

Risk Factors of Fertile Age in the Inability of the Use of Long Term Contraception Method in Pekanbaru

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ABSTRACT**Keywords:**

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The population problem facing Indonesia is the large population with a low quality of life. Uncontrolled rate of population will cause a population explosion so it is necessary to disseminate information about the benefits of family planning (KB). The longterm contraceptive method (LONG TERM CONTRASEPTION) has a high level of effectiveness and can suppress the rate of population growth. The purpose of this study was to analyze the risk factors for fertile age couples in the long term failure of contraceptive methods. This research uses quantitative research with case-control study design. The population and sample in this study are couples of childbearing age in the Work Area of the Umban Sari Health Center amounting to 8055 EFAs, sampling by quota sampling. The measuring instrument used was a questionnaire. Analysis is carried out univariately and bivariately. The results of statistical tests using the chi square test are known to the independent and dependent variables namely there is a relationship between the number of children (p.value = 0.027), level of education (p.value = 0.002), knowledge (p.value = 0.0001) attitudes (p .value = 0.014), partner support (p.value = 0.01) with the unsuccessful use of long-term contraceptive methods. meanwhile the age and role of health workers have no relationship. With the use of long-term contraception methods, it is expected that health workers in the Umban Sari Health Center work area can increase health promotion of long-term contraceptive methods to EFA not only in posyandu but in the family building of each pillar. the neighbor.

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1. Introduction

Indonesia is one of the countries with the largest population. Indonesia is ranked fourth in the world after China, India and the United States in a row. From the results of the 2010 census, Indonesia's population reached 237,641,326 people, with an increase in Indonesia's population of 1.49% per year (Central Bureau of Statistics, 2010). To suppress the rate of population growth in Indonesia, the government is pursuing a Family Planning (KB) program for couples of childbearing age (PUS) as stated in the Millennium Development Goals (MDGs) 2015 Indicator 5b.

The results of the 2018 IDHS show that 64% of currently married women aged 15-49 use a family planning tool or method, 57% use modern family planning tools or methods and 6% use traditional family planning methods. Use of long-term contraceptive methods, 13% use long-term contraceptive methods (LONG TERM CONTRASEPTION) consisting of IUD, implant, MOW. Discontinuation of using the device or method of family planning is discontinued within 12 months, the most common reasons for stopping using the device or method of family planning are side effects or health problems 33% and wanting to get pregnant 30%. And the family planning needs of married women aged 15-49 years are not met as much as 11%.

From these data, it is known that the contraceptive method used by family planning acceptors is dominated by non-LONG TERM CONTRASEPTION contraceptive injections and pills. In fact, injection and pill contraception requires monthly control to re-inject and to obtain birth control pills (Sinclair,

2009). The need for re-control to get repeated contraceptive services resulted in a high dropout rate for this method compared to contraceptives which are classified as long-term contraceptive methods.

Pekanbaru City is the capital and largest city in Riau Province with a population of 1.1 Million Soul (Service Pekanbaru Population and Civil Registry in 2020). Based on data on the number of active participants in 2018 with a total of 116.471 PUS (Department of Population Control and KB Pekanbaru City), KB participants chose to use LONG TERM CONTRASEPTION KB 25.4% while non LONG TERM CONTRASEPTION 56.7%. Population Control (Disdalduk) Pekanbaru City, the percentage of achievement of using LONG TERM CONTRASEPTION in Rumbai District is still very low, namely 10%. With the low achievement figures, researchers are interested in conducting research in the Work Area of the Health Center in Rumbai District.

Based on the highest data table above, the author is interested in taking the research place at the Puskesmas which has the highest number of EFAs, namely those at the Umban Sari Health Center, which amounted to 8,055. From the initial survey conducted by the author by filling out questionnaires and interviews with 10 respondents who were at the Umban Sari Health Center, there were respondents aged <20 and >35 years, 6 people did not use LONG TERM CONTRASEPTION and 1 person used LONG TERM CONTRASEPTION and 2 people aged 20-35 years. one person does not use LONG TERM CONTRASEPTION and 1 person uses LONG TERM CONTRASEPTION. Based on the number of children > 2 totaling 7 people, there were 2 people using LONG TERM CONTRASEPTION and those with <2 children not using LONG TERM CONTRASEPTION. Based on the level of education, 2 people who have high education level (SMA-PT) use LONG TERM CONTRASEPTION while 8 people who have low education (Not in School, Elementary, Middle School) do not use LONG TERM CONTRASEPTION.

2. Method

Quantitative descriptive research using a case control study design, was conducted in the Working Area of the Umban Sari Health Center on January 6 - 24 2020. The population in this study amounted to 8,055 PUS consisting of Case Groups that did not use LONG TERM CONTRASEPTION totaling 6,336 PUS while the Control Group was using LONG TERM CONTRASEPTION totaled 199 EFA with a sample of 102 respondents. Sampling in this study used a quota sampling technique for case groups, which is a technique for determining samples from the population that have certain characteristics to the desired number (quota)

3. Results and Discussion

3.1 Univariate Analysis

Table 1
Univariate Analysis

No	Variabel	Non LONG TERM CONTRASEPTION		LONG TERM CONTRASEPTION		Total	
1	Age	n	%	n	%	n	%
	20-35	40	78.4	32	62.7	72	70.6
	<20 - >35	11	21.6	19	37.3	30	29.4
	Total	51	100	51	100	102	100

From the results of the study, it was known that the age <20 years and >35 years in Non LONG TERM CONTRASEPTION were 11 people (21.6%) and in the LONG TERM CONTRASEPTION group there were 19 people (37.3%).

3.2 Bivariate Analysis

a. Relationship of Age with Unsuccessful Use of LONG TERM CONTRASEPTION

Table 2
Age Unsuccessful Use of Long Term Contraception

Age	Unsuccessful use of LONG TERM CONTRASEPTION				Total	P Value	QR 95% CI
	Non LONG TERM CONTRASEPTION		LONG TERM CONTRASEPTION				
	n	%	N	%			
20-35	40	78.4	32	62.7	72	72	0.463
<20 and>35	11	21.6	19	37.3	30	30	(0.183 - 1.112)

Age	Unsuccessful use of LONG TERM CONTRASEPTION				Total	P Value	QR 95% CI
	Non LONG TERM CONTRASEPTION	LONG TERM CONTRASEPTION	Non LONG TERM CONTRASEPTION	LONG TERM CONTRASEPTION			
Total	51	100	51	100	102	100	

Based on table 7 of the 51 case groups there were 11 people (21.6%) EFA aged <20 and >35 years who did not use LONG TERM CONTRASEPTION and from 51 controls there were 19 people (37.3%) aged <20 and >35 years old who use LONG TERM CONTRASEPTION. The results of the chi-square test obtained P value = 0.128 > (0.05) This means that at a significance level of 5% there is no significant relationship between age and the unsuccessful use of LONG TERM CONTRASEPTION.

b. Relationship between Number of Children and Unsuccessful Use of LONG TERM CONTRASEPTION

Table 3
Number of Children and Unsuccessful Use of Long Term Contraception

Number of children	Unsuccessful use of LONG TERM CONTRASEPTION				Total	P Value	QR 95% CI
	Non LONG TERM CONTRASEPTION	LONG TERM CONTRASEPTION	Non LONG TERM CONTRASEPTION	LONG TERM CONTRASEPTION			
	n	%	N	%			
2 people	31	60.8	18	35.3	49	48.0	0.027 (1,194-6,103)
> 2 people	20	39.2	33	64.7	53	52.0	
Total	51	100	51	100	102	100	

Based on table 8 of 51 Non LONG TERM CONTRASEPTION there are 20 people (39.2%) who have children > 2 people do not use LONG TERM CONTRASEPTION and from 51 LONG TERM CONTRASEPTION there are 33 people (64.7%) who have children > 2 people using LONG TERM CONTRASEPTION. The results of the Chi-Square Test obtained P value = 0.027 < (0.05), this means that at a significance level of 5% there is a significant relationship between the number of children and the unsuccessful use of LONG TERM CONTRASEPTION. Analysis of the closeness of the relationship between the two variables obtained an Odds Ratio (OR) = 2.700, meaning that the number of children > 2 people has 2 times the risk of not using LONG TERM CONTRASEPTION compared to the number of children ≤2 people.

c. The Relationship between Education Level and Unsuccessful Use of LONG TERM CONTRASEPTION

Table 4
The Relationship between Education Level and the Unsuccessful Use of Long-Term Contraception Methods (LONG TERM CONTRASEPTION) in the Work Area of the Umban Sari Health Center in 2020

Level of education	Unsuccessful use of LONG TERM CONTRASEPTION				Total	P Value	QR 95% CI
	Non LONG TERM CONTRASEPTION	LONG TERM CONTRASEPTION	Non LONG TERM CONTRASEPTION	LONG TERM CONTRASEPTION			
	n	%	N	%			
Tall	26	51.0	42	82.4	68	66.7	0.002 (1,815-11,096)
Low	25	49.0	9	17.6	34	33.3	
Total	51	100	51	100	102	100	

Based on table 9 of 51 Non LONG TERM CONTRASEPTION there are 25 people (49%) who have a low level of education do not use LONG TERM CONTRASEPTION and of 51 LONG TERM CONTRASEPTION there are 9 people (17.6%) who have low education using LONG TERM CONTRASEPTION. The results of the Chi-Square Test obtained P value = 0.002 < (0.05) this means that at a significance level of 5% there is a significant relationship between the level of education and the unsuccessful use of LONG TERM CONTRASEPTION. Analysis of the closeness of the relationship variables obtained the value of Odds Ratio (OR) = 4.487, meaning that low education levels are 4 times the risk of not using LONG TERM CONTRASEPTION compared to higher education levels.

d. Relationship of Knowledge with Unsuccessful Use of LONG TERM CONTRASEPTION

Table 5
Relationship of Knowledge with Unsuccessful Use of LONG TERM CONTRASEPTION

Knowledge	Unsuccessful use of LONG TERM CONTRASEPTION				Total	P Value	
	Non LONG TERM CONTRASEPTION		LONG TERM CONTRASEPTION				
	n	%	n	%	N	%	
Tall	15	29.4	36	70.6	51	50.0	0.0001
Low	36	70.6	15	29.4	51	50.0	

Berd Based on table 10 of 51 Non LONG TERM CONTRASEPTION there were 36 people (70.6%) who had low knowledge of not using LONG TERM CONTRASEPTION and from 51 controls there were 15 people (29.4%) who had low knowledge of using LONG TERM CONTRASEPTION. The results of the Chi-Square Test obtained P-value 0.0001 <0.05, this means that there is a significant relationship between knowledge and the unsuccessful use of LONG TERM CONTRASEPTION. Analysis of the close relationship between two variables, the value of Odds Ratio (OR) = 5.760 means that low knowledge is 5 times the risk of not using LONG TERM CONTRASEPTION compared to high knowledge

e. Relationship between Attitude and Unsuccessful Use of LONG TERM CONTRASEPTIO

Table 6
Relationship between Attitude and Unsuccessful Use of LONG TERM CONTRASEPTIO

Attitude	Unsuccessful use of LONG TERM CONTRASEPTION				Total	P Value	
	Non LONG TERM CONTRASEPTION		LONG TERM CONTRASEPTION				
	n	%	N	%	N	%	
Positive	25	49.0	38	74.5	63	61.6	0.014
Negative	26	51.0	13	25.5	39	38.2	

Based on table 11 of 51 Non LONG TERM CONTRASEPTION there are 26 people who have a negative attitude as many as 26 people (51%) do not use LONG TERM CONTRASEPTION and from 51 LONG TERM CONTRASEPTION there are 13 people (25.5%) who have a negative attitude towards using LONG TERM CONTRASEPTION. The results of the Chi-Square Test obtained P value = 0.014 <0.05, this means that there is a relationship between attitude and the unsuccessful use of LONG TERM CONTRASEPTION. Analysis of the close relationship between the two variables, the value of Odds Ratio (OR) = 3.040 means that those who have a negative attitude are 3 times the risk of not using LONG TERM CONTRASEPTION compared to those who have a positive attitude.

f. Relationship of Spouse Support with Unsuccessful Use of LONG TERM CONTRASEPTION

Table 7
Relationship Of Spouse Support With Unsuccessful Use Of Long Term Contraception

Couple Support	Unsuccessful use of LONG TERM CONTRASEPTION				Total	P Value	
	Non LONG TERM CONTRASEPTION		Control				
	n	%	n	%	N	%	
Support	21	41.2	35	68.6	56	54.9	0.01
Does not support	30	58.8	16	31.4	46	45.1	

Based on table 12 of the 51 Non-LONG TERM CONTRASEPTION there were 30 people (58.8%) who did not have the support of a partner who did not use LONG TERM CONTRASEPTION. Of the 51 LONG TERM CONTRASEPTION there were 16 people (31.4%) using LONG TERM CONTRASEPTION. The results of the Chi-Square Test obtained Pvalue = 0.01 < 0.05 this means that there is a significant relationship between age and the unsuccessful use of LONG TERM CONTRASEPTION. Analysis of the closeness of the relationship between the two variables obtained an Odds Ratio (OR) = 3.125, meaning that couples who do not support are 3 times more likely to not use LONG TERM CONTRASEPTION than those who do

g. The Relationship between the Role of Health Officers and the Unsuccessful Use of LONG TERM CONTRASEPTION

Table 8

The Relationship between The Role Of Health Officers And The Unsuccessful Use Of Long Term Contraception

Health workers	Unsuccessful use of LONG TERM CONTRASEPTION				Total		P Value	QR 95% CI
	Non LONG TERM CONTRASEPTION		LONG TERM CONTRASEPTION		N	%		
role	n	%	n	%	N	%		
No role	21	41.2	20	39.2	41	40.2	0.1	(0.492-2.395)
Total	51	100	51	100	102	100		

Based on table 13 out of 51 Non LONG TERM CONTRASEPTION there were 21 people (41.2%) who did not get the role of health workers and from 51 LONG TERM CONTRASEPTION there were 20 people (39.2%) using LONG TERM CONTRASEPTION. The results of the Chi-Square Test obtained P-value 0.1 < 0.05, this means that there is no relationship between age and the unsuccessful use of LONG TERM CONTRASEPTION.

3.3 Discussion

a. The Relationship of Age with the Unsuccessful Use of Long-Term Contraceptive Methods

Based on the results of calculations using the Chi-square test obtained P-value 0.128 < 0.05, which means there is no relationship between age and the unsuccessful use of long-term contraceptive methods.

The results of this study are supported by the research of Wenny, L et al, (2020) Age has an exp B value of 2.24 which means that the tendency of people aged ≥35 years to choose LONG TERM CONTRASEPTION is 2.24 greater than the tendency of people with age <35 years. .

According to the researcher's assumptions, age <20 and >35 years does not affect the use of long-term contraceptive methods because the use of contraception is based on the number of children owned by PUS, the more children owned by EFA, the higher the use of long-term contraceptive methods, while many are aged 20-24. 35 years who have used LONG TERM CONTRASEPTION with the reason that they already know the effectiveness of LONG TERM CONTRASEPTION, and LONG TERM CONTRASEPTION is the right contraception tool to regulate the desired spacing of children.

b. Relationship between the number of children and the unsuccessful use of long-term contraceptive methods

Based on the results of calculations using the Chi-square test obtained P value 0.0027 < (0.05), which means there is a relationship between the number of children and the unsuccessful use of long-term contraceptive methods. With the value of Odds Ratio (OR) = 2.700, it means that the number of children has a risk of not using long-term contraceptive methods compared to the number of children

The results of this study are supported by research by Fienalia (2011) with the title factors related to long-term contraceptive methods in Depok, which states that respondents who have 3 children will have a 3.9 times greater chance of using LONG TERM CONTRASEPTION.

According to the researcher's assumptions, mothers who have more than 2 children think that they have had enough with 2 children and feel that they do not want to get pregnant again due to support from partners who only want 2 children. By having two children, mothers feel more able to manage their daily activities, especially for mothers who work outside the home.

c. The Relationship between Education Level and Unsuccessful Use of Long-Term Contraceptive Methods

Based on the results of calculations using the Chi-square test obtained P value 0.002 < 0.05, which means that there is a relationship between the level of education and the unsuccessful use of long-term contraceptive methods. With the value of Odds Ratio (OR) = 4,487, it means that the low level of education has 4 times the risk of not using long-term contraceptive methods compared to high.

The results of this study are supported by the research of Weny, L et al (2020) Education has a B value of 0.31 which means that the tendency of people with higher education to choose LONG TERM CONTRASEPTION is 0.31 times compared to the possibility of people with low education. The results of the survey on the performance indicators of the RPJMN KKBPK program also showed the same results as the results of this study, where the use of contraception generally decreased with the increase in a person's education. The 3-month injection contraceptive method, pills and implants were dominated by

acceptors with junior high school education and below.

According to the assumption of the researcher, the level of education affects a person's knowledge about something he wants to choose, including in choosing the contraceptive method he wants to use. The higher the level of education will affect a person in taking the right action or decision for him, and the higher the level of education a person will influence in receiving input from others on the delivery of health information provided. Likewise with the use of long-term contraceptives, the level of higher education will cause a positive response to information so that it will produce positive behavior or actions in the use of long-term contraceptive methods.

d. The Relationship of Knowledge with the Unsuccessful Use of Long-Term Contraceptive Methods

Based on the results of calculations using the Chi-square test obtained P value $0.0001 < (0.05)$, which means there is a relationship between age and the unsuccessful use of long-term contraceptive methods. With the value of Odds Ratio (OR) = 5.760, it means that low knowledge has 5 times the risk of not using long-term contraceptive methods compared to high knowledge.

The results of this study are supported by the research of Maheasy, N. et al (2015) with the title Analysis of factors related to the selection of long-term contraceptive methods (LONG TERM CONTRASEPTION) on female family planning acceptors in Banyubiru District, Semarang Regency that there is a relationship between knowledge and the choice of long-term contraception with result p value 0.001. Based on the risk estimate test, it was found that the Prevalance Ratio (PR) value of 1.912 means that acceptors who have less and sufficient knowledge have the opportunity to choose a non-LONG TERM CONTRASEPTION contraceptive method of 1.912 or 2 times greater than those who have good knowledge according to The researcher's assumption is that good knowledge of certain contraceptive methods will change the perspective of family planning users in determining appropriate and effective contraception to use, thus making family planning users more comfortable with contraception and with good knowledge of contraceptives can avoid mistakes in choosing contraception.

e. The Relationship between Attitudes and the Unsuccessful Use of Long-Term Contraceptive Methods

Based on the results of calculations using the Chi-square test obtained P-value $0.014 < \alpha (0.05)$, which means there is a relationship between attitude and the unsuccessful use of long-term contraceptive methods. With the value of Odds Ratio (OR) = 3.040, it means that a negative attitude has 3 times the risk of not using a long-term contraceptive method compared to a positive attitude. The results of this study are supported by the research of Setiasih, S. et al (2013) entitled Analysis of Factors Influencing the Selection of Long-Term Contraception Methods (LONG TERM CONTRASEPTION) in Women of Childbearing Age (PUS) in Kendal Regency that there is a relationship between attitudes and the choice of contraceptive methods. long term Pvalue = 0.0027. According to the researcher's assumption, the attitude of influencing the actions that will be taken by EFA in the use of long-term contraceptive methods, with a positive attitude towards information about long-term contraceptive methods, will enable individuals to accept suggestions from other people and health workers so that they affect EFA in the use of LONG TERM CONTRASEPTION.

f. Relationship of Spouse Support with Unsuccessful Use of Long-Term Contraceptive Methods

Based on the results of calculations using the Chi-square test obtained P-value $0.01 < (0.05)$, which means that there is a relationship between partner support and the unsuccessful use of long-term contraceptive methods. With an Odds Ratio (OR) = 3.125, it means that those who do not have partner support have a 3 times risk of not using long-term contraceptive methods compared to those who have partner support. According to the researcher's assumption, the mother has received the support of her partner in the form of attention and financial so as to provide freedom for the mother in choosing contraception that is suitable and comfortable according to the mother. but many couples do not know about information about long-term contraceptive methods. Couples should also be given information about LONG TERM CONTRASEPTION in order to have more knowledge about it because with this more knowledge, they will be able to give attention and permission to their partners in LONG TERM CONTRASEPTION in order to maintain the behavior of family planning acceptors to be able to continue using LONG TERM CONTRASEPTION.

g. The Relationship between the Role of Health Workers and the Unsuccessful Use of Long-Term Contraceptive Methods

Based on the results of calculations using the Chi-square test obtained p-value $0.1 < (0.05)$, which means there is no relationship between the role of health workers with the unsuccessful use of long-

term contraceptive methods. According to Grenn's theory in Notoadmodjo (2010), enabling factors are factors that enable or facilitate a person's behavior or actions. What is meant by enabling factors are facilities or facilities for the occurrence of health behavior such as puskesmas, number of health workers, posyandu, nutritious food, money and so on. The results of this study are supported by research by Yuanti, Y and Maesaroh (2020) with the title Determinants of the Selection of Long-Term Contraception Methods (LONG TERM CONTRASEPTION) in Couples of Childbearing Age, the support of health workers is one of the enabling factors in determining the choice of contraception. However, the multiple logistic regression statistical test obtained p value = 0.801, which means that there is no significant relationship between health workers' support and the selection of LONG TERM CONTRASEPTION.

According to the researcher's assumption, health workers have provided information at the posyandu regarding the use of LONG TERM CONTRASEPTION, only couples of childbearing age still feel foreign to LONG TERM CONTRASEPTION and are still much influenced by the myths that have been circulating in the community regarding the use of IUDs which can cause maternal death because the IUD can penetrate the organs. other things such as the heart, besides that there is a myth that the use of implants that have been installed under the skin is not found when removing the use of the implant, this causes the use of LONG TERM CONTRASEPTION is still very low. For this reason, information about family planning by health workers, including counseling, needs to be done because it can help prospective participants get an idea about various types of contraception and then make the right decision on their choice.

4. Conclusion

There is a relationship between the number of children, education level, knowledge, attitude and partner support with the unsuccessful use of long-term contraceptive methods in the Umban Sari Health Center Work Area in 2020. There is no relationship between age and the role of health workers with the unsuccessful use of long-term contraceptive methods in the Umban Sari Health Center Work Area

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