

Factors Influencing Discontinuation of Long-Term Contraceptive Methods

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ABSTRACT

Discontinuation of contraception represents a very important reproductive health problem and has adverse consequences on women's reproductive health outcomes. Worldwide, a large number of women become at risk of conception after discontinuation of contraception. The purpose of this study was to determine the reasons for discontinuation and the factors that influence the discontinuation of long-term contraceptive methods. The research method used is a literature review with article searches using four databases consisting of Pubmed, Sage, Science Direct and Proquest with a publication range of 2012-2022. The keywords used are associated factor and discontinuation of long acting reversible contraception. The findings indicate that the factors that influence the long-term discontinuation of contraceptive methods are marital status, education, counseling, age, parity, occupation, contraceptive satisfaction, partner support, duration to health facilities, desire to get pregnant again and side effects. The most common reason for discontinuing a long-term contraceptive method is due to health problems or side effects. Therefore, health workers should properly advise women about the common side effects of using long-term contraceptive methods and how to manage these side effects.

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INTRODUCTION

Family planning (KB) is very important to achieve the Sustainable Development Goals (SDG's), especially SDG's 3 which focuses on ensuring good health and well-being. Globally, family planning has contributed to reducing unplanned pregnancies, unwanted pregnancies, maternal deaths and deaths of children under 5 years (Dadzie et al., 2021). Despite the significant decrease in maternal and child deaths due to fertility-related causes from the 1990s, the burden of maternal and child mortality is high in countries with low resources. Around 295,000 maternal deaths occurred globally in 2017 and 94% of them were from low-resource countries. Similarly 5.4 million children died in 2017 globally and 89% of them came from low and middle income countries. Fortunately, most maternal and child deaths can be prevented with effective birth control interventions using modern contraception, especially long-term contraception (Bereku et al., 2022).

Investing in family planning has demographic, health, social and economic benefits at the individual, family and community levels. The social and economic benefits include improved schooling, greater family stability, increased labor participation among women, increased wages and reduced poverty. At the community level, increased contraceptive use acts as a catalyst in the development process and reduces regional disparities. Despite the powerful contraceptive benefits, contraceptive patterns and use vary widely across countries. In developing countries, even though the use of contraceptive methods has increased from 44% in 1980 to 61% in 2009, the unmet need for contraceptives remains high, the quality of care for family planning services remains poor and contraceptive discontinuation remains high (Agrahari et al., 2016).

Long-term methods of contraception including the intrauterine contraceptive (IUD) and implants provide a woman with effective protection against pregnancy (Grunloh et al., 2013). These two contraceptives represent highly effective modern methods of birth control and their duration of action ranges from 3 to 10 years (Melesse et al., 2022). Adolescents and women who use the pill have a 20-fold failure rate compared to women who use long-term contraceptive methods (Grunloh et al., 2013). Long-term contraceptive methods are types of contraception that do not require sustained efforts for a long time and are effective. Long-term contraceptive methods allow women and couples to save costs, prevent unwanted pregnancies by spacing and or limiting births (Mihretie et al., 2022). Long-term contraceptive methods such as intrauterine devices and subdermal implants are preferred because they do not depend on patient compliance such as taking pills or returning to the doctor for injections (Isa et al., 2020).

Regardless of women's desire to delay or limit births, contraceptive discontinuation presents a vital public health problem. Discontinuation of contraception represents a very important reproductive health problem and has disastrous consequences for women's reproductive health (Dadzie et al., 2021). Worldwide, a large number of women are exposed to the risk of conception after discontinuation of contraception (Tsfaye et al., 2021). A greater percentage of discontinuation of contraception occurs when women do not want to get pregnant which is often associated with unwanted pregnancies, unwanted births and unsafe abortions have increased the threat of pregnancy and childbirth related to maternal morbidity and mortality, as well as poor infant and child health problems (Dadzie et al., 2021).

Discontinuation of effective contraceptive methods is a universal problem. Every year, about a third of the 182 million pregnancies that occur worldwide are unplanned. These unplanned pregnancies result in larger family sizes and ultimately contribute to higher overall fertility rates and impact on social, economic and physical health (Amare & Terefe, 2020). Reducing discontinuation of long-term contraceptive methods is an excellent strategy to avoid or at least reduce unwanted pregnancies that affect millions of women worldwide (Melesse et al., 2022).

Termination of contraception can be attributed to external factors or individual and partner factors. Users of long-term contraceptive methods younger than 20 years, unmarried, uneducated and experiencing side effects are more likely to discontinue contraception even though they do not want to become pregnant (Mihretie et al., 2022). Therefore the aim of this study was to understand the reasons for discontinuation and the factors that influence discontinuation of long-term contraceptive methods (implants and IUDs). So that later can help policy makers to identify better strategies to support women and increase the use of sustainable contraception.

RESEARCH METHOD

This research method is a literature review which is compiled based on the selection process of article review and research objectives. The articles used as research samples were obtained from searching 4 (four) databases consisting of Pubmed, Sage, Science Direct and Proquest. The keywords used are associated factor and discontinuation of long acting reversible contraception. The search results yielded 17,789 scientific articles in English. Then, the year range was filtered from 2012-2022 and the remaining 8,630 articles. Then the articles were screened based on free full

text and 656 articles were obtained. Next, the researcher screened the titles and abstracts and the remaining 53 articles.

The criteria used in this study used PICOS namely Population, Intervention, Comparison, Outcome and Study Design. The population in this study were family planning acceptors who had used long-term contraceptive methods, there were no interventions, no comparisons and outcomes regarding factors that influenced discontinuation of long-term contraceptive methods. The study design used was cross sectional and cohort. Exclusion from this study was research that only examined 1 type of long-term contraception. Of the 53 articles, they were re-screened based on suitability of the inclusion and exclusion criteria, resulting in 8 articles that were eligible to be used as research samples. Figure 1 is the search result for 4 databases.

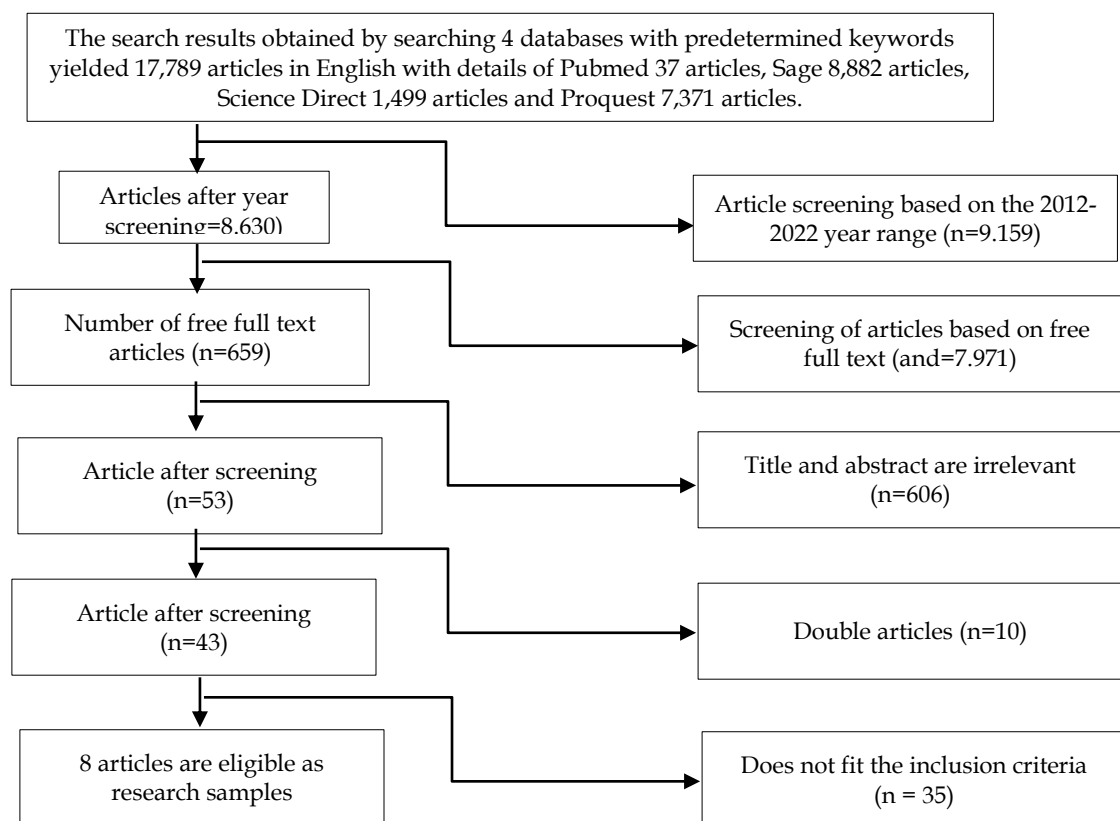


Figure 1. Article Search Method Diagram

RESULTS AND DISCUSSIONS

This research focuses on knowing the factors that influence the discontinuation of the use of long-term contraceptive methods and the reasons for discontinuing them. The article results from the search are listed in table 1.

Table 1. Summary of Factors Influencing the Termination of Use of Long-Term Contraceptive Methods and the Reasons

No.	Author	Year	Study Design	Factor Affecting	Reason for Termination
1.	Grunloh et al.,	2013	Cohort	Marital status (OR 1,62)	Irregular cramping and bleeding
2.	Abebe et al.,	2020	Cross sectional	Mother's education (AOR 2,33), lack of counseling (AOR 2,50), side effects (AOR 2,10) and desire to get pregnant in the near future (AOR 2,22)	Experiencing side effects such as menstrual irregularities and weight gain
3.	Abeje et al.,	2020	Cross sectional	Age 25-34 (HR 0,26), age 35-49 years (HR 0,17), educational status (HR 1,32), primiparous women (HR 0,53), participation in household decision making (HR 0,55) and fertility preferences (HR 2,11)	Intention to get pregnant, side effects or health problems and motives related to fertility
4.	Isa et al.,	2020	Cohort	Age, number of children (OR 16,31), occupation (OR 13,55) and education (OR 17,24)	Husband rejection, pelvic infection and weight gain
5.	Geja et al.,	2021	Cross sectional	Age of women 25 and 29 (OR 9,86) age of women 30 and 34 years (OR 11,5), educational status (OR 0,26), service satisfaction (OR 2,24), counseling about benefits and effectiveness (OR 2,7)	Planning to get pregnant soon, fear of side effects and health problems
6.	Mihretie et al.,	2022	Cohort	Initiation of method without partner involvement (aHR 0,67) and method dissatisfaction (aHR 0,21)	Dissatisfaction with the method (benefits, use, side effects)
7.	Bereku et al.,	2022	Cohort	Number of children (AOR 1,61)	The desire to get pregnant and side effects
8.	Weldekidan et al.,	2022	Cross sectional	Time spent reaching health institutions (OR 6,16), desire to have many children (OR 5,3) and counseling about the benefits of long-term contraceptive methods prior to insertion (OR 0,08)	Side effects (menstrual disturbances, headaches, weight gain, insertion arm pain and abdominal pain) and desire to have children

Factors Affecting Discontinuation of Long-Term Contraceptive Methods

Even though it has been many years since starting to implement family planning, the low rate of utilization and early termination or switching from long-term family planning methods to short-term family planning can cause women to experience unwanted pregnancies. However, a higher termination rate is not necessarily a risk of unwanted pregnancies due to the fact that the desire to get pregnant is one of the most important reproductive rights of women (Bereku et al., 2022).

Based on the 8 articles that were the sample of the study, it can be seen that the factors influencing discontinuation of long-term contraceptive methods are marital status (Grunloh et al., 2013), education (Abebe et al., 2020; Abeje et al., 2020; Geja et al., 2021; Isa et al., 2020), counseling (Abebe et al., 2020; Geja et al., 2021; Weldekidan et al., 2022), age (Abeje et al., 2020; Geja et al., 2021; Isa et al., 2020), parity (Abeje et al., 2020; Bereku et al., 2022; Isa et al., 2020), employment (Isa et al., 2020), contraceptive satisfaction (Geja et al., 2021; Mihretie et al., 2022), partner support (Mihretie et al., 2022), duration of visits to health facilities (Weldekidan et al., 2022), desire to become pregnant again (Abebe et al., 2020; Abeje et al., 2020; Weldekidan et al., 2022) and side effects (Weldekidan et al., 2022). Long-term contraceptive discontinuation among women with low education was 2.3 times higher than among those with higher education. This is due to the level of awareness and understanding of contraceptive properties (Abebe et al., 2020). This is in line with the findings by Geja et al., (2021) that women with higher education are less likely to stop long-term contraception before one year of use. The use of long-term contraceptive methods is higher among educated women than among those who are not educated. Proper knowledge of long-term contraceptive methods is a key factor for ensuring their improvement and proper use and also avoiding misinformation that can dissuade women from adopting methods that are not suitable for them (Isa et al., 2020). This finding is in contrast to Abeje et al., (2020) that women who only have basic education have a 32% higher likelihood of discontinuing long-term contraceptive methods compared to women without formal education. Education is helpful for weighing the advantages and disadvantages of taking certain actions.

Women between the ages of 25 and 29 years and those between the ages of 30 and 34 years are 10 and 11 times more likely to stop using a long-term contraceptive method within a one-year period compared to women over 35 years of age (Geja et al., 2021). Women in their 20s are more likely to stop using contraception, because younger women are associated with the highest fertility rates and are more likely to initiate active childbearing (Bawah et al., 2021). Older women have a lower risk of discontinuing the method because they have achieved the desired level of fertility (Abeje et al., 2020). Older women are more likely to use long-term contraceptive methods than younger women. Discontinuation rates decrease with parity as women reach their desired family size with older ages. Meanwhile, younger women tend to delay using it to give birth at a certain time (Agrahari et al., 2016).

Women who did not receive pre-option counseling about the benefits of long-term contraceptive methods were 2.5 times more likely to quit than those who did. Providing counseling prior to insertion or during insertion about the benefits and side effects of contraceptive methods is positively related to the use of these methods (Abebe et al., 2020). Whereas the lack of education and proper information about side effects, method changes are more likely to result in negative attitudes towards the method whenever they experience side effects. If women have very clear information about the services provided, they will experience fewer side effects and may have a higher chance of continuing long-term contraceptive methods (Obsu et al., 2022). Women who are dissatisfied with family planning services are 2 times more likely to stop the method earlier than those who are satisfied (Geja et al., 2021). Low levels of satisfaction can result from inadequate information or understanding during counseling at method initiation. Women who are satisfied with long-term contraceptive methods are less likely to discontinue the method (Mihretie et al., 2022).

Discontinuation of long-term contraceptive methods because women want to get pregnant in the near future is 2.4 times higher than those who do not plan to become pregnant (Abebe et al., 2020). Women who desire more children are 5 times more likely to discontinue long-term contraceptive methods compared to women who do not wish to have more children (Weldekidan et al., 2022). The number of children alive at the time of contraceptive use was significantly related to the reason for discontinuation, suggesting that women wish to delay or limit delivery because of the increased number of children. The higher the number of living children the higher the

probability of adopting a long-term contraceptive method. The desire to limit the number of future children leads women to believe that they have enough children (Isa et al., 2020).

Single, divorced/separated and widowed women are more likely to stop using long-term contraception than married women. Unmarried women are less likely to be in stable or sexually active relationships and thus more likely to discontinue long-term contraceptive methods compared to those who are married (Grunloh et al., 2013). The decision to use a long-term method of contraception in consultation with the partner reduces discontinuance because a woman may stop using contraception for fear of marital disharmony with a partner who does not agree. Spousal support increases women's use and adherence to contraception. The joint decision between husband and wife regarding initiation of the method influences discontinuation of long-term contraceptive method use. Those who decide together are 33% less likely to stop contraception than women who decide without involving a partner (Mihretie et al., 2022). In addition, women who have jobs tend not to stop using long-term contraceptive methods. This is possible because empowered women are able to control their reproductive needs (Isa et al., 2020).

Reasons for Discontinuing Use of Long-Term Contraceptive Methods

Side effects or health problems are the most common reasons for discontinuing long-term contraceptive method use. Even though the side effects of long-term contraceptive methods may not outweigh the problems faced by women due to unwanted pregnancies (Abeje et al., 2020). Women who experience side effects such as menstrual irregularities and weight gain are 2.1 times more likely to discontinue contraception than those who do not experience side effects (Abebe et al., 2020). Exposure to side effects contributed to discontinuation. In addition, women who discontinue long-term contraceptive methods because of side effects may be intolerant of side effects and fear complications that may impact their health in the future. According to Nega et al., (2021) some couples do not support the use of contraception because they consider the side effects to be dangerous and will change their partner's behavior.

Menstrual disturbances are the main side effect encountered. Irregular menstruation may not cause serious health problems but interferes with daily activities, especially sexual activity with husbands (Weldekidan et al., 2022). This is in line with what was stated by Yimer et al., (2022) that although it does not have a serious effect on women's health, they are more worried about sexual relations as a result of unfavorable bleeding patterns.

Another reason is the desire to get pregnant again. Women who have not yet decided about their fertility intention have a higher likelihood of discontinuing the method compared to women who intend or plan to have more children. This is because women who want children use more short-term contraceptive methods. This can happen due to provider bias due to program targets. This biases family planning service providers and encourages women to use long-term contraception regardless of their interest. It is important to inform family planning providers to follow a proper family planning approach rather than providing services based on provider targets (Abeje et al., 2020).

Other fertility-related reasons (infrequent sex, menopause and divorce) are next reasons for discontinuation. Women who think they are entering the menopause stage or those who rarely have sex for various reasons are more likely to stop. Family service providers should take this into account when advising women to use long-term contraception (Abeje et al., 2020). This review also found that pelvic infection and husband refusal were other reasons for discontinuation. Husband's refusal is another barrier to contraceptive use. This is due to their ignorance about the benefits of contraception in women's reproductive life (Isa et al., 2020).

CONCLUSION

Factors that influence discontinuation of long-term contraceptive methods are marital status, education, counselling, age, parity, occupation, contraceptive satisfaction, partner support,

duration of visits to health facilities, desire to become pregnant again and side effects. The reasons for discontinuing the use of this method were health problems or side effects, the desire to get pregnant and related to fertility.

Discontinuation due to side effects was the result of inadequate counseling and information about possible side effects prior to insertion of long-acting contraceptives. Providing adequate counseling and information about possible side effects can ensure continued use. Therefore health workers should properly advise women about the common side effects of long-term use of contraceptive methods and how to manage these side effects. Family planning service providers must clearly evaluate the fertility intentions of young and nulliparous women before administering long-term methods of contraception. Encouraging women's participation in household decision-making can also increase the use of contraceptive methods.

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