

The relationship between knowledge level and participation in the use of male contraception in Gunung Telu Village, Karangpucung, Cilacap

Dwi Kurnia Ningsih¹, Happy Dwi Aprilina^{2*}, Yektingtyastuti², Devita Elsanti²

¹ Faculty of Health Sciences, Universitas Muhammadiyah Purwokerto, Purwokerto, Indonesia

² Department of Maternity Nursing, Faculty of Health Sciences, Universitas Muhammadiyah Purwokerto, Purwokerto, Indonesia

* Corresponding author. Happy Dwi Aprilina, Universitas Muhammadiyah Purwokerto, Jalan Letjen. Soepardjo Roestam, Po. Box 229, Sokaraja, Banyumas, Central Java 53181, Indonesia. E-mail address: happydwiaprilina@ump.ac.id. ORCID: 0000-0002-3471-3979.

ARTICLE INFO

Article history:

Received: April 16, 2026

Revised: June 12, 2026

Accepted: June 22, 2026

Keywords:

Pregnancy prevention,
Contraceptive use participation,
Level of knowledge,

ABSTRACT

The low level of male participation in the Family Planning (KB) program remains a national challenge, including in Gunung Telu Village, Cilacap Regency. In fact, men play a crucial role in reproductive decision-making. One of the main factors influencing this lack of involvement is men's limited knowledge regarding contraception. This study aimed to determine the relationship between the level of knowledge and male participation in the use of contraception in Gunung Telu Village. A quantitative approach with a cross-sectional design was employed. A total of 108 married men aged 20–35 years were selected using Slovin's formula and cluster random sampling. Data were analyzed using the chi-square test. Most respondents had a low level of knowledge (46.3%) and did not use contraception (52.8%). The statistical test revealed a significant relationship between knowledge level and male participation in contraceptive use ($p = 0.001$). Knowledge significantly influences male involvement in contraception. Targeted and continuous educational efforts are needed to raise awareness among men and support the success of the family planning program.



© 2026 Published by LPPM Universitas Muhammadiyah Gombong. This is an open access article under the CC BY-SA 4.0 license.

1. INTRODUCTION

The Family Planning (KB) program is a government effort aimed at improving public health and family welfare by regulating pregnancy timing, the number of children, and birth spacing. The implementation of this program is closely related to the availability and effective use of contraceptive methods to support reproductive health goals and population control. Contraception plays an important role in helping couples make informed decisions regarding pregnancy planning and improving the quality of family life. Therefore, the success of the KB program depends not only on the availability of contraceptive services but also on community awareness and participation in using appropriate contraceptive methods.

Contraception is a method of preventing pregnancy through various methods, including hormonal, non-hormonal, and permanent methods. Despite the availability of various contraceptive options, women still dominate its use, while male involvement in contraceptive use is relatively low. Yet, male contraception is a crucial part of modern family planning, aiming to more equally divide reproductive responsibilities between husband and wife [1].

Globally, the contribution of male contraceptive methods remains limited. In 2020, male contraceptive use accounted for only about 21% of total contraceptive use worldwide [2]. In Indonesia, the use of male contraceptives, such as condoms and vasectomy, remains very low compared to female contraceptive methods. Data from Cilacap Regency also shows the dominance of female contraceptive methods, while male contraceptive methods are virtually unused [3].

Low male participation in family planning programs is influenced by various factors, one of which is knowledge. Lack of knowledge about the types, benefits, and safety of male contraception can lead to the perception that contraception is solely the responsibility of women. The National Population and Family Planning Agency states that low knowledge and limited information are the main factors contributing to men's minimal involvement in family planning programs [4].

Previous research has shown that men's knowledge plays a significant role in contraceptive decisions and method selection. Good knowledge can increase men's participation in family planning programs, especially in communities where women's roles in reproductive health decision-making are limited [5].

Although several studies have examined factors influencing contraceptive use, most previous studies have focused primarily on women's contraceptive behavior and the use of female contraceptive methods. Studies specifically exploring men's knowledge and participation in male contraceptive use, particularly in rural communities, are still limited. In addition, differences in social, cultural, and accessibility conditions may influence men's perceptions and decisions regarding contraception. Therefore, further research is needed to understand the factors associated with male involvement in family planning programs at the community level.

The novelty of this study lies in its focus on the relationship between knowledge level and male participation in the use of male contraceptives among married men in Gunung Telu Village, Karangpucung District, Cilacap Regency. This study provides specific evidence from a rural setting where male participation in family planning remains relatively low and where misconceptions regarding contraception are still found. The findings of this study are expected to contribute to the development of more targeted reproductive health education strategies and encourage shared responsibility between men and women in family planning decisions.

This phenomenon was also found in Gunung Telu Village, Karangpucung District, Cilacap Regency. Preliminary interviews revealed that most men believed contraception was only for women and were unaware of contraceptive options for men. This indicates that low male participation in family planning programs is closely linked to low levels of knowledge.

Based on this description, this study aims to determine the relationship between the level of knowledge and male participation in the use of male contraception in Gunung Telu Village.

2. METHOD

This study used a descriptive correlational design with a cross-sectional approach. The research was conducted in Gunung Telu Village, Karangpucung District, Cilacap Regency, Central Java. The proposal was prepared from September 2024 to January 2025, and data collection was carried out in June 2025. The population in this study comprised all married young-adult men aged 20–35 years in Gunung Telu Village, totaling 148 people.

The sampling technique used was cluster random sampling, in which the population is divided into several groups or clusters and several clusters are then selected randomly to be sampled. This technique is used when the population is too large or geographically dispersed, making it impractical or costly to sample each individual. The sample was drawn from residents of Gunung Telu Village, and the number of samples used in this study was 108 married male respondents aged 20–35 years.

The variables in this study consisted of an independent variable and a dependent variable. The independent variable was knowledge about contraception, while the dependent variable was participation in contraceptive use.

The instrument used in this study was a questionnaire. The knowledge questionnaire was a modified version of an instrument from a previous study conducted by Winda Yudi Astuti (2017). It consisted of 20 items, comprising 16 favorable and 4 unfavorable items, covering the definition, benefits, and mechanisms of male contraceptives. The questionnaire on male participation in contraceptive use contained 7 questions: item 1 determined the proportion of users and non-users, while items 2–7 supported the discussion of male participation in contraceptive use.

The collected data were analyzed using univariate and bivariate analyses. Univariate analysis was used to describe the frequency distribution and percentage of each variable using a computer program. Bivariate analysis was used to examine the relationship between the independent and dependent variables using the chi-square test. If the asymptotic significance value was <0.05 , then H_0 was rejected and H_a was accepted.

The researcher obtained ethical approval from the health research ethics committee under the number KEPK/XXX/140/VII/2025.

3. RESULTS

Table 1. Characteristics of Respondents

Characteristics	Frequency (f)	Percentage (%)
Age		
Early adulthood (20–25 years)	3	2.8
Young adults (26–30 years)	53	49.1
Late adulthood (31–35 years)	52	48.1
Total	108	100.0
Last education		
Elementary School	15	13.9
Junior High School	32	29.6
High School/Vocational School	55	50.9
Bachelor's (S1)	6	5.6
Total	108	100.0
Occupation		
Farmer	40	37.0
Employee	26	24.1
Trader	15	13.9
Mechanic	3	2.8
Driver	11	10.2
Teacher	6	5.6
Entrepreneur	7	6.4
Total	108	100.0

Based on Table 1, the majority of respondents were young adults, namely 53 people (49.1%); most had a high school/vocational school education, namely 55 people (50.9%); and most worked as farmers, namely 40 people (37%).

Table 2. Frequency Distribution of Knowledge Level on Contraceptive Use

Level of Knowledge	Frequency (f)	Percentage (%)
Insufficient	50	46.3
Sufficient	18	16.7
Good	40	37.0
Total	108	100.0

Based on Table 2, the majority of respondents had an insufficient level of knowledge regarding contraceptive use, namely 50 respondents (46.3%).

Table 3. Frequency Distribution of Participation in Contraceptive Use

Contraceptive Use Participation	Frequency (f)	Percentage (%)
Using contraceptives	51	47.2
Not using contraceptives	57	52.8
Total	108	100.0

Based on Table 3, the majority of respondents did not use contraceptives, namely 57 people (52.8%).

Table 4. Cross-tabulation of the Relationship Between Knowledge Level and Participation in Male Contraceptive Use

Contraceptive Use Participation								p-value
Level of Knowledge	Do not use		Use		Total			
	f	%	f	%	f	%		
Insufficient	41	69.5	18	30.5	59	100.0	0.001	
Sufficient	7	29.2	17	70.8	24	100.0		
Good	9	36.0	16	64.0	25	100.0		
Total	57	52.8	51	47.2	108	100.0		

The chi-square test in Table 4 yielded a p-value of 0.001. This result indicates an asymptotic significance (2-sided) value of <0.05, so it can be concluded that there is a relationship between knowledge level and participation in male contraceptive use in Gunung Telu Village.

4. DISCUSSION

Based on the results of this study, the number of respondents in young adulthood (26–30 years) and late adulthood (31–35 years) was almost equal. The age range of 26–30 years is classified as young adulthood, in which a person is generally married, has children, and is in a productive stage both economically and in terms of household decision-making [6]. According to Sitorus, young adulthood is a crucial phase in decision-making regarding contraceptive use [7]. Meanwhile, the age range of 31–35 years falls within late adulthood, in which individuals have generally achieved emotional maturity and marital stability [8]. At this age,

contraceptive use becomes crucial for more conscious and targeted pregnancy planning, whether to delay, space, or limit the number of children for the sake of family well-being [9].

The majority of respondents had a high school or vocational high school education, indicating that most had a secondary education [10]. Education plays a crucial role in shaping mindsets and the ability to understand information, including knowledge about contraception. With a high school education, respondents are expected to have the basic skills to understand the benefits, mechanisms, and risks of using contraceptives.

Most respondents worked as farmers, a dominant profession in rural areas. According to Rahayu and Wijayanti, this occupation can affect access to health information, including information on family planning [11]. Limited time, access to health services, and minimal counseling can be factors contributing to low male participation in contraceptive use, although knowledge remains key [12]. The study results showed that most respondents had a low level of knowledge regarding contraceptive use. This condition reflects the community's limited understanding of the types, benefits, mechanisms, and risks of contraceptives, which contributes to low participation in family planning programs. According to Rahayu and Wijayanti, a lack of knowledge regarding contraceptive use can lead to inaccurate selection of contraceptives, irregular use, or even rejection of family planning programs [13]. This potentially increases the risk of unplanned pregnancy and limits couples' ability to plan their family life carefully. Misunderstandings can also lead to fear, suspicion, or distrust regarding the effectiveness of contraception [14].

Based on the results of this study, the majority of respondents did not use male contraception. This indicates a lack of awareness among men about the importance of birth control as part of responsible family planning. The decision to use contraception demonstrates a concern for reproductive health and family well-being, and vice versa [15].

Of the various types of contraception available, condoms are the method most frequently used by respondents. This choice is thought to be related to ease of use, widespread availability, and the absence of significant side effects. In addition to being a contraceptive, condoms also provide dual protection against sexually transmitted infections. High condom use indicates that respondents have sufficient knowledge about the function and benefits of this contraceptive [16]. In addition to knowledge, perceptions of comfort and personal control over contraceptive use can influence condom use [12]. Condoms allow users to feel safe without undergoing any medical procedures [17].

The lack of contraceptive use is also closely related to the influence of social and cultural norms. In some communities, contraceptive use is still viewed as

contrary to moral or religious values [18]. The decision not to use contraceptives is often linked to the perception that children are a blessing that should not be hindered, or that family planning is contrary to God's will [19]. These views are deeply ingrained and can foster a passive attitude toward reproductive health programs, even when information is provided by public service institutions.

In addition to value-related aspects, structural factors also play a significant role. Inequality in access to health services—whether geographical, financial, or related to quality—is a major barrier to contraceptive use [20]. Individuals living in remote areas often face limitations in accessing modern contraceptives or adequate information [21]. Furthermore, the quality of services in primary health care facilities remains unresponsive to user needs. The lack of a personalized, counseling-based approach, the unavailability of diverse method options, and negative perceptions of the treatment by health workers are factors that hinder participation [22].

Psychological factors also play a role in the decision not to use contraception. According to Sugianto and Rafidah, fear of side effects, trauma from past experiences, or misleading information about the risk of infertility can increase resistance to contraceptive use [18]. Without empathetic, trust-based educational support, these negative perceptions will continue to grow and hinder active involvement in healthy and safe reproductive decision-making [23].

This study shows a relationship between the level of knowledge and male participation in contraceptive use in Gunung Telu Village. The higher the level of knowledge, the greater the male involvement in contraceptive use [24]. This is in line with Dorothea Orem's self-care theory, which emphasizes that knowledge is an important basis for making conscious and responsible health decisions [25]. A good understanding of the benefits, types, and risks of contraception can reduce fear, dispel myths, and form a positive attitude toward family planning programs. Conversely, low knowledge is often accompanied by negative perceptions and stigma toward male contraception, resulting in low participation and a greater burden of family planning responsibilities being placed on women [26]. Therefore, increasing reproductive health literacy through communicative education and counseling supported by the social environment is an important strategy for increasing male participation and realizing an equal and sustainable family planning program.

The researcher acknowledges that this study still has several shortcomings and limitations. These limitations include the limited scope of the research area, which covered only Gunung Telu Village, so the findings cannot be generalized to other areas with different social and cultural characteristics; the limited number of research samples, so that the results are not optimal; and the age range of

respondents, which covered only adults (20–35 years). This limitation restricts the generalizability of the results, because men outside this age range—especially those over 35 years old—may still be reproductively active and use contraception with different characteristics and considerations.

5. CONCLUSION

Most respondents were in the young-adult age range (26–30 years), namely 53 people; the majority had a high school/vocational high school education, namely 55 people; and most worked as farmers, namely 40 people. The number of respondents who had a low level of knowledge regarding contraceptive use was 50 people. The majority of respondents did not use contraceptives, namely 57 people. The results showed that there was a relationship between the level of knowledge and participation in the use of male contraceptives in Gunung Telu Village, with a p -value of <0.05 (0.001).

Based on these results, it is recommended that future researchers expand the scope of their study and involve a larger number of respondents to ensure more representative results and broader generalizability. Future researchers are also encouraged to include other variables, such as social perceptions, partner support, and access to health services, to gain a deeper understanding of the factors influencing men's participation in contraceptive use.

DATA AVAILABILITY STATEMENT

The datasets generated and/or analyzed during this study are available from the corresponding author on reasonable request.

FUNDING

This research did not receive any specific grant from any funding agency.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

1. National Population and Family Planning Agency. *Bangga Kencana program performance report*. BKKBN; 2022.
2. Abraham T, TA, BK. Male involvement in family planning and associated factors: a global perspective. *International Journal of Reproductive Health*. 2021;15:85–93.
3. Cilacap Regency Health Office. *Cilacap Regency Health Profile 2022*. Cilacap: Cilacap Regency Health Office; 2022.
4. National Population and Family Planning Agency. *Profile of Indonesian population and family planning*. BKKBN; 2020.
5. Anbesu EW, AM, AN. Knowledge and male participation in family planning decision making: evidence from developing countries. *BMC Public Health*. 2022;22:1–9.
6. Sari RK, IYSN. Characteristics of pregnant women related to knowledge in the use of postpartum contraception. *Manarang Health Journal*. 2020;6.

7. Sitorus RM, TM. Factors associated with the use of contraceptives in men. *Indonesian Journal of Health Sciences & Midwifery*. 2025;2:39–46.
8. Satriyandari Y, MN. Sexual dilemmas of DMPA injectable contraceptive acceptors: a correlational study of sexual function. *Indonesian Midwifery Journal*. 2025;16:35–46.
9. Adella T, Damayanti R, Makful MR. The relationship between the need for family planning services in unmarried adolescents and the intention to use contraception in adulthood (2017 IDHS analysis). *Indonesian Journal of Health Promotion and Behavior*. 2021;3:1.
10. Jumiaty A, Riski M, Efendi H. The relationship between education, age, and parity with the use of IUD contraception. *Jurnal 'Aisyiyah Medika*. 2023;8.
11. Sarpini SAM, Ariyani NW, Somoyani NK. The relationship between mother's knowledge and the use of implant contraceptives in Sukawana Village, Bangli Regency. *The Journal of Midwifery*. 2022;10:140–6.
12. Koba MTE, Mado FG, Kenjam Y. The relationship between the level of knowledge of family planning acceptors and the role of health workers with interest in using long-term contraception (MKJP). *Public Health Media*. 2019;1:1–7.
13. Rahayu R, WT. The relationship between mother's knowledge level and the use of IUD contraception: a literature review in 2021. *Borneo Studies and Research*. 2022;3:1675–87.
14. Lestari AL, Hardani R, Masyita AA. Analysis of knowledge level in the selection and use of contraception in Tikke Raya District, Pasangkayu Regency. *Indonesian Health Promotion Publication Media (MPPKI)*. 2022;5:852–64.
15. Murti NN, Rahmawati E, Pasiriani N. Factors influencing men's participation in the use of contraceptives: an observational study. *Health Information: Research Journal*. 2023;15:58.
16. Rohmah HNF. Counseling on the selection of contraceptive devices according to the acceptor's health condition. *SELAPARANG: Journal of Progressive Community Service*. 2022;6:1375–9.
17. Rampengan DDCH, Turalaki GLA, Tendean LEN. The relationship between knowledge level and men's attitudes toward condom contraception use in Tuminting District in 2023. *Medical Scope Journal*. 2025;7:96–102.
18. Sugianto NDAK, RI. The relationship between husband's knowledge and attitudes and the use of condom contraception in men at the Darul Azhar Community Health Center, Tanah Bumbu Regency, in 2024. *Integrative Perspectives of Social and Science Journal*. 2025;2:294–304.
19. Fatchiya A, Sulistyawati A, Setiawan B, Damanik R. The role of family planning counseling in increasing family planning knowledge among fertile-age couples (PUS) in poor community groups. *Journal of Counseling*. 2021;17:60–71.
20. Hadijah ER, MM. The relationship between knowledge, side effects, and community trust that influence the low interest of PUS in choosing IUD contraception in Sangiang Village in 2022. *SENTRI: Scientific Research Journal*. 2023;2:1960–72.
21. Natasya CD, Kristianti S, Sendra E. Knowledge and availability factors with condom use in HIV/AIDS prevention among female sex workers. *Al-Insyirah Midwifery: Journal of Midwifery Sciences*. 2023;12:32–9.
22. Gayatri M. Analysis of contraceptive use in urban poor areas in Indonesia. *Journal of Family Planning*. 2022;7:44–53.
23. Degu Ayele A, Yenealem Beyene F, Getnet Kassa B, Nibret Mihretie G. Men's knowledge of vasectomy and its associated factors in Debre Tabor Town, Northwest Ethiopia: a community-based cross-sectional study. *Open Access Journal of Contraception*. 2021;12:27–34.
24. Aenti EF, Sumawati NMR, Saraswati PAD, Widiastini LP. The relationship between husband's knowledge level and participation in the selection of IUD contraceptive devices in the Abang II Community Health Center work area. *Midwifery Journal: Jurnal Kebidanan UM Mataram*. 2025;9:9–15.
25. Amaliya N. The relationship between the use of hormonal contraceptives and blood sugar levels in family planning acceptors. *Journal of Excellent Health*. 2021;1:91–101.
26. Wulandari D, HEN. Association of patriarchal culture with contraceptive use. *Journal of Health Research at Poltekkes Depkes Bandung*. 2024;16:354–64.