<u>www.time.com</u>- *The Long, Strange History Of Birth Control* (2015)

⁵<u>http://www.teenpregnancystatistics.org</u> -

⁶<u>http://journalistsresource.org</u>- *The Effects Of Contraception* On Female Poverty (2014)

⁷ <u>http://www.healthline.com</u> - *The Effects Of Birth Control On The Body*