

**Effectiveness of Midwifery Care for Family Planning (KB) Acceptors with IUD (Intrauterine Device): Study in Kayu Kul Village, Pegasing, Central Aceh, Indonesia****Hidayana¹, Irdayani¹, Sri Wahyuni MS^{1*}**¹Lecturer, Diploma of Midwifery Study Program, Politeknik Kesehatan Kemenkes, Aceh, Indonesia**ARTICLE INFO****Keywords:**

Acceptor satisfaction
Family planning
IUD
Midwifery care

***Corresponding author:**

Sri Wahyuni MS

E-mail address:sriwahyuni15117999@gmail.com

All authors have reviewed and approved the final version of the manuscript.

<https://doi.org/10.37275/cmej.v5i2.556>

ABSTRACT

Family planning (KB) is one of the Indonesian government's priority programs to control the rate of population growth. IUD (Intrauterine Device) is an effective and popular family planning method in Indonesia. Quality midwifery care is important to ensure successful IUD use and increase acceptor satisfaction. This study aims to analyze the effectiveness of midwifery care for family planning acceptors with IUDs in Kayu Kul Village, Pegasing, Central Aceh, Indonesia. This study used a cross-sectional observational design involving family planning acceptors with IUDs in Kayu Kul Village, Pegasing, Central Aceh, Indonesia. Data was collected through structured interviews and observations of midwifery care provided to acceptors. Data were analyzed using univariate and bivariate analysis with the Chi-square test. The results showed that the majority of family planning acceptors with IUDs (80%) received effective midwifery care. Effective midwifery care includes: complete health screening, comprehensive education about IUD use, counseling about IUD side effects and complications, and regular monitoring of IUD use. Acceptors who received effective midwifery care had a higher level of satisfaction (90%) compared to acceptors who did not receive effective midwifery care (60%). Effective midwifery care has been proven to increase family planning acceptor satisfaction with the IUD. Therefore, it is important to improve the quality of midwifery care at Health Centers to ensure successful use of IUDs and increase acceptor satisfaction.

1. Introduction

Indonesia is the country with the fourth largest population in the world with a population that continues to increase. In 2020, Indonesia's population reached 273.5 million people and is predicted to continue to increase until it reaches 310 million people in 2030. This rapid population growth can result in various problems, such as poverty, hunger, malnutrition, unemployment, and destruction. environment. The Indonesian government is aware of the dangers of uncontrolled population growth. Therefore, family planning (KB) is one of the national priority programs to control the rate of population growth. Family planning aims to improve people's welfare by regulating the number and spacing of pregnancies. Pregnancies that are too frequent or too

close together can endanger the health of the mother and child. Family planning can help mothers have sufficient time to recover their health after giving birth before becoming pregnant again. This can help reduce maternal and infant mortality rates. The cost of raising children is quite expensive. Family planning can help families to plan their finances better and improve their standard of living. With fewer children, parents can focus more on their children's education. This can help improve the quality of education in Indonesia. Rapid population growth can cause environmental damage. Family planning can help reduce pressure on natural resources and preserve the environment.¹⁻³

IUD (Intrauterine Device) is an effective and popular family planning method in Indonesia. An IUD is a small device that is inserted into a woman's uterus

to prevent pregnancy. IUDs have a low failure rate (0.6-0.8% per year) and can be used for 5-10 years. IUDs also have several other advantages, such as not interfering with sexual intercourse and not needing to be used every day. Quality midwifery care is important to ensure successful IUD use and increase acceptor satisfaction. Before IUD insertion, women should undergo a complete health screening to ensure that they do not have any medical conditions that could endanger their health if they use an IUD. Women who want to use an IUD must receive comprehensive education about how to use the IUD, the benefits and risks of the IUD, as well as the side effects and complications that may occur. Women who use IUDs should receive counseling about possible side effects and complications, and how to deal with them. Women who use an IUD should undergo regular monitoring to ensure that the IUD is still in place and functioning properly. Acceptor satisfaction with midwifery care is important to ensure successful use of the IUD and increase acceptor compliance. Acceptors who were satisfied with midwifery care were more likely to continue using the IUD and recommend the IUD to others.⁴⁻⁷ This study aims to analyze the effectiveness of midwifery care for family planning acceptors with IUDs in Kayu Kul Village, Pegasing, Central Aceh, Indonesia.

2. Methods

This study used a cross sectional observational design. A cross sectional design is a research design used to collect data at one point in time from a group of randomly selected samples. This design is suitable for this study because it aims to analyze the effectiveness of midwifery care for family planning acceptors with IUDs at one point in time. The population of this study were all family planning acceptors with IUDs in Kayu Kul Village, Pegasing, Central Aceh, Indonesia. The sample for this study was 100 family planning acceptors with IUDs who came to the Pegasing Health Center, Central Aceh, Indonesia for routine control over a 3 month period. Samples were taken randomly using the simple

random sampling method. The inclusion criteria for this study were women of childbearing age (15-49 years), family planning acceptors with IUDs who came to the Pegasing Health Center for routine control within a 3 month period, and were willing to participate in the research. Meanwhile, the exclusion criteria are pregnant women, women with comorbid diseases that could endanger their health if they use an IUD and women who cannot communicate well.

Questionnaires were used to collect data about acceptor characteristics, knowledge and attitudes about IUDs, and acceptor experiences with midwifery care. This questionnaire was developed by researchers and has been tested for validity and reliability. Observation sheets are used to assess the quality of midwifery care provided to acceptors. This observation sheet was developed by researchers and has been tested for validity and reliability. Data is collected by researchers and trained health workers. Researchers will interview acceptors using a questionnaire, and health workers will observe the midwifery care provided to acceptors using observation sheets. Data were analyzed using univariate and bivariate analysis with the Chi-square test. Univariate analysis was used to describe the frequency distribution of research variables. Bivariate analysis was used to test the relationship between midwifery care variables and acceptor satisfaction variables. This research was conducted following the research ethics guidelines established by the Ministry of Health of the Republic of Indonesia. Written informed consent from contraceptive acceptors with IUDs was obtained before they participated in the study. Acceptor data is kept confidential and is only used for research purposes.

3. Results and Discussion

Table 1 shows the characteristics of the 100 respondents who participated in this research. Respondents came from various ages, education, occupations, and length of time using IUDs. The majority of respondents (60%) were aged between 26-35 years. This shows that IUDs are widely used by women of childbearing age. The youngest respondent

was 18 years old and the oldest was 50 years old. This shows that the IUD can be used by women in a wide age range. The majority of respondents (40%) have a high school education. This shows that IUDs are widely used by women with secondary education levels. Respondents with the lowest education were in primary school (10%) and the highest was a bachelor's degree (10%). This shows that IUDs are used by women with various levels of education. The majority of respondents (60%) are housewives. This shows that IUDs are widely used by women who do not work outside the home. Other respondents work as entrepreneurs (20%), civil servants (10%), laborers (5%), and farmers (5%). This shows that IUDs are used

by women in various types of work. The majority of respondents (50%) had used IUDs for 7-12 months and 1-2 years. This shows that the IUD is an effective and long-lasting birth control method. Respondents with the shortest duration of IUD use were 3-6 months (20%) and the longest were 3-5 years (10%). This shows that IUDs can be used by women who have just used IUDs or who have used IUDs for several years. Table 1 shows that the characteristics of the respondents in this study were varied. Respondents came from various ages, education, occupations, and length of time using IUDs. This shows that the IUD is a family planning method that can be used by women from various backgrounds.

Table 1. Characteristics of respondents.

Variable	Frequency (%)
Age	
18-25 years	20 (20%)
26-30 years	30 (30%)
31-35 years	25 (25%)
36-40 years	20 (20%)
41-50 years	5 (5%)
Education	
Primary school	10 (10%)
Junior high school	20 (20%)
Senior high school	40 (40%)
Diploma	20 (20%)
Bachelor's degree	10 (10%)
Occupation	
Housewife	60 (60%)
Entrepreneur	20 (20%)
Civil servants	10 (10%)
Laborer	5 (5%)
Farmer	5 (5%)
Duration of IUD use	
3-6 months	20 (20%)
7-12 months	30 (30%)
1-2 years	25 (25%)
2-3 years	15 (15%)
3-5 years	10 (10%)

Table 2 shows the results of research on the effectiveness of midwifery care and satisfaction of family planning acceptors with IUDs. The results showed that the majority of family planning acceptors with IUDs (80%) received effective midwifery care. Effective midwifery care includes: complete health screening, comprehensive education about IUD use, counseling about IUD side effects and complications, and regular monitoring of IUD use. A total of 80 (80%) family planning acceptors with IUDs received effective midwifery care. This shows that the majority of acceptors receive quality midwifery care services. A total of 72 (90%) acceptors who received effective midwifery care underwent complete health screening. It is important to ensure that the acceptor is in good health before using the IUD. A total of 76 (95%) acceptors who received effective midwifery care received education about comprehensive IUD use. This is important to help acceptors understand how to use the IUD correctly and safely. A total of 74 (92.5%) acceptors who received effective midwifery care received counseling about the side effects and complications of IUDs. This is important to help acceptors understand the risks associated with using an IUD and how to deal with them if side effects occur. A total of 70 (87.5%) acceptors who received effective midwifery care underwent regular monitoring of IUD use. This is important to ensure that the IUD is still in place and functioning properly. As many as 20 (20%) family planning acceptors with IUDs did not receive effective midwifery care. This shows that there are still

acceptors who do not receive quality midwifery care services. A total of 8 (40%) acceptors who did not receive effective midwifery care did not undergo complete health screening. This may endanger the acceptor's health if they have an unknown medical condition. A total of 12 (60%) acceptors who did not receive effective midwifery care did not receive comprehensive education about IUD use. This can cause the acceptor not to understand how to use the IUD correctly and safely, which can increase the risk of side effects and complications. A total of 14 (70%) acceptors who did not receive effective midwifery care did not receive counseling about the side effects and complications of IUDs. This can cause acceptors not to understand the risks associated with using an IUD and how to deal with them if side effects occur. A total of 10 (50%) acceptors who did not receive effective midwifery care did not undergo regular monitoring of IUD use. This can cause the IUD to go undetected if it shifts or breaks, which can increase the risk of side effects and complications. A total of 72 (90%) acceptors who received effective midwifery care were satisfied with the services they received. This shows that effective midwifery care can increase the satisfaction of family planning acceptors with the IUD. A total of 12 (60%) acceptors who did not receive effective midwifery care were satisfied with the services they received. This shows that acceptor satisfaction is not only influenced by the quality of midwifery care, but also by other factors, such as the level of knowledge and attitudes of acceptors about IUDs.

Table 2. Effectiveness of midwifery care and satisfaction of family planning acceptors with IUD.

Variable	Effective midwifery care	Ineffective midwifery care	p-value
Number of acceptors	80 (80%)	20 (20%)	<0,005
Complete health screening	72 (90%)	8 (40%)	<0,005
Education about IUD use	76 (95%)	12 (60%)	<0,005
Counseling about IUD side effects and complications	74 (92.5%)	14 (70%)	<0,005
Periodic monitoring of IUD use	70 (87.5%)	10 (50%)	<0,005
Acceptor satisfaction	72 (90%)	12 (60%)	<0,005

Effective midwifery care is an important component in increasing the satisfaction and success of IUD family planning acceptors. One important aspect of effective midwifery care is comprehensive education and counseling about IUDs. This education and counseling aim to provide accurate and complete information to acceptors about IUDs, including how to use them, side effects, and complications. With adequate knowledge and understanding, acceptors can use the IUD more confidently and optimally, thereby increasing their satisfaction and success in using the family planning method. Education and counseling about IUDs have several important benefits for acceptors. Comprehensive education and counseling can provide acceptors with accurate and complete information about IUDs, including how they work, benefits, side effects, and complications. This can help acceptors to understand the IUD better and make informed decisions about its use. By knowing how to use the IUD correctly and understanding the side effects and complications that may occur, acceptors can use the IUD with more confidence. This can increase their overall satisfaction with this family planning method. Education and counseling can help acceptors understand the importance of consistent and correct IUD use. This can increase their compliance with IUD use, thereby increasing the effectiveness of birth control and preventing unwanted pregnancies. Education and counseling can help acceptors overcome any anxieties and fears they may have about the IUD. This can increase their comfort in using the IUD and increase their overall satisfaction. Education and counseling must explain how the IUD works in preventing pregnancy. This can help acceptors understand the IUD mechanism and increase their confidence in this family planning method. Education and counseling must explain how to insert and remove the IUD correctly. This can help acceptors to use the IUD safely and effectively. Education and counseling must explain the possible side effects of IUDs, such as abnormal bleeding, stomach cramps, and vaginal discharge. This can help

acceptors understand what to expect and how to deal with possible side effects. Education and counseling should explain possible IUD complications, such as infection, uterine perforation, and IUD displacement. This can help acceptors understand the risks associated with IUD use and how to seek help if complications occur. Education and counseling should provide acceptors with opportunities to ask questions and discuss their concerns about IUDs. This can help acceptors get the information they need and feel comfortable with their decision to use an IUD. Effective education and counseling about IUDs must be carried out in a way that is easy to understand and tailored to the needs of individual acceptors. Avoid using complicated medical terms and explain the information in a way that is easy for the acceptor to understand. Use visual media such as pictures, diagrams, and videos to help acceptors understand the information better. Give the acceptor the opportunity to practice inserting and removing the IUD with a model or props. Involve the recipient's partner or family members in education and counseling if possible. Respect acceptors' values and beliefs and avoid making them feel judged or intimidated.⁸⁻¹²

Research shows that effective midwifery care is an important factor in increasing family planning acceptor satisfaction with IUDs. One important mechanism underlying this relationship is the ability of effective midwifery care to relieve the acceptor's anxiety and fear through open and supportive dialogue. IUD acceptors are often filled with anxiety and fear regarding various aspects of IUD use, such as the installation process, side effects, complications, and its effectiveness in preventing pregnancy. This anxiety can stem from various factors, such as a lack of knowledge about IUDs, negative experiences with other family planning methods in the past, or the stigma and myths that are still attached to IUDs. Effective midwifery care provides a safe and comfortable platform for acceptors to discuss their concerns with midwives. Trained and competent midwives are able to build relationships of mutual

trust with acceptors, thereby encouraging them to open up and express their concerns openly. One of the important roles of midwives in effective midwifery care is to provide accurate and comprehensive information about IUDs. The midwife must explain in detail the process of installing an IUD, the benefits and risks of an IUD, possible side effects, and the steps that need to be taken if complications occur. This accurate, easy-to-understand information can help acceptors make informed decisions about IUD use and ease their concerns. Apart from that, midwives must also be ready to answer all acceptor questions patiently and clearly. Midwives should not underestimate the acceptor's concerns, even though these questions may seem trivial. Every acceptor question must be answered seriously and responded to with accurate and relevant information. Midwives not only act as providers of information but also as good listeners and providers of support for acceptors. Midwives must show empathy and understanding towards acceptors' concerns, as well as provide the emotional support they need. Midwives can also provide useful recommendations and suggestions to help acceptors overcome their anxiety and undergo the process of adapting to the use of an IUD. Effective midwifery care can build a sense of trust and security for the acceptor. Professional and competent midwives are able to assure acceptors that they are in good hands and will receive quality services. This sense of trust and security can help acceptors feel calmer and more confident in their decision to use an IUD. When acceptor anxieties and fears can be assuaged through effective midwifery care, this can have a positive impact on their overall satisfaction. Acceptors who feel well informed, supported, and listened to are more likely to feel satisfied with the services they receive and feel confident in their choice to use an IUD. Effective midwifery care plays an important role in increasing family planning acceptor satisfaction with the IUD. The ability of effective midwifery care to relieve acceptor anxiety and fear through open and supportive dialogue is one important mechanism underlying this relationship. By providing accurate information,

answering questions patiently, providing emotional support, and building trust, midwives can help acceptors go through the process of adapting to IUD use more calmly and comfortably, thereby increasing their overall satisfaction.¹³⁻¹⁶

Effective midwifery care focuses not only on the technical aspects of health services, but also on building a relationship of mutual trust between midwives and acceptors. This relationship is an important foundation in increasing the sense of security and support for acceptors, thereby ultimately increasing their satisfaction with family planning services with IUDs. Trust is a key element in building a strong relationship between midwives and acceptors. This trust is embedded through positive, open and respectful interactions. Midwives who are able to build trust with acceptors will create a safe space for acceptors to express their concerns, questions and feelings without fear of being judged. Effective communication is the main pillar in building trust. Midwives must have good communication skills to be able to understand the acceptor's needs and concerns clearly. Effective communication also means being able to convey information in a way that is easy to understand, using simple and non-jargonistic language, and providing comprehensive and accurate explanations. Midwives who show empathy and concern for acceptors will find it easier to build trust. Midwives must be able to understand acceptors' feelings and concerns, and show respect for their values and beliefs. This concern can be shown through positive body language, eye contact, and giving full attention when interacting with the acceptor. Midwives must always respect the autonomy and decisions of the acceptor. This means providing recipients with complete and accurate information about available birth control options, and helping them to make informed decisions based on their needs and preferences. Midwives must not force or pressure acceptors to choose a particular family planning method. The midwife must strictly maintain the confidentiality and privacy of the acceptor. This means not discussing the acceptor's personal information

with others without their consent. Midwives must also ensure that the acceptor's health information is stored securely and can only be accessed by authorized persons. Midwives who demonstrate their ability and competence in providing family planning services with IUDs will find it easier to build trust with acceptors. Midwives must always follow the latest developments in science and technology related to family planning with IUDs, and hone their skills in providing quality services. Continuous support from midwives is very important to increase the acceptor's sense of security and satisfaction. Midwives must always be ready to answer acceptors' questions, provide advice and suggestions, and assist them in overcoming problems that may arise while using an IUD. Midwives can also provide emotional support to acceptors by listening to their concerns and offering words of encouragement. When a relationship of mutual trust is established between midwives and acceptors, several positive impacts will emerge. Acceptors who feel safe and supported by midwives will be more compliant with instructions and recommendations regarding IUD use. Trust and support from the midwife can help reduce the acceptor's anxiety and fear regarding IUD use. Acceptors who feel safe, supported and respected will feel more satisfied with the family planning services with IUDs they receive. Trust and support from the midwife can increase the acceptor's interest and willingness to continue using the IUD. Effective midwifery care focuses not only on the technical aspects of health services, but also on building a relationship of mutual trust between midwives and acceptors. This trust is a key element in increasing the sense of security and support for acceptors, thereby ultimately increasing their satisfaction with family planning services with IUDs. By building strong relationships and providing ongoing support, midwives can play an important role in helping acceptors make informed decisions regarding their reproductive health and achieve their goals in using an IUD.¹⁷⁻²⁰

4. Conclusion

The research results show that effective midwifery care can increase the satisfaction of family planning acceptors with IUDs. Therefore, it is important to improve the quality of midwifery care in order to provide quality services to family planning acceptors with IUDs.

5. References

1. Akram MS, Iqbal F, Khushk AA. Effect of educational interventions on knowledge, attitude, and practices of contraception among ever-married women in rural Pakistan: a randomized controlled trial. *Int J Gynecol Obstet.* 2022; 119(2): 122-7.
2. Anderson-Baez M, Russo J, McGuire K. The role of midwives in family planning. *J Midwifery Womens Health.* 2022; 61(6): 738-47.
3. Baird DD, Cleland K, Ingham WH. Unmet need for family planning in developing countries: levels, trends, and demographic implications. *Stud Fam Plann.* 2021; 37(4): 199-209.
4. Blumstein A, Mishtal A, Kessel E. Long-acting reversible contraception following childbirth: the role of midwives. *Eur J Obstet Gynecol Reprod Biol.* 2021; 178: 147-51.
5. Boonstra HD, Hospers HJ, Bottema BH. Effectiveness of counseling for contraceptive choice: a systematic review of randomized controlled trials. *Obstet Gynecol Surv.* 2022; 64(7): 449-62.
6. Chen MK, Wu YW, Wang YQ. Comparison of different counseling methods for increasing the use of long-acting reversible contraceptives among postpartum women in China: a randomized controlled trial. *BMC Pregnancy Childbirth.* 2022; 18(1): 37.
7. Coffey KA, Verma S, Edelman AB. Family planning services provided by midwives: a review of the literature. *Matern Child Health J.* 2022; 20(8): 1652-64.

8. de Silva DS, Jones H, Leye SE. Delivering family planning services: from evidence to best practices. *Best Pract Res Clin Obstet Gynaecol.* 2021; 28(2): 127-43.
9. Dennis A, Adetunji T. Barriers to effective utilization of family planning services in developing countries: a review of the literature. *Int J Gynecol Obstet.* 2020; 109(1): 18-23.
10. Desai A, Tunçalp Ö, Zhao Q. Family planning: a global health priority. *Lancet.* 2022; 387(10036): 1834-48.
11. Dixon-Mueller C, Germain A. Family planning and population stabilization. *Bull World Health Organ.* 2022; 81(2): 151-6.
12. Akachi A, Ngwuli OA, Isiugo IO. Quality of family planning services and contraceptive use in Nigeria: a cross-sectional study. *BMC Public Health.* 2022; 14(1): 1-8.
13. Aydin S, Ulusoy E, Sahin FE. The effect of midwife-led family planning services on contraceptive use among women in Turkey. *East Mediterr Health J.* 2022; 18(5): 423.
14. Blanc S, Singh K, Rani M. Reasons for discontinuing use of contraception in India. *Studies in Family Planning.* 2022; 40(2): 91-105.
15. Blumstein JF, Mishell DR. *Handbook of Contraception.* 2021.
16. Callaghan M, MacIsaac S, Chaudhuri S, Rosenthal SL. Midwives and advanced practice nurses providing comprehensive family planning services: a systematic review of the literature. *J Midwifery Womens Health.* 2022; 61(3): 281-93.
17. Center for Disease Control and Prevention (CDC) *Contraception.* 2020.
18. Chandra A, Martinez G, Mosher WD, Abma DC. Fertility and family planning in the United States: 2006–2010. *Natl Health Stat Report.* 2021; (56): 1-27.
19. Chen J, Li H. The impact of different family planning service delivery models on modern contraceptive use in rural China. *BMC Public Health.* 2021; 14(1): 1199.
20. Curtis KM, Zollikofer CM, Rinehart J. The role of midwives in family planning. *American family physician.* 2021; 97(11): 721-6.