



Factors Influencing The Use Of Injectable Contraceptive Devices In Fertilizing Couples

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ABSTRACT

The coverage of active family planning participants in Indonesia has increased by 74.8%. The contraceptive method that is mostly chosen is contraceptive injection, which is 51.53%. This increase is also in line with complaints of side effects from users of contraceptive injections with a percentage of 78.1% compared to IUD, pill, and implant acceptors. The purpose of this study was to determine the Factors that Influence the Use of Contraceptive Injections in Fertile Age Couples. This research method uses a quantitative method with a cross-sectional design. The study was conducted at TPMB Bidan M Rangkaian Jaya Depok with a period of May-September 2023. The sample in this study was WUS who used contraceptives at TPMB Bidan M Rangkaian Jaya Depok for the period May-July 2023 as many as 86 people. The data analysis used was the Chi square test. The results of the study showed that there was a significant relationship between age and the use of contraceptives ($p = 0.010$), education and the use of contraceptives ($p = 0.012$), employment and the use of contraceptives ($p = 0.001$), the number of children and the use of contraceptives ($p = 0.001$), and knowledge and the use of contraceptives ($p = 0.017$). This study concluded that there was a significant relationship between the variables of age, education, employment, number of children, and knowledge with the use of contraceptives.

Keywords: *Contraceptive methods, age, education, occupation and number of children*

INTRODUCTION

Indonesia is one of the countries with the largest population in the world, ranking fourth after China, India and the United States with a population of 275,122,131, Indonesia ranks fifth highest out of eleven countries for Total Birth Rate with 2.45 (BKKBN, 2020). This figure is still relatively high for the balanced population growth standard of 2.1 so that there is no population explosion (Netral, 2021).

Family planning is a way that allows people to achieve the number of children they want and determine the spacing of pregnancies, which can be achieved through the use of contraceptive methods and infertility treatment (WHO, 2018). The use of contraception can reduce the number of unwanted pregnancies in couples of childbearing age. Based on comparative data on the percentage of women of childbearing age who experience unwanted pregnancies, if they do not use contraception, either from any method or type of contraception, it will increase the risk of unwanted pregnancy by 85%, and for women of childbearing age who use contraception, it will reduce the percentage of pregnancy from 0.05% to 32% (World Health Organization et al., 2019).

The Central Statistics Agency (BPS), 2020 recorded that 55.36% of fertile couples

(PUS) in Indonesia were using Family Planning (KB) or traditional methods in 2022. This percentage increased by 0.3% points compared to last year which was 55.06%. In detail, the percentage of fertile couples using modern and traditional contraceptives in urban areas was 52.14%. The figure is higher than in rural areas which reached 59.44%.

The coverage of active family planning participants in Indonesia has increased by 74.8%. The contraceptive method that is mostly chosen is the contraceptive injection, which is 51.53% in New Family Planning participants and 47.96% in Active Family Planning participants. This increase is also in line with complaints of side effects from users of contraceptive injections with a percentage of 78.1% compared to IUD, pill, and implant acceptors (Darmawan, 2019 in Astiti, 2021).

The coverage of active KB participants in West Java in 2020 was 66.2%. According to the Central Statistics Agency, the most widely used contraceptive methods were injections (51.53%) or around 562,771 people, pills (23.17%) or around 244,867 people, implants (11.37%) or 79,773 people, IUDs (7.23%) or 93,051 people, condoms (4.78%) or 22,884 people, MOW (1.73%) or 17,798 people, and MOP (0.18%) or 6,654 people. (Central

Statistics Agency, 2022) in Depok City in 2020, there were 264,853 active family planning participants, consisting of 11,402 condom users (4.31%), 122,908 injection users (46.41%), 62,153 pills users (23.47%), 43,140 IUD users (16.29%), 1,072 MOP users (0.40%), 7,418 MOW users (2.80%) and 16,760 implant users (6.33%). (Depok City Statistics Agency, 2020)

Side effects of using injectable contraception can cause excessive worry and anxiety in acceptors. Therefore, it is important for prospective users of three-monthly contraceptive injections to understand and be aware of the potential side effects before deciding to use them, in order to prevent discontinuation. Based on data from the 2017 SDKI, one of the main causes of discontinuation of contraceptive use is lack of knowledge, which is an important element in shaping a person's mindset and behavior. Understanding the types of contraception, their benefits, and risks will influence an individual's decision in choosing the most appropriate contraceptive. Acceptors who use contraception with full awareness and confidence in its benefits—both for themselves, their families, and the community—tend to continue using the contraception in the long term. Conversely, if acceptors are not sure about

its benefits, they are likely to stop using it if they experience side effects that are considered detrimental to their health (Astiti, 2021)

Side effects of using injectable contraception, especially 3-monthly injections (which contain progestin hormones such as Depo-Provera), can vary from woman to woman. However, some commonly reported side effects include Changes in Menstrual Patterns such as Irregular Menstruation, Spotting, No menstruation at all (amenorrhea), especially after several injections, Weight Changes, Changes in Mood or Emotions, Anxiety, mood swings, even depression in some cases, Decreased Libido, Breast Pain, Skin Disorders, Acne or oily skin in some women, and Delayed Fertility (Astiti, 2021). The use of contraceptives is seen to decrease along with increasing economic status. It was recorded that only 43.24% of fertile couples with the best economic status or quintile 5 used contraceptives. The figure is much different compared to the worst economic status group or quintile 1 which was 62.52%. Meanwhile, the most widely used contraceptive is injections. This was conveyed by 56.01% of fertile couples in Indonesia last year. As many as 18.18% of fertile couples use contraceptives in the form of pills. Then, there are 9.49% of

fertile couples who use birth control implants. (Central Statistics Agency, 2020) Lontaan A., Kusmiyati & Dompas R., (2014), reported that most respondents chose non-long-term contraceptive methods. Socioeconomic factors, husband/wife participation education, age, have a relationship with the choice of contraception, and parity has no relationship with the choice of contraception. Then, Nurhayati A, Ramadhani W, & Umamy Ryza (2021), argued that respondents who used 1-month injection contraception were higher than 3-month injections. The high interest of users of injection contraception as an option to space pregnancies is because it is safe, simple, effective, efficient and can be used after childbirth. In addition, the choice of injection contraception can also be influenced by factors related to the choice of injection contraception methods by women of childbearing age during the Covid-19 pandemic, namely knowledge, age, education, parity, socio-economic, husband's support, support from health workers.

According to the research results of Yurike Septianingrum, 2018. Stating Factors Affecting the High Acceptance of 3-month Injectable KB in 2018 Factors that influence the contraceptive method used are Injections by Women of Childbearing

Age During the Covid-19 Pandemic in the Juju Juharni PMB Area, Depok City, 2020 Period, The results of the study obtained that respondents who knew about the knowledge of choosing contraceptives with good knowledge were 87.3%, and sufficient knowledge was 12.7%. The age category that chose the most injectable KB was 20-35 years old, namely 65.5%. The highest education category was high school, namely 61.8%.

Therefore, the researcher wanted to know the Factors Affecting the Use of Injectable Contraceptives in Childbearing Age Couples at the TPMB Bidan M Rangkapan Jaya Depok in 2023.

METHOD

This type of research is quantitative research with a cross-sectional approach, namely to analyze the relationship between age, education, employment and number of children at TPMB Bidan M Rangkapan Jaya Depok in 2023. The research was conducted at TPMB Bidan M Rangkapan Jaya Depok in May - July 2023. The population of this study was fertile couples with a sample of 86 people who met the inclusion and exclusion criteria. The sampling technique used Accidental Sampling. The independent variables in this study are age, education, employment and number of children while the dependent variable is the use of injectable

contraceptives. Data on the variables age, education, employment and number of children are primary data obtained by filling out a questionnaire. Data analysis carried out in this study was univariate and

bivariate using the Chi-Square test with a confidence level of 95% ($\alpha = 0.05$).

RESULTS AND DISCUSSIONS

Result

Table 1. The relationship between age and the use of injectable contraceptives at TPMB Bidan M Rangkapan Jaya Depok

Variables	Category	contraception						P Value
		do not use		use		Total		
		n	%	n	%	n	%	
Age	high risk	7	8,1	13	15,1	20	23,3	0,010
	Low Risk	7	8,1	59	68,6	66	76,7	

The results of this research analysis show a p-value of 0.010 <0.05. In this case, a p-value that is smaller than 0.05 indicates that there is

a significant relationship between age and the use of contraceptives..

Table 2. Relationship education with The use of injectable contraceptives at TPMB Midwife M Rangkapan Jaya Depok

Variables	Category	contraception						P Value
		do not use		use		Total		
		n	%	n	%	n	%	
education	Base	2	23,3	21	24,4	23	26,7	0,012
	Intermediate	6	7,0	43	50,0	49	57	
	Tall	6	7,0	8	9,3	14	16,3	

The results of this analysis show the values p Value of 0.012. This p-value is used to test whether the relationship between education and the use of tools contraception is statistically significant. In in this case, the value p-value which is less than 0.05 ($\alpha = 0.05$) indicates that there is

a significant relationship between education and the use of contraceptives. Education is a person's activity in developing thinking skills and attitudes that can shape his behavior, both for present life and preparation for life in the future.

Table 3. Relationship between work and the use of injectable contraceptives at TPMB Bidan M

Variabe	Category	contraception						P Value
		do not use		use		Total		
		n	%	n	%	n	%	
Work	Work	8	9,3	12	14	20	23,3	0,001
	Doesn't Work	6	7	60	69,8	66	76,7	

The results of this analysis show the value Pvalue of 0.001. The value p-value This is used to test whether the relationship between employment and contraceptive use is

statistically significant. In this case, the value p-value which is less than 0.05 indicates that there is a significant relationship between work and the use of contraceptives.

Table 4. Relationship between the number of children and the use of injectable contraceptives at TPMB Bidan M Rangkapan Jaya Depok.

Variables	Category	contraception						P Value
		do not use		use		Total		
		n	%	n	%	n	%	
Amount child	Risk Tall	10	11,6	18	20,9	28	32,6	0,001
	Risk Low	4	4,7	54	62,8	58	67,4	

The results of this analysis show the value p-value of 0.001. The value p-value This is used to test whether the relationship between the number of children and the use of contraceptives is statistically significant.

In this case, the value p-value which is less than 0.05 indicates that there is a significant relationship between the number of children and the use of contraception.

Table 5. Relationship knowledge with The use of injectable contraceptives at TPMB Midwife M Rangkapan Jaya Depok.

Variables	Category	contraception						P Value
		do not use		use		Total		
		n	%	n	%	n	%	
Knowlidge	good	9	10,5	19	22,1	28	32,6	0,017
	enough	4	4,7	31	36,0	35	40,7	
	Not enough	1	1,2	22	25,6	23	26,7	

The results of this analysis show value p value of 0.017. Mark p-value This was used to test whether the relationship between knowledge and contraceptive use was statistically

significant. In this case, value p value which is smaller than 0.05 indicates that there is a significant relationship between knowledge and use of contraceptives.

Discussion

Relationship between Age and Use of Injectable Contraceptives

According to Wahyuni (2015) age is related to the use of contraception as an intrinsic factor. Age is related to organ structure, physiological function, biochemical composition including a

woman's hormonal system. Differences in physiological function, biochemical composition, and hormonal system in a certain age period cause differences in the contraception needed which shows that reproductive age can affect the use of injectable contraception because it is considered more effective and younger. Acceptor age is a variable that has an important attitude influence on the use of injectable contraception. Naturally, a woman's reproductive period is divided into three periods, namely the young reproductive period (15-19 years), the healthy reproductive period (20-35 years), and the old reproductive period (36-45 years). This division is based on epidemiological data that the risk of pregnancy and childbirth for mothers is higher at the age of less than 20 years and more than 36 years.

The results of this study are in line with Nadya's research, 2019 with the title factors related to the choice of injectable contraceptive methods in active family planning participants in Mekarwangi Village, Tanah Sareal District, Bogor City in 2019, stating that age influences the choice of contraception in Mekarwangi Village, Tanah Sareal District with a p-value of 0.006.

The results of this study analysis showed that mothers with low-risk ages used injectable contraceptives more than mothers with high-risk ages. From the results of the study, 66 respondents (76.7%) of the 86 respondents used injectable contraceptives. These results also show a p-value of 0.010 <0.05. In this case, a p-value smaller than 0.05 indicates that

there is a significant relationship between age and the use of contraceptives.

According to researchers, injectable contraception aims to space pregnancies, the period of wives aged 20-35 years is the best age to give birth with a total of 2 children with a birth gap of 3 to 4 years. This is in accordance with the theory that the age of 20-35 years is a healthy reproductive age that allows mothers to plan the spacing of their pregnancies and choose effective and efficient injectable contraceptives to support mothers in the Family Planning program.

Relationship between Education and Use of Injectable Contraceptives

According to Affandi (2015), a person's education factor greatly determines the pattern of decision-making and receiving information. Education is one of the factors that greatly determines a person's knowledge and perception of the importance of something, including the importance of participating in family planning, reading and writing skills facilitate the dissemination of information about family planning but also about the basic understanding of how and why and various ways to limit births and whether the ones that have been limited so far have been successful, and what are the advantages of these methods.

In line with the research of Fina Yanti, 2021 with the research title The Relationship between Parity, Education, and Occupation with the Use of 3-Month Injectable Contraceptives at PMB Yusida Palembang in 2021, it shows that from 261 respondents, the Chi Square test results were obtained pvalue =

0.036 meaning $\alpha = 0.05$. This shows that there is a relationship between education and the use of 3-month contraceptive injections at PMB Yusida Am.Keb in 2021. It is concluded that respondents with higher education will find it easier to understand and accept information that they consider good for themselves and their families, especially regarding the use of contraceptive injections with various advantages or benefits that are more than the disadvantages or losses or side effects.

The results of the analysis of mothers with secondary education levels, there were 49 respondents (57.0%) who used injectable contraceptives at TPMB Bidan M Rangkapan Jaya Depk in 2023, with the results of the chi-square test p-value of 0.012 seen from the data respondents who have secondary education have a greater chance of using injectable contraceptives compared to mothers with low education levels. According to researchers, people who are highly educated and have good knowledge about injectable contraceptives prefer injectable contraceptives to other contraceptives.

Relationship between Work and Use of Injectable Contraceptives

According to Ani Anggriani (2019), working women have expensive time values so that the opportunity to take care of children is less than women who do not work, so working women tend to limit the number of children, Based on the results of Rini Camelia's research (2020) with the title of the study The Relationship Between Menstrual Cycles and Mother's

Occupation with the Selection of Cyclofem Injectable Contraceptives in Independent Midwives. The results of the statistical test showed that there was a relationship between the mother's employment status and the selection of injectable contraceptives with the result $p = 0.013$ ($p < 0.05$) which indicates a relationship between work and the use of injectable contraceptives.

The results of this research analysis show that mothers with unemployed status have a greater chance of choosing injectable contraceptives than mothers with employed status. From the results of the data analysis, it was found that 66 (76.7%) unemployed respondents also showed a p-value of 0.001. This p-value is used to test whether the relationship between work and the use of contraceptives is statistically significant. In this case, a p-value of less than 0.05 indicates that there is a significant relationship between work and the use of contraceptives. According to the researcher, there is a possibility that unemployed mothers have more free time to return to health facilities on schedule so that the effectiveness of injectable contraceptives can be felt optimally. Supported by the theory that injectable contraceptives are 99% effective in preventing pregnancy if used properly. The pregnancy rate in injectable contraceptive users is very low, which is less than 4 per 1000 in the second year after using injectable contraceptives.

Relationship between Number of Children and Use of Injectable Contraceptives

Herowati, Diyah (2017) reported that the use of injectable contraception was higher in WUS who had ideal children (as many as 1-2 children) 66% (6780 people) and the lowest in WUS with 6 children. In line with the results of the study by Nurdin Rahman, 2018 with the title of research on factors related to the use of cyclofem injectable contraception in the Sangurara Health Center work area in 2018 using ChiSquare which was carried out on parity with the use of Cyclofem injectable contraception, the p value (0.026) $< \alpha$ (0.05) was obtained, so H_0 was rejected and H_a was accepted, meaning that there is a relationship between parity and the use of injectable contraception. This is because acceptors will use contraceptive methods as a way to overcome unwanted child births, if the number of living children they have is sufficient, because currently in the midst of society there are still those who adhere to the traditional concept, namely tending to choose to have children in large numbers.

According to researchers, looking at the results of data analysis, there were 58 (67.4%), respondents who had a number of children \leq 2 obtained a p-value of 0.001, which indicates a relationship between the use of injectable contraceptives and the number of children they have. mothers with a number of children \leq 2 have a greater chance of being at risk of choosing injectable contraceptives compared to mothers with a number of children $>$ 2. According to researchers, this is because injectable contraception is a short-term contraception that can be stopped at any

time when planning to get pregnant again. While mothers who have children $>$ 2 will be given direction by health workers to use long-term contraception or permanent contraception. Supported by the government program with the plan of 2 children is better, for that mothers with more than 2 children are advised to use long-term contraception or permanent contraception.

Relationship between Knowledge and Use of Injectable Contraceptives

Knowledge is a characteristic of humans, knowledge has a limited (hypothesis) and developing (progress) or historical (historical) nature. Knowledge always moves from a point of limitation to the next point of limitation, so that knowledge is always developing (dynamic) and not final (Watlotly, 2013). This is in line with the results of research conducted by Wiwi Sartika, 2020. With the title of the study Weight Gain with the Use of 1 Month Injectable KB Contraceptives Based on the results of the P-Value results (P-value = .006 $<$ 0.05) it can be stated that the results of the bivariate analysis using the chi square test obtained a p value = 0.005 which means that there is a relationship between knowledge and the use of injectable KB contraception.

The results of the research analysis of 86 respondents, 35 (40.7%) respondents have sufficient knowledge of using injectable contraceptives compared to mothers with less knowledge. The results of this analysis also show a p-value of 0.017. This p-value is used to test whether the relationship between knowledge and use of contraceptives is

statistically significant. In this case, a p-value smaller than 0.05 indicates that there is a significant relationship between knowledge and use of contraceptives. According to the researcher, in this condition, it is likely that mothers with sufficient knowledge have knowledge about injectable contraceptives so that they can properly consider the contraception they need. Theoretically, it is known that knowledge has a major contribution in changing a person's behavior to do something and knowledge is developing.

CONCLUSION

Based on the results of research regarding factors influencing the use of contraceptives in couples of childbearing age at TPMB Midwife M in Rangkaian Jaya Depok in 2023, of the 5 variables there are 5 variables that influence each other with the following explanation, There is a significant relationship (p-value = 0.010) between age and the choice of injectable contraceptives at TPMB Bidan M Rangkaian Jaya Depok.

There is a significant relationship between education and the choice of injectable contraceptives at TPMB Bidan M Rangkaian Jaya Depok with (p-value = 0.012). The work variable with the choice of injectable contraceptives at TPMB Midwife M Rangkaian Jaya Depok has a significant relationship with (p-value =

0.001). The number of children has a significant relationship with the choice of injectable contraceptives at TPMB Bidan M Rangkaian Jaya Depok with (p-value = 0.001). There is a significant relationship between knowledge and the choice of injectable contraceptives at TPMB Midwife M Rangkaian Jaya Depok (p-value = 0.017).

b. Suggestion

Based on research that has been carried out as well as the results of research on factors influencing the selection of injectable contraceptives at TPMB Bidan M Rangkaian Jaya Depok in 2023, researchers suggest:

1. Divide the research location

For TPMB Midwife M Rangkaian Jaya Depok, to continue to support the community and ensure the availability of injectable contraceptives so that family planning services can run well and injectable family planning acceptors receive good service.

2. For Respondents

For women of childbearing age who use contraceptives, they should understand and be wiser in choosing contraceptives according to their needs.

3. For the Depok City Government

For the Depok Health Service, to facilitate the contraceptive supply

chain to Community Health Centers so that family planning programs can be implemented well.

4. For educational institutions

The results of this research can be used as a reading source and provide more references about injectable contraceptives as a lesson for future researchers who want to research the use of contraceptives in older couples. fertile at TPMB Bidan M so that he can continue research with other research methods.

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