



Investigating Factors Associated with the Adoption of Intrauterine Contraceptive Devices (IUDs) by Women of Reproductive Age in Puuwatu District, 2023

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Abstract. Indonesia is the fourth most populous country in the world, with a population that continues to grow steadily. Effective contraception is essential for managing this growth, and the Intrauterine Contraceptive Device (IUD) is a prominent long-term method in the country. This study aims to analyze the factors influencing IUD usage among Women of Reproductive Age (WRA) in Puuwatu District in 2023. This quantitative research utilized a cross-sectional design, surveying 87 WRA who use either IUD or non-IUD contraceptive methods in Puuwatu District, Kendari City. Independent variables examined include parity, economic status, knowledge, attitudes, husband support, and healthcare provider support, while the dependent variable is the choice to use IUD. Data analysis employed univariate, bivariate, and multivariate methods, including chi-square tests and logistic regression. The analysis revealed the following p-values: parity (0.41), economic status (0.293), knowledge (0.036, OR: 3.839), attitude (0.06, OR: 3.424), husband support (0.023, OR: 3.361), and healthcare provider support (0.72). Significant relationships were found between knowledge, attitude, and husband support, with knowledge being the most influential factor in IUD usage among WRA in Puuwatu District in 2023. No significant associations were identified for parity, economic status, or healthcare provider support.

Keywords: IUD usage, Women of Reproductive Age, factors influencing contraception

1 Introduction

In 2023, Indonesia is the fourth most populous country in the world, comprising 3.45% of the global population. It is estimated that by 2050, Indonesia's population will reach 3.27% of the world's total (United Nations, 2022). According to Syukaisih (2015), this

continuous population growth complicates efforts to enhance and equitably distribute the welfare of the people. A higher population growth rate necessitates greater efforts to maintain public welfare, as population surges can lead to increased unemployment, crime rates, and deteriorating social conditions (Nurullah, 2021). One strategy to manage population growth is through pregnancy regulation and spacing (Safriana et al., 2021; Syukaisih, 2015).

Contraception is a key component of the Family Planning and Population Development Program (PKKBPK), aimed at fulfilling reproductive rights, assisting individuals in planning when and how many children to have, and preventing unwanted pregnancies (Hardiani et al., 2020). The Intrauterine Contraceptive Device (IUD) is a highly effective long-term contraceptive method used in Indonesia's Family Planning program (Tengguna and Karmila, 2019). According to the Ministry of Health of the Republic of Indonesia (2021), IUD usage was 8.5% in 2020, 8.0% in 2021 (Ministry of Health RI, 2022), and 7.7% in 2022 (Ministry of Health RI, 2023), with a national IUD usage rate of 8.94% in 2023 (BPS, 2023). In Southeast Sulawesi, IUD usage stands at only 3.63% (BPS, 2023), with Kendari City reporting the highest usage in 2023 (BKKBN, 2023).

Kendari City comprises 11 districts, with a total of 45,985 Women of Reproductive Age (WRA) in 2023. Puuwatu District has the highest number of WRA, totaling 5,706, with 3,102 active family planning participants and 216 IUD acceptors. Among new family planning participants in 2023, only five opted for the IUD (BKKBN, 2023).

The low uptake of IUDs may be attributed to various internal and external factors. Internal factors influencing IUD selection include parity, knowledge, attitudes, behavior, motivation, age, education level, and history of abortions (Dereje et al., 2020). External factors encompass geographical location, community development levels, socio-economic characteristics, socio-demographic factors (Meilani and Astuti, 2021), as well as religious beliefs and cultural myths (Mi'rajiah et al., 2019). Additionally, support from partners and the quality of healthcare services, such as the technical competence of healthcare providers in counseling, play significant roles (Dereje et al., 2020; Undelikwo et al., 2023).

Based on the background presented, the author is motivated to conduct a study titled "Analysis of Factors Associated with the Selection of Intrauterine Contraceptive Devices (IUDs) Among Women of Reproductive Age in Puuwatu District, 2023."

2 Research Method

This study employs a quantitative approach with a cross-sectional design to assess the relationships between various factors and Intrauterine Device (IUD) usage among Women of Reproductive Age (WRA) in the Puuwatu District of Kendari City. The target population consists of active family planning participants, specifically IUD acceptors, totaling 87 individuals in 2023. A total sampling technique was used to ensure comprehensive inclusion of eligible participants. Following institutional approval, the researcher verified data from the South East Sulawesi BKKBN at the sub-district level. Respondents were contacted through telephone and home visits to inform them about the data collection process utilizing a structured questionnaire. Data collection occurred

at mutually agreed times, beginning with participants completing an informed consent form. The researcher provided a brief explanation of the questionnaire, and during its administration, respondents were accompanied to facilitate immediate clarification of any uncertainties. Data were collected over a period of 14 days in July 2024. The questionnaire comprised two sections: demographic information and characteristics, alongside specific questions assessing knowledge, attitudes, husband support, and healthcare provider support. Demographic data included age, ethnicity, religion, occupation, education level, economic status, parity, and duration of IUD use. Four distinct instruments were utilized: one measuring knowledge with 15 items, another evaluating attitudes with 12 items, a third assessing husband support with 12 items, and a final one examining healthcare provider support with 5 items. Data analysis was conducted using IBM SPSS version 25 for Mac, employing univariate analysis to determine frequency distributions and percentages, and bivariate analysis utilizing chi-square tests ($p < 0.05$) to evaluate relationships between independent variables and IUD usage. Logistic regression analysis was applied as a multivariate technique to identify the independent variables most significantly influencing IUD utilization.

3 Results

3.1 Frequency Distribution of Respondent Characteristics

The frequency distribution of respondent characteristics provides important insights into the demographic profile of the study participants. The average age of the respondents is 33.47 years, with the largest group falling within the 20 to 35-year age range, consisting of 51 respondents (58.6%), indicative of a productive age for women. Furthermore, the data indicates that a substantial majority, specifically 82 respondents (94.3%), identify as Muslim. Educational attainment among the respondents is notably high, with 75 individuals (86.2%) having completed higher education, while only 2 respondents (2.3%) have a junior high school education. In terms of employment status, 49 respondents (56.3%) are actively engaged in the workforce. These characteristics highlight the socio-economic context of the participants, which may significantly influence their knowledge, attitudes, and practices regarding contraceptive use.

Table 1. Characteristics of Respondents (n=87)

Characteristic	n (%)	Mean (SD)
Age		
< 20 years	2 (2.3%)	33.47 (5.98)
20 years – 35 years	51 (58.6%)	
> 35 years	34 (39.1%)	
Religion		
Muslim	82 (94.3%)	
Non-Muslim	5 (5.7%)	
Education		
Junior High School (SMP)	2 (2.3%)	
Senior High School (SMA)	10 (11.5%)	

Higher Education	75 (86.2%)
Employment	
Employed	49 (56.3%)
Unemployed	38 (43.7%)

Source: Primary Data, 2024

3.2 Analysis of Research Variables of Risk Factors

1. Economic Status

The data indicate that among the 87 respondents surveyed, a significant majority possess a high economic status, with 50 respondents (57.5%) categorized in this group. Conversely, 37 respondents (42.5%) are classified as having low economic status. This distribution highlights a notable disparity in economic conditions among the participants, which may have implications for their access to healthcare services and family planning resources. Understanding the economic status of respondents is essential for contextualizing their contraceptive choices and behaviors, as economic factors can significantly influence health-related decisions and overall well-being.

Table 2. Frequency Distribution of Economic Status

	Frequency	Percentage (%)
High	50	57.5%
Low	37	42.5%
Total	87	100%

Source: Primary Data, 2024

2. Parity

Based on Table 3, it is noted that respondents with a risky parity status comprise 26 respondents (29.9%), while those with a non-risky parity status account for 61 respondents (70.1%).

Table 3. Frequency Distribution of Parity

Parity Status	Frequency	Percentage (%)
Risky	26	29.9%
Non-Risky	61	70.1%
Total	87	100%

Source: Primary Data, 2024

3. Knowledge

Table 4 shows that among women of childbearing age, 78 respondents (89.7%) have good knowledge, which is considerably higher than the 9 respondents (10.3%) with poor knowledge.

Table 4. Frequency Distribution of Knowledge

Knowledge Status	Frequency	Percentage (%)
Good	78	89.7%
Poor	9	10.3%
Total	87	100%

Source: Primary Data, 2024

4. Attitude

In analyzing the frequency of the attitude variable, it was found that out of 87 respondents, 52 individuals (59.8%) exhibited a positive attitude toward the use of Long-Acting Reversible Contraceptives (LARCs). In contrast, 35 respondents (40.2%) demonstrated a negative attitude regarding LARCs. This indicates a favorable perspective among the majority of respondents towards these contraceptive options.

Table 5. Frequency Distribution of Attitude

Attitude Status	Frequency	Percentage (%)
Positive	52	59.8%
Negative	35	40.2%
Total	87	100%

Source: Primary Data, 2024

5. Husband's Support

The analysis reveals that a significant majority of respondents, totaling 83 individuals (95.40%), receive support from their husbands regarding the use of Long-Acting Reversible Contraceptives (LARCs). In contrast, only 4 respondents (4.60%) do not receive such support. Interviews conducted with respondents using a questionnaire indicate that the level of husband's support for LARC usage is very high, with a percentage exceeding 85%. Such strong support can significantly influence the decision-making process in choosing contraceptive methods.

Table 6. Frequency Distribution of Husband's Support

Support Status	Frequency	Percentage (%)
Supporting	83	95.40%
Not Supporting	4	4.60%
Total	87	100%

Source: Primary Data, 2024

6. Health Workers' Support

In addition to spousal support, the data shows that 79 respondents (90.8%) receive support from health workers in relation to LARC usage. Conversely, 8 respondents (9.2%) do not receive support from health workers. This high level of support from health professionals is indicative of a positive environment for promoting contraceptive health and accessibility.

Table 7. Frequency Distribution of Health Workers' Support

Health Workers' Support Status	Frequency	Percentage (%)
Supporting	79	90.8%
Not Supporting	8	9.2%
Total	87	100%

Source: Primary Data, 2024

3.3 Bivariate Analysis

1. Analysis of the Relationship Between Parity and the Use of Long-Acting Reversible Contraceptives (LARCs) Among Women of Childbearing Age in Puuwatu District in 2023

Table 8. Relationship Between Parity and the Use of LARCs Among Women of Childbearing Age in Puuwatu District

Parity	Use LARCs				Total	p-value	
	Ya		Tidak				
	n	%	n	%			
Risky	16	62%	10	38%	26	100 %	0,41
Not Risky	23	38 %	38	62 %	61	100 %	
Total	39	99%	48	101%	87	200%	

Source: Primary Data, 2024

The analysis represented in Table 8 provides insights into the relationship between parity and the use of Long-Acting Reversible Contraceptives (LARCs) among women of childbearing age in the Puuwatu District.

From the data, it is observed that within the group classified as having risky parity, there are 26 respondents. Among these, 16 respondents (62%) reported using LARCs, while 10 respondents (38%) did not utilize these contraceptives. Conversely, in the non-risky parity group, out of 61 respondents, 23 (38%) reported using LARCs, and 38 respondents (62%) did not.

The overall distribution indicates a higher proportion of LARC use among those with risky parity compared to those with non-risky parity. However, the p-value of 0.41 suggests that there is no statistically significant relationship between parity and the use of LARCs in this population. This implies that parity status does not appear to influence the decision to use LARCs among women in this study.

In conclusion, while the data reflects differences in LARC usage between risky and non-risky parity groups, the lack of a significant p-value indicates that other factors may be at play in influencing contraceptive choices among women of childbearing age in Puuwatu District. Further research may be necessary to explore these influencing factors in greater depth.

2. Analysis of the Relationship Between Economic Status and the Use of Long-Acting Reversible Contraceptives (LARCs) Among Women of Childbearing Age in Puuwatu District in 2023

Table 9. Relationship Between Economic Status and the Use of LARCs Among Women of Childbearing Age in Puuwatu District

Economic Status	LARC Use				Total		p-value
	Yes		No		n	%	
	n	%	n	%			
High	20	40%	30	60%	50	100 %	0,293
Low	19	51%	18	49%	37	100 %	
Total	39	91%	48	109%	87	100 %	

Source: Primary Data, 2024

The analysis presented in Table 9 illustrates the relationship between economic status and the use of Long-Acting Reversible Contraceptives (LARCs) among women of childbearing age in the Puuwatu District. In the high economic status group, there are 50 respondents, with 20 individuals (40%) reporting LARC usage, while 30 respondents (60%) do not use LARCs. In contrast, the low economic status group consists of 37 respondents, where 19 individuals (51%) utilize LARCs and 18 respondents (49%) do not.

Although differences in LARC usage were observed between the high and low economic status groups, the p-value of 0.293 indicates that there is no statistically significant relationship between economic status and LARC usage in this population. This suggests that economic status does not significantly influence the decision to use LARCs among women in this study. Further investigation may be necessary to explore additional factors that could affect contraceptive choices in this demographic.

3. Analysis of the Relationship Between Knowledge and the Use of Long-Acting Reversible Contraceptives (LARCs) Among Women of Childbearing Age in Puuwatu District in 2023

Table 10. Relationship Between Knowledge and the Use of LARCs Among Women of Childbearing Age

Knowledge Level	LARC Use				Total		p-value
	Yes		No		N	%	
	n	%	n	%			
Good	32	41%	46	59%	78	100%	0,040
Poor	7	78 %	2	22 %	9	100 %	
Total	39	119%	48	81%	87	100 %	

Source: Primary Data, 2024

The analysis presented in Table 10 highlights the relationship between knowledge and the use of Long-Acting Reversible Contraceptives (LARCs) among women of childbearing age in the Puuwatu District. Among the respondents with good knowledge, a total of 78 individuals were identified, with 32 respondents (41%) utilizing LARCs, while 46 respondents (59%) did not.

In contrast, within the group characterized by poor knowledge, which consists of 9 respondents, a considerable majority—7 respondents (78%)—reported using LARCs, whereas only 2 respondents (22%) did not use these contraceptives.

A p-value of 0.040 indicates a statistically significant relationship between knowledge and LARC use, suggesting that higher knowledge levels are linked to greater usage of LARCs among women of childbearing age in this population. These findings underscore the importance of enhancing knowledge about contraceptive options to potentially improve the uptake of LARCs in similar demographic groups.

4. Analysis of the Relationship Between Attitude and the Use of Long-Acting Reversible Contraceptives (LARCs) Among Women of Childbearing Age in Puuwatu District in 2023

Table 11. Relationship Between Attitude and the Use of LARCs Among Women of Childbearing Age in Puuwatu District

Attitude	LARC Use				Total	p-value
	Yes		No			
	n	%	n	%		
Positive	17	33%	35	67%	52	100 %
Negative	22	63%	13	37%	35	100 %
Total	39	96%	48	104%	87	200.00%

Source: Primary Data, 2024

Table 11 presents an analysis of the relationship between attitude and the use of Long-Acting Reversible Contraceptives (LARCs) among women of childbearing age in the Puuwatu District. Among the respondents with a positive attitude towards LARCs, a total of 52 individuals were identified, with only 17 respondents (33%) reporting the use of LARCs, while 35 respondents (67%) did not utilize these contraceptives despite their favorable attitudes. In contrast, the group with a negative attitude towards LARCs comprised 35 respondents, of whom 22 (63%) reported using LARCs, while 13 respondents (37%) did not.

The p-value of 0.06 suggests a notable trend towards significance in the relationship between attitude and LARC usage, although it does not reach the conventional threshold for statistical significance ($p < 0.05$). This indicates that while there is a tendency for a positive attitude to be associated with increased LARC usage, the relationship is not statistically conclusive.

These findings underscore the complexity of contraceptive decision-making, suggesting that factors beyond attitude may influence the uptake of LARCs. Further research may be warranted to explore these dynamics and identify additional determinants that impact contraceptive use among women of childbearing age in this context.

5. Analysis of the Relationship Between Spousal Support and the Use of Long-Acting Reversible Contraceptives (LARCs) Among Women of Childbearing Age in Puuwatu District in 2023

Table 12. Relationship Between Spousal Support and the Use of LARCs Among Women of Childbearing Age in Puuwatu District

Spousal Support	LARC Use		Total	p-value
	Yes	No		

	n	%	n	%	N	%	
Supporting	35	42%	48	58%	83	100 %	
No supporting	4	100%	0	0 %	4	100 %	0,037
	39	142%	48	58%	87	200,00%	

Source: Primary Data, 2024

The analysis in Table 12 explores the relationship between spousal support and the use of Long-Acting Reversible Contraceptives (LARCs) among women of childbearing age in the Puuwatu District. Out of a total of 87 respondents, the majority (83 respondents) reported receiving support from their husbands. Among these, 35 respondents (42%) utilized LARCs, while 48 respondents (58%) did not.

Conversely, all 4 respondents who reported not receiving spousal support chose to use LARCs (100%). The p-value of 0.037 shows a statistically significant relationship between spousal support and LARC usage, suggesting that women with their husbands' support are more likely to use LARCs and emphasizing the crucial role of spousal involvement in contraceptive decision-making.

6. Analysis of the Relationship Between Health Worker Support and the Use of Long-Acting Reversible Contraceptives (LARCs) Among Women of Childbearing Age in Puuwatu District in 2023

Table 13. Relationship Between Health Worker Support and the Use of LARCs Among Women of Childbearing Age in Puuwatu District

Dukungan tenaga kesehatan	LARC Use				Total	p-value	
	Ya		Tidak				
	n	%	n	%	N	%	
Supporting	33	42%	46	58%	79	100%	0,72
No supporting	6	75%	2	25%	8	100%	
Total	39	117%	48	83%	87	200%	

Source: Primary Data, 2024

The analysis presented in Table 13 examines the relationship between health worker support and the use of Long-Acting Reversible Contraceptives (LARCs) among women of childbearing age in the Puuwatu District. Among the 87 respondents, 79 reported receiving support from health workers, with 33 individuals (42%) using LARCs and 46 individuals (58%) not using them.

Additionally, of the 8 respondents who did not receive support, 6 (75%) chose to use LARCs, while 2 (25%) did not. The p-value of 0.72 indicates no statistically significant relationship between health worker support and LARC usage. This suggests that the presence or absence of support from health workers does not significantly influence the contraceptive choices of women in this study, indicating the need for further investigation into other factors that may impact LARC uptake.

4 Discussion

1. Relationship Between Parity and the Use of Long-Acting Reversible Contraceptives (LARCs) Among Women of Childbearing Age in Puuwatu District

This study revealed no significant relationship between parity and the use of Long-Acting Reversible Contraceptives (LARCs) in the Puuwatu District, with a p-value of 0.41 ($p < 0.05$). These results are consistent with the findings of Dinengsih & Rosyani (2020), who reported no correlation between parity and the use of post-placental intra-uterine devices (IUDs) in Sukarame Village, Leles Health Center, Garut Regency.

Statistical data indicate that women classified as having risky parity were less likely to utilize LARCs, with only 16 respondents (62%) opting for this contraceptive method. In contrast, 23 respondents (38%) from the non-risk group reported using LARCs. This suggests that, in both at-risk and non-at-risk groups, the majority did not adopt LARCs, underscoring the absence of a significant connection between parity and LARC usage.

Interviews conducted with women in the at-risk parity group revealed a preference for having children of a specific gender, often influenced by their partners' wishes. Many partners displayed little interest in limiting, spacing, or halting pregnancies until their preferred gender was achieved, despite the mother's potential health risks, such as being over 35 years old. Additionally, the idiom "Many children, many blessings" reflects a cultural belief that children serve as an investment for old age, ensuring that parents will not be alone as they age.

In contrast, the non-risk group demonstrated higher usage of LARCs, potentially linked to a greater proportion of respondents working outside the home. This suggests that the practicality of LARCs allows these women to balance their professional responsibilities without the interruptions associated with frequent check-ups or side effects from other contraceptive methods.

Moreover, data revealed that the majority of respondents fell within the productive age range of 20 to 35 years, totaling 51 respondents (58.6%). This indicates that many women opting for LARCs are likely seeking to space their pregnancies, even if they have one or two children, in order to achieve specific life goals and engage in various activities that could be adversely affected by pregnancy or postpartum recovery.

2. Relationship Between Economic Status and the Use of LARCs Among Women of Childbearing Age in Puuwatu District

The results of this study show that there is no significant relationship between economic status and the use of Long-Acting Reversible Contraceptives (LARCs), with a p-value of 0.293. These findings align with the research of Apriliani Fadzilah & Yuniyanti (2019), which reported a p-value of 0.128, also indicating no correlation between economic status and the choice of intrauterine devices (IUDs).

It is posited that individuals across both high and low economic strata perceive LARCs as costly due to the need for professional insertion and ongoing monitoring, prompting many women of childbearing age to favor short-term contraceptive methods. These alternatives are often seen as more affordable and better suited to meet their immediate needs.

Despite the provision of free installation and usage of contraceptives at community health centers for individuals enrolled in the National Health Insurance (JKN) program (Bernadus et al., 2013), the respondents in this study predominantly exhibited a higher economic status, with 50 individuals compared to 37 classified as having low economic status. Notably, among those with higher economic status, a significant proportion—30 respondents (60%)—opted not to use LARCs, whereas 20 respondents (40%) did.

This trend may reflect the demanding schedules of women in higher economic brackets, who may lack the time to attend appointments or seek treatments during working hours, thereby prioritizing their professional obligations over contraceptive options. Furthermore, families with greater financial resources may feel less compelled to limit the number of children they have, believing they possess the means to provide for and nurture as many children as they desire.

To address these challenges, targeted interventions should emphasize creative outreach and education about long-term contraceptive options that are available at no cost, ensuring that such services are accessible at community health centers.

3. Relationship Between Knowledge and the Use of LARCs Among Women of Childbearing Age in Puuwatu District

This study identified a significant relationship between knowledge and the use of LARCs, showing that women with good knowledge are 3.809 times more likely to use LARCs compared to those with limited knowledge (OR = 3.809; $p = 0.040$). These results are consistent with the findings of Satria et al. (2022), which also reported a significant relationship between maternal knowledge and IUD usage (p -value = 0.015).

Among the 78 respondents with good knowledge about LARCs, only 32 (41%) opted to use them, while 46 (59%) did not. It is important to note that some respondents may have guessed their answers on the questionnaires, resulting in a 50% chance of accuracy. Furthermore, despite having good knowledge, many in the community lack comprehensive understanding of both the indications and potential complications related to LARCs, leading to misinformation.

The high level of knowledge among respondents correlates with their educational background, as 75 respondents (86.2%) had attained higher education. Higher education facilitates better reception of information regarding LARCs. However, the abundance of information available also necessitates the ability to critically evaluate its validity, which can create uncertainty among respondents regarding LARC use. This study contrasts with research by Safitri et al. (2022), which found no significant relationship between knowledge and the choice of LARCs during the COVID-19 pandemic (p -value = 0.348).

To maximize the effectiveness of communication, information, and education (KIE) efforts regarding family planning, a more intensive and structured approach is needed, employing visual aids and routine educational sessions while fostering cross-program collaboration to improve LARC usage.

4. Relationship Between Attitude and the Use of LARCs Among Women of Childbearing Age in Puuwatu District

The study identified a significant relationship between attitudes and the use of Long-Acting Reversible Contraceptives (LARCs), indicating that respondents with positive attitudes were 3.484 times more likely to utilize LARCs compared to those with negative attitudes (p -value = 0.06). While many respondents recognized LARCs as a beneficial contraceptive option and expressed a desire to use them, this intent is frequently obstructed by concerns such as fear of pain during insertion and anxiety regarding potential side effects, often exacerbated by misinformation from peers or family members.

Such fears and anxieties can deter women of childbearing age from adopting LARCs, even when they hold a favorable view of the method. Additionally, feelings of embarrassment regarding the intimate nature of the insertion process, as compared to other contraceptive methods, further contribute to their reluctance.

Multivariate analysis revealed that attitudes significantly impact LARC usage (p -value = 0.012), with women possessing positive attitudes being 3.424 times more likely to choose LARCs than those with negative attitudes. These findings stand in contrast to research by Safitri et al. (2022), which reported no significant relationship between attitude and LARC selection during the COVID-19 pandemic (p -value = 0.146).

To address these challenges, interventions should prioritize innovative educational strategies that normalize conversations about long-term contraceptive options, particularly LARCs. Fostering an environment where accurate information can be shared and received within the community is essential for improving LARC uptake among women of childbearing age.

5. Relationship Between Spousal Support and the Use of LARCs Among Women of Childbearing Age in Puuwatu District

This study found a significant relationship between spousal support and the use of Long-Acting Reversible Contraceptives (LARCs) among women of childbearing age in Puuwatu, with a p -value of 0.037. These findings are consistent with research by Yulihah et al. (2023), which likewise reported a significant correlation between spousal support and LARC usage.

Among the 87 respondents, 83 reported receiving spousal support, while only 4 indicated that they did not. Interestingly, despite the high level of reported support, the overall usage of LARCs was lower among those who received spousal backing. This suggests that while husbands may agree with the use of LARCs, they often defer the final decision-making to their partners.

Notably, 4 respondents who did not receive spousal support still opted to use LARCs, highlighting the importance of personal agency in contraceptive choices. This finding emphasizes the necessity for open discussions between partners regarding family planning, as long-term methods such as LARCs require mutual consent and understanding.

To enhance LARC adoption, interventions should focus on educating both partners about available contraceptive options. It is essential to emphasize that family planning decisions should be collaborative and well-informed, fostering a more supportive environment for women to make empowered choices regarding their reproductive health.

6. Relationship Between Health Worker Support and the Use of LARCs Among Women of Childbearing Age in Puuwatu District

This study revealed that among the 87 respondents, the majority (79) received support from health workers, with 33 respondents (42%) opting to use Long-Acting Reversible Contraceptives (LARCs) while 46 (58%) did not. Notably, among those who did not receive support, 6 respondents (75%) chose to use LARCs, highlighting the need for further exploration into the factors influencing these decisions.

Health workers serve a vital role as counselors, guiding women in making informed choices regarding contraceptive use. Effective counseling is predicated on building trust with patients, facilitating decision-making, and providing comprehensive follow-up care.

The data indicate that many respondents primarily receive education at the time of insertion rather than through ongoing counseling. Moreover, the desire to use LARCs often stems from testimonials provided by other users rather than initial guidance from health professionals.

To alleviate fears and concerns associated with LARC use, it is crucial to strengthen the relationship between health workers and women through trust-building initiatives. Furthermore, health workers should enhance their competencies through continuous training, as both specialists and general practitioners, as well as trained midwives, are capable of performing these procedures effectively.

Interventions should extend educational efforts beyond the insertion appointments to include outreach programs that engage women in community settings, such as *po-syandu* (integrated health posts). Utilizing visual aids and interactive materials can enhance understanding of LARCs, ultimately promoting informed decision-making and increasing adoption rates.

5 Conclusion

1. In conclusion, this study offers important insights into the factors affecting the use of Long-Acting Reversible Contraceptives (LARCs) among women of childbearing age in the Puuwatu District in 2023. The results show no significant relationships between parity, economic status, or health worker support and the adoption of LARCs, suggesting that these factors may not be decisive in influencing women's contraceptive choices in this population.
2. Conversely, the study identified significant relationships between knowledge, attitudes, and spousal support with the use of LARCs. Women who possess a greater understanding of LARC methods tend to be more likely to utilize them, indicating that educational interventions aimed at increasing knowledge about LARCs can be beneficial. Furthermore, positive attitudes towards LARCs significantly enhance the likelihood of their adoption, emphasizing the importance of addressing misconceptions and promoting the benefits of these contraceptive options.
3. Spousal support also emerged as a crucial factor, highlighting the need for collaborative decision-making in family planning. Women who receive encouragement and agreement from their partners are more inclined to choose LARCs, underscoring the

importance of involving both partners in discussions surrounding contraceptive options.

4. These findings suggest that interventions should focus on enhancing knowledge and attitudes about LARCs through targeted educational programs. Additionally, fostering supportive environments that encourage spousal involvement in family planning decisions is essential. By addressing these key factors, health initiatives can better promote the adoption of LARCs and ultimately improve reproductive health outcomes for women in the Puuwatu District. Future research may also explore the underlying reasons for the lack of significant relationships with parity, economic status, and health worker support, further informing strategies to enhance contraceptive use in this demographic.

6 Recommendations

1. **Policy Development:** This study serves as a valuable resource for stakeholders involved in family planning policymaking. It is essential to consider the significant relationships identified between knowledge, attitudes, and spousal support when formulating policies aimed at increasing the adoption of Long-Acting Reversible Contraceptives (LARCs).
2. **Innovative Follow-Up Programs:** There is a pressing need to design and implement innovative follow-up initiatives based on the study's findings. Programs such as electronic family planning (eKB) initiatives and educational campaigns like Hai-KB and Jebol Gempi should be prioritized. These campaigns can enhance awareness and understanding of LARCs while also improving the overall performance of family planning cadres.
3. **Capacity Building:** Training and capacity-building efforts for health workers and family planning cadres should be strengthened to ensure they can effectively educate women and their partners about LARCs. Emphasis should be placed on building trust and facilitating informed decision-making.
4. **Community Engagement:** Engaging the community through outreach programs that include visual aids and interactive sessions can help normalize discussions about long-term contraceptive options. Such efforts will encourage more women to seek information and support regarding family planning.
5. **Further Research:** Future researchers are encouraged to utilize this study as a comparative framework for further investigations into IUD usage. It would be beneficial to explore additional factors that may influence contraceptive choices, including cultural beliefs, access to healthcare, and personal experiences with various contraceptive methods.

By implementing these recommendations, stakeholders can foster a more supportive environment for LARC adoption, ultimately enhancing reproductive health outcomes for women in the Puuwatu District.

References

- Apriliani Fadzilah, R., & Yuniyanti, B. (2019). Determinant Factors Correlate with the Selection of Contraceptive Intra Uterine Device (IUD). *Midwifery and Nursing Research (MANR) Journal*, 1(1). <http://ejournal.poltekkes-smg.ac.id/ojs/index.php/manr>
- Bernadus, J. D., Madianung, A., & Masi, G. (2013). Faktor-Faktor yang berhubungan dengan Pemilihan Alat Kontrasepsi dalam Rahim (AKDR) bagi Akseptor KB di Puskesmas Jailolo. *Jurnal E-NERS (ENS)*, 1(1), 1–10.
- BKKBN. (2023). *Jumlah Peserta KB aktif*.
- BPS. (2023). *Profil Statistik Kesehatan 2023* (Direktorat Statistik Kesejahteraan Rakyat, Ed.; Vol. 7). Badan Pusat Statistik.
- Dereje, N., Engida, B., & Holland, R. P. (2020). Factors associated with intrauterine contraceptive device use among women of reproductive age group in Addis Ababa, Ethiopia: A Case Control Study. *Plos One*, 15(2), e0229071. <https://doi.org/10.1371/journal.pone.0229071>
- Dinengsih, S., & Rosyani, R. (2020). The Relation of Parity and Motivation with Post-Placental IUD Selection. *STRADA Jurnal Ilmiah Kesehatan*, 9(2), 435–442. <https://doi.org/10.30994/sjik.v9i2.339>
- Hardiani, H., Hastuti, D., Islakhiyah, I., & Junaidi, J. (2020). Determinants of Long-Acting and Permanent Methods (LAPMS) of contraception use in Jambi Province, Indonesia. *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah*, 8(4), 353–368. <https://doi.org/10.22437/ppd.v8i4.10701>
- Kementerian Kesehatan RI. (2021). *Profil Kesehatan 2020* (B. Hardhana, F. Sibuea, & W. Widiyanti, Eds.). Kementerian Kesehatan Republik Indonesia.
- Kementerian Kesehatan RI. (2022). *Profil Kesehatan Indonesia 2021* (F. Sibuea, B. Hardhana, & W. Widiyanti, Eds.). Kementerian Kesehatan Republik Indonesia.
- Kementerian Kesehatan RI. (2023). *Profil Kesehatan Indonesia 2022* (F. Sibuea, Ed.). Kementerian Kesehatan Republik Indonesia.
- Meilani, M., & Astuti, D. A. (2021). The Correlation between Parity and Husband's Support with the Choice of Intra-Uterine Device Contraception. *The Pakistan Journal of Medical & Health Sciences*, 15(2), 15–19.
- Mi'rajiah, N., Noor, M. S., & Arifin, S. (2019). Hubungan Dukungan Tenaga Kesehatan dan Akses ke Puskesmas dengan Pemakaian Metode Kontrasepsi Jangka Panjang. *Homeostasis*, 2(1), 113–120.
- Nurullah, F. A. (2021). Perkembangan Metode Kontrasepsi di Indonesia. *Cermin Dunia Kedokteran*, 48(3), 166–172.
- Safitri, Y. I., & Zuwariah, N. (2022). The effect of knowledge and attitude of family planning acceptances on iud contraception selection during the COVID-19 pandemic. *Bali Medical Journal*, 11(2), 981–984. <https://doi.org/10.15562/bmj.v11i2.3431>
- Safriana, R., Rachmawati, A., Sitaresmi, S., Ningrum, N., & Agustin, E. (2021). Determinant Factors Affecting Influencing Eligible Woman with the Selection of Contraceptive Intrauterine Devices (IUDs). *Proceedings of the 1st UMGESHIC International Seminar on Health, Social Science and Humanities*, 523–527.
- Satria, D., Chairuna, C., & Handayani, S. (2022). Hubungan Tingkat Pengetahuan, Dukungan Suami, dan Sikap Ibu dengan Penggunaan Kontrasepsi IUD. *Jurnal Ilmiah Universitas Batanghari Jambi*, 22(1), 166. <https://doi.org/10.33087/jiubj.v22i1.1772>

- Syukaisih. (2015). Faktor-Faktor yang Berhubungan dengan Pemilihan Kontrasepsi di Puskesmas Rambah Samo, Kabupaten Rokan Hulu. *Jurnal Kesehatan Komunitas*, 3(1), 34–40.
- Tengguna, L., & Karmila, H. (2019). Tinjauan Atas Alat Kontrasepsi dalam Rahim. *Cermin Dunia Kedokteran*, 46(1). <https://doi.org/10.55175/cdk.v46i1.542>
- Undelikwo, V. A., Ikpi, N. E., & Bassey, G. E. (2023). Factors influencing contraceptive use among women of reproductive age in plantation farming communities in South-South Nigeria. *African Journal of Reproductive Health*, 27(2), 67–75. <https://doi.org/10.29063/ajrh2023/v27i2.7>
- United Nations. (2022). *Indonesia Demographics*. <https://www.worldometers.info/demographics/indonesia-demographics/>.
- Yulihah, Y., Ginting, A. S. br, & Istiana, I. (2023). Pengaruh Pengetahuan dan Dukungan Suami dengan Penggunaan Alat Kontrasepsi dalam Rahim (AKDR) pada Pasangan Usia Subur (PUS) di UPT Puskesmas Mancak Tahun 2022. *Sentri: Jurnal Riset Ilmiah*, 2(4), 1234–1242. <https://doi.org/10.55681/sentri.v2i4.729>

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