



## RELATIONSHIP OF AGE, EDUCATION, MOM'S KNOWLEDGE ABOUT IMPLANT CONTRACEPTION WITH THE USE OF IMPLANT CONTRACEPTION IN PUSKESMAS SILINDA IN 2021

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### ABSTRACT

The contraceptive program that is promoted and effective is the long-term contraceptive method (MKJP) with implants being one of the leading methods. The percentage of the number of family planning participants who reported no significant change was from 60% in 2006 to 61% in 2014 (BKKBN, 2013). The results of a preliminary survey conducted at the Silinda Health Center obtained information that the total number of family planning acceptors who became implant contraceptive acceptors was still very small, around 1.5% of the total family planning acceptors who used other contraceptive methods due to fear and lack of knowledge about the benefits of implants. The purpose of this study was to determine the relationship between age, education, knowledge of mothers about implant contraceptives and the use of implant contraceptives at the Silinda Health Center in 2021. The type of research was an analytical survey with a cross sectional approach. The population is pregnant women of all women of childbearing age totaling 95 people with a total sample of 49 people with accidental sampling technique using a questionnaire. Data analysis used chi square test at a significance level of 95%. The results showed that the relationship between maternal age and the use of contraceptive implants using the formula  $\chi^2$  (chi square) with  $p$  value = 0.133 ( $p > 0.05$ ), which means that there is no relationship between maternal age and the use of implant contraceptives, the relationship between maternal education and contraceptive use. implant using the formula  $\chi^2$  (chi square) with  $p$  value = 0.154 ( $p > 0.05$ ) which means that there is no relationship between maternal education and the use of implant contraceptives, and the relationship between mother's knowledge and the use of implant contraceptives using the  $\chi^2$  (chi square) formula with  $p$  value = 0.001 ( $p > 0.05$ ) which means that there is a relationship between mother's knowledge and the use of implant contraceptives. It was concluded that only the knowledge variable had a relationship with the use of implant contraceptives. It is expected that health workers at the Silinda Health Center will provide more information about implant contraceptives to women of childbearing age.

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**1. INTRODUCTION**

Health development is a part of national development which aims to increase awareness, willingness and ability to live healthy for everyone in order to realize the highest degree of public health. The health development is an effort of all the potentials of the Indonesian nation, both the community, the private sector and the government (Kemenkes RI, 2011). Population increase is one of the big problems for developing countries. Indonesia is a country with the largest population after China, India and the United States. Based on the 2010 population census, it is known that the total population of Indonesia is 237,641,326 people, which includes those who live in urban areas as many as 118,320,256 people (49.79%) and in rural areas as many as 119,321,070 people (50.21%). .

One of the methods used by the Population Control Agency to reduce the rate of population growth is through birth control. The government through the Population and Family Planning Agency (BKKBN) has implemented the Family Planning (KB) program which began in 1970. In the early decades of the family planning program (1970-1990), the rate of population growth in Indonesia could be reduced to 1.98% and 1.40% in the next decade (1990-2000). Furthermore, in 2000-2010 the population growth rate increased to 1.49% (BPS, 2013). It is estimated that ten thousand babies are born every day, in other words, the population of Indonesia increases by about 3.5 million people every year. During the reformation period, the family planning program has stagnated for the last 10 years, the government has not been able to reduce the total fertility rate (TFR) which reached 2.6. This figure is still far from the target of 2.1. This very rapid growth rate will be a problem for the future development of the Indonesian nation (BKKBN, 2013).

The contraceptive program that is promoted and effective is the long-term contraceptive method (MKJP) with implants being one of the leading methods. The achievement of MKJP in 2014, the total number of MKJP users was 10.6% while the National target of MKJP users was 10%. The total fertility rate has decreased globally, but in developing countries the decline has occurred very slowly due to the low use of modern contraception, which is only 31% (Sherpa, 2012). The percentage of reported family planning participants did not change, namely 60% in 2006 to 61% in 2014 (BKKBN, 2013).

Implant contraceptives make a major contribution in helping control the population by preventing unwanted pregnancies (Winner et al, 2015). The use of implant contraceptives is influenced by many factors. Research on factors related to contraceptive use conducted in Ethiopia found that knowledge and parity of more than two had a significant relationship to the use of contraceptives (Rainy Alus, 2016).

North Sumatra is the fourth most populous province in Indonesia after East Java, West Java and Central Java. Based on data from the BPS of North Sumatra Province, the population of North Sumatra in 2014 was recorded at 13,326,307 people, an increase from 2013 as many as 110,906 people (0.84%) from 13,215,401 people. The number of couples of childbearing age (PUS) in North Sumatra Province in 2013 was 2,184,486 people with 424,583 new family planning participants (19.44%) and 1,477,026 active family planning participants (67.61%). The

highest number of active family planning participants according to the type of contraception used was injection with a total of 481,113 people (32.57%) and followed by pills as many as 452,150 people (30.61%) (Kemenkes RI, 2015).

The number of EFA in 2013 in the city of Medan was 330,376 people with the number of active family planning participants who used the pill as many as 69,404 people (31.40%) which was in second place after users of injectable contraceptives, which were 77,711 people (35.15%), IUDs. 29,249 people (13.23%), MOW 13,414 people (6.07%), implants 16,025 people (7.25%), and condoms 13,127 people (5.94%) (Medan City Health Office, 2016).

Based on the results of a preliminary survey conducted at the Silinda Health Center, information was obtained that the total number of family planning acceptors who became implant contraceptive acceptors was still very small, around 15% of the total family planning acceptors who used other contraceptive methods due to fear and lack of knowledge about the benefits of implants. So from this, researchers are interested in conducting research on the Relationship between Age, Education, Mother's Knowledge About Implant Contraceptives with the Use of Implant Contraceptives at the Silinda Health Center in 2021.

## 2. RESEARCH METHODE

This type of research is an analytical survey with a cross sectional approach, which is a type of research looking for the relationship between the independent variables (age, education, and knowledge) with the dependent variable (use of implant contraceptives) by taking instantaneous measurements (Sugiyono, 2017). This approach can describe the relationship between Age, Education, Mother's Knowledge of Implant Contraceptives with the Use of Implant Contraceptives at the Silinda Health Center.

This research will be carried out at the Silinda Public Health Center. This research was conducted from September to November 2021 with a population of 95 people, while the number of samples was 50 people with accidental sampling technique.

## 3. RESULT AND ANALYSIS

### Univariate Analysis

Univariate analysis aims to find out the frequency distribution of a respondent's answer to a variable based on the research problem as outlined in the form of frequency. Then the following results are obtained:

**Tabel 1. Distribusi Karakteristik Responden**

Variabel	N	Persentase (%)
<b>Umur</b>		
<20 tahun	5	10
20-35 tahun	27	54
>35 tahun	18	36
<b>Pendidikan</b>		
SMP	13	26
SMA	32	64
PT	5	10
<b>Pengetahuan</b>		
Baik	14	28
Cukup	25	50
Kurang	11	22
<b>Penggunaan Kontrasepsi</b>		
<b>Implant</b>		
Iya	19	38
Tidak	31	62

Jumlah 50 100

The results showed that the majority of respondents aged 20-35 years were as many as 27 people (54%) and the minority aged <20 years were 5 people (10%), the majority of respondents had high school education as many as 32 people (64%) and the minority was educated at PT. that is as many as 5 people (10%), the majority of respondents have sufficient knowledge as many as 25 people (41.9%) and the minority has less knowledge as many as 11 people (22%), and the majority of respondents do not use implant contraceptives as many as 31 people (62%) and a minority using implant contraceptives as many as 19 people (38%).

### Bivariate Analysis

Table 2. Relationship between Age and Use of Implant Contraceptives at Silinda Health Center in 2021

**Tabel 2. Hubungan Umur Dengan Penggunaan Kontrasepsi Implant Di Puskesmas Silinda Tahun 2021**

Umur	Penggunaan Kontrasepsi Implant				Jumlah		<i>p value</i>
	Iya		Tidak		n	%	
	n	%	n	%			
<20 tahun	2	40	3	60	5	100	0,133
20-35 tahun	7	25,9	20	74,1	27	100	
>35 tahun	10	55,6	8	44,4	18	100	
<b>Jumlah</b>	<b>19</b>	<b>38</b>	<b>31</b>	<b>62</b>	<b>50</b>	<b>100</b>	

Based on Table 2. it is known that mothers aged <20 years who use implant contraceptives are 2 respondents (40%) while those who do not use implant contraceptives are 3 respondents (60%). Mothers aged 20-35 years who use implant contraceptives are 7 respondents (25.9%) while those who do not use implant contraceptives are 20 respondents (74.1%). Mothers aged >35 years who used implant contraceptives were 10 respondents (55.6%) who did not use implant contraceptives, namely 8 respondents (44.4%). The results of the chi square test analysis with  $p$  value = 0.133 ( $P > 0.05$ ), which means that there is no relationship between maternal age and the use of implant contraceptives at the Silinda Health Center in 2021.

**Tabel 3. Hubungan Pendidikan Dengan Penggunaan Kontrasepsi Implant Di Puskesmas Silinda Tahun 2021**

Pendidikan	Penggunaan Kontrasepsi Implant				Jumlah		<i>p value</i>
	Iya		Tidak		n	%	
	n	%	n	%			
SMP	7	53,8	6	36,2	13	100	0,154
SMA	9	28,1	23	71,9	32	100	
PT	3	60	2	40	5	100	
<b>Jumlah</b>	<b>19</b>	<b>38</b>	<b>31</b>	<b>62</b>	<b>50</b>	<b>100</b>	

Based on Table 3. it is known that mothers with junior high school education who use implant contraceptives are 7 respondents (53.8%) while those who do not use implant contraceptives are 6 respondents (36.2%). Mothers with high school education who use implant contraceptives are 9 respondents (28.1%) while those who do not use implant contraceptives are

23 respondents (71.9%). Mothers with higher education education who use implant contraceptives are 3 respondents (60%) who do not use implant contraceptives, as many as 2 respondents (40%). The results of the chi square test analysis with p value = 0.154 ( $P > 0.05$ ), which means that there is no relationship between maternal education and the use of implant contraceptives at the Silinda Health Center in 2021.

**Tabel 4. Hubungan Pengetahuan Dengan Penggunaan Kontrasepsi Implant Di Puskesmas Silinda Tahun 2021**

Pengetahuan	Penggunaan Kontrasepsi Implant				Jumlah		p-value
	Iya		Tidak				
	n	%	n	%	n	%	
Baik	11	78,9	3	21,4	14	100	0,001
Cukup	7	28	18	72	25	100	
Kurang	1	9,1	10	90,9	11	100	
<b>Jumlah</b>	<b>19</b>	<b>38</b>	<b>31</b>	<b>62</b>	<b>50</b>	<b>100</b>	

Based on Table 4. it is known that mothers who have good knowledge who use implant contraceptives are 11 respondents (78.9%) while those who do not use implant contraceptives are 3 respondents (21.4%). Mothers who have sufficient knowledge who use implant contraceptives are 7 respondents (28%) while those who do not use implant contraceptives are 18 respondents (72%). Mothers who are sufficiently knowledgeable who use implant contraceptives are 1 respondent (9.1%) who do not using implant contraceptives, as many as 10 respondents (90.9%). The results of the chi square test analysis with p value = 0.154 ( $P > 0.05$ ), which means that there is a relationship between mother's knowledge and the use of implant contraceptives at the Silinda Health Center in 2021.

#### 4. CONCLUSION

The conclusions in this study are:

1. There is no relationship between maternal age and the use of implant contraceptives using the formula  $\chi^2$  (chi square) with p value = 0.133 ( $P < 0.05$ ).
2. There is no relationship between maternal education and the use of implant contraceptives using the formula  $\chi^2$  (chi square) with p value = 0.154 ( $P < 0.05$ ).
3. There is a relationship between maternal knowledge and the use of implant contraceptives using the formula  $\chi^2$  (chi square) with p value = 0.016 ( $P < 0.05$ ).

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