

Correlation Analysis Of Education Level And Husband's Support Toward Implant Contraceptive Selection Among Family Planning Acceptors In Banjarmasin City Indonesia

Fatimah^{1*}, Bardiati Ulfah², Siti Fatimah³, Suryati⁴

^{1,3,4} Undergraduate Midwifery Study Program and Midwifery Professional Education, Universitas Muhammadiyah Banjarmasin

² Faculty of Nursing and Health Sciences, Universitas Muhammadiyah Banjarmasin

Email: Fatimbulkyn@gmail.com, ulfah74@umbjm.ac.id, fattimaharifin80@umbjm.ac.id, suryati@umbjm.ac.id

Article Info

Article history:

Received March, 27 2026

Revised April, 15 2026

Accepted May, 21 2026

Keywords:

Contraceptive Choice

Educational Level

Family Planning Acceptors

Husband's Support

Implant Contraception

ABSTRACT

The use of implant contraception as a long-acting contraceptive method is still not widely preferred by family planning acceptors in Indonesia, including those in the working area of Karang Mekar Public Health Center, Banjarmasin City. This condition is presumed to be influenced by several factors, particularly the level of education of the acceptors and the support provided by husbands in family planning decision-making. This study aimed to analyze the relationship between educational level and husband's support with the selection of implant contraception among family planning acceptors. The research employed a quantitative approach with a correlational analytic design using a cross-sectional method. A total of 135 active family planning acceptors were selected as research samples through purposive sampling. Data were collected using structured questionnaires and analyzed using the Spearman Rank correlation test. The results indicated that the majority of respondents, both those with lower and higher educational levels, did not choose implant contraception. Statistical analysis revealed a significant relationship between educational level and the selection of implant contraception ($p = 0.000$). In contrast, husband's support did not show a statistically significant relationship with the selection of implant contraception ($p = 0.149$). In conclusion, educational level plays an important role in the selection of implant contraception, while husband's support has not yet become a primary determining factor. Therefore, efforts to enhance reproductive health education and increase partner involvement in family planning programs are necessary to improve the utilization of implant contraception implants among women of reproductive age in the community.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Fatimah,

Undergraduate Midwifery Study Program and Midwifery Professional Education,

Universitas Muhammadiyah Banjarmasin,

Jl. S. Parman Kompleks RS Islam Banjarmasin.

Email: Fatimbulkyn@gmail.com

1. INTRODUCTION

The Family Planning (FP) program is one of the Indonesian government's strategies to reduce birth rates and improve family quality through pregnancy regulation. One of its implementations is the use of contraceptive methods, including short-term methods such as pills and injections, as well as long-acting reversible contraceptives (LARCs) such as implants, intrauterine devices (IUDs), and sterilization. The use of contraception plays an important role not only in birth spacing but also in protecting maternal and child health by preventing the risk of pregnancy complications and maternal mortality [1].

According to the World Health Organization (WHO), the proportion of women participating in family planning programs in 2021 was 49.0%, and it is projected to increase by 2030 [2]. Indonesia ranks 68th globally in contraceptive use, with a prevalence rate of 63%. In Southeast Asia, Indonesia ranks fourth in contraceptive use with the same prevalence rate of 63%. Data from the Ministry of Health of the Republic of Indonesia 2021 show that injectable contraception is the most widely used method (63.7%), followed by female sterilization (MOW) at 2.76% and male

sterilization (MOP) at 0.5%. Although the government, through the National Population and Family Planning Board [3], has provided various safe and effective contraceptive methods, the utilization of long-acting contraceptive methods in Indonesia remains lower compared to non-LARC methods. Data from the Ministry of Health (2023) indicate that injectable contraception still dominates at 63.7%, while implant use remains relatively low. In fact, implants have high effectiveness (>99%) and are practical for use over a period of three to five years [4].

The prevalence of family planning participants in South Kalimantan is relatively high at 71.1%[5]. However, the distribution of contraceptive methods shows disparities, particularly in Banjarmasin City. Based on data from the Population Control and Family Planning Office of Banjarmasin City in 2024, the use of implants in East Banjarmasin Subdistrict was recorded at only 36 users out of 446 active family planning users. Specifically, in the working area of the Karang Mekar Public Health Center, only one new family planning acceptor chose implants in 2024, while the majority still preferred injections and pills. This condition indicates that interest in and acceptance of implants remain low.

Preliminary findings from a study conducted at the Karang Mekar Public Health Center in 2025, based on interviews with a midwife responsible for family planning data, showed that only a small proportion of active family planning participants chose the implant method, and its use was very rare. Further interviews with one to two family planning acceptors revealed that the reasons for not using implants included a lack of husband's support, where husbands did not permit or support their use, as well as the low educational level of the acceptors, most of whom had only completed elementary school. Husband's support for contraceptive use was still limited, as many husbands had not fully provided permission or accompaniment for their wives to use implants. In addition, the educational level of most acceptors was relatively low (junior high school or below), resulting in limited understanding of the effectiveness, safety, and benefits of implant contraception.

Previous studies have shown that educational level and husband's support are important factors influencing women's decision-making in selecting contraceptive methods. Women with higher levels of education generally have better knowledge and greater capacity for rational thinking in determining appropriate contraceptive choices. This is consistent with the findings which indicate that education influences the understanding and acceptance of contraceptive methods [6][4]. In addition, husband's support contributes to the success of family planning programs, as husbands who provide permission, information, and motivation can increase wives' confidence in using contraception [7].

However, in the working area of the Karang Mekar Public Health Center, Banjarmasin City, the use of implant contraception remains low. This condition is presumed to be associated with the educational level of acceptors, which is predominantly low, resulting in suboptimal understanding of the effectiveness, safety, and benefits of implant contraception. In addition, not all husbands provide full support in decision-making regarding contraceptive use, which also contributes to the low selection of implant methods.

2. RESEARCH METHOD

This study employed a quantitative approach with a correlational analytic design using a cross-sectional method, in which variables were measured at a single point in time. The study was conducted in the working area of the Karang Mekar Public Health Center, Banjarmasin City. The population in this study consisted of all active family planning acceptors totaling 203 individuals. The sample consisted of 135 respondents selected using purposive sampling techniques based on predetermined inclusion criteria. Data collection was conducted using structured questionnaires and data collection sheets containing respondent characteristics, educational level, husband's support, and the selection of implant contraception. The data obtained were then processed and statistically analyzed using the Spearman Rank correlation test to determine the relationship between independent variables and the dependent variable. This study received ethical approval from the Research Ethics Commission of Universitas Muhammadiyah Banjarmasin with Ethics Approval Number 553/UMB/KE/XI/2025 and KEPK Number 0128226371.

3. RESULTS AND DISCUSSIONS

3.1. Results

The results of this study are presented in the form of descriptive analysis and bivariate analysis to describe respondent characteristics as well as the relationship between educational level and husband's support with the selection of implant contraception. Data analysis was conducted on 135 active family planning acceptors who met the research criteria and had completed the questionnaires.

Table 1. Frequency Distribution of Respondents' Age

Age	Frequency (f)	Percentage (%)
<20 years	2	1.5%
20-35 years	72	53.3%
>35 years	61	45.2%
Total (n)	135	100

Source: Primary data

Based on Table 1 regarding the age distribution of respondents in the working area of the Karang Mekar Public Health Center, Banjarmasin City, it shows that respondents aged 20–35 years totaled 72 respondents (53.3%), those aged >35 years totaled 61 respondents (45.2%), and those aged <20 years totaled 2 respondents (1.5%).

Table 2. Frequency Distribution of Respondents' Occupation

Occupation	Frequency (f)	Percentage (%)
Housewife	114	84.4%
Civil Servant	4	3.0%
Entrepreneur	17	12.6%
Total (n)	135	100

Source: Primary data

Based on Table 2 regarding the occupational distribution of respondents in the working area of the Karang Mekar Public Health Center, Banjarmasin City, it shows that most respondents were housewives totaling 114 respondents (84.4%), followed by civil servants with 4 respondents (3.0%), and entrepreneurs with 17 respondents (12.6%).

Table 3. Frequency Distribution of Respondents' Educational Level

Educational Level	Frequency (f)	Percentage (%)
Low Education (Elementary–Junior High School)	55	40.7%
High Education (Senior High School/Vocational/Bachelor)	80	59.3%
Total (n)	135	100

Source: Primary data

Based on Table 3 regarding the distribution of respondents' educational level in the working area of the Karang Mekar Public Health Center, Banjarmasin City, it shows that respondents with low educational level (elementary to junior high school) totaled 55 respondents (40.7%), while those with higher education (senior high school/vocational/bachelor) totaled 80 respondents (59.3%).

Table 4. Frequency Distribution of Husband's Support

Husband's Support	Frequency (f)	Percentage (%)
Supportive	121	89.6%
Not Supportive	14	10.4%
Total (n)	135	100

Source: Primary data

Based on Table 4 regarding the distribution of husband's support in the working area of the Karang Mekar Public Health Center, Banjarmasin City, it shows that respondents who received support from their husbands in selecting contraception totaled 121 respondents (89.6%), while those who did not receive support totaled 14 respondents (10.4%).

Table 5. Frequency Distribution of Implant Contraceptive Selection

Implant Selection	Frequency (f)	Percentage (%)
Using Implant	16	11.9%
Not Using Implant	119	88.1%
Total (n)	135	100

Source: Primary data

Based on Table 5 regarding the distribution of respondents' selection of implant contraception in the working area of the Karang Mekar Public Health Center, Banjarmasin City, it shows that most respondents did not use implant contraception, totaling 119 respondents (88.1%), while only a small proportion chose implant contraception, totaling 16 respondents (11.9%).

Table 6. Crosstab of Spearman Rank Correlation

Variable	Category	P Implant No n (%)	P Implant Yes n (%)	P-value	95%CI
Educational Level	Low (ES-JHS)	39(70.9%)	16 (29.1%)	0.000	-0.57 to -0.29
	High (SHS/Vocational/Bachelor)	80(100%)	0 (0%)		
Husband's Support	Supportive	105(86.8%)	16(13.2%)	0.149	-0.05 to 0.29
	Not Supportive	14 (100%)	0(0.0%)		
Total (n)		119(88.1%)	16(11.9%)		

Source: Primary data

Based on Table 6, the results of the Spearman Rank correlation test indicate that there is a significant relationship between educational level and the selection of implant contraception. The analysis shows that the Spearman correlation coefficient (r_s) is -0.442 with a p-value of 0.000 ($p < 0.05$) and a 95% confidence interval ranging from -0.57 to -0.29 . This correlation value indicates a moderate strength relationship with a negative direction, meaning that the higher the respondent's educational level, the lower the tendency to choose implant contraception. The results of the correlation test between husband's support and the selection of implant contraception show a Spearman correlation coefficient (r_s) of 0.125 with a p-value of 0.149 ($p > 0.05$) and a 95% confidence interval ranging from -0.05 to 0.29 . These results indicate that the relationship between husband's support and the selection of implant contraception is weak and not statistically significant.

3.2. Discussions

The results of the study show that the majority of respondents (88.1%) have not selected implant contraception as their family planning method. This condition indicates that the utilization of long-acting contraceptive methods remains relatively low, despite implants being known for their high effectiveness and long duration of action. In terms of age, most respondents (53.3%) were within the active reproductive age range. In this age group, the selection of contraceptive methods is generally adjusted to the need for pregnancy regulation, either for spacing or limiting births. However, statistical analysis shows that age does not have a significant relationship with the selection of implant contraception. This indicates that the consideration of implant use is not solely determined by age, but is more influenced by other factors such as comfort, perceived risk, and individual preferences. This study is consistent with the findings which state that age is not always a dominant factor in the selection of long-acting contraceptive methods, as contraceptive decisions are more influenced by individual readiness, knowledge, and family support [8]. In addition, other studies have also reported that although individuals in the active reproductive age group have a greater potential to use long-acting contraceptive methods, the final decision still depends on social and environmental factors. This is in line with the findings reported which indicate that age is not associated with interest in implant use [9].

Based on occupational characteristics, most respondents (84.4%) were housewives. This condition allows respondents to have flexibility in accessing healthcare services; however, it does not necessarily increase the selection of implant contraception. Respondents who are employed tend to consider time efficiency and the effectiveness of contraceptive methods, making implants a potential option. Nevertheless, occupation is not a dominant factor in determining implant use, as contraceptive decisions are still strongly influenced by personal considerations and the information received. According to occupation is related to an individual's social and economic environment, which can influence knowledge, attitudes, and health behavior [10]. Individuals with different occupations have varying opportunities to access health information and healthcare services. According to Lawrence Green, occupation is included as a predisposing factor that influences health behavior [11]. Types of occupation can affect lifestyle, access to health information, and the utilization of healthcare services.

The results of the study show that the majority of respondents (59.3%) had a higher level of education; therefore, they can be considered to have a better understanding of the benefits, safety, and effectiveness of long-acting contraceptive methods. This understanding contributes to a more open attitude toward accepting implant methods. The results of the bivariate analysis indicate a relationship between educational level and the selection of implant contraception, although the strength of the relationship is relatively weak. This suggests that education acts as a supporting factor, but not the sole determinant in decision-making. This study is consistent with the findings [4], which



state that maternal educational level is associated with the use of implant contraception. Education has a strong influence on the selection of implant contraception, as respondents with higher education tend to better understand the benefits of implant use, whereas those with lower educational levels may find it more difficult to understand these benefits.

This study is also consistent with an international study from Ethiopia conducted [12], which found that women's educational level is significantly associated with the use of modern contraception ($p < 0.05$). This indicates that education plays an important role in shaping knowledge, attitudes, and decision-making in selecting long-acting contraceptive methods, including implants. This finding is also in line with the study [8], which states that maternal education is one of the factors influencing the use of implant contraception, as education affects understanding and decision-making related to reproductive health. In addition the PRECEDE-PROCEED theory, states that education is a predisposing factor that influences individual health behavior [11]. Higher education can increase individual awareness of the importance of disease prevention and the utilization of healthcare services.

The results of the study show that the majority of respondents (89.6%) received support from their husbands, either in the form of approval or emotional support. However, the analysis indicates that husband's support is not significantly associated with the selection of implant contraception. This finding suggests that although partner support has psychological importance, the decision to use implants is more strongly determined by the respondent's personal considerations and recommendations from healthcare providers. According to Green, husband's support is a reinforcing factor that plays a role in shaping and maintaining health behavior, including contraceptive choice. Notoatmodjo states that husband's support strongly influences health-related decision-making [10].

The results of the bivariate analysis using the Spearman Rank correlation test indicate a relationship between educational level and the selection of implant contraception, with a Spearman correlation coefficient (r) of -0.442 and a significance value (p -value) of 0.000 ($p < 0.05$), indicating that the relationship is statistically significant. The negative correlation coefficient indicates an inverse relationship between educational level and the selection of implant contraception. Respondents with higher levels of education tend to have a better understanding of long-acting contraceptive methods, making them more open to selecting implant methods. Although the relationship identified is relatively weak, education remains a supporting factor in the decision-making process regarding contraceptive use. These findings are consistent which show that education contributes to improving women's understanding and decision-making in selecting modern contraceptive methods [13][12]. This confirms that education influences the development of knowledge and attitudes, which ultimately affect the selection of long-acting contraceptive methods, including implants. The results of the bivariate analysis indicate a relationship between educational level and the selection of implant contraception, although the strength of the relationship is relatively weak.

This suggests that education serves as a supporting factor but is not the sole determinant in decision-making. This study is consistent with the findings which state that maternal educational level is associated with the use of implant contraception [13]. Education has a strong influence on the selection of implant contraception, as respondents with higher education are more likely to understand the benefits of implant use, whereas those with lower educational levels may find it more difficult to understand these benefits. This study is also consistent with an international study from Ethiopia conducted which found that women's educational level is significantly associated with the use of modern contraception ($p < 0.05$)[12]. This indicates that education plays an important role in shaping knowledge, attitudes, and decision-making in selecting long-acting contraceptive methods, including implants.

The results of the bivariate analysis using the Spearman Rank correlation test indicate that there is no significant relationship between husband's support and the selection of implant contraception among family planning acceptors. The Spearman correlation coefficient (r) is 0.125 , indicating a very weak relationship. Meanwhile, the significance value (p -value) obtained is 0.149 ($p > 0.05$), indicating that the relationship is not statistically significant. Husband's support is one of the important aspects in the context of family decision-making. The majority of respondents in this study received support from their husbands, both in the form of approval and emotional support. However, the analysis shows that husband's support is not significantly associated with the selection of implant contraception. This finding suggests that although partner support has psychological importance, the decision to use implants is more strongly determined by the respondent's personal considerations and recommendations from healthcare providers.

This is consistent with the study by Puspita & Maryana, which states that husband's support is associated with the selection of long-acting contraceptive methods among couples of reproductive age, due to the involvement of husbands in the family decision-making process [14]. Several previous studies have also reported that husband involvement in family decision-making plays a role in the selection of long-acting contraceptive methods among couples of reproductive age. Husband's support, particularly in the form of approval and the provision of information, can increase the wife's confidence in determining the contraceptive method to be used. A study by Susanah shows that the selection of implant contraception is not only influenced by husband's support but also by the mother's level of

knowledge. The support provided by husbands contributes to increasing the wife's comfort and confidence regarding the safety and benefits of implant contraceptive methods [15].

4. CONCLUSION

Based on the results of the study, it can be concluded that the educational level of family planning acceptors in the working area of the Karang Mekar Public Health Center, Banjarmasin City, is predominantly at the secondary level. Educational level is proven to have a significant relationship with the selection of implant contraception. The majority of respondents received support from their husbands in the use of contraception. However, the results of the analysis indicate that husband's support is not significantly associated with the selection of implant contraception. This suggests that the decision to use implants is more influenced by the respondents' internal factors and medical considerations rather than partner support.

ACKNOWLEDGEMENTS

The authors would like to express their sincere gratitude to all parties who contributed to the completion of this study. Special appreciation is extended to the Head of Karang Mekar Public Health Center and all healthcare staff for granting permission, providing assistance, and supporting the research process. The authors also gratefully acknowledge all respondents for their valuable participation in this study. In addition, the authors would like to thank colleagues and all individuals who provided support during data collection and the preparation of this research. Finally, sincere thanks are addressed to the educational institution for its academic guidance and support, which made this study possible.

REFERENCES

- [1] Nafisa, R. D, "Pengaruh Program KB terhadap Kesehatan Ibu dan Anak," *Bumi Aksara*, 2024.
- [2] WHO, "Family Planning/ Contraception Methods."
- [3] BKKBN "Panduan Pelayanan Kontrasepsi Jangka Panjang (MKJP)," *BKKBN*, 2021.
- [4] Jamuddin, Fatimah, Fitriani, S. "Faktor Yang Mempengaruhi Pnggunaan Metode Kontrasepsi Implant Terhadap Minat Ibu," *IJMT (Indonesian J. Midwifery Today*, vol. 2, no. 2, p. 47, 2023.
- [5] BKKBN, "Profil Kependudukan dan Keluarga Berencana Indonesia Tahun 2022," *BKKBN*, 2022.
- [6] Sutarto, "Hubungan Tingkat Pendidikan dengan Pemilihan Kontrasepsi Implan," *J. Kesehat. Reproduksi*, 2020.
- [7] Nurhaeni, "Dukungan Suami terhadap Penggunaan Alat Kontrasepsi," *J. Keperawatan Dan Kebidanan*, 2020.
- [8] Mukhdinarie, R., Sari, D., Lestari, P. "Faktor-faktor yang memengaruhi pemilihan metode kontrasepsi jangka panjang pada wanita usia subur," *J. Kesehat. Reproduksi*, vol. 15, no. 1, pp. 45–53, 2024.
- [9] Nirwana, N., Handayani, S., & Rahmawati, I. "Hubungan umur dengan minat penggunaan kontrasepsi implan pada akseptor KB," *J. Ilmu Kebidanan*, vol. 13, no. 1, pp. 88–95, 2024.
- [10] Notoadmodjo S., *Ilmu Perilaku Kesehatan*. Jakarta: Rineka Cipta, 2014.
- [11] Green L. W., "Health education planning: A diagnostic approach," *Mayf. Publ. Co.*, 1980.
- [12] Tadesse & Kassa, "Educational level and utilization of modern contraceptives among women," *Int. J. Reprod. Heal.*, 2024.
- [13] Nurdalifah, Nopiyanti, Sri Ayu Nata, Nur Annisa Fauzi "KB IMPLAN DI RSUD BATARA SIANG KAB . PANGKEP Relationship Between Mother ' s Education Level And The Use Of Implants In Batara," vol. 19, pp. 17–20, 2024.
- [14] Puspita Sari Pribadi and N. Maryana, "Hubungan Dukungan Suami dengan Pemilihan Metode Kontrasepsi Jangka Panjang di Puskesmas Baamang 2 Sampit Tahun 2024," vol. 5, no. 2, pp. 1591–1596, 2025.
- [15] Susanah, Syiska Atik Maryanti, Riza Umami "Gambaran dukungan suami terhadap pemakaian KB Metode Kontrasepsi Jangka Panjang IUD dan Implan di Wilayah Puskesmas Silo 1," *Jur. Kebidanan*, vol. 4, no. 4, pp. 454–460, 2025.