

## INTENTION IN USING LONG-TERM CONTRACEPTIVE METHODS (EXPLORING THE IMPACT OF KNOWLEDGE)

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### Abstract

*The purpose of this study is to determine the level of knowledge and interest in long-term contraceptive methods among couples of reproductive age in Cimahi, as well as to determine how much knowledge influences the interest of couples of reproductive age in using long-term contraceptive methods in Cimahi. Explanatory research is used in research. A sample of 400 respondents was distributed to couples of reproductive age in Cimahi who still use short-term contraceptive methods. The sampling technique used is quota sampling, which is distributed in 3 sub-districts in Cimahi. Questionnaires were distributed online and offline. The majority of Cimahi residents already know about long-term contraceptives, especially intrauterine devices. However, they are less interested in using long-term contraception. This is due to the perception of the high cost of installation. But they are basically willing to use long-term contraceptives if the installation fee is free. And their main choice is an intrauterine device. Knowledge is quite closely related to intention, which means that if knowledge is increased, couples of reproductive age's intention of using long-term contraceptives will also increase. Optimizing the roles of doctors, nurses, midwives, field instructors, and family and friends in disseminating information related to long-term contraceptives can be done to increase public knowledge. Correcting the information on the myths that have been circulating in the community related to the installation of long-term contraceptives can be done by involving a third party who is believed to be able to correct the incorrect myth. Corporate Social Responsibility activities from companies in Cimahi or community service from universities engaged in the health sector in collaboration with the local government and the Health Office to eliminate the cost of installing long-term contraceptives can be carried out to increase their use in Cimahi.*

**Keywords:** Long-Term Contraceptive Methods, Knowledge, Intention.

### Introduction

One of the targets of Population and Family Planning Development in the 2015-2019 National Medium-Term Development Plan is to increase the number of active family planning participants using the Long-Term Contraceptive Method. The indicator target for this is 23.5%. Meanwhile, the results of the Program Performance and Accountability Survey showed an achievement of 24.6 percent in 2019. So the target has been achieved.

The achievement of the national target has also been achieved by Cimahi, as one of the cities in West Java Province. The percentage of long-term contraceptive methods in Cimahi for 2019 is 33.8%. This percentage far exceeds the national target but has not been reduced by the percentage of couples of childbearing age who do not use or have not used contraception, which is 18.5%. If it is reduced by this percentage, the percentage of long-term contraceptive methods has the possibility of decreasing (it is assumed that those who have not used contraceptives will choose to use short-term contraceptive methods) to 15.3%.

Cimahi has 3 sub-districts served by 12 health centers. Couples of fertile age in Cimahi City in 2019 were 91,773 people. Meanwhile, only 81.5% have become active family planning participants. This means that there are as many as 15.5% who have not become participants. Of these, 66.2% used the Short Term Contraceptive Method. And injectable contraceptives are the most dominantly used. In fact, long-term contraceptive methods have proven to be the most effective in reducing pregnancy rates. However, until now long-term contraceptive methods are still not the choice of the majority of couples of childbearing age in Indonesia (Octaviyani, 2017).

The use of long-term contraceptives in Indonesia is still a concern. The National Family Planning Population Agency continues to encourage the use of long-term contraceptive methods. However, in 2012 it only reached 17 percent, and in 2017 it rose to 21 percent of the total use of contraceptives. What is even more concerning is that the use of injections is increasing. Most of them are given by private midwives and the injections are given once a month. In fact, if Indonesia wants to succeed in reducing population growth and maternal mortality rates, at least the achievement of using long-term contraceptive methods must reach 65%. In 2017, the maternal mortality rate was still around 259-305 per 100 thousand births. Far from the target of 102 per 100 thousand births. The 2012 Demographic and Population Survey showed that around 32.5 percent of the Maternal Mortality Rate occurred due to giving birth too young or too young, and about 34 percent due to too many pregnancies or more than three children. In order to increase users of long-term

contraceptive methods, the National Family Planning Population Agency has created a district program of one obstetrician who can serve tubectomy, and one general practitioner who can serve vasectomy (Octaviani, 2017).

Knowledge about short-term and long-term contraceptive methods as stated above seems to be easily obtained by the public because of the incessant communication, information, and education carried out by the government, especially the National Family Planning Population Board, which has done so through mass media, outdoor media, and contact with health workers or those who know about family planning.

This study aims to obtain the results of a study on the knowledge and interest of couples of childbearing age in Cimahi about long-term contraceptive methods. In addition, it also aims to obtain the results of the analysis of the effect of knowledge of couples of childbearing age in Cimahi on the interest in using long-term contraceptive methods. This research is also important to conduct to increase the use of long-term contraceptive methods, especially in Cimahi. In addition, this is also the first step towards photographing the profiles of couples of childbearing age in Cimahi so that it will be easier to develop intervention programs related to increasing the use of long-term contraceptive methods.

## **Literature Review**

### **Knowledge**

When it comes to investigating a product's buying behavior, product knowledge is crucial. Consumers must be aware of a product's features. Consumers who do not grasp product qualities are more likely to make poor purchasing decisions (Nittissusastro, 2012). Product categories, brands, terminology, product traits or features, product prices, and product beliefs are all examples of product knowledge (Lin and Lin in Resmaawa, 2017).

Furthermore, product knowledge will be preserved in consumers' memories, ensuring that it remains in their brains at all times (Brucks in Rezvani et al., 2012). If the consumer regains knowledge, the newly gained knowledge will cause the consumer's knowledge to rise, decrease, or correct itself.

### **Intention**

The desire to own a product is the purchasing intention. If a consumer is affected by the quality and quality of a product, as well as knowledge about the product, buying interest will arise (Duriyanto, 2003; Putri et al., 2016). A consumer's self-instruction to make a product purchase, plan, and execute necessary actions such as suggesting, recommending, choosing, and finally making a purchase decision is known as buying interest (Rossiter and Percy, 1997; Mulyana, 2016). Additionally, "purchasing interest" can be assessed by the likelihood of consumers making purchases (Hasan, 2013).

### **Knowledge and Intention**

Good product knowledge will lead to good buying interest as well. Vazifehdooost and Ghanbari (2019) suggest that product knowledge has a significant positive effect on purchase intention. Consumer buying interest is influenced by the amount of product knowledge, where the more product knowledge the consumer has, the higher the purchase intention (Lin and Lin, 2007).

Wang and Bai (2019) also found that in addition to the direct influence between product knowledge and purchase intention, consumer perceived trust and effectiveness are also partially mediated. This is also supported by research conducted by Nuryahati and Hendar (2019). They both also added that product awareness is a partial mediation between product knowledge and buying interest. Furthermore, Han and Mu (2017) describe how product knowledge has a positive effect on perceived benefits and that perceived benefits have a positive effect on purchase intention. Consumer product knowledge has a negative effect on risk perception, and profit perception has a negative effect on risk perception, and risk perception has a negative effect on purchase intention.

Perceived value influences purchase intent favorably, while perceived risk influences purchase intention adversely. Quality knowledge has the greatest impact on perceived value, followed by cost knowledge and green knowledge. Quality knowledge has the greatest impact on risk perception, followed by cost knowledge (Wang, 2015).

## **Research Methods**

This type of research is called explanatory research. Researchers distributed questionnaires online in this study by distributing network links that directed objects to a page that displayed several questionnaire questions.

The population in this paper is couples of childbearing age in Cimahi who still use short-term contraceptive methods. The number of women who still use short-term contraceptive methods (condoms, injections, and pills) is 49,543 (Cimahi Health Office, 2019). By using the Slovin formula, it is known that the minimum sample size in this study is 397 people. The sampling technique used is quota sampling. Quota sampling is a technique for determining a sample from a population that has certain characteristics that match the desired number. Samples were taken by giving a certain allotment to the group. After the quota is met,

data collection is stopped (Sekaran, 2014). Questionnaires were distributed online and offline to couples of childbearing age in Cimahi who used short-term contraceptive methods.

## Result and Discussion

### Respondent Profile

The following is a profile of the Cimahi community members who participated in this study:

**Table 1.** Profile

| Indicator                       | Description     |         |                 |        |                  |        |              |        |
|---------------------------------|-----------------|---------|-----------------|--------|------------------|--------|--------------|--------|
| Sex                             | Female          | 100,00% | Male            | 0,00%  |                  |        |              |        |
| Age                             | <25 year        | 11,50%  | 25 - 35 year    | 66,25% | 36 - 50 year     | 22,25% | > 50 year    | 0,00%  |
| Education                       | Junior High     | 48,25%  | Senior High     | 51,75% | Diploma          | 0,00%  | Bachelor     | 0,00%  |
| Monthly Expenses                | < Rp. 3 million | 27,75%  | 3 s/d 5 million | 30,75% | 5 s/d 10 million | 26,25% | > 10 million | 15,25% |
| District                        | North Cimahi    | 32,25%  | Middle Cimahi   | 37,50% | South Cimahi     | 30,25% |              |        |
| Short-Term Contraception User   | Yes             | 100,00% | No              | 0,00%  |                  |        |              |        |
| Contraception method            | Condom          | 16,25%  | Inject          | 68,00% | Pill             | 15,75% |              |        |
| Duration of using contraception | < 2 years       | 9,25%   | 2 s/d 5 years   | 49,75% | > 5 years        | 41,00% |              |        |
| Reason of use                   | Cheap           | 39,00%  | practical       | 59,75% | No side effect   | 1,25%  | Others       | 0,00%  |
| Side effects                    | Yes             | 42,25%  | No              | 57,75% |                  |        |              |        |

The majority of the Cimahi community members who took part in this study were female and aged 25 to 35. The bulk of respondents attended Senior High School and Junior High School as their most recent educational institutions. The majority of individuals polled have monthly expenses ranging from 5 to 10 million rupiah. The bulk of responders were from the North Cimahi and Central Cimahi districts, respectively.

All of the respondents are also short-term contraceptive users, with injectable contraception being the most common form used for more than 2 (two) years. They utilize short-term contraception because it is inexpensive and convenient. Furthermore, the majority of them had never experienced the negative effects of using short-term contraceptives. Others, on the other hand, have reported negative side effects from using these short-term contraceptives.

### Knowledge of Long-Term Contraceptives

The following table shows the Cimahi community's understanding about long-acting contraceptives:

**Table 2.** Knowledge Variable Descriptive Analysis

| Indicator                     | Permanent Method of Contraception |                          |                             |                             |
|-------------------------------|-----------------------------------|--------------------------|-----------------------------|-----------------------------|
|                               | Tubectomy                         | Vasectomy                | Contraceptive Implant       | Intrauterine Device         |
| Knowledge                     | Understand                        | Do not understand        | Do not understand           | Do not understand           |
| Source of knowledge           | Field instructor and doctor       | Family/friend and doctor | Field instructor and doctor | Doctor and field instructor |
| Information clarity           | Clear                             | Clear                    | Clear                       | Clear                       |
| Information                   | Interesting                       | Interesting              | Interesting                 | Interesting                 |
| Effectiveness                 | Effective                         | Effective                | Effective                   | Effective                   |
| Understanding of side effects | understand                        | understand               | understand                  | understand                  |

Source: Processed data (2021)

Cimahi residents are aware of tubectomy and intrauterine devices. Field teachers and doctors provide the majority of this expertise. They understand tubectomy and intrauterine devices that are effective in preventing conception since the information gained is clear and intriguing.

In the meantime, they are less knowledgeable about vasectomy and implants. They've heard of vasectomy and implants but don't know what they are. This basic knowledge is primarily derived from family/friends, doctors, and field instructors. Although the information gathered is not very clear or interesting, they do know that vasectomy and implants are successful in preventing pregnancy.

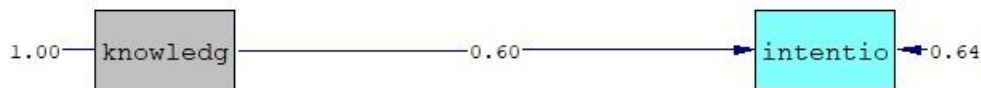
**Intention in Using Long-Term Contraceptive Methods**

Cimahi residents are less interested in using long-term contraceptives. This is due to the perception of the high cost of using long-term contraceptives. In fact, the cost of installing long-term contraceptives is relatively cheaper when compared to short-term contraceptives because the installation costs are for a period of 3 years or 5 years and are only controlled every year. Another reason is the myths that they often hear. For example, if using an intrauterine device, it will stick in the uterus and can interfere with husband and wife relationships. Or other myths that say that the installation of long-term contraceptives is not justified by religion (especially Islam) because it inserts foreign objects into the body. Meanwhile, reasons for impracticality and side effects are other reasons.

However, they are basically willing to use long-term contraceptives if the installation fee is free. And their main choice when using long-term contraception is an intrauterine device.

**The Impact of Knowledge on the Intention of the Cimahi Community in Using Long-Term Contraceptives**

The calculation results show a structural relationship between knowledge and public interest, as can be seen in the following table:



**Figure 1.** Path Diagram

By using the Lisrel program to calculate the path analysis, the following structural equations are obtained:

**Structural Equations**

$intentio = 0.604 * knowledg$ , Errorvar.= 0.635 ,  $R^2 = 0.365$   
 Standerr (0.0399) (0.0450)  
 Z-values 15.138 14.124  
 P-values 0.000 0.000

From the structural equation above, the hypothesis testing are as follows:

**Table 3.** Hypothesis Testing

| Null Hypothesis                                  | t <sub>count</sub> | t <sub>table</sub> | Result  | Conclusion                                    |
|--|--------------------|--------------------|---|---|
| Knowledge has no significant impact on Intention | 15,138             | 1,97               | t <sub>count</sub> > t <sub>table</sub><br>H <sub>0</sub> rejected<br>Significant | Knowledge has significant impact on Intention |

Source: Processed data (2021)

Knowledge has a significant and positive effect on the interest of the Cimahi community in using long-term contraceptives. This means that if knowledge of long-term contraceptives is increased, the public's interest in using long-term contraceptives will continue to increase.

From the resulting structural equations and hypothesis testing that have been carried out, the magnitude of the influence of knowledge on intention can be seen in the following table:

**Table 4.** Variable Impact

| Correlation            | Coefficient | Impact | Residual |
|------------------------|-------------|--------|----------|
| Knowledge on Interests | 0.604       | 36.5%  | 63.5%    |
| Total                  |             |        | 100%     |

Knowledge affects the public's interest by 36.5 percent. This shows that promotion has a significant effect on interest. Or it could also be interpreted that knowledge is quite closely related to the intention of the

Cimahi resident in using long-term contraceptives. With increasing knowledge about long-term contraceptives, public interest will also increase. Meanwhile, other influences that have not been studied have a major impact on people's interest in using long-term contraceptives.

### **Discussion**

The results showed that knowledge has a significant and positive effect on the interest of couples of reproductive age in using long-term contraceptives. This is in line with what Vazifehdooost and Ghanbari (2019) stated. Furthermore, Lin and Lin (2007) suggest that interest is influenced by the amount of product knowledge a consumer has, with the more product knowledge the consumer has, the higher the purchase intention. This means that if knowledge is increased, then couples of reproductive age using long-term contraceptives will continue to increase.

Increasing knowledge related to long-term contraceptive methods can be done by explaining that the myths that have been circulating in the community are not correct. In addition, it should also be noted that the cost of installing long-term contraceptive methods is relatively cheaper and more effective when compared to short-term contraceptive methods. Therefore, the role of doctors, field instructors, and families needs to be increased.

### **Conclusion**

The majority of Cimahi resident already know about long-term contraceptives, especially intrauterine devices. Most of this knowledge comes from doctors, nurses or midwives, field instructors, and family and friends. The information obtained is clear and interesting, allowing them to understand effective intrauterine devices for pregnancy prevention. However, they are less interested in using long-term contraception. This is due to the perception of the high cost of installation. However, they are basically willing to use long-term contraceptives if the installation fee is free. And their main choice is an intrauterine device. Knowledge is quite closely related to the interest of the people of Cimahi in using long-term contraception. This means that if knowledge is increased, the public's interest in using long-term contraceptives will also increase.

Optimizing the roles of doctors, nurses, midwives, field instructors, and family and friends in disseminating information related to long-term contraceptives can be done to increase public knowledge. This can be done by bringing in a doctor or field instructor to share knowledge related to all the important information on activities such as Posyandu and social gatherings or recitation. Correcting the information on the myths that have been circulating in the community related to the installation of long-term contraceptives can be done by involving a third party who is believed to be able to correct the incorrect myth. Corporate Social Responsibility activities from companies in Cimahi or community service from universities engaged in the health sector in collaboration with the local government and the Health Office to eliminate the cost of installing long-term contraceptives can be carried out to increase their use in Cimahi.

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