


Analysis of Factors Influencing Mothers' Interest in Using IUD Contraception at PKM Kemuningsari Kidul

Painem¹, Rani Safitri²

^{1,2}Institut Teknologi, Sains, dan Kesehatan RS dr. Soepraoen Malang

Article Info	ABSTRACT
Keywords: IUD Contraception, Maternal Interest, Knowledge, Attitude, Husband's Support	The issue of low use of long-term contraception such as IUD is still a challenge in the program for Family Planning (KB) in Indonesia. This study's goal is to investigate the impact of knowledge, attitudes, and husband's support on mothers' interest in using IUD contraception at work Kemuningsari Kidul Health Center. This study used a using a cross-sectional design and a quantitative descriptive analytical method and involved 30 fertile mothers selected through purposive sampling techniques. The tool that was employed was a closed survey that underwent validity and reliability testing. Data analysis was carried out using SPSS version 27, including normality, homogeneity, multicollinearity, heteroscedasticity, testing for hypotheses and multiple linear regression. The results showed that attitudes and knowledge had a significant effect on mothers' interest in using IUDs ($p < 0.05$), while husband's support had no significant effect ($p > 0.05$). These findings indicate the importance of increasing education and correct information to encourage mothers' interest in choosing IUD contraception as a long-term family planning method.
This is an open access article under the CC BY-NC license 	Corresponding Author: Painem Institut Teknologi, Sains, dan Kesehatan RS dr. Soepraoen Malang Jl. S. Supriadi No.22, Sukun, Kec. Sukun, Kota Malang, Jawa Timur Kode Pos: 65147 painemsiswoyo@gmail.com

INTRODUCTION

Population issues remain a significant concern faced by many developing countries, including Indonesia. The high rate of population growth can impact various sectors such as health, education, economy, and social welfare. According to BKKBN (2020), one of the main strategies employed by the Indonesian government to control population growth is through the Family Planning (FP) program, which aims to regulate birth spacing to improve the quality of life.

Within the FP program, the government introduced various contraceptive methods, both short-term and long-term. One of the most effective long-term contraceptive methods is the Intrauterine Device (IUD). According to Prawirohardjo (2022), an IUD is a contraceptive device implanted in the uterus to prevent pregnancy, and it can last for 5 to 10 years depending on the type. IUDs offer advantages such as high effectiveness, affordability, and minimal need for regular intervention compared to pills or injections.

Nevertheless, the utilization rate of IUDs in Indonesia remains low. Based on Riskesdas (2018), most women of reproductive age tend to use short-term methods such as pills and injections, which are perceived as easier to use despite having lower effectiveness. The low uptake of IUDs may be due to a lack of knowledge, concerns about side effects, as well as myths and misinformation circulating within communities. According to Sari et al. (2023), negative perceptions of IUDs also contribute to mothers' reluctance to use them.

Interest itself refers to a motivational factor originating from an individual's internal response to a particular object or activity. Slameto (2013) defines interest as a form of individual preference and attraction toward something or an activity conducted out of personal will. In the context of contraceptive use, a mother's interest in using an IUD may be influenced by psychological factors such as self-confidence, perceived risks, and comfort in using the method.

Several key factors influence a mother's interest in using an IUD, including knowledge, attitude, and husband's support. According to Notoatmodjo (2014), knowledge results from awareness and occurs after individuals perceive or sense a particular object. The higher a person's knowledge, the more capable they are of making rational decisions. Meanwhile, Azwar (2015) states that attitude is an individual's internal response toward an object, reflecting readiness to act.

In addition, husband's support plays a crucial external role. According to Green and Kreuter (2005) in the PRECEDE-PROCEED model, social support from a spouse is considered an enabling factor that can influence individual health behavior. Spousal support may include granting permission, accompanying the mother during FP consultations, or giving consent to use a specific contraceptive method.

Given that IUD usage in the service area of Kemuningsari Kidul Community Health Center (PKM) remains low, a study is needed to further analyze the contributing aspects behind mothers' interest in this contraceptive method. Therefore, this study aims to examine the influence of knowledge, attitude, and husband's role on mothers' interest in using the intrauterine contraceptive device (IUD). The findings are expected to contribute to strengthening family planning promotion and education strategies at the primary healthcare level.

RESEARCH METHOD

This study employed a quantitative research approach using a descriptive-analytic model with a cross-sectional design. This approach was chosen to examine the correlation between the independent variables (knowledge, attitude, and husband's support) and the dependent variable (mothers' preference for using IUD contraception) at a single point in time.

The research instrument used was a structured (closed-ended) questionnaire consisting of four sections: knowledge, attitude, husband's involvement, and mothers' interest in using IUDs. Each section underwent validity and reliability testing. The validity test showed that all items in the variables of knowledge, attitude, husband's support, and maternal interest had correlation values greater than the critical r -value of 0.361, confirming the validity of the

instrument. The reliability analysis based on Cronbach's Alpha also demonstrated that all instruments had good reliability, with values exceeding 0.6.

Data were processed using SPSS version 27. The analysis included instrument feasibility tests through validity and reliability tests, data normality testing using the Kolmogorov-Smirnov method, followed by tests for homogeneity, multicollinearity, and heteroscedasticity to ensure the basic assumptions for regression analysis were met. Multiple linear regression was used to test the hypotheses, and partial t-tests were conducted to determine the effect of each independent variable on the dependent variable. The significance level applied in this analysis was 0.05 or 5%, indicating that if the p-value (significance) is less than 0.05, the variable is considered to have a statistically significant contribution to the mother's interest in using IUD contraception.

RESULT AND DISCUSSION

Result

Respondent Characteristics Identification Results

Table 1. Frequency Identification Based on Age

		Ages			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Early Young Adulthood	8	26,7	26,7	26,7
	Middle Adulthood	19	63,3	63,3	90,0
	Late Adulthood	3	10,0	10,0	100,0
	Total	30	100,0	100,0	

Table 2. Frequency Identification Based on Education

		Education			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Senior High School	17	56,7	56,7	56,7
	Junior High School	12	40,0	40,0	96,7
	Elementary School	1	3,3	3,3	100,0
	Total	30	100,0	100,0	

Tabel 3. Frequency Identification Based on KB Used

		KB_Used			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Month	15	50,0	50,0	50,0
	3 Month	12	40,0	40,0	90,0
	5 Month	1	3,3	3,3	93,3
	6 Month	2	6,7	6,7	100,0
	Total	30	100,0	100,0	

In Table 1, the age category shows that 8 respondents or 26.7% fall under the early young adult category, followed by 63.3% or 19 respondents in the middle adulthood category, and 3 respondents or 10% in the late adulthood category. Then, in Table 2, the education category shows that 17 respondents or 56.7% have completed senior high school, followed by 12 respondents or 40% with junior high school education, and 1 respondent or 3.3% with primary school education. Table 3 displays the types of contraceptive methods used by the respondents, indicating that 15 respondents or 50% use monthly contraceptives, 12 respondents or 40% use 3-month injectables, 1 respondent or 3.3% uses a 5-month method, and 2 respondents or 6.7% use a 6-month contraceptive.

Prerequisite Analysis Test Results

Table 4. Normality Test

One-Sample Kolmogorov-Smirnov Test			Unstandardized Residual
N			30
Normal Parameters ^{a,b}	Mean		0,0000000
	Std. Deviation		1,44684101
Most Extreme Differences	Absolute		0,063
	Positive		0,060
	Negative		-0,063
Test Statistic			0,063
Asymptotic Significance (2-tailed) ^c			,200 ^d
Monte Carlo Significance (2-tailed) ^e	Significance		0,990
	99% Confidence Interval	Lower Bound	0,988
		Upper Bound	0,993

a. Test Distribution is Normal

b. Calculated from data

Normality analysis was conducted using the Kolmogorov-Smirnov test, yielding a significance value of 0.200. Thus, it can be concluded that the distribution of the Unstandardized Residuals is normal. Since the p-value exceeds 0.05, the data can be used for further classical assumption testing.

Table 5. Hypothesis Testing (t)

Model	Coefficients ^a			t	Significance
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
1 (Constant)	4,291	1,908		2,250	0,033
Attitude	0,391	0,082	0,653	4,761	0,000
Knowledge	0,209	0,091	0,313	2,293	0,030

Husband's Support	0,063	0,092	0,095	0,690	0,496
-------------------	-------	-------	-------	-------	-------

a. Dependent Variable: Minat Ibu

ased on the results above, the t-test values indicate that attitude has a positive and significant influence on mothers' interest, with a significance value of 0.000. Furthermore, knowledge also has a positive and significant influence on mothers' interest, with a significance value of 0.030. Meanwhile, husband's support does not have a significant effect. The t-count value for the attitude variable is $4.761 > t$ -table value of 2.052, indicating that attitude has an effect on mothers' interest. For the knowledge variable, the t-count is $2.293 > 2.052$, which also indicates an effect on mothers' interest. Lastly, the t-count value for husband's support is $0.690 < 2.052$, meaning it does not have a significant influence on mothers' interest.

Discussion

The results of the statistical test indicate that mothers' attitudes have a significant impact on interest in using IUD contraception ($p = 0.000$). A positive attitude toward IUD use such as feeling comfortable, trusting its effectiveness, and not fearing side effects is a dominant factor in determining interest. This finding is consistent with Azwar's theory (2015), which asserts that attitude is a tendency to behave positively or negatively toward a particular object. In this context, the IUD as an object is more likely to be accepted if the individual has a supportive perception.

This study supports the findings of Ariyani & Suryani (2021), who stated that mothers with a favorable attitude toward IUD contraception are more likely to be interested in using it compared to those who are doubtful. Therefore, family planning counseling approaches should focus more on shaping positive attitudes through interpersonal communication between healthcare workers and mothers, as well as through educational media that promote a positive image of the IUD in the community.

Maternal knowledge also proves to have a significant influence on interest in utilizing IUD contraception ($p = 0.030$). Mothers who have a good understanding of the IUD—including its benefits, mechanism of action, effectiveness, and side effects—tend to be more interested in using it. Knowledge plays a foundational role in shaping one's attitudes and behaviors toward a particular object, as stated by Notoatmodjo (2014).

This condition highlights the importance of disseminating accurate and reliable information about the IUD, whether through healthcare professionals, mass media, or community-based sources. Misinformation or myths about IUDs can reduce interest, even though this method is highly effective and rarely causes complications. Community-based educational interventions can be an appropriate strategy to increase long-term contraceptive literacy.

In contrast to the previous two variables, husband's support in this study did not have a significant effect on the mother's interest ($p = 0.496$). This situation may occur for various reasons, such as maternal autonomy in decision-making, lack of husband involvement in

family planning programs, or minimal communication between couples regarding contraceptive choices.

According to Green & Kreuter (2005), spousal support should be an enabling factor that facilitates healthy behavior, including the choice of contraceptive methods. However, in practice, the husband's role remains limited in family planning decisions, especially in communities where reproductive responsibility is more often viewed as the woman's domain.

This condition points to the need for additional interventions targeting men, such as couple counseling, family-based education, and involving husbands in family planning programs at healthcare facilities. These findings highlight the importance of interventions focusing on internal factors in mothers, particularly increasing knowledge and fostering positive attitudes toward IUDs. Nonetheless, the husband's role should not be overlooked, even if it has not shown a significant influence. Active male involvement should be encouraged so that contraceptive decision-making becomes a shared responsibility.

CONCLUSION

The results of this study show that mothers' attitudes and knowledge have a significant impact on interest in using IUDs, while husbands' support has no significant effect. Mothers with positive attitudes and good knowledge tend to be more interested in using IUDs. Therefore, appropriate education and counseling need to be improved to encourage the use of this long-term contraceptive. These findings emphasize the importance of educational and promotive approaches in increasing interest in the use of long-term contraceptives such as IUDs. Efforts to improve reproductive health literacy, provide accurate information, and effective communication between health workers and mothers are key strategies that need to be strengthened. Although husbands' support was not significant in this study, partner involvement remains crucial to strengthen the overall success of the Family Planning program.

REFERENCES

- Ariyani, N. M., & Suryani, N. K. (2021). Pengaruh Pengetahuan, Persepsi dan Peran Suami dalam Mendorong Minat Istri Menggunakan Kontrasepsi IUD di Wilayah Kerja Puskesmas. *Jurnal Kesehatan Reproduksi*, 8(2), 101108. <https://doi.org/10.12345/jkr.v8i2.101>
- Azwar, S. (2015). *Sikap manusia: Teori dan pengukurannya* (ed. revisi). Yogyakarta: Pustaka Pelajar.
- BKKBN. (2020). *Peraturan BKKBN Nomor 8 Tahun 2020 tentang Pedoman Umum Pelayanan Program Keluarga Berencana*. Jakarta: BKKBN. Diakses <https://peraturan.bpk.go.id/Details/225061/peraturan-bkkbn-no-8-tahun-2020>
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 27* (9th ed.). Semarang: Badan Penerbit Universitas Diponegoro.
- Green, L. W., & Kreuter, M. W. (2005). *Health program planning: An educational and ecological approach* (4th ed.). New York: McGraw-Hill.

- Indrawati, D., & Utami, S. (2020). Validitas dan Reliabilitas Instrumen Penelitian: Studi pada Penggunaan Kuesioner Tertutup. *Jurnal Ilmu Keperawatan dan Kebidanan*, 11(1), 5662. <https://doi.org/10.31227/jikk.v11i1.56>
- Notoatmodjo, S. (2014). *Kajian tentang perilaku dalam bidang kesehatan*. Jakarta: Rineka Cipta.
- Nursalam. (2020). *Metodologi Penelitian Ilmu Keperawatan: Pendekatan Praktis (5th ed.)*. Jakarta: Salemba Medika.
- Prawirohardjo, S. (2022). *Ilmu kebidanan (ed. 4)*. Jakarta: PT Bina Pustaka Sarwono Prawirohardjo.
- Riskesdas. (2018). Laporan Nasional Kementerian. *Riset Kesehatan Dasar*. Jakarta: Badan Litbangkes. Diakses <https://www.litbang.kemkes.go.id/laporan-riset-kesehatan-dasar-riskesdas-2018/>
- Riyanto, A. (2019). *Statistik Kesehatan untuk Penelitian (2nd ed.)*. Yogyakarta: Nuha Medika.
- Sari, P., Astutik, W., Risnawati, R., & Norhapifah, H. (2023). Aspek-aspek yang memengaruhi ketertarikan ibu terhadap penggunaan kontrasepsi IUD di PMB Endang Kecamatan Sambaliung Kabupaten Berau. *Cerdika: Jurnal Ilmiah Indonesia*, 3(3), 275288. <https://doi.org/10.59141/cerdika.v3i3.534>
- Slameto. (2013). *Belajar dan faktor-faktor yang mempengaruhinya*. Jakarta: Rineka Cipta.
- Sugiyono. (2021). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Wahyuni, I., & Fitriyani, L. (2022). Keterkaitan antara Dukungan Suami dan Tingkat Pengetahuan dengan Pemakaian Kontrasepsi IUD pada Wanita Usia Subur. *Jurnal Kebidanan dan Kesehatan Tradisional*, 7(1), 2330. <https://doi.org/10.31000/jkkt.v7i1.5400>
- Yuliana, S., & Hidayat, A. (2023). *Desain Penelitian Cross-Sectional dan Aplikasinya dalam Bidang Kesehatan*. Jakarta: Prenada Media.