

## The Relationship on Knowledge of Women of Word About Contraception in Women with Participation Mother in Using it in Public Health Center Tanjung Morawa

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### ABSTRACT

The main problem faced by Indonesia in the field of population is population growth which is still high. Based on the Indonesian Demographic Health Survey (IDHS), the coverage of active family planning participants in Indonesia in 2012 was 76.39%. The purpose of this study was to determine the relationship between knowledge of couples of childbearing age about intrauterine devices with maternal participation in using them. This study uses *an analytical survey design* with a *cross sectional approach*. The population is the mother of couples of childbearing age as many as 6,052 people. Sampling using *the slovin formula* as many as 98 samples. Data processing using *chi-square test*. The results of the Chi -Square test results showed that the *p value* = 0.005 (< 0.05). The conclusion of this study is that there is a relationship between knowledge of fertile age couples about intrauterine contraceptive devices with participation in using them at the Tanjung Morawa Health Center in 2022. It is hoped that this research can be input for health workers at the Tanjung Morawa Health Center to further improve health promotion regarding the use of intrauterine devices.

#### Keywords:

Knowledge, Contraceptive Devices in the Womb

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## 1. INTRODUCTION

### Background

The National Family Planning Program has been changed to the National Family Planning Movement. The National Family Planning Movement is a community movement that gathers and invites all community potentials to actively participate in institutionalizing and cultivating the Small Happy and Prosperous Family Norm (NKKBS) in order to improve the quality of human resources in Indonesia. The goal of the National Family Planning Movement is to create a happy and prosperous small family which is the basis for the realization of a prosperous society through birth control and population growth in Indonesia. [1]

The main problem faced by Indonesia in the field of population is population growth which is still high. The higher the population growth, the greater the effort made to maintain the welfare of the people. The threat of a population explosion in Indonesia is getting real. This can be seen from the survey results of the population in 2012 which amounted to 244,775,797 people, consisting of a male population of 132.222,475 and a female population of 121,553,322 with a sex ratio of 101. This figure means that there are 101 male men out of 100 women. [1]

It is estimated that Indonesia's population in 2015 reached 255.5 million. Therefore, the Government continues to strive to suppress the rate of growth with the Family Planning (KB) program. The family planning program is an integral part of the national development program and aims to participate in creating the welfare of the Indonesian population, in order to achieve a good balance. [2]

Based on the Indonesian Health Demographic Survey (IDHS), the coverage of active family planning participants in Indonesia in 2012 was 76.39%. Description provincial distribution shows that the highest percentage

is Bengkulu Province by 87.91%, followed by Gorontalo Province at 86.96%, and Bali Province by 86.11%. The province with the lowest percentage was Papua at 67.7%, followed by North Sumatra at 67.99%, and Banten at 69.95%. The use of contraceptive methods in family planning consists of several types. Family planning participation according to contraceptive method use in 2012 shows that most family planning participants choose to use short-term contraceptive methods through injections[3]

The percentage of active family planning participants according to the contraceptive method, namely injectable family planning acceptors was 46.84%, pill family planning acceptors 25.13%, condom acceptors reached 3.13%, implant family planning acceptors with a percentage of 9.17%, IUD family planning acceptors reached 11.53%, KB MOW Acceptors 3.49% and MOP 0.70%.[3]

The level of welfare of a nation is determined by how far the Family Planning movement can be accepted in society. A quality family is a family that is prosperous, healthy, advanced, independent, has the ideal number of children, is forward-looking, responsible, harmonious and devoted to God Almighty. [4]

According to the 2013 Indonesian Health Profile, it is known that the most widely used contraceptive method by active family planning participants is injections (46.87%) and the second most is pills (24.54%). While the contraceptive method that was chosen the least by active family planning participants was the Male Operation Method (MOP), which was 0.69%, then condoms were 3.22%. The highest percentage of active family planning participants was Aceh (89.9%), then DIY (89.08%) and Bali (86.16%). Meanwhile, the provinces with the lowest percentage of active family planning participants were West Papua Province (4.80%) and Papua Province (16.09%). Nationally, the percentage of active family planning participants in 2013 was 76.73%. [4]

Family Planning is the first pillar of *safe motherhood* which is expected to reduce the risk of maternal death during childbirth due to too many births and too short the distance between births. This effort is also to prevent unwanted pregnancies in couples of childbearing age (EFA) which have the potential to cause new social problems in society. Many women have difficulty in choosing the type of contraception. This is caused not only by the limited methods available, but also because of the mother's ignorance about the requirements and safety of these contraceptive methods.

Meanwhile, for new family planning participants, the percentage of the most used contraceptive method was injection, which was 48.56%. The second most common method is pills, with 26.60%. The method that was chosen the least by new family planning participants was the male operation method (MOP) as much as 0.25%, then the female surgical method (MOW) as much as 1.52%, and condoms (6.09%) and the IUD at 7.75%. [4]

Based on data on the health profile of the districts/cities of North Sumatra Province in 2012, the number of new family planning participants was 19.44%, an increase compared to 2011 which was 14.08%, in 2010 was 17.05% and in 2009 was 14.58%. . the percentage of use of contraceptive injections is (32%), pills (31%), implants (11%), MOW (7%), MOP (1%), condoms (7%) and IUDs (11%). [5]

Intrauterine contraception is one of the modern contraceptives that has been designed in such a way (both in terms of shape, size, material, and the active period of the contraceptive function), is placed in the uterine cavity as a contraceptive effort, prevents fertilization, and makes it difficult for eggs to implant in the uterus. The advantages of IUDs include high effectiveness, ie 0.6-0.8 pregnancies per 100 women in the first year of use, no hormonal side effects, generally safe and effective, can be used until menopause.[6]

Based on the results of an initial survey conducted by researchers at the Tanjung Morawa Health Center on 10 women of childbearing age, there were 8 mothers who said they were afraid to use intrauterine devices and preferred injection or pill contraception and 2 used intrauterine devices .

From the data that has been described previously, the researchers are therefore interested in conducting research on the relationship between knowledge of women of childbearing age about Intrauterine Contraceptive Devices and mother's participation in using them at the Tanjung Morawa Health Center in 2022. The purpose of this study was to determine the relationship between knowledge of women of childbearing age about intrauterine contraceptive devices with mother's participation in using them at the Tanjung Morawa Health Center in 2022.

## 2. METHOD

### Research design

The research design used is *an analytic survey research* with a *cross sectional approach* where data that includes independent variables and dependent variables will be collected and measured at the same time. *This study aims* to determine the relationship between knowledge of women of childbearing age about intrauterine contraceptive devices and the participation of mothers in using them at the Tanjung Morawa Health Center in 2022. [17] This research was conducted at the Tanjung Morawa Health Center . The time of the research was carried out in April-August 2022.

### Population and Sample

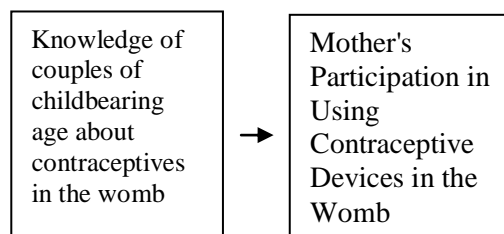
Population is all subjects to be studied and meet the specified characteristics. [16] The population used in this study as case subjects were mothers of childbearing age who were at the Tanjung Morawa Health Center as many as 6,052 people.

The sample is part of the number and characteristics possessed by the population. [16] The sampling technique used in this study is *purposive sampling*, namely sampling based on the *judgment* of the researcher regarding who is worthy (fulfilling the requirements) to be sampled. So, the sample size in this study amounted to 98 respondents.

### Conceptual framework

Conceptual framework is a research flow that shows the variables that influence and are influenced.

*Independent Variables      Dependent Variables*



**Figure 1. Conceptual framework**

### Operational definition

**TABLE 1.**  
*Operational Definition and Measurement Aspect*

Independent Variable	Operational definition	Tool Measuring	Category	Weight	Measuring Scale
Mother's Knowledge of Couples of Childbearing Age	Everything mothers of fertile couples know about intrauterine devices	Questionnaire (22 questions) True = 1 False = 0	a. Good: (76%-100%) if the answer is correct (16-22)	3	ordinal
			b. Enough: (56%-75%) if the answer is correct (12-15)	2	
			c. Less: (<56%) if the correct answer is <12)	1	
Dependent variable	Operational definition	Measuring instrument	Category	Weight	Measuring Scale
Mother's participation in using intrauterine contraception	Mothers who use intrauterine contraception	Questionnaire (1 question)	a. Use	2	ordinal
			b. Do not use	1	

### Data collection technique

#### 1. Primary data

The data collected in this study is primary data, where primary data collection is carried out directly by the researcher by giving an explanation of filling out the questionnaire and then distributing questionnaires to respondents in order to obtain data about Contraceptive Devices in the Womb.

#### 2. Secondary Data

Secondary data in this study was obtained by looking at medical records at the Tanjung Morawa Health Center to see the records of family planning acceptors and records of the number of women of childbearing age at the Tanjung Morawa Health Center in 2022.

#### 3. Tertiary Data

The tertiary data collection was obtained by accessing through the official website the data that had been carried out by previous research, such as the IDHS data, the Indonesian Health Profile and the Health Profile of the Province of North Sumatra.

## Data analysis

### 1. Univariate Analysis

Univariate analysis was conducted to explain or describe the characteristics of each research variable. The form of univariate analysis depends on the type of data. In general, this research produces the distribution of the frequency and percentage of each variable.

### 2. Bivariate Analysis

After knowing the characteristics of each variable in this study, the analysis will continue at the bivariate level. To find out the relationship (correlation) between the independent variable ( *independent variable* ) and the dependent variable ( *dependent variable* ). [16] To prove the existence of a significant relationship between the independent variable and the dependent variable, *Chi-square analysis was used* with a 95% confidence level and at the statistical significance limit of the *p value* (0.05).

If the calculation results show  $p \text{ value} < p \text{ value}$  (0.05) then it is said ( $H_0$ ) is rejected, meaning that the two variables have a statistically significant relationship. Then to explain the association (relationship) between the dependent variable and the independent variable used cross tabulation analysis. [16]

## 3. RESULTS AND DISCUSSION

### 3.1. Results

#### Univariate Analysis

##### 1. Knowledge

**TABLE . 2.**

*Frequency Distribution of Knowledge of Couples of Childbearing Age about Intrauterine Contraceptive Devices at Tanjung Morawa Health Center in 2022*

No.	Knowledge	Amount	
		F	%
1	Well	18	18.4
2	Enough	37	37.8
3	Not enough	43	43.9
<b>Total</b>		<b>98</b>	<b>100</b>

Univariate results in table .2. it is known that of the 98 respondents (100%) the majority have less knowledge about intrauterine devices as many as 43 people (43.9%) and the minority have good knowledge about intrauterine devices as many as 18 people (18.4%).

##### 2. Mother's Participation in Using Contraceptive Devices in the Womb

**TABLE .3 .**

*Frequency Distribution of Mother's Participation in Using Intrauterine Contraceptives at Tanjung Morawa Health Center in 2022*

No.	Opt-in	Amount	
		F	%
1	Using	37	37.8
2	Do not use	61	62.2
<b>Total</b>		<b>98</b>	<b>100</b>

Based on Table .3. it is known that from 98 respondents (100%) with mothers of reproductive age couples who use contraceptives in the womb as many as 37 people (37.8%) and who do not use contraceptives in the womb as many as 61 people (62.2%).

## Bivariate Analysis

### Relationship between knowledge of women of childbearing age about contraceptive devices in the womb and participation in using them

TABLE . 4.

*Cross Tabulation of Knowledge of Mothers of Childbearing Age about Contraceptive Devices in the Womb with Participation in using them at Tanjung Morawa Health Center in 2022*

No	Knowledge	KB participation				Amount		P
		Use		Do not use		F	%	
		f	%	f	%			
1	Well	11	11.2	7	7.1	18	18.4	0.005
2	Enough	17	17.3	20	20.4	37	37.8	
3	Not enough	9	9.2	34	34.7	43	43.9	
	<b>Total</b>	<b>37</b>	<b>37.8</b>	<b>61</b>	<b>62.2</b>	<b>98</b>	<b>100</b>	

Based on Table .4. it is known that from 98 respondents (100%) there are 18 respondents with good knowledge, most of them use intrauterine devices , namely 18 people (11.2%), respondents with sufficient knowledge there are 37 people, most of whom do not use contraceptives in the womb as much as 20 people (20.4%) and a total of 43 respondents who had less knowledge mostly did not use intrauterine contraception , namely 34 people (34.7%). The results of the Chi-square test showed that  $p = 0.005 < 0.05$ , meaning that there was a relationship between knowledge of women of childbearing age about intrauterine devices and their participation in using them at the Tanjung Morawa Health Center in 2022.

## 3.2. Discussions

### 1. Knowledge

Low education also makes respondents less able to accept and understand family planning counseling provided by family planning officers, thus hampering the process of disseminating information about family planning and hindering the process of change. from not using an intrauterine device chooses to use an intrauterine device that is expected in the family planning program. Means that low education affects the use of contraceptives in the womb. Knowledge is a very important domain for the formation of open behavior. In general, the higher the level of education of a person, the better the level of knowledge. Rogers' research revealed that before people adopt a new behavior in the person there is a sequential process.

According to the researcher's assumption, that the majority shows that the respondents are less knowledgeable. Mothers with less knowledge can be influenced due to lack of information and low education they have. The more information the mother gets, the mother is expected to know more about an object. This is related to the mother's knowledge about the use and benefits of intrauterine contraceptives. With low knowledge about intrauterine contraceptives It is known that women of childbearing age are expected to increase the use of intrauterine contraceptives.

### 2. Participation in Using Contraceptives In The Womb

Family Planning (KB) is an effort to increase public awareness in realizing a happy and prosperous small family which is an effort to space or plan the number and spacing of pregnancies using contraception. (10)

The general goal is to form a small family in accordance with the socio-economic strength of a family, by regulating the birth of children in order to obtain a happy and prosperous family that can meet their needs. (10)

Intrauterine devices are made of elastic plastic, wrapped around copper or a mixture of copper and silver. Metallic coils cause an anti-fertility reaction with a duration of use that can reach 2-10 years, with the working method of preventing the entry of spermatozoa/seminal cells into the fallopian tubes. Installation and removal of this contraceptive device must be carried out by medical personnel (trained doctors or midwives), it can be used by all women of reproductive age but may not be used by women exposed to sexually transmitted infections.

The thing that encourages most respondents to choose the right contraceptive according to the conditions and needs of the mother is the high level of mother's knowledge about the types and types of contraceptives available, the advantages, disadvantages and also the side effects of each contraceptive. Respondents who did not choose to use contraception for several reasons, namely some of the community did not want to limit the number of offspring, were still afraid to use family planning, and the stigma that many children had a lot of fortune. In addition, due to lack of knowledge and information about family planning and not planning to participate in family planning at this time.

Basically all types of contraceptives will be considered good depending on the wearer, whether they feel it is suitable for the contraceptive they choose and according to their conditions and needs. Likewise, those who do not choose to use contraception, depending on the future plans that will be built by the husband and wife.

### **3. Relationship between knowledge of women of childbearing age about contraceptives in the womb and participation in using them**

Knowledge is the result of "knowing" and this occurs after people have sensed a certain object. Sensing of objects occurs through the five human senses, namely sight, hearing, smell, taste and touch. At the time of sensing to produce knowledge is strongly influenced by the intensity of attention perception of the object. Most of human knowledge is obtained through the eyes and ears. [15]

The results of the Chi-square test showed that  $p = 0.005 < 0.05$ , meaning that there was a relationship between knowledge of couples of childbearing age about intrauterine devices and their participation in using them at the Tanjung Morawa Health Center in 2022.

Knowledge can be increased by health workers by providing counseling about family planning on an ongoing basis and directly touching all levels of society, especially couples of childbearing age. The low interest of WUS in intrauterine contraception is inseparable from the low knowledge of these contraceptives. So it is very necessary to have a good understanding of intrauterine devices for women of childbearing age.

This is in line with the research conducted by Enggar Rosyanna in 2011 with the title of the relationship between the knowledge level of postpartum mothers and the interest in using intrauterine devices in the independent practice midwife (BPM) Ny.D in Sukomulyo Village, South Kaliwungu District, Kendal Regency. knowledge with interest in the use of Intrauterine Contraceptive Devices.

A person's knowledge about intrauterine devices can be obtained through experience or education as well as his understanding of intrauterine contraceptives. The higher a person's knowledge, the better his understanding of intrauterine contraceptives will be. Measurement of knowledge can be done by interviews or questionnaires that ask about the content of the material to be measured from the research subject.

According to the researcher's assumptions, the knowledge that mothers have about family planning is related to the use of intrauterine devices, but from the results of the study, it was found that mothers with good knowledge about family planning did not fully use intrauterine devices. Even though the postpartum woman did not use contraceptives in the womb, the postpartum women continued to use contraceptives other than intrauterine devices, such as injections, pills and some also used tubectomy.

## **4. CONCLUSION**

Based on the results of data analysis and discussion of the relationship between knowledge of women of childbearing age about contraceptive devices in the womb and participation in using them at the Tanjung Morawa Health Center in 2022, the following conclusions can be drawn:

1. Knowledge of Mothers of Childbearing Age about Contraceptive Devices in the Womb is the majority with less knowledge, as many as 43 people (43.9%).
2. Mother's participation in using contraceptives in the womb shows the majority of respondents do not use as many as 61 people (62.2%).
3. There is a correlation between knowledge of women of childbearing age about intrauterine contraceptive devices with participation in using them at the Tanjung Morawa Health Center in 2022 with  $p \text{ value} = 0.005 (< 0.05)$ .

### **Suggestion**

#### **1. Advice to Mother**

The results of the study are expected to be input and add insight to women of childbearing age about intrauterine contraception.

#### **2. Suggestions for Research Places**

This research is expected to be an input for health workers at the Tanjung Morawa Health Center to further improve health promotion regarding the use of intrauterine devices.

#### **3. Advice To Helvetia Institute of Health**

It is hoped that it can be used as input or information for further research in developing science in particular

#### **4. Suggestions for Further Researchers**

It is hoped that it can be used as a comparison material for researchers who will conduct research with the same topic and different research methods..

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