

Relationship between knowledge and attitudes of third trimester pregnant women with iud contraception selection after childbirth

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ABSTRACT

IUD Post Partum (PPIUD) is an effective and safe method of contraception that is used up to 48 hours after the procedure. Inappropriate understanding of the IUD Post Partum can have an impact on not achieving the family planning program and in general respondents who have a positive attitude will have good knowledge about IUD Post Partum. The purpose of this study was to determine the description and relationship of the level of knowledge and attitudes of pregnant women in the third trimester with the IUD selection plan after childbirth. The current study used complete sampling with a sample size of 34 adult males and used a study survey analytic technique. This analysis tool makes use of lembar kuesioners. Data analysis includes both univariate and bivariate analyses (uji chi square). The study was conducted from September 2021 to February 2022. The results showed that there was a relationship between the level of knowledge of third trimester pregnant women and the plan for choosing IUD post partum, p value=0,025 (p value <0,05) and there was a relationship between the attitude of third trimester pregnant women and the plan for choosing IUD post partum. P value = 0,001 (p value < 0,05).

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INTRODUCTION

Population problems that occur in developing countries, such as in Indonesia, are population explosions. To overcome these problems, the Indonesian government has implemented a family planning program (KB) which began in 1968 by establishing the LKBN (National Family Planning Institute) later in its development to become BKKBN (National Family Planning Coordinating Board) which aims to control the rate of population growth and improve the quality of life human resources (Sumantri, 2020).

The total population of Indonesia in 2020 based on the estimation results is 271,066,366. The largest population in Indonesia is in West Java Province (49.935,858 people). (Profil Kesehatan Indonesia, 2021). Meanwhile, based on Cimahi City population data, the total population in 2019

was 548,373 people. (Dinas Kesehatan Kota Cimahi, 2019). MMR is one of the sensitive indicators that can describe the welfare of the people of a country. The Maternal Mortality Rate (MMR) in West Java is still relatively high. The results of the achievements in 2018 were the number of maternal deaths found as many as 700 cases or 79.68 / 100,000 KH, a slight increase compared to 2017 which was 695 cases (Dinas Kesehatan Kota Cimahi, 2019).

With the increase in achievement results for the MMR and IMR indicators in 2019 when compared to previous years, a strategy to reduce maternal and infant mortality is needed. Indonesia plays a role in efforts to reduce MMR, in accordance with the targets set in the SDGs, namely reducing maternal mortality to <77 per 100,000 KH in 2030. To support efforts to reduce maternal mortality, a strategy is needed. One strategy that can be carried out during the postpartum period is in the form of family planning services, high risk Long-Term contraceptive method and back referrals (Dinas Kesehatan Kota Cimahi, 2019). Safe Motherhood is an effort made to reduce maternal mortality. WHO (World Health Organization) developed the "four pillars of safe motherhood" to expand the scope of efforts to save mothers and babies, namely family planning, antenatal care, clean and safe delivery and essential obstetric services (Varney, 2017).

Postpartum family planning services are an important public health strategy with significant benefits for both mother and baby. Ideally, the choice of postpartum contraception has been introduced during pregnancy so that it is not too late to get it because women generally start using contraception in the sixth week after delivery. Postpartum family planning services are one of the strategic programs to reduce unwanted pregnancies (Nurjanah et al., 2021). Several factors are considered to have an influence on third trimester pregnant women in the use of postnatal family planning. The high perceived behavioral control (knowledge, readiness and experience) possessed by pregnant women in the third trimester has an impact on the high intention of using postnatal contraceptives, other factors that influence the use of postnatal contraceptives are attitudes, knowledge, support from husbands and health workers (Lia & Nurdini, 2019). Therefore, the researchers used a sample of pregnant women in the third trimester to determine the relationship between the level of knowledge and attitudes with the plan for selecting the IUD after delivery.

The number of new family planning participants in Cimahi City in 2019 was 6.1%, an increase compared to 2018 which was 4.72%, the percentage of active family planning participants also increased to 79.4%. Most of the new and active family planning participants chose the injection method of contraception and the IUD as a means of contraception. These two types of contraceptives are considered easy to obtain and use by couples of childbearing age. (Dinas Kesehatan Kota Cimahi, 2019).

From the description of the background the author is interested in choosing a research title regarding "Relationship of Knowledge and Attitudes of Third Trimester Pregnant Women with IUD Contraception Selection after Childbirth".

RESEARCH METHOD

This methodology for analysis entails non-experimental survey analysis with cross-sectional data collection done once only in a specific time frame (One point time approach). The independent variables in this study were the level of knowledge and attitudes of pregnant women in the third trimester. While the dependent variable in the study is the IUD Postpartum selection plan. A total of 34 people made up the third trimester of the infant cohort at Midwife Independent Practice (MIP) Reni Sutaryo, AMd., Keb., SKM., MM throughout the months of November and December 2021. Using total sampling, this sampling technique uses the same number of samples as the population, which in this case is 34 people. Data collection was carried out by the researcher himself on third trimester pregnant women who were registered as MIP clients, Reni Sutaryo, AMd., Keb., SKM., MM Cimahi City.

Researchers provide information in advance to research subjects about the aims and objectives of the study (Informed Consent), researched directly for 3 days. The data collection

instrument used in the study was using a questionnaire. The correlation technique used is the Pearson Product Moment correlation. The collected data were analyzed using univariate and bivariate analysis. Univariate analysis aims to explain or describe the characteristics of each research variable. Meanwhile, bivariate analysis was carried out on two variables that were thought to be related or correlated. After that, a bivariate test was carried out using chi-square which aims to determine whether there is a relationship between variables. If the value of the test (<0.05) then there is a relationship between variables.

RESULTS AND DISCUSSIONS

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An overview of the level of knowledge of pregnant women in the third trimester about post-delivery IUD contraception

Table 1. An overview of the level of knowledge of pregnant women in the third trimester about post-delivery IUD contraception

No.	Knowledge	N	%
1.	Good	15	44,12
2.	Lack	19	55,88
	Total	34	100

Source: (*primary data*)

In Table 1, the characteristics of respondents' levels of understanding of IUD contraception are shown. Of the respondents, 19 had a level of understanding of contraception that was too high, while only 15 had a level of understanding of contraception that was too low.

Overview of the Third Trimester Pregnant Women's Attitudes About Post-partum IUD contraception.

Table 2. Overview of the third trimester pregnant women's attitudes about post-partum iud contraception

No.	Attitudes	N	%
1.	Positive	13	38,24
2.	Negative	21	61,76
	Total	34	100

Source: (*primary data*)

Table 2 shows the characteristics of the respondent's level of attitude about IUD contraception where as many as 13 pregnant women (38.24%) have a positive attitude with the plan to choose IUD contraception, while as many as 21 pregnant women (61.76%) have a negative attitude by not planning choice of IUD contraception.

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The Relationship between Knowledge Level of Third Trimester Pregnant Women and Postpartum IUD Contraceptive Selection Plans

Table 3. The relationship between knowledge level of third trimester pregnant women and postpartum IUD contraceptive selection plans

No.	Knowledge	IUD contraception plan				Total		P-value
		Planned		Not planning		N	%	
		n	%	n	%			
1.	Good	7	46,7	8	53,5	15	100	0,025

No.	Knowledge	IUD contraception plan				Total		P-value
		Planned		Not planning		N	%	
		n	%	n	%			
2.	Lack	2	10,5	17	89,5	19	100	
Total		9	26,5	25	73,5	34	100	

Table 3 shows the results of the analysis that 46.7% of pregnant women have good knowledge about the IUD contraceptive selection plan after delivery, while 10.5% of pregnant women have less knowledge about the post-partum IUD contraceptive selection plan. The results of statistical analysis showed the relationship between the level of knowledge of pregnant women in the third trimester with the IUD contraceptive selection plan with SPSS 23 applicants using the Chi-Square test. However, because the 2x2 table shows that $E < 5$, there are 2 cells (25%) so that the p-value is taken from the row fisher exact test column and the exact sig column. (2-sided). So that the statistical decision is H_a is accepted, so it can be concluded that there is a relationship between the level of knowledge of pregnant women in the third trimester and the planned selection of IUD contraception after delivery.

The Relationship of the Attitude of Pregnant Women in the Third Trimester With the Plan for Choosing an IUD after Childbirth

Table 4. The relationship of the attitude of pregnant women in the third trimester with the plan for choosing an IUD after childbirth

No.	Attitudes	IUD contraception plan				Total		P-value
		Planned		Not planning		N	%	
		n	%	n	%			
1.	Positif	8	61,5	5	38,5	13	100	
2.	Negatif	1	4,8	20	95,2	21	100	0,001
Total		9	26,5	25	73,5	34	100	

Table 4 shows the results of the analysis that as many as 61.5% of pregnant women showed a positive attitude about the IUD selection plan after delivery, while 4.8% of third trimester pregnant women showed a negative attitude about the post-partum IUD KB selection plan. The results of the statistical analysis showed the relationship between the level of attitude of pregnant women in the third trimester with the IUD KB selection plan with SPSS 23 applicants using the Chi-Square test. However, because the 2x2 table shows that $E < 5$, there are 2 cells (25%) so that the p-value is taken from the row fisher exact test column and the exact sig column. (2-sided). So that the statistical decision is H_a is accepted, so it can be concluded that there is a relationship between the attitude level of pregnant women in the third trimester and the post-delivery IUD selection plan.

An overview of the level of knowledge of pregnant women in the third trimester about the IUD after delivery

With increasing age, there will be changes in psychological and psychological aspects (mental). In general, physical growth will experience changes both from the aspect of size and from the aspect of proportion where this occurs due to the maturation of organ functions. Meanwhile, in the psychological (mental) aspect, there is a change in the level of thinking of a person who is increasingly mature and mature. This study is in line with the results of research. (Arihta et al., n.d.) that the age of pregnant women has low knowledge of post-placental IUD contraception as much as

42.3%. From the statistical test results, the p-value is 0.032, meaning that the p-value < (0.05), statistically proves that there is a relationship between the age of pregnant women and knowledge of post-placental IUD contraception.

Based on the latest education, mothers who have good knowledge are SMA/SMK as many as 7 people (53.8%) and those who have less knowledge are elementary school as many as 5 people (50.0%). Education is a learning process and a process of growth, development or change for the better, more mature and more mature towards individuals, groups or communities. It is undeniable that the higher a person's education, the easier it is to receive information and ultimately the more knowledge he gains. Conversely, if a person's education is low, it will hinder the development of a person's attitude towards acceptance, information and newly introduced values (Achyut et al., 2016).

This study is in line with the results of the study (Sari et al., 2020) that the results of the bivariate analysis showed that education had a significant relationship with maternal knowledge in the use of postpartum contraception with p value = 0.002. This happens because the majority of mothers' education is high school so that mothers are able to use search for information independently using online media, so that the information obtained can increase mother's knowledge, besides that pregnant women are also diligent in visiting health services around their homes.

Based on the work of mothers who have good knowledge, namely housewives as many as 14 people (43.8%) and those who have less knowledge, namely traders as much as 1 person (50.0%). Work is a factor that affects knowledge. Judging from the type of work that often interacts with other people, they have more knowledge when compared to people without any interaction with other people. Work experience that is developed to provide professional knowledge and skills as well as work learning experience will be able to develop the ability to make decisions which are an integrated reasoning scientifically and ethically (Istyanto & Maghfiroh, 2021).

Based on the number of children, mothers who have good knowledge are mothers who have <3 children as many as 7 people (38.9%) and those who have less knowledge are mothers who have 3 children as many as 3 people (42.9%). This situation is based on the findings due to the age of pregnant women who are still productive so that they have many children who are not more than 4. So that with the age of 20-35 years pregnant women in reproducing have a tendency to use family planning with lower effectiveness, such as using injectable contraceptives or pills compared to IUDs or IUDs. Postpartum IUDs because of their longer usage period (Lia & Nurdini, 2019).

This study is in line with the results of the study (Lia & Nurdini, 2019) it was found that the knowledge of pregnant women was good, namely mothers who had children >2 as many as 3 people (15.8%). This situation is due to the age of pregnant women who are still productive so that they have children who are not more than 4 who tend to use the IUD because the period of use is longer.

Overview of the Third Trimester Pregnant Women's Attitudes About Postpartum IUD Family Planning

Based on the age of mothers who have a good attitude, namely the age of 15-25 years as many as 8 people (50.0%) and those who have a poor attitude, namely the age of 26-36 years as many as 10 people (76.9%). The older one gets, the more experience and knowledge a person gains, so that it can increase mental and intellectual maturity. The age of a person who is more mature affects the level of ability and maturity in thinking and receiving information that is getting better when compared to a younger age. Age affects a person's level of knowledge. The more mature the age, the level of maturity and ability to receive information is better when compared to younger or immature ages (Achyut et al., 2016).

Based on the latest education, mothers who have a good attitude are S1 as many as 100% and those who have a poor attitude are 9 people who have junior high school as many as 90.0%. Maternal educational status was positively associated with post-delivery IUD use. Women who have a high school education are more likely to use the IUD Postpartum contraception than their less

educated peers. These findings are similar to studies conducted in Uganda and India. Therefore, women with higher education levels can increase women's knowledge about contraceptive use. In addition, these findings indicate that education has a positive impact on women's willingness to use the IUD after delivery (Puri, Moroni, et al., 2020).

Apart from that, education is also a change in attitude, behavior and the addition of knowledge from a person and is a basic process of human life. Through human education, individuals make qualitative changes so that their behavior develops. All activities and achievements of human life are nothing but the result of learning. The learning process will not just happen if it is not accompanied by something that helps the person concerned (Istyanto & Maghfiroh, 2021). This is the same as research conducted by (Sinaga, 2019) which states that from the statistical test using the chis square test of p-value 0.002 that there is a relationship between education and the use of the Post Placenta IUD.

Based on the work of mothers who have a good attitude, namely housewives as many as 12 people (37.5%) and those who have less attitudes, namely traders as many as 1 person (50.0%). Women who work as housewives are more likely to use the IUD Postpartum than those who do not work. This is supported by the main study conducted in Uganda, because housewives are at high risk for repeated pregnancies and have more children (Puri, Joshi, et al., 2020). Employment relationship, it can be explained that if a woman works then of course the desire to have more children is lower than women who do not work. Working women have a greater chance of using long-term contraception because working women want to regulate their pregnancies so that they can work better, not get pregnant and have children within a certain time as planned. Working mothers have 2 times the opportunity to use long-term contraceptive compared to mothers who do not work (Sinaga, 2019).

Based on the number of children, mothers who have a good attitude are mothers who have <3 children as many as 6 people (33.3%) and those who have less attitudes are mothers who do not have children as many as 4 people (44.4%). This is the same as the study (Sari et al., 2020) that the results of the bivariate test showed the number of children had a significant relationship with mother's knowledge of postnatal contraceptive use with p value = 0.006).

The Relationship between Knowledge Level of Third Trimester Pregnant Women With the Plan for the Selection of the IUD after Childbirth

Individual behavior is based on knowledge (cognitive), attitude (affective), and action (psychomotor). Several theories state that individual behavior is influenced by predisposing factors, enabling factors, and reinforcing factors, and one of the predisposing factors is knowledge. A person who does not want to use contraception can be caused because that person does not know or does not know the benefits of contraception for himself and his family (Rochadi et al., 2022). Pregnancy that is closely spaced in the first year postpartum is the most risky for both mother and child resulting in a high increased risk of harm. Postpartum IUD is a contraceptive that is carried out during the postpartum period. It is safe and effective up to 48 hours after delivery (Puri, Joshi, et al., 2020).

The results of another study (Karlina et al., 2020) that from the results of the chi-square test using SPSS it was found that there was a relationship between knowledge and the use of long-term contraceptive family planning in Pasirmuncang Village, Cikaum District in 2020. The insertion of an intrauterine device (IUD) during the postpartum period is an ideal method for some women because it does not interfere with breastfeeding, is comfortable for women, and allows women to obtain contraception that is safe, long-term and highly effective (Puri, Joshi, et al., 2020).

Postpartum contraceptive use in Nepal is very low. In particular, the use of the IUD Postpartum contraception is very low despite the many benefits and ongoing efforts of the government to promote its use to protect against unwanted pregnancies. In addition, little is known about the continued use of the IUD after delivery or the reasons for discontinuing its use (Puri, Joshi, et al., 2020) In Ethiopia, IUD utilization is low compared to other family planning methods. The

results of a study conducted in Ethiopia that there is a relationship between knowledge of IUDs and use of post-partum intrauterine contraceptives as described in three studies. 57% of women reported receiving a postnatal check-up within the first two days after birth, most of whom did not receive family planning counseling during the post-partum examination. Only 13% of women reported receiving information about family planning during the postpartum period. Availability and capacity of service providers, availability of supplies, social and cultural beliefs, and access to services in remote areas are the main factors hindering post-partum family planning counseling (Puri, Moroni, et al., 2020).

The Relationship of the Attitude of Pregnant Women in the Third Trimester With the Plan for the Selection of the IUD after Childbirth

Unfavorable attitudes related to long-term contraceptive will affect respondents' actions in making decisions to use long-term contraceptive method. The structure of a person's attitude is a mutually supportive component. These components consist of cognitive, affective and psychomotor components. However, if the individual only has one or two components, then the attitude to produce the expected behavior is not necessarily formed, the attitude is also usually based on the knowledge of the respondent. Respondents who have good knowledge about long-term contraceptive method tend to have a positive attitude. A person's attitude can change by obtaining additional information about the object through persuasion and pressure from his social group. So in this case, increasing knowledge about long-term contraceptive needs to be done to form a positive attitude towards long-term contraceptive (Rochadi et al., 2022).

This study is in line with the results of research (Shim et al., 2018) that the majority of pregnant women have no interest in using an IUD, which is 58.2%. From the results of the statistical test, it was obtained that the p value was 0.016, meaning that the p value < (0.05) was able to prove the existence of a relationship between the interest of pregnant women and knowledge of post-placental IUD family planning, and the Odds Ratio (OR) value was 0.319.

The formation of attitudes is strongly influenced by the knowledge factor. The existence of knowledge will affect a person's perception so that people have attitudes and can then be seen in their actions (Haryani et al., 2021). This is also in line with the results of the study that respondents' attitudes also significantly influence the use of long-term contraceptive method. The role of attitude in family planning is directed at understanding pregnant women about a healthy age for pregnancy and childbirth, pregnancy spacing that is too risky, and the ideal number of children in order to achieve a happy and prosperous family this is the same as the results of research showing that the attitude variable has a significant influence on long-term contraceptive participation.

CONCLUSION

The results of this study can be concluded that there is a relationship between the level of knowledge of pregnant women in the third trimester with the planned selection of IUD contraception after delivery, obtained p-value = 0.025 (p value <0.05). And there is a relationship between the attitude of pregnant women in the third trimester with the planned selection of IUD contraception after delivery, obtained p-value = 0.001 (p value <0.05).

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