

## SPOTTING EVENTS ON ACCEPTERS IUD CONTRACEPTION: LITERATUR REVIEW

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### Abstract

Indonesia ranks fourth of the total population in the world, so the BKKBN predicts a baby boom, therefore the government continues to strive to suppress the rate of growth by creating a movement known as KB. One type of contraception that is still lacking in demand is the IUD, for fear of its installation and fear of side effects. One of the side effects that often occurs is spotting, which is spotting blood after using hormonal and nonhormonal IUD contraceptives. This study aimed is to determine the incidence of spotting on IUD contraceptive acceptors. The research method used is a literature review using 10 journal sources and articles based on predetermined criteria. From 10 journals it was found that there are still many IUD contraceptive acceptors who experience side effects of spotting. Spotting is the spotting of blood that comes out after the use of a hormonal IUD containing progestin and a nonhormonal IUD containing a copper coil. The most common factor that causes spotting is the duration of use as the body adapts to the device. Hormonal IUDs cause spotting due to hormonal imbalance in the body, while non-hormonal IUDs cause spotting because copper coils secrete substances that cause inflammation.

**Keywords:** Intrauterine contraceptives, side effects, spotting

### Introduction

According to the CIA World Factbook in 2016, the total population (population) was 7,323,187,457. Where Indonesia ranks fourth with 258,316,051 people or around 3.5% of the total world population (Rusdiana, 2018).

A large population with a relatively high population growth rate is one of the main problems faced by Indonesia. Indonesia faces problems with the number and quality of human resources with 5,000,000 births per year. If the family planning movement is not carried out simultaneously with economic development, it is feared that the results of development will not be meaningful (Manuaba, 2010).

The National Population and Family Planning Agency (BKKBN) predicts a baby boom or birth rate explosion has the potential to occur during the pandemic. This is triggered by an increase in the intensity of husband and wife relationships without using contraception (Ramadani, 2020). Therefore, the government continues to try to suppress the rate of growth and create a population movement known as Family Planning (KB). The family planning program (KB) was started in 1970, starting with the establishment of the LKBN (National Family Planning Institute) which later developed into BKKBN (Kusuma, 2016). This program helps prevent the increase in the number of AKI (Maternal Mortality Rate) and IMR (Infant

Mortality Rate). Because as is known, the close birth distance between one child and another, as well as the number of children who are too many, are more or less a factor in the increase in IMR and MMR (Suryani & Rosmauli, 2014).

The percentage of new family planning participants according to contraceptive methods in Indonesia is in the first place with injections of 17,414,144 (47.69%), second with 8,280,823 pills (22.81%), the third with 4,067,699 implants (11.20%)., and in the last place IUDs were 3,852,561 (10.61%) (Kemenkes RI, 2017).

There are many contraceptives that a woman can use to control pregnancy, namely non-hormonal contraception without the use of devices such as coitus interruptus (interrupted intercourse), calendar system (periodic abstinence), basal temperature method, and condoms to using hormonal contraceptives or devices such as pills, injections, AKBK (Under the Skin Contraceptive Device), implant, IUD (Intrauterine Contraceptive Device), and contraception (steady contraception). Many of these contraceptives have side effects, and the duration of contraceptive use has certain advantages and disadvantages (Rafika dian Rahmawati, 2015).

Until now, there are still many women who think twice about using a long-term contraceptive type IUD. The reason is simple, because of fear. Fear of installation, fear of side effects (Menur, 2018). Although it has many advantages, the IUD contraceptive method also has side effects that need to be considered (Handayani, 2010). The side effects of IUD contraceptives include bleeding, vaginal discharge, expulsion, pain, infection, translocation and erosion of the portio which are marked by bright red ports (Manuaba, 2010: 611).

Some women find their menstrual cycles to be longer. In addition, abnormal bleeding or vaginal discharge can also occur in the initial three months after the IUD is inserted (Felicia, 2020). They complain because spotting occurs between menstrual cycles, menstruation is longer and more numerous, and interferes with sexual activity (Sutriyani, 2013).

Based on the description and data above, the researcher is interested in researching a literature review on Family Planning with Spotting problems which is expected to be more helpful in achieving prosperous families with family planning programs both in the World, Indonesia and South Kalimantan.

## Materials and Methods

The research method used in this study is a literature review. Literature Review is a description of the theory, findings and other research materials obtained from reference materials to be used as a basis for research activities to develop a clear framework of thought from the formulation of the problem to be studied.

The sources of literature used in this study were Google Scholar and the Garuda Portal, because there were adequate journals. 10 selected literatures were using the keyword "spotting, bleeding, side effects, IUD, intrauterine device, IUD, and intrauterine device" using the conjunction AND. The literature review search was carried out from November 2020 to April 2021.

## Results and Discussion

The process of collecting literature is carried out by selecting journals and articles with keywords that match the title appointed and the year that has been determined, namely the last 5 years (2016-2021) so that it will be filtered and 10 national journals will be obtained.

This search process is carried out through electronic-based media, such as Google Scholar and Garuda Portal.

Until now, there are still many women who think twice about using a long-term contraceptive type IUD. The reason is simple, because of fear. Fear of installation, fear of side effects (Menur, 2018). The side effects of IUD contraceptives include bleeding, vaginal discharge, expulsion, pain, infection, translocation and erosion of the portio which are marked by bright red ports (Manuaba, 2010: 611). This is in line with research (Erna Mesra, 2020) which states that the use of contraceptives has side effects, including the use of IUDs causing longer menstruation (30.3%), profuse bleeding (30.3%), spotting (18, 2), and pain during menstruation (21.2%). This is also in line with research according to (Suhartatik et al, 2019) which mentions fewer IUD acceptor users because many say that the installation of contraceptives is painful and terrible. The research according to (Rumopa et al, 2017) states that vaginal bleeding and abdominal pain are side effects that often cause a person to stop using the IUD. Bleeding is the highest reason to discontinue IUD use.

Some women find their menstrual cycles to be longer. In addition, abnormal bleeding or vaginal discharge can also occur in the initial three months after the IUD is inserted (Felicia, 2020). This is in line with the theory according to (Anita et al, 2016) which states that IUD and injectable contraception have side effects, the most important side effect being spotting bleeding between periods. However, there are differences in the causes of spotting in IUD and 1 month injection contraceptive users according to (Fathan Mustafid, 2019), namely bleeding experienced by IUD contraceptive users due to an injury to the uterine wall after IUD insertion, while the spotting incident in 1 month injection contraceptives has not. However, the use of the hormone progesterone results in thinning of the endometrium so that the endometrial arteriolar capillary walls are thin and bleeding will occur when the thin endometrial walls are damaged and bleeding occurs or comes directly out of the ruptured arterioles. As for the theory according to (Zhang, 2016) in addition to hormonal IUDs, nonhormonal IUDs can also cause spotting because the copper in the IUD is corroded so that it can cause spotting discharge of spotting outside of menstruation.

According to (Suhartatik et al, 2019) there are differences in menstrual cycles between respondents who use IUD contraceptives are better (normal menstrual cycle 21-35 days) compared to acceptors who use injectable contraceptives (21 days short menstrual cycle).

There are two types of IUDs, namely hormonal and nonhormonal, each type of IUD has a trademark and a time limit for use, namely: hormonal, Mirena (6 years), Skyla (3 years), Liletta (4 years), and Kyleena (5 years), while nonhormonal ones are Tcu 380 A (10 years), Silverline Cu 380 Ag (5 years), Tcu 380 A postpartum (10 years), Sleek Cu 375 (5 years), Tcu 380 A Safe Load (10 years) and Silverline Cu 200 Ag (3 years) (Cakrawala Persada, 2019).

The different length of menstruation is caused by several factors including the use of IUD contraception (Erni Dwi Widyana et al, 2018). Menstrual disorders and their cycles, especially during the reproductive period, can be classified into abnormalities in the amount of menstrual blood, abnormalities in the duration of menstrual bleeding, bleeding outside of menstruation and other disorders related to menstruation (Prawirohardjo, 2010).

According to (Erna Mesra, 2020) there are many factors that influence side effects, namely age, parity, occupation, knowledge, and duration of use. Age >35 years (71.8%) had a 20.36 times chance of side effects compared to respondents aged <35 years. Primiparas (62.2%) had a 6.08 times chance of side effects compared to multiparas. Respondents who do not work (55%) have a 3.67 times chance of side effects compared to respondents who work. Respondents with less knowledge (54.3%) had 2.97 times the chance of side effects occurring compared to

respondents with high knowledge. The duration of IUD contraceptive use <3 months (72.9%) had a 3.37 times chance of side effects compared to respondents who used it for >3 months.

In a study (Erni Dwi Widyana et al, 2018) it was stated that there was a relationship between the duration of IUD contraceptive use and the length of menstruation in IUD contraceptive acceptors. This theory is reinforced by (Ratna et al, 2020) which states that the duration of IUD use has a significant relationship with side effects that occur in IUD acceptors. With the new use is more dominant with mild side effects, this may occur because of the adaptation of the body to the IUD used. The research according to (Betristasia Puspitasari and Diah Siswati, 2019) states that the side effects experienced by each respondent are different from one another. Starting from the factor of using the IUD, whether the mother is new or old.

Most women who experience heavy and irregular vaginal bleeding due to the insertion of the IUD because the mother said that before using the IUD every menstruation vaginal bleeding was normal, but after use it became more frequent. This is in line with research (Iklima et al, 2021) which states that the side effects of using IUDs in couples of childbearing age are influenced by several factors, one of which is the length of use.

According to research (Fera and Ika, 2018), the length of menstruation affects hemoglobin levels in women, namely 45 respondents (61.6%) experienced normal hemoglobin levels and 28 respondents (38.4%) experienced abnormal hemoglobin levels.

## Conclusion

From the journals that have been reviewed, the authors conclude that there are still many occurrences of spotting side effects in users of hormonal and nonhormonal IUD contraceptives. Spotting on hormonal IUD contraceptives is caused by hormonal imbalances in the body, while spotting on nonhormonal IUD contraceptives is caused by corroded copper coils which will cause spotting outside of menstruation.

Factors causing spotting are age, parity, occupation. Knowledge, and the duration of use, but duration of use is the most common occurrence of spotting, because the body has to adapt to the IUD contraception, causing spotting to occur only in the first 3 months of use.

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## Declaration of Interest Statement

The author declares no conflict of interest in preparing this article.

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