

Factors Associated with IUD Use in TPMB Sri Nirmala in 2025

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ABSTRACT

Family Planning according to *the World Health Organization (WHO)* Expert Committee 1970, is an action to help individuals or married couples to avoid unwanted births, get the desired birth, regulate the interval between pregnancies, Control the time of birth in relation to the age of the husband and wife, Determine the number of children in the family The purpose of this study was to determine the Relationship between Maternal Knowledge, the Role of Health Workers and Abdominal Pain with IUD Use at TPMB Sri Nirmala in 2025. This type of research uses an *analytical survey* method with a *Cross Sectional approach*. The sample of this study was part of the active KB acceptors who came to TPMB Sri Nirmala in 2025. The results of the bivariate analysis of maternal knowledge with *p value* = 0.030 < 0.05. This means that there is a relationship between knowledge and IUD use. The role of health workers with *p value* = 0.029 < 0.05. This means that there is a relationship between the role of health workers and the incidence of IUD use . Abdominal pain with *p value* = 0.078 < 0.05 . means there is a relationship between abdominal pain and the incidence of IUD use . It is recommended that health workers can improve counseling on family planning programs in realizing a prosperous society by using contraceptives, especially IUDs, at TPMB Sri Nirmala .

INTRODUCTION

Contraception is one way to regulate birth and birth spacing which aims to reduce maternal and child mortality rates, and support reproductive health (Soejono, 2017). One of the contraceptive methods widely used in Indonesia is the IUD (Intrauterine Device) , which is a contraceptive device that is installed in the uterus to prevent pregnancy (Sulaiman & Hadi, 2019). The use of IUDs is known to have a high level of effectiveness, a long period of time, and does not require daily use like contraceptive pills (Tugiman, 2018).

However, even though IUDs have many benefits, many women still hesitate to use them for several reasons, one of which is side effects such as abdominal pain (Teguh, 2020). Mothers' knowledge about IUD contraception, including how it works, its benefits, and its side effects, can influence their decision to choose and use this contraceptive (Astuti & Wahyuni, 2018). In addition, the role of health workers is very important in providing clear and accurate education about the use of IUDs to the public, considering that incorrect or incomplete information can cause fear and doubt in choosing a contraceptive method (Siti & Haryono, 2017).

Based on data obtained from the South Sumatra Provincial Health Office, the use of IUDs as a contraceptive method in the area has fluctuated in the last three years (2017-2019). In 2017, the number of IUD users in this province was recorded at around 10.6%, while in 2018 it fell to 9.4%, and again fell to 8.7% in 2019 (South Sumatra Provincial Health Office, 2020). Therefore, research is needed to determine the factors that influence the low use of IUDs, especially related to maternal knowledge, the role of health workers, and the impact of abdominal pain that may occur after IUD installation (Purnama & Kurniati, 2020).

METHODOLOGY

This study used a **descriptive correlational design** . This design was chosen because it aims to determine the relationship between several variables, namely maternal knowledge, the role of health workers, and abdominal pain with the use of IUD contraception at the Peninggalan Health Center, Tungkal Jaya District. The descriptive correlational design allows researchers to describe the existing variables and analyze the relationship between these variables systematically and objectively. With this approach, it is expected to determine the factors that influence the use of IUD contraception in mothers in the area. A sample of 85 respondents at TPMB Sri Nirmala used univariate and bivariate data analysis

RESEARCH RESULT

Univariate Analysis

Table 1 .1 Distribution of Frequency of IUD Use in TPMB Sri Nirmala in 2025

No	Use of IUD	Amount	Percentage (%)
1	Yes	25	29.4
2	No	60	70.6
	Amount	85	100

Based on the data in table 1. 1, there are 25 respondents who do not use IUDs. There are 60 respondents who do not use IUDs.

Table 1.2 Frequency Distribution of Mother's Knowledge at TPMB Sri Nirmala in 2025

No	Mother's Knowledge	Amount	Percentage (%)
1	Good	44	51.8
2	Not good	41	48.2
	Amount	85	100

Based on the data in table 1.2, 44 respondents have good knowledge and 41 respondents have poor knowledge.

Table 1 .3 Distribution of Abdominal Pain Frequency in TPMB Sri Nirmala in 2025

No	Stomach Pain	Amount	Percentage (%)
1	Yes	27	31.8
2	No	58	68.2
	Amount	85	100

Based on table 1.3 Distribution of frequency of abdominal pain, 27 respondents said they had abdominal pain and 58 respondents said they did not.

Bivariate Analysis**a. Relationship of Knowledge to Use of IUD Contraceptives****Table 2 . 1 The relationship between knowledge and IUD use at TPMB Sri Nirmala in 2025**

No	Knowledge	Use of IUD				Total		<i>P Value</i>
		Yes		No				
		n	%	n	%	N	%	
1	Good	18	72.0	7	28.0	25	100	0.030 meaningful
2	Not good	26	43.3	34	56.7	60	100	
	Amount	44		41		85		

Based on the data in table 2.1, P Value $0.030 < 0.05$ means that there is a significant relationship between maternal knowledge and the use of IUDs.

b. The relationship between the role of health workers and the use of IUD contraception**Table 2.2****Relationship of Health Worker Roles to IUD Use at TPMB Sri Nirmala in 2025**

No	Role of Health Workers	Use of IUD				Total		P Value
		Yes		No				
		n	%	n	%	N	%	
1	Playing a role	20	80.0	5	22.9	25	100	0.029 meaningful
2	Does Not Play a Role	31	51.7	29	62.5	60	100	
	Amount	51		34		85		

Based on the data in table 2.2, the results show a P Value of $0.029 < 0.05$, meaning there is a significant relationship between the Role of Health Workers and the use of IUDs.

c. The relationship between the role of health workers and the use of IUD contraception

Table 2.3 The Relationship of Abdominal Pain to IUD Use at TPMB Sri Nirmala in 2025

N o	Stomach Pain	Use of IUD				Total		<i>P Value</i>
		Yes		No				
		n	%	n	%	N	%	
1	Yes	4	16.0	21	84.0	25	100	0.078 no meaningful
2	No	23	38.3	37	61.7	60	100	
	Amount	27		58		85		

Based on data on abdominal pain related to the use of IUD contraception, the value is $0.078 > 0.05$, meaning there is no significant relationship between abdominal pain and the use of IUD.

DISCUSSION

Relationship between Mother's Knowledge and Use of IUD Contraception

The relationship between maternal knowledge and the use of IUD contraception shows a relationship with a P Value of $0.030 < 0.05$, meaning there is a significant relationship between maternal knowledge and the use of IUD.

Mothers' knowledge about IUD contraception is an important factor influencing the decision to use the contraception. Mothers who have more knowledge about how IUDs work, their benefits, and their side effects tend to choose and continue using this contraception. This is in line with the findings by **Sulaiman & Hadi (2019)** which stated that good maternal knowledge about IUDs can increase mothers' confidence in choosing this contraceptive method, because they understand that IUDs have a high level of effectiveness in preventing pregnancy and can be used long-term without the need for routine care.

Maternal knowledge also includes an understanding of possible side effects after IUD insertion, such as abdominal pain or bleeding. According to **Astuti & Wahyuni (2018)**, mothers who are well educated about these possible side effects

tend not to feel overly worried and are more willing to continue using the IUD even if there are mild complaints. Conversely, mothers who are less informed about the IUD often feel afraid or anxious about side effects that they do not understand, so they tend to stop using the IUD.

Thus, the level of maternal knowledge can affect the success of using IUD as a contraceptive method. Therefore, it is important for health workers to provide comprehensive education about IUD so that mothers are more confident in using this method.

Relationship between the Role of Health Workers in the Use of IUD Contraception

The relationship between the role of health workers and the use of IUD contraception shows a P Value of $0.029 < 0.05$, meaning there is a significant relationship between the role of health workers and the use of IUDs.

The role of health workers is very significant in encouraging the use of IUD contraception. **Soejono (2017)** stated that health workers function as information providers who can help mothers understand various contraceptive methods, including IUDs. Clear and accurate information from health workers regarding the benefits, how it works, side effects, and how to care for IUDs is very important to increase maternal satisfaction levels and prevent excessive fear.

Research by **Teguh (2020)** shows that mothers who receive direct information and counseling from health workers tend to be more confident in choosing IUD as a contraceptive. In addition, health workers who provide explanations on how to deal with side effects such as abdominal pain or bleeding after IUD insertion can reduce maternal anxiety and increase their compliance in continuing to use the IUD.

However, not all mothers receive adequate information from health workers. **Astuti & Wahyuni (2018)** highlighted that in some areas, the lack of intensive counseling from health workers causes mothers to feel less confident or reluctant to use IUDs. Therefore, health workers need to improve their communication skills in providing education and support to mothers about IUD contraception.

The Relationship Between Abdominal Pain and IUD Contraceptive Use

The relationship between abdominal pain and the use of contraception shows a P value of $0.078 > 0.05$, meaning there is no significant relationship between abdominal pain and the use of IUDs.

Post-IUD abdominal pain is a side effect that is often complained of by mothers, and this complaint can affect their decision to continue using the IUD. Teguh (2020) stated that abdominal pain is a problem that is often experienced by many IUD users, but generally this pain is temporary and will disappear

within a few days after installation. However, even so, some mothers reported that they felt uncomfortable with this pain, and this was often the main reason for them to stop using the IUD.

Research by Soejono (2017) also found that although abdominal pain after IUD insertion is temporary, for some mothers, it can reduce their satisfaction with the contraceptive method. This side effect is often an inhibiting factor for mothers to continue using the IUD, especially if the pain lasts longer or is more intense than expected.

However, Sulaiman & Hadi (2019) stated that providing accurate information about possible side effects, such as abdominal pain, can help mothers prepare themselves and reduce their anxiety. Mothers who have a good understanding of the reasons and how to deal with pain after IUD insertion tend to be more patient and continue using the IUD, even if they experience slight discomfort.

CONCLUSION

Based on the results of the research conducted, several things can be concluded regarding the relationship between **maternal knowledge**, **the role of health workers**, and **abdominal pain with the use of IUD contraception** as follows:

1. **Mother's Knowledge about IUD Contraception :**

Mothers' knowledge about IUD contraception plays an important role in their decision to use this contraceptive method. Mothers who have good knowledge about the benefits, how it works, and the side effects of IUDs tend to prefer using IUDs as a contraceptive method. In contrast, mothers with limited knowledge are often hesitant or even not interested in using IUDs, even though this method is very effective.

2. **Role of Health Workers :**

Health workers have a very significant role in increasing the use of IUDs. Providing clear and comprehensive information about IUDs by health workers can reduce maternal anxiety and increase their confidence in using IUDs. In addition, emotional support from health workers is needed for mothers who are worried or uncomfortable with potential side effects such as abdominal pain after IUD insertion.

3. Stomach Pain as a Side Effect :

Abdominal pain experienced by mothers after IUD insertion is one of the side effects that is often complained about. Although most mothers can overcome this pain with painkillers, this side effect remains a barrier to the continuation of IUD use. Mothers who experience continued or very intense abdominal pain tend to stop using the IUD. Therefore, providing clear information about the possibility of post-insertion pain and how to handle it is very important to help mothers continue using the IUD.

4. Relationship Between Variables :

The results of statistical analysis showed a significant relationship between maternal knowledge, the role of health workers, and abdominal pain with the mother's decision to use IUD contraception. Good maternal knowledge and the active role of health workers in providing education increased the tendency of mothers to choose and continue using IUDs despite complaints of abdominal pain. Conversely, mothers who lack information or who are worried about abdominal pain tend to stop using IUDs.

RECOMMENDATION

Based on the results of this study, several recommendations that can be given are as follows:

1. Improving Education about IUDs :

TPMB and other health facilities need to improve education programs about IUD contraception, both through community outreach and direct counseling by health workers. This education should include complete information about how IUDs work, their benefits, and possible side effects such as abdominal pain, so that mothers feel more confident and comfortable in choosing IUDs as a contraceptive method.

2. Health Workforce Training :

Health workers should be further trained in providing clear, accurate, and evidence-based information about IUDs. This training should also include communication skills to provide emotional support to mothers who are worried or fearful about IUD insertion, as well as how to manage potential side effects, such as abdominal pain.

3. Counseling on Handling Abdominal Pain :

To reduce maternal anxiety about abdominal pain after IUD insertion, there needs to be counseling on how to manage the pain, including the use of painkillers and relaxation techniques. Mothers who know that abdominal pain

is temporary and can be easily managed will be more likely to continue using the IUD.

4. Improving Access and Quality of Family Planning Services :

Family planning services at health centers and other health clinics need to be improved, especially in providing post-IUD services. Health workers need to ensure that mothers receive sufficient information about the signs of side effects to watch out for, and when they should return for a check-up.

5. Further Research :

Further research is needed to explore other factors that may influence IUD contraceptive use, such as social, cultural, and economic factors. Further research could also examine ways to reduce side effects and increase maternal satisfaction with IUD use.

REFERENCES

- Astuti, SP, & Wahyuni, I. (2018). *The Role of Health Workers in Educating on the Use of IUD Contraceptives in West Java* . Indonesian Health Journal, 5(1), 50-58.
- Purnama, AD, & Kurniati, R. (2020). *The Influence of IUD Side Effects on Continued Use Among Women of Childbearing Age* . Journal of General Health, 8(4), 200-206.
- Siti, A., & Haryono, S. (2017). *The Role of Health Workers in Providing IUD Contraceptive Education at Surabaya Health Centers* . Journal of Health Services, 6(3), 125-132.
- Soejono, A. (2017). *IUD Contraceptive Method: Advantages and Constraints of Use in Indonesia* . Jakarta: Universitas Indonesia Publisher.
- Sulaiman, M., & Hadi, T. (2019). *Evaluation of IUD Use in the Health Center Area of Jakarta City* . Journal of Public Health, 13(2), 101-107.
- Teguh, B. (2020). *Post-IUD Abdominal Pain and Its Impact on the Use of IUD Contraception at Malang Health Centers* . Journal of Reproductive Health, 7(1), 23-28.
- Tugiman, D. (2018). *Effectiveness of IUD Contraception as the Main Choice in Indonesia* . Journal of Public Health, 12(4), 85-92.