

Factors Associated with the Interest of IUD Contraceptive Users in Kalirong Village, Kediri Regency

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ABSTRACT

Background: Population growth in Tarokan Village, Kediri, increased by 0.77% in 2021–2022 and 0.73% in 2022–2023, driven by a decline in contraceptive use. The largest decline occurred in IUD use, which fell from 46 in 2022 to 36 in 2023.

Purpose: To identify factors influencing IUD contraceptive acceptors' interest in Kalirong Village, Kediri.

Methods: This study used a cross-sectional analytical survey of 82 PUS mothers aged ≥ 21 – ≤ 35 years with

≥ 1 child, selected using simple random sampling. Data were collected via a questionnaire and analyzed using the *chi-square test* with a significance level of $p = 0.1$.

Results: There was a significant association between the knowledge of postpartum mothers in Kalirong Village and their interest in IUD use ($p = 0.000 < 0.1$), whereas spousal support was not associated (p

$= 0.784 > 0.1$). An analysis of parity was not performed because all respondents had the same parity. Conclusion: Knowledge is the dominant factor influencing interest in IUD use.

Conclusion: Comprehensive education and counseling are essential to increase family planning participation, as women's knowledge significantly influences their interest in using an IUD, whereas spousal support and parity show no significant effect.

Keywords: Family Planning, Intrauterine Device (IUD), Knowledge, Parity, Spousal Support

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BACKGROUND

The population growth rate in Kediri, particularly in Tarokan Village, increased by 0.77% during the 2021–2022 period and by 0.73% during the 2022–2023 period. One factor influencing this growth is the decline in contraceptive use, particularly IUDs, in Indonesia. According to data from the Kediri Regency Central Statistics Agency, more than 10 subdistricts experienced a decline in IUD users, with Tarokan Subdistrict ranking first. The number of IUD users in Tarokan Subdistrict continued to decline from 3,024 in 2020 to just 593 in 2023, falling far short of the set target. This situation calls for further analysis to understand the main causes of this decline and to find appropriate solutions.

Various studies have identified a number of factors that influence the low uptake of IUDs. Fetty's (2022) study identified four main factors: economic status, level of knowledge, level of education, and age, with knowledge emerging as the dominant factor ($p = 0.001$). Emi's (2023) study revealed that spousal support ($p = 0.005$) had a greater influence than knowledge ($p = 0.143$). Meanwhile, Kadir's (2020) study showed that parity is the most dominant factor ($p = 0.001$; OR = 11.283), indicating a significant opportunity to increase mothers' interest in using IUDs. In Kalirong Village, Tarokan Subdistrict, a significant decline in the number of IUD users was also observed, from 46 people in 2022 to 36 people in 2023.

In light of this situation, the researcher aims to conduct an additional study titled "Factors Associated with Interest in IUD Use Among Family Planning Acceptors in Kalirong Village, Kediri Regency." The objective of this study is to examine the factors influencing the low interest in IUD use at the local level and to offer data-driven solutions to improve family planning program outcomes in the region. From the existing factors, the researcher selected the three most dominant factors based on several previous studies to identify those that most significantly influence mothers' interest.

METHODS

This study was designed using analytical observation and employed a cross-sectional approach, focusing on 449 mothers of couples of reproductive age (PUS) who met the criteria. These women were then selected as the sample using *simple random sampling* and the *Slovin* formula, resulting in a sample of 82 respondents. The questionnaire used in this study was developed by Sufianti (2018), and its validity and reliability had been tested, yielding a *Cronbach's Alpha* value of 0.721 for the knowledge questionnaire and 0.637 for the spousal support questionnaire; thus, it can be concluded that all questions in the questionnaire are valid and reliable. The researcher also obtained ethical approval to conduct this study under No. DP.04.03/F.XXI.31/01227/2024. The data were analyzed using the *chi-square* test with a significance level of $p < 0.1$. This significance level was set to enhance the test's sensitivity in detecting the dominant factors influencing family planning acceptors' interest.

RESULTS

Table 1. Characteristics of PUS Mothers

Characteristics	Frequency (n)	Percentage (%)
Age		
20–25 years	29	34.9
26–30 years	27	32.5
31–35 years	27	32.5
Education		
Elementary School	11	13.4

Junior High School	26	13.4
High School	37	45.1
Bachelor's Degree	8	9.7
Employment		
Farming	7	8.5
Housewife	54	67.5
Private-Sector	8	9.7
Employee	6	7.3
Civil Servant	7	8.5
Self-Employed		

Source: Processed Data, 2024

Based on Table 1, it can be seen that a small proportion of respondents were aged 20–25 years (34.9%); the vast majority of IUD users had a high school education (37 women, or 45.1%); and the majority of IUD users were not employed (54 women, or 67.5%).

Table 2. Frequency Distribution of Factors Associated with Interest in IUD Contraception

No.	Category	Frequency	Percentage (%)
1.	Knowledge	44	53.6
	Fair		
	Good	38	46.4
	Total	82	100.0
2.	Husband's Support	48	58.5
	Not Very Good		
	Good	34	41.5
	Total	82	100.0
3.	Parity	0	0
	Primiparous		
	Multipara	82	100
	Total	82	100.0
4.	Interest in PUS	67	81.7
	Not Interested		
	Interested	15	18.3
	Total	82	100.0

Source: Processed Data, 2024

Table 2 shows that the majority of PUS mothers have a low level of knowledge, totaling 44 women (53.6%). The majority of PUS mothers also have a low level of spousal support, totaling 48 women (58.5%). All respondents were multiparous, totaling 82 women (100%). The majority of respondents 67 women (81.7%) were not interested in IUD family planning.

Table 3. Results of the *Chi-Square* Test on the Relationship Between PUS Mothers' Knowledge and Interest in IUD Contraception

<i>Chi Square Test</i>					
	value	df	Asymp. Sig (2-sided)	Exact. Sig (2-sided)	Exact. Sig (1-sided)
Pearson Chi Square	21.918	1	.000		
	a				

Continuity Correction ^b	19.383	1	.000		
Likelihood Ratio	28.142	1	.000		
Fisher`s Exact Test		1		.000	.000
Linear-by-Linear Association	21.650	1	.000		
N of Valid Cases	82	1			
a. 0 celss (0.0%) have expected count less tha5. The minimum expected count is 7.61					
b. Computed only for 2x2 table					
Source: Processed Data, 2024					

Table 3 shows a significant relationship between knowledge level and interest, as indicated by a test value of 0.000. This value is lower than the significance threshold used for this study, namely $P < 0.1$.

Table 4. Results of the *Chi-Square* Test for the Relationship Between Support from the Husband of PUS Mothers and Interest in IUD Contraception

Chi Square Test					
	value	df	Asymp. Sig (2-sided)	Exact. Sig (2-sided)	Exact. Sig (1-sided)
Pearson Chi Square	.129 ^a	1	.720		
Continuity Correction ^b	.006	1	.940		
Likelihood Ratio	.130	1	.719		
Fisher`s Exact Test		1		.784	.474
Linear-by-Linear Association	.127	1	.721		
N of Valid Cases	82	1			
a. 0 celss (0.0%) have expected count less tha5. The minimum expected count is 7.61					
b. Computed only for 2x2 table					
Source: Processed Data, 2024					

The significance value (sig) was recorded at 0.784, which is higher than 0.1, indicating that there is no significant correlation between spousal support and interest.

Table 5. Results of the *Chi-Square* Test for the Relationship Between Parity and Interest in IUD Contraceptive Users

Chi-Square Tests			
	Value	Negatif	Jumlah
Pearson Chi-Square	.a	1	4
N of Valid Cases	82	18	29
a. No. statistics are computed because Paritas is a constant		19	23

Sumber: Data Olahan 2024

The relationship between parity and interest could not be tested using the chi-square test because all respondents were multiparous.

DISCUSSION

Based on the results of the chi-square test in Table 3, there is a significant association between the knowledge of women of reproductive age (PUS) in Kalirong Village and their interest in using an IUD as a method of contraception, with a significance value of 0.000 (less than 0.1). Knowledge has been shown to play a crucial role in shaping the behavior of mothers in the Reproductive-Age Couple (RAC) group. This aligns with Suryanti's (2019) study, which found that mothers with low levels of knowledge tend not to use IUDs. A good understanding of the benefits, mechanism of action, and effectiveness of IUDs can increase interest and confidence in choosing this method, while a lack of understanding leads to doubts or reluctance. Therefore, comprehensive and ongoing education and counseling are needed to raise awareness, reduce concerns, and encourage positive decisions regarding the use of IUDs as a safe and effective method of contraception.

Based on the results of the chi-square test in Table 4, there was no significant association between the support provided by the husbands of women of reproductive age (PUS) in Kalirong Village and their interest in using an IUD, with a p-value of 0.784 (greater than 0.1). Although spousal support is generally considered an important factor in contraceptive decision-making, the results of this study indicate that low spousal involvement in discussions, mothers' limited knowledge about IUDs, and the tendency to view contraceptive decisions as the wife's personal matter may reduce the relevance of spousal support to interest in using an IUD. The discrepancy between these results and previous studies such as that conducted by Emi Sutrisminah (2023), which found a strong association between a husband's encouragement and a wife's interest in IUDs is likely due to differences in population characteristics, culture, or couples' communication patterns that influence the husband's role in family decisions. This highlights the importance of improving education and communication between couples to support the success of family planning programs.

An analysis of the relationship between parity and interest cannot be conducted using a chi-square test because all respondents in this study fall into the multiparous category, meaning there is no variation in the parity variable. This lack of variation renders the chi-square test irrelevant, as this method requires distinct categories within the variable being analyzed. Consequently, parity cannot be used as a distinguishing factor to measure respondents' interest.

Knowledge was found to be the dominant factor influencing the interest of IUD users, with a significance value of 0.000 indicating a highly significant association, while spousal support and parity had no effect. Comprehensive education and counseling about the IUD are crucial for increasing users' interest and participation and supporting the success of family planning programs.

CONCLUSION

The knowledge of women of reproductive age (PUS) was found to be significantly associated with their interest in using an IUD, while spousal support and parity did not show a significant effect. Comprehensive education and counseling are needed to raise awareness, reduce concerns, and encourage acceptors' participation in family planning programs.

CONFLICTS OF INTEREST

One limitation of this study is the lack of data variation in the parity variable, as all respondents fell into the multiparous category. Consequently, the correlation analysis between parity and IUD users' interest could not be further evaluated.

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REFERENCES

- Astuti, M.O., Guntur, R.D., Atti, A., Sinu, E.B., and Kusumaningrum, D., 2024. Pearson Chi-Square Analysis of Factors Associated with the Incidence of Stunting. *Journal of Innovation Research and Knowledge*, 3(11), pp. 2197–2210.
- Kadir, D., & Sembiring, J. B. (2020). Factors Influencing Mothers' Interest in Using IUDs at the Binjai Estate Community Health Center.
- Mustafyani, A. D., & Mahmudiono, T. (2018). The Relationship Between Knowledge, Attitudes, Spousal Support, Behavioral Control, and Mothers' Intentions with the Caregiving Behavior of Mothers of Undernourished Toddlers. *The Indonesian Journal of Public Health*, 12(2), 190. <https://doi.org/10.20473/ijph.v12i2.2017.190-201>.
- Rochadi, K., Sembiring, R., Nababan, D., Sitorus, M. E. J., & Wandra, T. (2022). Analysis of Factors Influencing Participation in Long-Acting Contraceptive Methods (LACMs) in the Langsa Timur Subdistrict.
- Suciati, R., and Wijayanti, T. (2022). The Relationship Between Parity and the Incidence of Hypertension During Pregnancy. *Borneo Studies and Research*, 4(1), pp. 9–15.
- Sutrisminah, E., Lisani, F., & Hudaya, I. (2023). Factors Influencing Low Interest in the Use of Long-Term Intrauterine Device Contraception in the Family Planning Village. *Faletehan Health Journal*, 10(01), 41–47. <https://doi.org/10.33746/fhj.v10i01.467>.
- Swarjana, I. K. (2022). Concepts of Knowledge, Attitudes, Behavior, Perceptions, Stress, Anxiety, Pain, Social Support, Motivation, Satisfaction, the COVID-19 Pandemic, and Access to Healthcare Services, Complete with Theoretical Concepts, Methods for Measuring Variables, and Sample Questionnaires. Yogyakarta: Andi Publishers.
- Wulandari, F. C., & Nisa, Z. F. (2022). Factors Influencing the Low Number of IUD Users in the Purworejo Community Health Center Service Area. *Journal of Health Communication*, 13(2). <https://doi.org/10.56772/jkk.v13i2.257>.