

# Knowledge Affects the Participation of Women of Reproductive Age in the Use of Long-Term Contraceptive Methods

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## ARTICLE INFO

### Article history:

Received Sep 23, 2022

Revised Sep 30, 2022

Accepted 21 Okt 2022

### Keywords:

Knowledge  
Opt-in  
Fertile Age Couples  
Contraception

## ABSTRACT

The trend of acceptors of family planning in Indonesia so far shows less use of long-term contraceptive methods compared to short-term contraceptive methods. This may be due to limited knowledge or information obtained by women of childbearing age couples, so the aim of this study was to determine the relationship between knowledge and participation of women of childbearing age in the use of long-term contraceptive methods. This type of correlation analytic research was a cross-sectional approach that was carried out in May-2012. June 2022. The research population was all female couples of childbearing ages who used active contraception in the Petiken hamlet, Petiken village, Driyorejo Gresik District, totaling 345 women with a total sample of 182 women who met the inclusion criteria through simple random sampling. The data collection method was carried out directly with a research instrument in the form of a questionnaire. Data were analyzed using the Chi-Square statistical test. The results showed that knowledge influenced the participation of women of childbearing age in the use of long-term contraceptive methods ( $P = 0.000$ ). Knowledge is a very important domain in the formation of one's actions so that a good level of knowledge will determine behavior in the use of long-term contraceptive methods.

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## INTRODUCTION

Indonesia is one of the signatories to the global development commitments of the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs). This global development goal also includes indicators of family planning programs such as contraceptive use rates, youth fertility rates and unmet needs for family planning. The targets to meet all the needs of family planning and increase the number of contraceptive use have shown slow progress and tend to stagnate in the last decade. Until finally, in 2012 a global partnership initiative was launched for family planning known as Family Planning 2020 (FP2020) (BKKBN, Indonesian Ministry of Health, Bappenas, & UNFPA, 2013). FP2020 aims to support the rights of every woman to be able to

determine freely for themselves whether they want to have children, when to have them and how many children they want to have (Emeh et al., 2021).

This commitment led to the success of the Indonesian government in reducing the rate of population which was marked by a decrease in the total fertility rate (TFR). Over the past five years, the TFR has decreased from 2.41 children per woman of childbearing age 15-49 years (SP 2010) to 2.40 (SDKI 2017) and the latest data shows it is 2.38 (2018 RPJMN/SKAP survey). In addition, it was shown by an increase in the number of contraceptive use in 1991-2012 which increased from 49 percent to 62 percent and then decreased in 2021 to 57.4%. But on the other hand, the number of use of modern contraception is still showing a decline. The use of the Modern Contraceptive Prevalence Rate (mCPR) decreased from 57.9 percent (2012 IDHS) to 57.2 percent (2017 IDHS). The highest decline even occurred in the age segment 15 years to 29 years, which fell by 4% (BKKBN, 2020; BKKBN et al., 2013).

During this period, major changes in the choice of contraceptive methods occurred with a dramatic increase in the proportion of women using injectable contraceptives, while the use of long-term contraceptive methods such as the intrauterine device decreased (Calhoun et al., 2022). In accordance with the policy directions and strategies of the National Population and Family Planning Agency, in general, they refer to the national policy directions and strategies outlined in the 2020-2024 Government Development Plan and Work Plan which are more directed at the use of long-term contraceptive methods as part of the National Family Planning Program in Indonesia (BKKBN), 2020).

The pattern of selecting modern contraceptive methods in 2021 in Indonesia shows that a small proportion of acceptors choose to use long-term contraceptive methods of 22.4% compared to short-term contraceptive methods of 75.7% (Ministry of Health Republic of Indonesia, 2022). The results of the East Java Province Health Profile in 2021 also show that acceptors of long-term contraceptive methods are 23.9% less than acceptors of short-term contraceptive methods of 73.8%. For the Gresik district in 2021, the rate of using long-term contraceptive methods is 17% compared to users of short-term contraceptive methods of 81.9% (East Java Provincial Health Office, 2022). It is also supported by the local area monitoring report on maternal and child health in Petiken village, Driyorejo district sub-district, the use of long-term contraceptive methods in 2020 is only 21.93% (PWS KIA Petiken, 2020).

This pattern occurs every year, where fewer family planning acceptors choose to use long-term contraceptive methods than short-term contraceptive methods (Aryati et al., 2019). When viewed from effectiveness, both types of family planning devices/drugs/methods (injections and pills) are short-term contraceptive methods so that the level of effectiveness in controlling pregnancy is lower than long-term contraceptive methods (Hikmah et al., 2022). Long-term contraceptive methods are contraception that can be used for a long time, more than two years, effective and efficient for the purpose of use, spacing births for more than three years or terminating pregnancies in couples of childbearing age who no longer wish to have more children. Family planning tools/medications/methods which include long-term contraceptive methods, namely intra uterine devices (IUD), implants, male operating methods or vasectomy and female operating methods or tubectomy (Weni et al., 2019).

The low use of long-term contraceptive methods is due to, among other things, cultural influences that cause couples of childbearing age to be reluctant to use long-term contraceptive methods such as IUDs because they are embarrassed to have to open their intimate organs, anxiety during insertion, fear of side effects, disrupt sexual intercourse, damage to the fetus in the form of errors. conception and prohibition of the husband. Meanwhile, tubectomy and vasectomy contraception methods are caused by people's fear of performing surgery (Nikmawati, 2017). The existence of anxiety, fear and perceptions in the community regarding long-term contraception methods that are not suitable is probably due to limited knowledge or information obtained by couples of childbearing age (Widyarni & Dhewi, 2018).

One of the factors that influence the participation of women of childbearing age in the use of long-term contraceptive methods is knowledge of long-term contraceptive methods. The results of previous research conducted by Suryanti (2019) showed that the majority of women of childbearing age had poor knowledge of long-term contraceptive methods, which affected the participation of women of childbearing age in the use of long-term contraceptive methods. In the perspective of Social Cognitive Theory, cognitive or personal factors such as knowledge, expectations and attitudes influence human health behavior (Prabandari et al., 2020).

By knowing the knowledge of women of reproductive age couples on long-term contraceptive methods, solutions that can be given regarding the lack of knowledge about long-term contraceptive methods are the provision of communication, education and information as well as promotions or campaigns regarding long-term contraceptive methods to couples of childbearing age. The hope is that it will increase the participation of women of childbearing age in the use of long-term contraceptive methods and the success of the *Bangga Kencana* program, which is one of the flagship programs of the National Population and Family Planning Agency (BKKBN, 2020; Widyarni & Dhewi, 2018).

Based on the description above, the authors are interested in further researching the relationship between knowledge and the participation of women of childbearing age in the use of long-term contraceptive methods in the Petiken Hamlet, Petiken Village, Driyorejo District, Gresik Regency.

## RESEARCH METHOD

This type of research is quantitative research, namely correlation analysis or survey analysis with a cross-sectional research design. This research was carried out from May to June 2022 which had previously been declared ethically feasible by the Ethics Committee of the STIKES Karya Husada Kediri Institute No 126/EC/ LPPM/STIKES/KH/V/2022. The population of this study is all women of childbearing age who use active contraception in the Petiken hamlet, Petiken village, Driyorejo sub-district, Gresik district in 2022, totaling 345 women. The sample size used was 182 women of childbearing age who were active contraception users who met the inclusion criteria through simple random sampling technique. The inclusion criteria in this study were women of childbearing age aged 25-49 years and willing to be respondents while the exclusion criteria were illiteracy and menopause.

The data collection method was carried out directly by participating in routine PKK activities in each RW by implementing the health protocol to prevent the transmission of Covid-19. General research data such as age, education, occupation, type of contraception and length of use of contraception as well as specific data in the form of knowledge about long-term contraceptive methods and participation in the use of long-term contraceptive methods was obtained through a questionnaire made by the researchers themselves and was declared valid and reliable. Knowledge data includes definitions, requirements, advantages, disadvantages, side effects and places of service regarding long-term contraceptive methods. The categories of knowledge include: less if the total answers are <56%; sufficient if the total answers are 57% -75% and good if the total answers are 76% -100%. Data on participation in the use of long-term contraceptive methods was taken based on categories: participating and not participating in the use of long-term contraceptive methods. The data were then analyzed univariately and bivariately with the Chi-Square statistical test with the help of IBM SPSS statistics version 22.

## RESULTS AND DISCUSSIONS

General data of respondents such as age, education, occupation, type of contraception and length of use of contraception can be seen in Table 1 below:

**Table 1.** Frequency Distribution of Female Couples of Reproductive Age Characteristics

Characteristics	Frequency (n)	Percentage (%)
Age		
	26	14,3
< 20 Years	75	41,2
20 - 35 Years	81	44,5
Education		
	2	1,1
Base	78	42,9
Intermediate	102	56
Work		
	2	1,1
Private	12	6,6
PNS/TNI/Polri	103	56,6
Businessman	65	35,7
Housewife		
Types of Contraception		
	37	20,3
Pill	112	61,5
Inject	14	7,7
Implants	14	7,7
IUDs	5	2,8
Duration of Contraceptive Use		
	10	5,5
< 6 Months	152	83,5
1-5 years	20	11
>5 Years		
Total	182	100

Based on Table 1, it can be seen that almost half of the respondents aged > 35 years, as many as 81 respondents (44.5%), most of the respondents had higher education, 102 respondents (56%), 103 respondents (56.6%) work as entrepreneurs, 112 respondents (61.5%) used injection type contraception and almost all respondents used contraception for 1-5 years as many as 152 respondents (83.5%).

Respondent specific data such as knowledge and participation in the use of long-term contraceptive methods can be seen in Table 2 below:

**Table 2.** Cross-tabulation of knowledge of women of childbearing age on participation in the use of long-term contraceptive methods

Knowledge	Participation in the Use of Long-Term Contraceptive Methods				Total	P	
	Participate		Do Not Participate				
	Σ	%	Σ	%	Σ	%	0,000
Well	17	9,3	0	0	17	9,3	
Enough	8	4,4	8	4,4	16	8,8	
Not enough	3	1,7	146	80,2	149	81,9	
Total	28	15,4	154	84,6	182	100	

Based on Table 2, it is explained that almost all respondents with poor knowledge did not participate in the use of long-term contraceptive methods as many as 149 respondents (81.9%).,3%). The results of the statistical test using the Chi-Square obtained a P value of 0.000 ( $\alpha < 0.05$ ) which means that there is a significant relationship between the knowledge of women of

childbearing age regarding long-term contraceptive methods and participation in the use of long-term contraceptive methods.

According to Green's theory, a person's health behavior is influenced by predisposing factors, reinforcing factors and enabling factors. Knowledge is included as a predisposing factor, namely the adoption of behavior through a process based on knowledge, awareness and a positive attitude. Knowledge is a very important domain in shaping one's actions. Behavior based on knowledge will be more lasting than behavior that is not based on knowledge. The level of knowledge will determine a person's level of health so that the better the level of one's knowledge, the better the person's health level will be (Nikmawati, 2017). With a good level of knowledge, it is hoped that couples of childbearing age will understand matters related to long-term contraceptive methods so that they will influence their behavior to use these contraceptive methods.

Green's theory is in line with the results of this study which show that there is a significant relationship between knowledge and the participation of women of childbearing age in the use of long-term contraceptive methods. This is indicated by women of childbearing age who use long-term contraception methods tend to have good knowledge and only a small proportion have poor knowledge. Meanwhile, women of childbearing age who do not use long-term contraception methods tend to have less knowledge, a small number have sufficient knowledge and none of them have good knowledge.

The results of this study are in accordance with research conducted by Belda et al (2017) in the Bale ecoregion, Oromia state, Southeast Ethiopia regarding knowledge of contraceptive methods in married women. This study showed that they had good knowledge about short-term contraceptive methods such as pills and injections and at least knew about long-term contraceptive methods such as IUDs, vasectomy and tubectomy. Likewise, the results of a study conducted by Oumer et al (2020) in the city of Gondar, Northwest Ethiopia showed that women of childbearing age who have good knowledge about contraceptive methods are more likely to use long-term modern contraceptives compared to women who have less knowledge.

This is in line with research conducted on active family planning acceptors in the village of Pasir Muncang, Cikaum subdistrict, which shows a relationship between knowledge and the choice of long-term contraceptive methods. Lack of knowledge about contraceptive methods is a key factor that can prevent women of childbearing age from using contraception so that it creates a negative attitude. The impact leads to awareness and behavior to use long-term contraceptive methods (Karlina et al., 2020). Knowledge of women of reproductive age couples who are good about long-term contraceptive methods will influence them in choosing the contraceptive method or device to be used, including the freedom of choice, suitability, whether the choice is effective or not, comfort and safety, as well as in choosing a more suitable place of service because of insight. It's getting better so their awareness is high to continue to use the method by ignoring wrong perceptions about long-term contraceptive methods (Setiasih et al., 2016).

In general, knowledge is influenced by age, education, occupation, length of use of contraception or life experience, interest, culture and information. Education plays an important role in the formation of human intelligence and changes in behavior. The duration of contraceptive use is related to the experience gained while using the type of contraception according to the choice. The experience a person gains will affect his knowledge and attitude towards certain things (Widyarni & Dhewi, 2018). Age maturity is also related to the ability to receive and gain knowledge which can later influence the choice of contraceptive method. Increasing age will change the perspective of things in order to increase knowledge (Rosidah, 2020). Work is related to interaction with co-workers in an effort to get more information than housewives who rarely get information in the community (Dharmawati & Wirata, 2016).

However, in the results of this study, age, education, employment and length of use of contraception did not affect the knowledge possessed by women of reproductive age couples

regarding long-term contraceptive methods. This indicates a more mature age, recent tertiary education, entrepreneurial work and experience in using contraception in the results of this study are not the only factors that influence the level of knowledge of women of reproductive age couples who are better. It is possible that the lack of knowledge is influenced by other factors that are more dominant, such as the information that has been obtained, but no in-depth study was carried out in this study. According to Rosidah (2020) information plays an important role in increasing the knowledge and interest of women of reproductive age couples in using long-term contraceptive methods.

This is supported by the results of research conducted by Santikasari & Laksmi (2019) explaining that there is a significant relationship between sources of information and contraceptive use in the Merak sub-district, Tangerang district. Sources of information are anything that can be used by someone so that they know about new things and have characteristics that can be seen, read, studied, studied, analyzed, utilized and developed in educational activities, research and transformed to others in the context of improve knowledge. In order to change or educate the community, influence from community leaders or leaders is often needed, including social support which can affect the long-term use of contraceptive methods. The support of leaders in the community includes community leaders (heads of RT, RW, Lurah and other village officials), religious leaders, health cadres and health workers.

## CONCLUSION

The results of this study concluded that knowledge of long-term contraceptive methods affects the participation of women of childbearing age couples in using long-term contraceptive methods. So it is necessary to socialize and promote women of childbearing age regarding long-term contraceptive methods by community leaders, religious leaders, health cadres and health workers so that women of childbearing age can determine and choose to use long-term contraceptive methods such as IUDs, implants and women's surgical methods (tubectomy). for those who qualify.

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