

**Overview:** Oral Contraceptives compared to IUD's and their side effects

1. **Purpose of the study:** The goal of this study was to show the differences between an oral contraceptive compared to an intrauterine device and how they effect women.
2. **Design:** This is a study that looks at individual reactions within a group of women to show how the different contraceptives affect them.
3. **Sample:** 272 women participated in this study. 54 women chose an IUD and 218 chose an oral contraceptive. Due to side effects, 25% of those who took the oral contraceptive stopped and 13% who had the IUD got it removed.

### Results

Birth control and the different forms are very prominent in the United States. While oral contraceptives are more vastly popular, it is shown that they also come with distressing side effects. The study that was done shows more women decided to stop taking an oral contraceptive compared to an IUD. Within the study, it states that this is due to headaches, depression, and loss of sexual desires. Compared to the IUD, the biggest complaint and reason to stop was due to breakthrough bleeding. The end of the article states that some of the women who stopped taking the oral contraceptive had a higher mean depression score in comparison to those women who remained on the IUD. Based on these results, contraceptives of any kind can be very individualized and affect women in different ways.

### Strength of the Study

**Level of the Study:** Level II

**Quality of the Study:** Medium

### Clinical Significance

The clinical significance of this study is to compare the side effects of oral and implanted contraceptives and how they affect women differently. Although oral contraceptives are more popular, it is shown that they come with more unbearable side effects when compared to an intrauterine device. An IUD is more invasive with fewer harsh side effects but less popular among women. The study also shows how each woman is different and some side effects are not too extreme to stop taking them.

Herzberg, B., Draper, K., Johnson, A., & Nicol, G. (1971, August 28). Oral contraceptives, depression, and libido. <https://www.bmj.com/content/3/5773/495.short>

## In child-bearing women seen in an OB GYN clinic, what is the effect of oral contraceptives in comparison to contraceptive implants on the effectiveness of preventing pregnancy?

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Contraceptives play a very important role in the United States when it comes to preventing pregnancy. Each year, there are nearly 6.7 million pregnancies, with nearly one half being unintentional. The use of long-acting reversible contraceptives (Kyleena, ParaGard, Nexplanon) and oral contraceptives (Sprintec, Previem, Junel) have shown to decrease the number of unintentional pregnancies. However, many women struggle when deciding which contraceptive technique correlates with their body best when preventing pregnancy. This raises questions when child-bearing women are exploring contraceptive techniques. What contraceptive method is most successful when preventing pregnancy in woman of child-bearing age seen by the OBGYN? Within this project, we explored both birth control methods and compiled research from different articles to help determine which form is most effective in preventing pregnancy.



**Overview:** Effectiveness of Long-Acting Reversible Contraception

1. **Purpose of the study:** The overall goal of this study was to determine the amount of unintended pregnancy's women have even while being on an oral contraceptive or from having a reversible implanted contraceptive.
2. **Design:** This is a prospective cohort study that emphasizes the usage of long-acting reversible contraceptive methods to prevent unintended pregnancies.
3. **Sample:** 7485 women participated in this study. There were a total of 334 unintended pregnancies due to the result of a contraceptive failure from the usage of pills or implants.

### Results

Unintended pregnancy is a major problem for the United States. It's been concluded that oral contraceptive methods are the most commonly used. But it also has a high failure rate because of the daily compliance it requires. Out of the 7486 participants in the study, 4.55 people out of every 100 had an oral contraceptive failure that resulted in pregnancy. Compared to reversible implants, there was only a failure in 0.27 people out of every 100. It's been determined that intrauterine devices have low failure rates and are not user-dependent, meaning they are able to be successful in nearly all women whereas oral contraceptives success strictly depend on the patient's health history compliance. Based off of the findings, participants using oral contraceptives are 20 times more likely to become pregnant than those using long-acting reversible contraceptives.

### Strength of the Study

**Level of Study:** Level II-2

**Quality of Study:** High

### Clinical Significance

The clinical significance of this study shows that the most popular form of birth control, is also one of the most unsuccessful forms. Even though oral contraceptives have little requirements, other than taking the pill at the same time every day, this isn't always realistic for some women as their every day life can interfere with the compliance of pill consumption. Implanted contraceptives last for years, don't require any additional work, and don't interfere with other medical conditions as oral birth controls do. Long-acting birth control is a newer way in preventing pregnancy and the success rates are much higher than oral forms.

Thomas, Brooke, et al. "Effectiveness of Long-Acting Reversible Contraception." NEJM. New England Journal of Medicine, 3 Mar. 2021.