The Evolution Of Birth Control

The evolution of birth control technologies date back to 3000 BCE in Egypt, when condoms were first used. They were made from materials such as fish bladders, animal intestines, and linen sheaths. As well, in this time period, women practiced birth control by using ineffective and unsafe methods, such as sponges with soap suds and douches made from honey and crocodile dung. Ever since then, contraceptive technologies have vastly improved. According to Case Western Reserve University, Charles Goodyear, an American chemist, made condoms from vulcanized rubber in 1844. For many decades, rubber condoms were manufactured by wrapping strips of raw rubber around penis-shaped molds. Workers would then dip the wrapped molds in a chemical solution to cure the rubber. Diaphragms were also made from vulcanized rubber in 1844, but were used less frequently until about the early 1930s. By 1912, Julius Fromm improved the creation of condoms, by dipping glass molds into a raw rubber solution. This process is called cement dipping, and it requires adding gasoline (or benzene) to the rubber in order for it to transform into a liquid. This method was very unsafe for users, and a fire hazard as they were extremely flammable from the gasoline. Latex was later invented in 1920, and was used for condoms (case.edu/affil/skuyhistcontraception/online-2012/Condoms-Sponges.html). In 1951, Carl Djerassi, a chemist in Mexico City, created a birth control pill by synthesizing hormones from mexican yams. Chemically he had created the pill, but Djerassi was not eligible to test or release the pill. The first contraceptive pill, Enovid, was approved by the US FDA in 1957. This pill was created by many individuals and groups, but Dr. Gregory Pincus and Margaret Sanger were two main contributors. In the early 1960’s, Lazar C. Margulies developed the first plastic IUD by using thermoplastics. His ‘T’ shaped design allowed the insertion of the IUD to enter the uterus without the need to dilate ones cervix. The US FDA later approved both the Lippes Loop and Copper 7 IUDs in 1968. A year later, an article was released called The Doctor’s Case Against The Pill, and it exposed side effects of the contraceptive pill such as risks of blood clots, heart attacks, strokes, depression, weight gain, and loss of libido. However, in 1988 the FDA released a study that showed the health benefits of newer pills, including a decreased risk of ovarian cancer, iron deficiency and anemia, and pelvic inflammatory disease. Technologies were well improved by 1997, as an Ortho Pharmaceutical’s Tri-Cyclen pill was created and released as a treatment for acne. And in 2003, the FDA approved the Seasonale; a pill that gives women only four periods a year.

In the present, more research is needed on controlled methods that are able to protect against STIs for anyone, as well as birth control for men. There are still barriers for women to access reliable and affordable contraception. However, there are many more options for birth control (pills, injections, inserted devices, condoms, and natural methods) in our society today. Contraception is not shamed upon on women or men anymore, and it is more of a personal choice than a societal one. As of 2019, three new methods of contraception for men are being put through clinical trials. A pill, a gel, and a non-surgical vasectomy. The pill (DMAU; dimethandrolone undecanoate), is a pill that would be taken once daily and is a steroid molecule. This means that DMAU has properties of both testosterone and progestin that suppresses sperm production. The gel contains the same hormones and would be applied to arms and shoulders every day, stimulating a shut down of sperm production as well. And the non-surgical vasectomy would involve injection of polymer gel into ones vas deferens, to block the sperm. This treatment would be reversible with a shot which then breaks down the gel

barriers. However, these products have been and will take a long time to perfect as complications are typical. The biology between women and men are much different from one another. Women produce one to two eggs per month, where as men produce hundreds of millions of sperm every day as well as a large amount of sperm during ejaculation. So, keeping men healthy while shutting down their reproductive system is a challenging task for scientists.

I think the future of birth control will succeed and go very far, but processing technologies in order to make them safe and reliable will take time, especially for men. I think eventually womens' contraceptive methods that require a schedule, will rely completely or mostly on mobile devices since that's where the rest of our future seems to be heading towards already. As well, I believe men will have safer technologies to use in order to be safe for both roles. New technologies will be created that haven't been discussed or thought of, and possibilities of technologies that can prevent spreading and/or developing STDs will be created as well. I think some time in the far future, birth control will be an ordinary thing that everyone uses, or should use if they are wanting to prevent unwanted pregnancy.

Birth control has come a long way with its technological advancements. Many of the methods have high success rates and are low maintenance. However, there's plenty of room ahead for reconstruction, new developments, and more options for men. Contraception has a price and has limited access for many individuals around the world. This price barrier is something that can be reduced, helped with, or even taken away to better society as a whole. Women are very lucky to have the options we have today, and will be even luckier in the future. As long as companies continue to manufacture products that can be used by everyone, whether that's more natural methods, insertive devices, etc., birth control will be more successful.