

The Factors of the Contraceptives Selection at the Summersari Public Health Center, Lumajang**Yulistiana**^{1(corresponding author)}, **Ancah Caesarina Novi Marchianti**², **Candra Bumi**³^{1(CA)}Postgraduate Program of Public Health Science, Universitas Jember, Indonesia;
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Submitted: December 27, 2019 -Revised: January 8, 2020 -Accepted: January 26, 2020 -Published: January 31, 2020

ABSTRACT

Side effects of the use of contraceptives have always been a problem complained by family planning acceptors. The side effects of family planning such as irregular menstruation, weight gain, nausea, dizziness, and vaginal discharge. This research was conducted in July-August 2019 to determine the factors causing the selection of contraceptives by family planning acceptors at the Summersari Public Health Center in Lumajang Regency. Researchers used a cross-sectional design. The sample were 98 family planning acceptors at the Summersari Public Health Center, Lumajang Regency, selected using cluster random sampling technique. Researchers used statistical regression tests to data analyze process. Statistical test results of factors that had a positive influence on the selection of contraceptive devices for family planning acceptors in the working area of Summersari Public Health Center were the number of children, knowledge of family planning, availability of tools, attitudes and husband's support; counseling performance in the majority of acceptors was good, and the majority of acceptors had a negative family planning history. Husband support and the number of children were the strong influence on the selection of contraception.

Keywords: family planning; acceptor; contraceptive selection; factors**INTRODUCTION**

Efforts to prevent the rate of population growth in 2015 by using contraceptives⁽¹⁾. Contraception is also a family's need to form a happy and prosperous small family⁽²⁾. The main predictors of contraceptive use are spouses' consent about contraceptive methods, the number of births, female authority, positive knowledge and attitudes about contraception, and the number of children desired⁽³⁾. The factors that have a significant influence on the choice of contraception are the cost of contraceptive use, non-material costs (experience of side effects), and factors that have no effect are cultural norms, mental health, physical health, and accessibility barriers⁽⁴⁾.

Report data on contraception services for family planning acceptors in East Java in 2014 included injection contraception 58.87%, pills 21.93%, condoms 3.10%, IUD 8.02%, implants 6.38%, MOW 1.64% and 0.06% MOP. In 2015 the contraceptive selection in East Java included: injection of 443,110; pills 153,384; implants 63,918; condoms 22,748; and IUD 45,809⁽⁵⁾. Data in Lumajang Regency shows that 74,086 acceptors of injecting contraceptive users, 23,031 acceptors of pill users and 25,164 implant users acceptors. Contraceptive use at the Summersari Public Health Center injecting family planning 2,251 acceptors, 886 pill acceptors, and 809 implant acceptors. A preliminary study at the Summersari Community Health Center found that the total number of 6,100 acceptors was the highest in Lumajang Regency. Choice of contraceptive methods with the injection method 2.251 (37%). Pill 886 (14%) and 809 implants (13%).

METHODS

This research was conducted in July-August 2019 to determine the factors causing the selection of contraceptives by family planning acceptors at the Summersari Public Health Center in Lumajang Regency. Researchers used the cross-sectional design. The research sample of 98 people. Researchers used cluster random sampling technique. Validity test was done to test the research instruments, the statistical test results obtained there were 28 valid questions from a total of 40 question questions, the researcher modified invalid sentence sentences before used the research instrument at the research site. Researchers used statistical regression tests to data analyze process. Researchers conducted a research ethics test at the Medical Faculty in Universitas Jember with certificate number of 501 / UN25.8 / KEPK / DL / 2019.

RESULTS

Based on table 1, it can be explained that the majority of study respondents aged 20-35 with a percentage of 82.7%, came from the Javanese ethnic group 52% and Islam 95.9%.

Table 1. Distribution of respondent characteristics in Summersari Public Health Center, Lumajang

Characteristics	Frequency	Percentage
Age		
• 20-35 year	81	82.7%
• >35 year	17	17.3%
Tribe		
• Madura	47	48%
• Jawa	51	52%
Religious		
• Islam	94	95.9%
• Christian	4	4.1%

Table 2. Determinant factors of the selection of contraception in Summersari Public Health Center, Lumajang

Variables	Frequency	Percentage
Use of hormonal birth control		
• Never	14	14.3
• Ever	84	85.7
Knowledge about family planning		
• Less	21	21.4
• Well	77	78.6
Husband's support		
• Does not support	39	39.8
• Support	59	60.2
Availability of tools		
• Available	88	89.8
• Not available	10	10.26
Attitude		
• Less	21	21.4
• Well	77	78.6
Counseling performance		
• Les	10	10.2
• Well	88	89.8
Side effects		
• There is no	22	22.4
• There / ever	76	77.6
Number of children		
• Less than 2	18	18.4
• More than 2	80	81.6
Friends of the same age		
• Low	24	24.5
• High	74	75.5
Negative history		
• There is no	28	28.6
• There /have	70	71.4
Contraception Type		
• Natural	33	33.7
• Non Hormonal	19	19.1
• Hormonal	46	47.2
Culture		
• High	65	66.3
• Low	33	33.7
Current family planning		
• MOW	2	2
• Injection, implant pills	46	47.2
• Mal/KB natural	33	33.7
• IUD	15	15.1
• Condom	2	2

From Table 2 can be explained the determinants of contraceptive choice. The majority of research respondents using family planning with a percentage of 85.7%, respondents' knowledge about the good category with a percentage of 78.6%, husband support for wives to use family planning with a percentage of 60.2%, availability of contraception with a percentage of 88%, attitudes towards family planning acceptors with a percentage of 77% were in the good category, counseling performance for family planning acceptors with a percentage of 89.8% were in the good category. The influence of the side effects of family planning acceptors mostly experienced side effects namely 77.6%, most had more than 2 children, ie 81.6%, peer influence on family planning acceptors in Summersari Public Health Center was 75.5%, negative influence of family planning on acceptors in existing categories / had a total of 71.4%. The 47.2% of family planning acceptors used injections of hormones, pills and implants.

Table 3. The distribution of contraception usage based on the determinants

	Usage of contraception				Total	
	No		Yes		Frequency	Percentage
	Frequency	Percentage	Frequency	Percentage		
Age						
< 20 years and > 35 years	6	6.1	11	15.3	17	17.3
20 – 35 year	27	27.6	54	51.0	81	82.7
Culture						
Madura	16	16.3	31	32.7	47	48.0
Jawa	17	17.4	34	34.3	51	52.0
Religious						
Islam	32	24.5	62	63.2	94	95.9
Kristen	1	9.2	3	3.1	4	4.1
Impact of hormonal contraception						
Never	9	9.2	12	12.2	21	21.4
Ever	24	24.5	53	54.1	77	78.6
Knowledge of family planning						
Less	5	5.1	9	9.2	14	14.3
Well	28	28.6	56	57.1	84	85.7
Husband support						
Does't support	24	24.5	15	15.3	39	39.8
Support	9	9.2	50	51.0	59	60.2
Availability of tools						
Not avilable	7	7.1	3	3.1	10	10.2
Availabel	26	26.5	62	63.3	88	89.8
Attitude						
Less	9	9.2	12	12.2	21	21.4
Well	24	24.5	53	54.1	77	78.6
Conselling performance						
Less	7	7.1	3	3.1	10	10.2
Well	26	26.5	62	63.3	88	89.8
Effects of side effects						
There is no	26	26.6	50	50.0	76	77.6
There / ever	7	7.1	15	15.3	22	22.4
Number of children						
Less than 2	27	27.6	53	54.0	80	81.6
More than 2	6	6.1	12	12.3	18	18.4
Friends of the same age						
Low	9	9.2	12	12.2	10	24.5
High	24	24.5	53	54.1	88	75.5
Negative history						
There is no	7	7.1	21	21.5	28	28.6
There /have	26	26.5	44	45.3	70	71.4
Culture						
High	22	22.5	43	43.8	65	66.3
Low	11	11.2	22	22.5	33	33.7

Based on table 3, among 98 acceptor respondents in Summersari Public Health Center who did not use contraception because of the age factor of less than 20 years and more than 35 years as many as 6 respondents and those aged 20-35 years as many as 27 respondents, Madurese 16 respondents and Javanese 17 respondents, Islam 32 respondents, Christian 1 respondent, hormonal contraception influence 9 respondents, no hormonal contraception influence 24 respondents no influence, knowledge about family planning is lacked in 5 respondents and good in 28 respondents, there is no support from her husband 24 respondents, who received support from her husband as many as 9 respondents, the availability of contraceptives as many as 7 respondents stated that they were not available and 26 stated that they were available, there were 9 acceptors 'attitude factors that stated less and 24 acceptors stated good attitude, 7 respondents' counseling performance stated less and 26 respondents stated good, 7 respondents said there were no side effects and 26 respondents said there were side effects of the used of family planning, the number of children more than two or had two children as many as 27 respondents and had children less than 2 children as many as 6 respondents.

Table 4. Logistic regression test results

Independent variables	B	R	P	Odd Ratio
Age	-4.510	0.084	0.033	0.011
Tribe	-4.277	0.063	0.041	0.14
Religious	-4.551	0.084	0.090	0.011
Hormonal contraception	-1.354	0.176	0.047	0.258
Knowledge about family planning	1.395	0.415	0.013	4.033
Husband's support	0.081	0.500	0.887	1.084
Availability of tools	0.720	0.219	0.160	2.055
Attitude	0.426	0.118	0.248	1.530
Counseling performance	-1.348	0.084	0.031	0.260
Side effects	-2.312	0.454	0.049	0.099
Number of children	1.078	0.632	0.007	2.940
Friends of the same age	-0.009	0.288	0.982	0.991
Family planning history is negative	-1.797	0.095	0.024	0.166
Family planning type	-1.218	0.122	0.140	0.296
Culture	-4.692	0.391	0.023	0.09
Current family planning	-2.446	0.032	0.025	0.087

Table 4 shows that influential factors with p-value of <0.05, out of the sixteen determinant factors that influence the choice of contraception include: number of children (p-value = 0.007), knowledge about family planning (p-value = 0.013), age (p-value = 0.033), ethnicity (p-value = 0.041), hormonal contraception (p-value = 0.047), counseling performance (p-value = 0.031), side effects (p-value = 0.049), family history negative (p-value = 0.024), culture (p-value = 0.023), current family planning (p-value = 0,025). The most influential was the number of children, husband's support, side effects, knowledge about family planning, and culture.

DISCUSSION

Family planning programs are needed to address population growth in Indonesia. Many family planning acceptors choose to use hormonal birth control methods such as pills, injections, and implants that contain the hormones estrogen and progesterone can cause increased body weight, hypertension, tumors, and cancer⁽⁶⁾. The risk of cervical cancer and breast tumors will increase with the use of hormonal contraception. The 19.6 million women using hormonal birth control who have breast cancer, 11,517 people mean the risk of breast cancer is higher than those who have never used hormonal birth control⁽⁷⁾. The risk increases with longer usage of

hormonal birth control. Women who use hormonal birth control gain an average of 6.2 kg ($p = 0.002$)⁽⁸⁾. The perception of women with family planning has an important role in switching the method of family planning through high-quality counseling to improve perception by encouraging rational, effective and efficient use of contraception⁽⁹⁾.

In Summersari Public Health Center with 6100 acceptors using family planning which includes: injections of hormones 2,251 (37%), pills 886 (14%) and implants 809 (13%). The data can be used to predict an increase in the number of non-communicable diseases such as tumors, cancer, hypertension, heart disease and metabolic diseases due to weight gain for the next 5 years or 10 years. Hormonal contraceptive methods containing the hormones estrogen and progesterone are suitable for users of the injection, pill and implantation methods because only about 1-2% have side effects such as hypertension, increased body weight, vaginal bleeding with an unknown cause. That the analysis of research data showed that parity and duration of hormonal development increased cervical cancer risk 2.6 - 4.5 times compared to women who did not use hormonal birth control⁽¹⁰⁾.

Cervical cancer is the second largest cause of death of women with an incidence of 288,000 per year. Cervical cancer cases are almost 80% in developing countries with 510,000 cases. HPV infection causes cervical cancer with intraepithelial neoplastic cervical precursors and the influence of hormonal contraception as a factor that might modulate the risk of developing HPV infection into the neoplastic intraepithelial cervix and cervical cancer. High parity and use of oral contraceptives increase the risk of cervical precancerous lesions in women with positive HPV infections⁽¹¹⁾. The 21.4 million people, 1249 incidents of ovarian cancer occurred. The use of progestogen products is not associated with the risk of ovarian cancer⁽¹²⁾. Previous studies have stated that hormone injecting users have increased body weight than non-contraceptive users⁽¹³⁾.

The dominant pattern of switching from a contraceptive method switches from one long-term contraceptive method to another. Factors causing the selection of contraceptives by family planning acceptors include age, number of children, and family planning motivation, side effects of contraceptive methods, ease of use of contraception, and the cost of contraception. The perception of women using the family planning method has an important role in switching methods of contraception. Therefore, providing a better understanding of contraception through good counseling is needed to improve perceptions and encourage rational, effective and efficient use of contraception⁽¹⁰⁾. In Nigeria, a society that has a diversity of cultures and religions, the use of contraceptives by women of reproductive age found problems in ethnicity, religiosity and other socio-demographic variables⁽¹¹⁾.

CONCLUSION

The factors that influence the method of family planning selection at the Summersari Public Health Center are age, ethnicity, hormonal birth control, knowledge of family planning, counseling performance, side effects, number of children, culture and negative history of family planning. The majority of family planning acceptors are aged 20-35 years, and Javanese. The influence of hormonal birth control and knowledge about the family planning method have an influence on the behavior or attitude to use contraception that is suitable or desired by the acceptor. The majority of acceptors have good knowledge about family planning. It can be concluded that knowledge is the most influential factor in contraceptive use. The research findings show that many respondents chose hormonal birth control over non-hormonal side effects despite increased side effects of weight gain, irregular menstruation, and nausea. The majority of acceptors have more than 2 children and many of them have a lot of fortune culture.

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