

The Relationship of Knowledge, Motivation, And Self-Efficacy With The Use Of Permanent Contraception (Tubectomy) Among Women Of Reproductive Age ≥ 35 Years In Rw 08, Cihanjuang Village, 2026

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ABSTRACT

Background: Permanent contraception (tubectomy) is one of the contraceptive methods available for women who have completed their reproductive plans. However, its utilization among women of reproductive age aged ≥ 35 years remains relatively low. Knowledge, motivation, and self-efficacy may influence women's decisions in choosing permanent contraception. **Purpose:** This study aimed to determine the relationship between knowledge, motivation, and self-efficacy with the use of permanent contraception (tubectomy) among women of reproductive age aged ≥ 35 years in RW 08, Cihanjuang Village, in 2026. **Methods:** This study used a quantitative observational analytic method with a cross-sectional design. The population consisted of 55 women of reproductive age aged ≥ 35 years in RW 08, Cihanjuang Village. Total sampling was used, resulting in 55 respondents. Data were collected using questionnaires measuring knowledge, motivation, self-efficacy, and tubectomy use. Data were analyzed using univariate analysis and the Chi-Square test with a significance level of $\alpha=0.05$. **Results:** Of the 55 respondents, 19 (34.5%) used tubectomy, while 36 (65.5%) did not. Most respondents had poor knowledge, namely 30 (54.5%), while 27 (49.1%) had high motivation and 24 (43.6%) had high self-efficacy. The Chi-Square test showed a significant relationship between knowledge and tubectomy use ($p<0.001$), motivation and tubectomy use ($p=0.010$), and self-efficacy and tubectomy use ($p=0.002$). **Conclusion:** There were significant relationships between knowledge, motivation, and self-efficacy with tubectomy use among women of reproductive age aged ≥ 35 years in RW 08, Cihanjuang Village. Strengthening contraceptive education and counseling is needed to support informed decision-making regarding permanent contraception.

Keywords: knowledge; motivation; self-efficacy; tubectomy; women of reproductive age

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INTRODUCTION

In today's competitive era, every company must be able to develop and improve the company by Family planning is an important component of reproductive health because it supports couples in regulating the number and spacing of pregnancies and in making reproductive decisions according to health conditions and family needs. Contraceptive services therefore involve not only the availability of methods but also information, counseling, and assistance so that couples can select an appropriate method. In women of reproductive age aged ≥ 35 years, contraceptive planning becomes particularly important because pregnancy at older reproductive age may carry greater maternal and neonatal risks. Long-acting and permanent methods, including tubectomy, may therefore be considered for couples who have completed their desired family size and do not plan further pregnancies (Kementerian Kesehatan RI, 2020, 2021).

Family-planning services require communication, information, and education as integral components of contraceptive care. Counseling helps prospective users understand reproductive needs, available contraceptive alternatives, benefits, limitations, and considerations before making a decision. Decisions concerning contraception can also be influenced by personal characteristics, education, previous experience, partner support, access to health services, and knowledge of method advantages and possible risks. Adequate knowledge enables women to assess alternatives more

appropriately and to consider contraceptive choices in accordance with their reproductive circumstances (BKKBN, 2025; Kementerian Kesehatan RI, 2021; Aulia et al., 2025).

Tubectomy is a permanent contraceptive method intended for individuals or couples who have decided not to have further pregnancies. The method prevents fertilization by interrupting the fallopian tubes and is characterized by high contraceptive effectiveness. Despite these advantages, acceptance of tubectomy remains lower than several other contraceptive methods. Previous research cited in the study indicates that women of reproductive age may still face barriers in accepting tubectomy, including limited understanding, perceptions of the procedure, and considerations surrounding permanent contraception (BKKBN, 2020; Tambunsaribu et al., 2024).

The low use of tubectomy is also evident in the broader context presented in the study. In Indonesia in 2023, injectable contraception accounted for 35.4% of contraceptive use, whereas tubectomy accounted for only 2.4%; in West Java, tubectomy use was reported at 2.0%. At the subdistrict level, UPT DPPKBPPA data for 2025 showed active family-planning coverage of 76.6% among 4,148 couples of reproductive age, while tubectomy use was only 2.7%. In RW 08 Cihanjuang Village, the preliminary data described 286 couples of reproductive age, with tubectomy use of 3.15%, substantially below the stated target of 15% (Kementerian Kesehatan RI, 2021; UPT DPPKBPPA, 2025).

The local preliminary assessment further showed that some women had already had three to five children and no longer wanted another pregnancy, yet were not willing to use permanent contraception and continued to choose short-term methods such as injections. The thesis also identified concerns about surgery, possible side effects, and limited understanding of the safety and effectiveness of tubectomy. Such perceptions can become barriers even when women have reproductive characteristics that make permanent contraception worth considering. This condition indicates the need to examine factors that may be associated with contraceptive decision-making in the local population (Hidayah & Lubis, 2019; Kementerian Kesehatan RI, 2021).

Knowledge is one of the factors considered important in health behavior and contraceptive decision-making. Knowledge about the meaning, benefits, effectiveness, procedure, safety, advantages, and limitations of tubectomy can provide a cognitive basis for evaluating whether the method is appropriate. The thesis found that knowledge was predominantly poor among respondents, suggesting that information concerning tubectomy had not been sufficiently received or understood. This finding is consistent with studies cited in the thesis showing that better contraceptive knowledge is associated with better consideration of contraceptive choices (Notoatmodjo, 2018; Maghfiroh, 2023; Amalia, 2020; Milania, 2025).

Motivation and self-efficacy are also relevant psychological dimensions in contraceptive decision-making. Motivation represents an internal or external drive toward a desired goal, while self-efficacy refers to confidence in one's ability to perform an action and overcome barriers. For permanent contraception, a woman may need sufficient motivation to end childbearing and adequate confidence to discuss the decision with her partner, access services, understand health-worker explanations, and face concerns about the procedure. Previous studies cited in the thesis indicate relationships between motivation, social support, self-efficacy, and contraceptive decision-making (Swarjana, 2022; Nastiti et al., 2022; Bandura, 1997; Milania, 2025; Salsabillah, 2025).

Based on the low proportion of tubectomy use in the study area and the presence of knowledge, motivation, and self-efficacy as potentially relevant factors, this study was conducted to determine the relationship of knowledge, motivation, and self-efficacy with the use of permanent contraception (tubectomy) among women of reproductive age aged ≥ 35 years in RW 08, Cihanjuang Village, in 2026. The study is expected to provide local evidence that can support more focused reproductive-health education and counseling for women and couples considering permanent contraception (Kementerian Kesehatan RI, 2021; BKKBN, 2020).

METHOD

This study used a quantitative observational analytic approach with a cross-sectional design. The design was selected because the study aimed to examine the relationship between knowledge, motivation, and self-efficacy as independent variables and tubectomy use as the dependent variable

without providing an intervention. In a cross-sectional study, variables are measured at one point in time to assess the relationship between factors and outcomes (Notoatmodjo, 2018).

The population consisted of all women of reproductive age aged ≥ 35 years residing in RW 08, Cihanjuang Village, totaling 55 people. The sample was determined using total sampling, so all members of the population who met the inclusion criteria were included. The inclusion criteria were women aged ≥ 35 years in RW 08, having more than two children, and having a youngest child older than two years. Exclusion criteria included women below 30 years who had not completed childbearing, pregnant or suspected pregnant women, and women who were uncertain about future fertility intentions (Sugiyono, 2019, 2020; Notoatmodjo, 2018).

Primary data were collected directly from respondents using questionnaires. The variables measured were tubectomy use, knowledge, motivation, and self-efficacy. Tubectomy use was categorized as tubectomy or non-tubectomy. Knowledge covered the meaning, benefits, procedures, side effects, advantages, and disadvantages of tubectomy and was categorized as good (76–100%), sufficient (56–75%), and poor ($<56\%$). Motivation was categorized as high (67–100%), moderate (34–66%), and low ($\leq 34\%$). Self-efficacy was categorized as high (24–32), moderate (17–24), and low (≤ 16). (Sugiyono, 2018; Notoatmodjo, 2018).

Data processing involved editing, coding, scoring, data entry, cleaning, and tabulation. Univariate analysis was used to describe the frequency and percentage distribution of tubectomy use, knowledge, motivation, and self-efficacy. Bivariate analysis used the Chi-Square test because the study variables were categorical. Statistical decisions were based on $\alpha=0.05$; $p<0.05$ indicated a statistically significant relationship (Sugiyono, 2018; Notoatmodjo, 2018).

The research was conducted in RW 08, RT 01–05, Cihanjuang Village, Parongpong District, West Bandung Regency, during May–June 2026. Respondents were informed about the study and confidentiality of their identities and answers. The study procedures followed the ethical principles described in the thesis, including informed consent, anonymity, confidentiality, justice, and non-maleficence (Notoatmodjo, 2018).

FINDING AND DISCUSSION

Finding

The study involved 55 women of reproductive age aged ≥ 35 years who met the inclusion criteria. The results are presented through bivariate analysis of the relationships between each independent variable and tubectomy use (Primary data, 2026).

Table 1. Relationship Between Knowledge and Tubectomy Use

knowledge	Tubectomy Use						P-value
	Tubectomy		Not Tubectomy		Total		
	n	%	n	%	N	%	
Good	15	100	0	0	15	100,0	<0,001
Sufficient	4	40,0	6	60,0	10	100,0	
Poor	0	0	30	100	30	100.0	

Table 1 shows a clear pattern: all respondents with good knowledge used tubectomy, whereas all respondents with poor knowledge did not use tubectomy. Among respondents with sufficient knowledge, 4 (40.0%) used tubectomy and 6 (60.0%) did not. The Chi-Square test produced $p<0.001$, indicating a statistically significant relationship between knowledge and tubectomy use (Primary data, 2026).

Table 2. Relationship Between Motivation and Tubectomy Use

Motivation	Tubectomy Use						P-value
	Tubectomy		Not Tubectomy		Total		
	n	%	n	%	N	%	
High	14	51,9	13	48,1	27	100,0	0,010
Moderate	1	6,3	15	93,8	16	100,0	
Low	4	33,3	8	66,7	12	100,0	

Table 2 shows that among respondents with high motivation, 14 (51.9%) used tubectomy and 13 (48.1%) did not. In the moderate motivation group, 15 (93.8%) did not use tubectomy, while in the low motivation group 8 (66.7%) did not use tubectomy. The Chi-Square test yielded $p=0.010$, demonstrating a statistically significant relationship between motivation and tubectomy use (Primary data, 2026).

Table 3. Relationship Between Self-Efficacy and Tubectomy Use

Self-Efficacy	Tubectomy Use						P-value
	Tubectomy		Not Tubectomy		Total		
	n	%	n	%	N	%	
High	13	54,2	11	45,8	24	100,0	0,002
Moderate	4	50,0	4	50,0	8	100,0	
Low	2	8,7	21	91,3	23	100,0	

Table 3 shows that 13 respondents (54.2%) with high self-efficacy used tubectomy, compared with 11 (45.8%) who did not. The moderate self-efficacy group was evenly divided, whereas 21 respondents (91.3%) with low self-efficacy did not use tubectomy. The Chi-Square test produced $p=0.002$, indicating a statistically significant relationship between self-efficacy and tubectomy use (Primary data, 2026).

Discussion

Relationship Between Knowledge and Tubectomy Use

The analysis showed a significant relationship between knowledge and tubectomy use, with a Chi-Square p -value of <0.001 ($p<0.05$). The cross-tabulation showed that all respondents with good knowledge used tubectomy (100.0%), whereas among respondents with sufficient knowledge, 40.0% used tubectomy and 60.0% did not. Meanwhile, all respondents with poor knowledge did not use tubectomy (100.0%). These findings indicate a tendency for respondents with better knowledge to be more likely to use or consider tubectomy as a permanent contraceptive method.

Knowledge is an important component in the formation of health behavior because it provides a basis for individuals to receive and understand information, form perceptions, and determine actions. According to Notoatmodjo (2018), knowledge is obtained through the process of sensing an object and becomes an important element in the formation of health behavior. In the context of tubectomy, adequate knowledge enables women of reproductive age to understand the definition, benefits, effectiveness, procedures, safety, advantages, disadvantages, and permanent nature of the method. Better understanding can help respondents assess whether tubectomy is appropriate for their reproductive needs.

The results of this study are consistent with previous research cited in the thesis. Milania (2025) reported a relationship between knowledge regarding contraception and contraceptive use among women of reproductive age. Good knowledge can help women understand the benefits, characteristics, and considerations of contraceptive methods, thereby supporting the selection of a method according to their reproductive needs. Salsabillah (2025) also found that respondents with better knowledge tended to have better understanding when considering and determining contraceptive methods according to their conditions and needs.

The researcher assumes that the significant relationship between knowledge and tubectomy use occurs because knowledge provides an important foundation for respondents in considering a permanent contraceptive method. Respondents who understand the purpose, benefits, procedures, effectiveness, and safety of tubectomy may be better able to assess the method rationally. However, tubectomy use is not determined by knowledge alone. Other factors, including educational level, partner support, social and cultural environment, motivation, and self-efficacy, may also be involved in the process of contraceptive decision-making.

Relationship Between Motivation and Tubectomy Use

The Chi-Square analysis demonstrated a significant relationship between motivation and tubectomy use, with a p-value of 0.010 ($p < 0.05$). The cross-tabulation showed that among respondents with high motivation, 51.9% used tubectomy and 48.1% did not. Among respondents with moderate motivation, 6.3% used tubectomy and 93.8% did not, while among those with low motivation, 33.3% used tubectomy and 66.7% did not. These findings indicate that motivation is associated with the decision to use tubectomy among women of reproductive age aged ≥ 35 years.

Motivation can be understood as an internal drive that encourages an individual to undertake an action. In relation to contraceptive use, women who have stronger motivation to prevent further pregnancy may be more prepared to consider a permanent contraceptive method. Nevertheless, high motivation does not necessarily result directly in tubectomy use because the decision may also be influenced by knowledge, partner support, social environment, and self-efficacy. Thus, motivation needs to be accompanied by adequate information and supportive conditions so that women can make reproductive decisions according to their needs (Setyorini, 2020; Nastiti, 2022).

The findings are consistent with Setyorini (2020), which reported that motivation is related to health behavior. Individuals with high motivation tend to be more prepared to make health decisions that they perceive as beneficial. Nastiti (2022) also showed that motivation and social support are related to decision-making regarding the use of long-term contraceptive methods among women of reproductive age. These findings support the present study because the decision to use tubectomy is not only an individual decision but may also involve the social environment and support received by respondents.

The researcher assumes that the significant relationship between motivation and tubectomy use indicates that stronger motivation may increase the tendency of women of reproductive age to consider tubectomy. However, respondents with high motivation may still choose not to use tubectomy when they have inadequate knowledge, insufficient partner support, social or cultural concerns, or low self-efficacy. Conversely, high motivation accompanied by adequate knowledge, partner support, and strong confidence may make respondents more prepared to consider permanent contraception.

Relationship Between Self-Efficacy and Tubectomy Use

The Chi-Square analysis showed a significant relationship between self-efficacy and tubectomy use, with a p-value of 0.002 ($p < 0.05$). The cross-tabulation showed that among respondents with low self-efficacy, 91.3% did not use tubectomy. Among respondents with moderate self-efficacy, the proportion using and not using tubectomy was equal at 50.0%. Meanwhile, among respondents with high self-efficacy, 54.2% used tubectomy and 45.8% did not. This finding indicates a tendency that higher self-efficacy is associated with a greater likelihood of considering or using permanent contraception.

According to Bandura (1997), self-efficacy refers to an individual's belief in their ability to perform an action and overcome obstacles that may arise. Self-efficacy can influence how individuals think, make decisions, and determine actions. In the context of tubectomy, self-efficacy is particularly relevant because tubectomy is a permanent contraceptive method that requires confidence in the decision taken. Women of reproductive age with high self-efficacy may feel more confident that their contraceptive decision is consistent with their reproductive condition and needs.

The relationship between self-efficacy and tubectomy use may be explained by the permanent nature of tubectomy. Women who have strong confidence in their decision may be better prepared to consider the benefits of tubectomy and accept the implications of choosing a permanent contraceptive method. In contrast, respondents with low self-efficacy may experience greater

uncertainty regarding their contraceptive choice. Such uncertainty may arise from concerns about the procedure, fear of surgery, or uncertainty about the consequences of a permanent method, leading respondents to prefer contraceptive methods that are perceived as more flexible and can be discontinued at any time.

Self-efficacy may also be related to support from partners and families as well as the social environment. Support from people close to the respondent can strengthen confidence when making reproductive decisions, whereas insufficient support may increase uncertainty, particularly when considering a permanent contraceptive method. Furthermore, information and opinions circulating within the community may shape perceptions of tubectomy. Perceptions that tubectomy is frightening, risky, or harmful may reduce confidence in choosing the method, while accurate information and positive support may strengthen respondents' confidence in making contraceptive decisions (Erlina, 2020; Milania, 2025; Salsabillah, 2025).

The results are consistent with Milania (2025), which found a relationship between self-efficacy and contraceptive decision-making among women of reproductive age. Women with higher self-efficacy tend to have greater confidence in the decisions they make and may be better able to face obstacles during the health decision-making process. Salsabillah (2025) also identified self-efficacy as one of the psychological factors associated with an individual's ability to determine a contraceptive method according to their needs and condition.

Overall, the findings demonstrate that knowledge, motivation, and self-efficacy are significantly associated with tubectomy use among women of reproductive age aged ≥ 35 years in RW 08, Cihanjuang Village. The three variables represent different aspects of contraceptive decision-making: knowledge provides an understanding of the method, motivation represents the drive to take action, and self-efficacy reflects confidence in making and carrying out the decision. However, because this study used a cross-sectional design, the findings demonstrate relationships between variables and do not establish causal relationships. Tubectomy use may also be related to other factors such as educational level, partner support, social and cultural environment, access to health services, and the quality of counseling received by respondents.

CONCLUSIONS

Among women of reproductive age aged ≥ 35 years in RW 08, Cihanjuang Village, most respondents did not use tubectomy (65.5%), and poor knowledge was the largest knowledge category (54.5%). High motivation was found in 49.1% of respondents, while high self-efficacy was found in 43.6%. Chi-Square analysis demonstrated significant relationships between knowledge and tubectomy use ($p < 0.001$), motivation and tubectomy use ($p = 0.010$), and self-efficacy and tubectomy use ($p = 0.002$). These findings support the need for focused contraceptive education and counseling that provides clear information about tubectomy and strengthens women's confidence and readiness to make informed reproductive decisions, with appropriate involvement of partners and health workers.

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