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## The Use of Non-Hormonal Contraception in Women of Fertile Age

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### ABSTRACT

Long-term use of hormonal contraception has various effects on acceptors. These side effects can be minimized by using non-hormonal contraceptives (condoms, IUDs, MOW) where their use is still very low. The purpose of this study was to determine the factors associated with the use of non-hormonal contraceptives in WUS. The research design is quantitative with a cross sectional approach. The sample of this study was 194 women of childbearing age who were taken by random technique. Data were collected using a questionnaire. The statistical test used was univariate with percentage, bivariate with chi square and multivariate with logistic regression. The results of the bivariate analysis of several variables showed that there was a relationship between age ( $p = 0.049$ ), service availability ( $p = 0.000$ ) with the use of non-hormonal contraceptives. While the variables of knowledge, husband's support, parity, family income, information on health workers and access proved to have no relationship with the use of contraceptives.

Keywords: Non-hormonal contraception, Knowledge, Age

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## INTRODUCTION

The choice of contraceptive method is very depend on the knowledge of women of childbearing age about the advantages and disadvantages they will get after using it. Long-term use of hormonal contraceptives has various effects on acceptors including nausea, fluid retention, headaches, breast tenderness, vaginal discharge, irregular bleeding, increased appetite with weight gain, acne, alopecia, sometimes breast shrinkage and hypomenorrhea <sup>1</sup>.

The number of side effects can be minimized by using non-hormonal contraceptives, namely condoms, IUDs, MOW and MOP. The use of the four contraceptive methods is still very low. According Health Profile (2018) that the use of non-hormonal contraceptive methods was 11.85% including IUD (7.35%), MOW (2.76%), MOP (0.5%) and condoms (1.24%). Meanwhile, 88.15% cesarean section hormonal contraceptives used implants (7.20%), injections (63.71%), and pills (17.24%).

Lack of knowledge is one of the causes of low knowledge of women of childbearing age about non-hormonal contraceptive methods which can actually be a safer alternative for health and more economical for the family economy. This lack of knowledge triggers women of childbearing age to prefer to use hormonal contraceptive methods such as injections and pills, which are also commonly found in midwifery services.

A preliminary survey conducted in December 2019 in Bantar Jaya Village showed that only 10.39% of non-hormonal family planning acceptors were accepted, which included IUD, MOW and natural methods. The purpose of this study was to determine the factors associated with the use of non-hormonal contraceptives.

## METHOD

The research design is quantitative with a cross sectional approach. The sample of this study was 194 women of childbearing age who were taken by random technique. Data were collected using a questionnaire. The statistical test used was univariate with percentage, bivariate with chi square.

**RESULTS**

**Table 1. Variable Frequency Distribution**

Variable	Category	Frecuency	Percentage
Use of contraceptive	Non Hormonal	5	2.6
	Hormonal	189	97.4
Knowledge	Upper	3	1,6
	Low	191	98,4
Age	≥35	67	34.5
	< 35	127	65.5
Partner Support	More	122	62.9
	Less	72	37.1
Paritas	>2	139	71.6
	1-2	55	28.4
Income	≥UMR	61	31.4
	<UMR	133	68.6
Service Available	Complete	6	3.1
	Incomplete	188	96.9
Information	Complete	176	90.7
	Incomplete	18	9.3
Acces	Reachable	86	44.3
	Unreachable	108	55.7

**Table 2 Correlation between Knowledge and Use of Non Hormonal Contraceptive**

		Contraception				Amount	P-value	OR	CI	
		Hormonal		Non Hormonal						
		n	%	n	%	n	%			
Knowledge	Low	186	97,4	5	2,6	191	100	1.000	.974	0.951-0.997
	Upper	3	100	0	0	3	100			
<b>TOTAL</b>		189	97,4	5	2,6	194	100			

Based on table 2 above, p-value more than 0.05 (1,000) which means there is no relationship between the knowledge possessed by women of childbearing age and the use of non-hormonal contraceptives. Meanwhile, OR = 0.974 means that women of childbearing age who have good knowledge of contraceptives have a 0.974-fold chance of using non-hormonal contraceptives.

**Table 3 Correlation Between Age and Use of Non-hormonal Contraceptives**

		Contraception				Amount	P-value	OR	CI	
		Hormonal		Non Hormonal						
		n	%	n	%	n	%			
Age	≤ 35 tahun	126	99,2	1	0,8	127	100	0.049	8.000	0.876-73.07
	>35 tahun	63	94	4	6	67	100			
<b>TOTAL</b>		189	97,4	5	2,6	194	100			

Based on table 3 above, p value = 0.049 illustrates that there is a relationship between age and the use of non-hormonal contraceptives. Where OR = 8,000 means that women of childbearing age with an age of more than 35 years have an 8-fold chance of using non-hormonal contraceptives than women of childbearing age with an age of less than 35 years.

**Table 4. Correlation Between Knowledge and Use of Non-hormonal Contraceptives**

		Contraception						P-value	OR	CI
		Hormonal		Non Hormonal		Jumlah				
		N	%	n	%	n	%			
<b>Partner Support</b>	Less	71	98,6	1	1,4	72	100	0.653	2.407	0.264-21.961
	More m	118	96,7	4	3,3	122	100			
<b>TOTAL</b>		189	97,4	5	2,6	194	100			

Table 4 shows that the p value (p value) = 0.653 means that there is no relationship between husband's support and the use of non-hormonal contraceptives. Meanwhile, the OR value of 2.47 illustrates that husbands who support their wives in using contraception have a chance of 2.4 times compared to husbands who do not support them.

**Table 5 Correlation Between Paritas and Use of Non-hormonal Contraceptives**

		Contraception						P-value	OR	CI
		Hormonal		Non Hormonal		Amount				
		n	%	N	%	n	%			
<b>Paritas</b>	1-2	54	98,2	1	1,8	55	100	1.000	1.600	0.175-14.642
	>2	135	97,1	4	2,9	139	100			
<b>TOTAL</b>		189	97,4	5	2,6	194	100			

Table 5 shows that the value of p = 1,000 means that there is no relationship between parity and the use of non-hormonal contraceptives. While the value of OR = 1,600 means that women of childbearing age who have more than 2 children have a 1.6 times chance of using non-hormonal contraceptives.

**Table 6. Correlation Between Income and Use of Non hormonal Contaceptive**

		Contraception						P-value	OR	CI
		Hormonal		Non Hormonal		Amount				
		n	%	n	%	n	%			
<b>Income</b>	<UMR	131	98,5	2	1,5	133	100	0.165	3.388	0.551-
	≥UMR	58	95,1	3	4,9	61	100			20.820
<b>TOTAL</b>		189	97,4	5	2,6	194	100			

Tabel 6 shows the p-value of 0.165, which means that there is no relationship between family income and the use of non-hormonal contraceptives. While the value of OR = 3.388 means that women of childbearing age with family income above the minimum wage are 3 times more likely to use non-hormonal contraceptives.

**Table 7. The relationship between Paritas and Use of Non-hormonal Contraceptives**

		Contraception						P-value	OR	CI
		Hormonal		Non Hormonal		Amount				
		n	%	n	%	n	%			
<b>Service Available</b>	Incomplete	186	98,9	2	1,1	188	100	0.000	93.000	11.142-776.250
	Complete	3	50	3	50	139	100			
<b>TOTAL</b>		189	97,4	5	2,6	194	100			

The p value (p value) of 0.000 means that there is a significant relationship between the completeness of available family planning services and the use of non-hormonal contraceptives. While OR = 93,000 means that the completeness of available family planning services provides 93 times the opportunity for women of childbearing age to use non-hormonal contraceptives.

**Table 8 Correlation Between Information and Use of Non-hormonal Contraceptives**

		Contraception						P-value	OR	CI
		Hormonal		Non Hormonal		Amount				
		n	%	n	%	n	%			
<b>Information</b>	Incomplete	18	100	0	0	18	100	1.000	-	-
	Complete	171	97,2	5	2,8	176	100			
<b>TOTAL</b>		189	97,4	5	2,6	194	100			

The P Value (=1.000 > 0.05) means that there is no relationship between information on health workers and the use of non-hormonal contraceptives.

**Table 9. Correlation Between Acces and Use of Non-hormonal Contraceptives**

		Contraception						P-value	OR	CI
		Hormonal		Non Hormonal		Amount				
		N	%	n	%	n	%			
<b>Acces</b>	Unreachable	105	97,2	3	2,8	108	100	1.000	1.600	0.175-14.642
	Reachable	84	97,7	2	2,3	86	100			
<b>TOTAL</b>		189	97,4	5	2,6	194	100			

The p value = 1,000, it can be concluded that there is no relationship between access (easiness to reach family planning services) and the use of non-hormonal contraceptives. While the OR in the bivariate analysis of 1,600 means that women of childbearing age who easily reach family planning services have a 1.6 times greater chance of using non-hormonal contraceptives than those who are difficult to reach family planning services.

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## DISCUSSION

### Correlation Between Knowledge and Use of Non-hormonal Contraceptives

Table 2 shows that women of childbearing age who use non-hormonal contraception have good knowledge while women of childbearing age who use non-hormonal contraception have poor knowledge of 2.6%.

The better the knowledge possessed by a woman of childbearing age, she will choose a safe method of contraception, with minimal side effects for her health, namely by using non-hormonal contraceptives. This is in line with research by Ratnaningtyas (2009) that there is a significant relationship between the mother's level of knowledge about contraceptive methods and the use of contraception. It can be interpreted that the better the mother's knowledge, the higher the use of non-hormonal contraception.

Knowledge or knowledge is the result of human sensing or the result of knowing someone about an object through their five senses. A person's knowledge is mostly obtained through the sense of hearing and the sense of sight <sup>2</sup>.

The factors that influence behavior in this case the use of non-hormonal contraceptive devices are divided into two, namely internal factors and external factors. Internal factors include: knowledge, intelligence, perception, emotion, motivation and so on which function as processing external stimuli. While external factors include the surrounding environment, both physical and non-physical <sup>2</sup>.

Soetrisno states that knowledge is the main aspect to determine a person's behavior to realize or not, as well as to regulate his own behavior. "Know, often becomes the basis of an action." In this study, what is meant by behavior is the use of non-hormonal contraceptives<sup>3</sup>.

Contraceptive methods used by 94.7% of research respondents are hormonal contraceptive methods such as pills, implants and injections. Side effects that arise due to the use of hormonal contraception can interfere with the health and beauty of the body, such as obesity or facial acne. In addition, hormonal contraceptives, namely injections, have side effects such as weight gain of users <sup>4</sup>.

Likewise with pills which have an effect on hormonal balance disorders in a woman's body which can trigger hypertension. Hypertension can cause death <sup>5</sup>. Prolonged use of contraceptive pills can cause cardiovascular and stroke, myocardial infarction and peripheral arterial disease <sup>6,4</sup>. The next type of hormonal contraception is implants which have side effects that cause changes in menstrual periods, weight gain, acne, headaches and breast pain<sup>7</sup>.

As an alternative, there are non-hormonal contraceptive methods that can be chosen as an effort to avoid all side effects due to hormone use while still being able to prevent pregnancy. Even the IUD contraceptive method has a high effectiveness in preventing pregnancy by 99.2 – 99.4% (0.6 – 0.8 pregnancies/100 women in the first year). Likewise with tubectomy (Female Operative Method) which is no less effective, which is less than 1 pregnancy per 100 women in the first year of use<sup>8</sup>.

However, the results of this study are not in line with the theory and the results of existing research are evident from the p-value, which shows that it is more than 0.05 (1,000) which means there is no relationship between the knowledge possessed by women of childbearing age and the use of non-hormonal contraceptives. Meanwhile, OR = 0.974 means that women of childbearing age who have good knowledge of contraceptives have a 0.974-fold chance of using non-hormonal contraceptives. The results of this study are in line with (Haryati, 2017) which states that there is no relationship between Mother's Knowledge About Contraceptive Methods and Contraception Selection at Majalaya Health Center with p value = 0.423<sup>9</sup>.

### **Correlation Between Age and Use of Non-hormonal Contraceptives**

From Table 3 above, it can be seen that 6% of women of childbearing age aged more than 35 years who use non-hormonal contraception use non-hormonal contraceptives (0.8%). P Value = 0.049 illustrates that there is a relationship between age and the use of non-hormonal contraceptives. Where OR = 8,000 means that women of childbearing age with an age of more than 35 years have an 8-fold chance of using non-hormonal contraceptives than women of childbearing age with an age of less than 35 years.

Age is one of the factors that influence a person's behavior, including the use of contraceptive methods. The older a woman is, the more risks she faces during pregnancy and childbirth. Complications due to the use of hormonal contraceptives are often found at this age. At the age of more than 35 years, a woman is easily infected with diseases such as anemia, malaria, cardiac tuberculosis, heart failure, diabetes mellitus, HIV/AIDS, toxoplasmosis and mild pre-eclampsia and decreased reproductive organs<sup>10</sup>.

According to Affandi (2014) some disadvantages of hormonal contraception (combination of estrogen and progesterone) can trigger serious side effects such as heart attacks, strokes, blood clots in the lungs and brain and the possibility of liver tumor<sup>8</sup>. Another thing that is no less important than the side effects of hormonal contraceptives is weight gain. This weight gain is feared to cause obesity which is closely related to DM (Dibetes Mellitus) as stated by (Oroh, 2018) in his research that there is a relationship between obesity and the incidence of diabetes mellitus in the work area of the Ranomut Health Center Manado City<sup>11</sup>.

Hormonal contraceptive methods also cause health problems, including menstrual disorders, weight problems, delayed return of fertility, decreased libido, headaches, hypertension and stroke<sup>1</sup>. The incidence of hypertension is closely related to a person's age. Research (Aristotle, 2017) states that some respondents are old and have hypertension since the age of 30 years and above because usually the function of human organs if they are older, their functions will weaken and are susceptible to disease. While very few young respondents have hypertension, young people can also suffer from hypertension due to poor diet, such as frequent consumption of foods high in fat, genetic factors, obesity, stress and unhealthy lifestyles such as Infrequent exercise can also be a cause of obesity at a young ages<sup>12</sup>. Women

of childbearing age with age more than 35 years tend to use non-hormonal contraceptives to avoid various possible diseases caused by the use of hormonal family planning.

### **Correlation Between Partner Support and Use of Non-hormonal Contraceptives**

One of the non-hormonal contraceptives available is the IUD. The use of the IUD by the wife is strongly influenced by the support of the husband. The worry that a wife will not be able to provide maximum service when having sex with husband and wife is because the presence of an IUD string for some husbands can be annoying. The forms of husband's support that can be given include accompanying his wife to do family planning consultations and helping make a decision to use the one type of contraceptive that is most appropriate for her, giving her permission to use the chosen contraceptive method, accompanying her when the contraceptive device is being installed, paying for it. the cost of installing contraceptives and establishing good communication with the wife regarding the use of these contraceptives <sup>13</sup>.

Table 4 states that women of childbearing age who use non-hormonal contraceptives who get support from their husbands are more than those who do not get support from their husbands. The p value (p value) = 0.653 means that there is no relationship between husband's support and the use of non-hormonal contraceptives. Meanwhile, the OR value of 2.47 illustrates that husbands who support their wives in using contraception have a chance of 2.4 times compared to husbands who do not support them.

The results of this study are in line with Veronica, et al (2019) that there is no significant relationship between husband's support for women of childbearing age and the use of IUD family planning in PKM Kota Bumi Udik Kab. Lampung, where the IUD is a non-hormonal contraceptive method <sup>14</sup>. Similar research results were also presented by (Mularsih, 2018) who stated that husband's support had no effect on the use of the IUD and Mariati (2018) who stated that husband's support was not related to the choice of IUD contraceptive use <sup>15</sup>.

Another study on the absence of a relationship between husband's support and the use of non-hormonal contraceptives, namely MOW was submitted by (Salim, 2021)<sup>16</sup>. The insignificance of this husband's support can be caused by the already high independence of women. One example is when the doctor advised after the operation to give birth to a third child to install MOW contraception to prevent further pregnancies and the wife agreed without asking her husband's consideration first.

Women of childbearing age have sufficient knowledge to be able to choose the right contraceptive to use. Most of the decision making on the use of contraceptives by the wife does not require advice or support from her husband in advance due to various things, such as a wife being used to being independent and participating in many community activities to increase knowledge about contraception. The increasing empowerment of women in the community also has an effect on this. Women's empowerment is the transformation of power relations between men and women at four different levels, namely family, community, market and state. The position of women will improve only when women



can be independent and able to control the decisions related to their lives<sup>16</sup>. Women's empowerment can be seen from their ability to carry out mobility, namely going out of the house or the area where they live alone without having to be accompanied by their husbands. Many women of childbearing age are economically independent by working so they can afford to pay for the use of non-hormonal contraceptives that require large funds such as IUDs and MOWs. Empowerment of women in the family can be seen in the role of a wife in making decisions, namely being able to make decisions alone or with her husband in various matters.

### **Correlation Between Paritas and Use of Non-hormonal Contraceptives**

Table 5 shows that women of childbearing age who use hormonal contraceptives and have more than two children are more than those who have 1-2 children. The value of  $p = 1,000$  means that there is no relationship between parity and the use of non-hormonal contraceptives. While the value of  $OR = 1,600$  means that women of childbearing age who have more than 2 children have a 1.6 times chance of using non-hormonal contraceptives.

The results of this study are in line with (Lestari, 2015) which states that there is no relationship between parity and the choice of tubectomy contraception where we know that tubectomy is one of the non-hormonal contraceptive methods<sup>17</sup>. The more children they have, not necessarily respondents (women of childbearing age) can correctly choose the contraceptive method needed because there are so many factors that influence respondents in choosing the right contraceptive to use according to their needs, such as socio-demographic factors, Socio-Psychology, and factors related to services<sup>18</sup>.

Many of the respondents who have more than two children still choose to use hormonal contraception because they think it is customary to use injectable contraceptives or pills among the community. Non-hormonal contraceptives such as condoms are considered impractical in their use because they require understanding, communication and good cooperation from the husband to temporarily stop sexual activities (interrupted intercourse) when putting on a condom<sup>8</sup>. Likewise, the IUD / IUD has not been widely accepted in the community. People think that inserting foreign objects into the body, especially into the uterus, is very dangerous for the body, especially when it is coupled with a painful installation procedure. MOW (Female Operative Method) is a non-hormonal contraceptive method that is very effective in terminating pregnancy. However, this procedure requires a large amount of money while more than half of the respondents earn below the minimum wage, which means that only a small amount of income is left to meet secondary needs including the MOW in it.

### **Correlation Between Income and Use of Non-hormonal Contraceptives**

From table 6 above, it can be seen that women of childbearing age who use non-hormonal contraceptives with a family income of more than the same as the minimum wage are more than those who have a family income of less than the minimum wage.

Families with weak economic conditions are assumed to lack positive support for the national family planning movement. Family economy is one of the causes of negative support. This may be because this

group still prioritizes the fulfillment of primary needs rather than other needs. On the other hand, families with better socioeconomic conditions are assumed to provide positive support as indicated by participation in tubectomy family planning which includes non-hormonal contraceptive methods<sup>19</sup>.

Among those included in the predisposing factors or which facilitate the occurrence of behavior is the economic level. Health behavior is influenced by economic background, for those with high economic status it will be easier to choose health services and vice versa. The higher the income, the higher the economic status. Economic status affects a person's behavior. Tubectomy Family Planning (KB) users who come from families with good socioeconomic status have a more positive view of themselves and their future compared to those who come from families with low economic status. Income has an influence on a person's participation in utilizing health services. A person's income cannot be fully measured by his work. If it is related to the level of participation in the tubectomy family planning program, people with high income levels will be easier to accept and join this program. On the other hand, people with low incomes will find it very difficult to participate in the tubectomy family planning program<sup>20</sup>.

This is contrary to the results of the study which showed a p-value of 0.165, which means that there is no relationship between family income and the use of non-hormonal contraceptives. While the value of OR = 3.388 means that women of childbearing age with family income above the minimum wage are 3 times more likely to use non-hormonal contraceptives. The results of this study are in line with (Komsari, 2012) which states that there is no significant relationship between family income and the use of contraceptive methods at PUS in Lengkong Village, Garawangi District, Kuningan Regency<sup>21</sup>.

At this time, family income no longer dominates the basis of a woman's decision to use non-hormonal contraceptives. As it is known that the IUD and MOW are contraceptives that require costs in the installation process. This is closely related to the amount of money owned by a family. However, this study shows the opposite phenomenon that families with high incomes still choose hormonal contraceptive methods such as pills or injections based on the assumption that the money they spend each time is only around Rp. 25,000.00 of the salary/income they get a month. As for families with incomes below the minimum wage but have thought long term (visionary) there are those who choose to use the IUD as a contraceptive method with the assumption that with a single payment of around Rp. 300,000.00 it can last up to several years. That is, if it is calculated carefully and correctly, the use of the IUD can actually minimize monthly expenses.

### **Correlation Between Service Availability and Use of Non-hormonal Contraceptives**

Table 7 states that women of childbearing age who use non-hormonal contraceptives and state that more complete contraceptives are available than those with less complete availability of services. The p value (p value) of 0.000 means that there is a significant relationship between the completeness of available family planning services and the use of non-hormonal contraceptives. While OR = 93,000

means that the completeness of available family planning services provides 93 times the opportunity for women of childbearing age to use non-hormonal contraceptives.

The availability of contraceptives is a means used to be given when providing health services, especially in providing family planning services with non-hormonal methods so as to facilitate or convince patients to seek treatment or consultation regarding injectable family planning<sup>22</sup>. The results of this study are in line with (Qomariah, 2020) which states that there is a significant relationship between the availability of contraceptives and the use of contraceptive methods. The availability of contraceptives in health facilities is very important, it is to encourage increased use of contraceptives by family planning acceptors, especially non-hormonal methods. The more complete the availability of contraceptives, the respondents will tend to choose non-hormonal contraceptives, in this case the IUD or MOW. One of the government's efforts to provide non-hormonal contraceptives is the IUD KB safari. The program is expected to help especially the underprivileged and the government to take a Community (participatory) approach that is driven by the role and responsibility of the community through community organizations and community leaders, which aims to foster and maintain existing family planning participants and increase the number of new family planning participants, especially family planning. relatively small non-hormonal side effects for the health of women of childbearing age<sup>23</sup>.

#### **Correlation Between Information and Use of Non-hormonal Contraceptives**

Table 8 above provides information that women of childbearing age who use non-hormonal contraceptives stated that information about contraceptives obtained from health workers was more complete than incomplete. Green (1980) in Notoatmodjo (2014) suggests that health workers have a role as counselors. A counselor is someone who provides counseling to women and couples of childbearing age, so that women of childbearing age can know about family planning and use contraception. There are two health problems, namely behavioral factors and non-behavioral factors where both factors are influenced by several other factors such as predisposing factors, enabling factors and reinforcing factors. These factors can be a reference so that women can change their behavior in using contraceptives, especially non-hormonal methods<sup>2</sup>. Andari, et al (2016) in their research on factors related to the behavior of using contraceptives stated that there was a relationship between the role of health workers and the behavior of using contraceptives. It can be seen that respondents who have less behavior in the use of contraceptives are found in the role group of health workers who are still lacking by 54.8%, compared to the role group of health workers who are already good, which is 26.4%. Health workers are parties who take a role in the final stage of using contraceptives for prospective family planning acceptors<sup>24</sup>.

The results of this study are not in accordance with Andari, et al (2016) because the P Value ( $=1.000 > 0.05$ ) means that there is no relationship between information on health workers and the use of non-hormonal contraceptives. In this study, the majority of respondents stated that health workers had provided information related to contraceptives in the form of various contraceptives, side effects

and ways of working. However, this information is not enough to move women of childbearing age to choose non-hormonal contraception according to their needs considering that there are many side effects that are felt by hormonal family planning acceptors, including aches, tingling, shortness of breath, dizziness, hypertension <sup>24</sup>.

### **Correlation Between Acces and Use of Non-hormonal Contraceptives**

Table 9 states that women of childbearing age who use hormonal contraception have less access to family planning services than those who are not easily accessible.

If viewed from the p Value ( $1,000 > 0.05$ ), it can be concluded that there is no relationship between access (easiness to reach family planning services) and the use of non-hormonal contraceptives. While the OR in the bivariate analysis of 1,600 means that women of childbearing age who easily reach family planning services have a 1.6 times greater chance of using non-hormonal contraceptives than those who are difficult to reach family planning services.

The results of this study are in line with Lagu, et al (2019) which states that there is no relationship between access to family planning service facilities and EFA participation in family planning <sup>25</sup>. The results of a similar study were also presented by Hakim (2013) regarding the Factors Affecting the Participation of Couples of Childbearing Age in the Family Planning Program in Kauman District, Ponorogo Regency, which stated that there was no significant effect between distance from the family planning service center on the participation of couples of childbearing age in the Family program. Plan where the p value = 0.158). This study is also in line with the results of Fitria's research (2015) which states that there is no relationship between access to family planning services and husband's participation in the Family Planning program where the value (p value = 0.401) <sup>26</sup>.

Access to family planning service facilities will affect the community's use of family planning service facilities. The easier the access, the greater the possibility/opportunity for women of childbearing age to use non-hormonal contraceptives. However, this is not the case in this study that women of childbearing age who have easy access choose to use hormonal contraceptives such as pills and injections. The public's view of the pain rate at the time of IUD insertion and the implementation of the MOW procedure may be the cause of respondents still choosing pills or injections. Surgery for most people is a curative action of last resort after several options fail to be implemented.

## **CONCLUSIONS**

1. There is no correlation between knowledge and the use of non-hormonal contraceptives
2. There is a correlation between age and the use of non-hormonal contraceptives
3. There is no correlation between husband's support and the use of non-hormonal contraceptives
4. There is no correlation between parity and the use of non-hormonal contraceptives
5. There is no correlation between family income and the use of non-hormonal contraceptives
6. There is a correlation between the availability of services and the use of non-hormonal

- contraceptives
7. There is no correlation between information from health workers and the use of non-hormonal contraceptives
  8. There is no correlation between access to family planning services and the use of non-hormonal contraceptives

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