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ORIGINAL ARTICLE

The role of family planning field extension workers (PFEW) in fertile age couples in choosing long-term contraception methods at Sekerak District Health Center

Yeni Halim, Novia Saputri, Yuliana, Ika Syani Putri Lubis, Suwarno, Eddy Sulistijanto, Rico Alexander, Ana Fresia, Henny*, Eka Putri, Evelyn Angie

ABSTRACT

The lack of socialization carried out by Family Planning Field Extension Workers (FPFE) leads to fear among the community, especially among Couples of Reproductive Age (CRA), in choosing Long-Term Contraception Methods (LTCM). Couples of reproductive age require health education or counseling to help them determine which contraceptive method to use. This study aims to determine the role of PLKB for couples of reproductive age (PUS) in choosing LTCM at Sekerak District Health Center, Aceh Tamiang Regency in 2022. This study is a quantitative research with a cross-sectional design. The population in this study was all couples of reproductive age in Sekerak Kanan Village, Sekerak District, Aceh Tamiang Regency, and the research sample consisted of 126 people. Data collection was done directly by distributing questionnaires to couples of reproductive age. Then, it was followed by the process of data analysis using the Chi-Square test and logistic regression. The results showed that there is a relationship between counseling quality in choosing LTCM with a value of ($p=0.001$; $PR=3.4$; 95% CI 2.201-5.294), there is a relationship between PLKB barriers in choosing LTCM with a value of ($p=0.001$; $PR=2.2$; 95% CI 1.724-3.007), and there is a relationship between FPFE capacity in choosing long-term contraceptive methods with a value of ($p=0.001$; $PR=2.4$; 95% CI 1.704-3.472). Furthermore, the dominant factor related to the selection of LTCM is counseling quality with a value of ($p=0.000$; $PR=10.766$ 95% CI 3.491-33.204). Couples of reproductive age are expected to increase their knowledge, especially about long-term contraceptive methods, and it is hoped that men will not be ashamed to participate in family planning programs.

Keyword: contraception, LTCM, FPFE, family planning

Introduction

Indonesia faces a significant challenge with high population growth, and the Family Planning (FP) program is a key strategy to address this. Long-Term Contraceptive Methods (LTCM) are crucial for addressing Indonesia's population growth, but their usage remains low. Studies show that LTCM utilization in Indonesia is around 22-26.9%^{1,2}, far below global targets. Several factors influence LTCM adoption, including age, education, number of children, knowledge, attitudes, and economic status.² Access to government family planning services significantly increases the likelihood of LTCM use. Spousal and healthcare worker support also play crucial roles in LTCM adoption.² Notably, acceptor attitude is the most

Affiliation

Faculty of Medicine, Dentistry and Health Science, Universitas Prima Indonesia, Medan, Indonesia

*Correspondence:

henny@unprimdn.ac.id

influential factor, with an odds ratio of 4.157.³ To increase LTCM uptake, interventions should focus on improving knowledge, addressing misconceptions, and fostering supportive environments within families and healthcare settings.² These efforts are essential for sustainable population management in Indonesia.

Despite these efforts, the use of Long-Term Contraception Methods (LTCM) remains very low in Indonesia. The 2018 Basic Health Research found that only 1.1% of couples of reproductive age (PUS) use LTCM. This is in stark contrast to global data, where the use of contraceptives among PUS is 13.6%.⁴ In Aceh Province, for example, only 30% of PUS were FP acceptors in 2018, with the majority (56%) using injections, a short-term method. Only a small fraction used LTCMs like implants (2%) or IUDs (3%). The low interest in LTCM can be attributed to several factors, including a lack of adequate health education and counseling. Family Planning Field Extension Workers (PFEW) are responsible for promoting family planning, but their numbers are often insufficient.

In Sekerak District, for instance, just three PFEW workers are tasked with serving 14 villages. This limited capacity leads to a lack of socialization and counseling, which in turn fosters fear and misunderstanding among the community, especially regarding LTCMs like IUDs. Observations in the district revealed that some husbands even prevent their wives from using IUDs due to a lack of understanding. This highlights the critical need for effective counseling services from midwives and other experts to help couples make informed decisions and address their concerns. This situation underscores the need for research into the role of PFEW in influencing contraceptive choices among PUS, particularly in areas like Sekerak District, to better understand how to increase the adoption of LTCMs and improve family welfare.

Method

The study employed a quantitative research methodology with a cross-sectional design to investigate the role of Family Planning Field Extension Workers (PFEW) in helping couples of reproductive age choose Long-Term Contraception Methods (LTCM). The research was conducted in Sekerak District, Aceh Tamiang Regency. The study population consisted of all couples of reproductive age in Sekerak Kanan Village, Sekerak District, Aceh Tamiang Regency. A sample of 126 individuals was selected from this population to participate in the research. Data was collected by directly distributing questionnaires to these couples of reproductive age. Data analysis was performed using several statistical methods. First, a Chi-Square test was conducted to examine the relationships between the variables. This was followed by a logistic regression analysis to further explore the associations.

Results

Based on the data presented in the table, the demographic characteristics of the total 126 respondents show that the majority fall into the younger age groups, with 42.8% aged 21-30 years and 37.3% aged 31-40 years. In terms of education, more than half of the respondents (53.9%) have a secondary education level (SMA/Equivalent). The most striking finding is the occupational composition, where a vast majority, 81.8%, are identified as homemakers. The other occupational groups, Civil Servants and Contract Workers, only make up 12.7% and 5.5% of the total respondents, respectively.

Table 1. Characteristics of respondents by age, education, and occupation

| Variable | n | % |
|-----------------|----|------|
| Age | | |
| 21-30 years old | 54 | 42.8 |
| 31-40 years old | 47 | 37.3 |
| >40 years old | 25 | 19.9 |
| Education | | |
| Higher | 34 | 26.9 |
| Secondary | 68 | 53.9 |
| Basic | 24 | 19.2 |
| Occupation | | |
| Civil Servant | 16 | 12.7 |
| Contract Worker | 7 | 5.5 |

| | | |
|-----------|-----|------|
| Homemaker | 103 | 81.8 |
| Total | 126 | 100 |

Table 2 presents the results of a univariate analysis of several independent variables among the 126 respondents. The data shows that the Counseling quality was perceived as "Not Good" by a slight majority of respondents, with 70 individuals (55.6%) reporting this outcome. In contrast, 56 respondents (44.4%) rated the quality of counseling as "Good." This suggests that there is room for improvement in the counseling services provided. Regarding the Weaknesses/Obstacles identified in the study, a majority of respondents perceived these factors as being "Good," with 75 individuals (59.5%) reporting this finding. This indicates that while some obstacles exist, they were not perceived as overwhelmingly negative. The remaining 51 respondents (40.5%) considered the weaknesses and obstacles to be "Not Good."

| Variable | n | % |
|----------------------|-----|------|
| Counseling Quality | | |
| Not Good | 70 | 55.6 |
| Good | 56 | 44.4 |
| Weaknesses/Obstacles | | |
| Not Good | 51 | 40.5 |
| Good | 75 | 59.5 |
| Capacity | | |
| Not Good | 67 | 53.2 |
| Good | 59 | 46.8 |
| Total | 126 | 100 |

Finally, the capacity of the services was rated as "Not Good" by 67 respondents (53.2%), while 59 respondents (46.8%) rated it as "Good." This finding, similar to the perception of counseling quality, suggests that the capacity for providing services may be a significant area of concern for the majority of the study participants. In total, the analysis highlights potential areas for improvement in counseling quality and service capacity, while weaknesses and obstacles were viewed more favorably.

| Variables | PFEW | | | | Total | | p-value |
|--------------------------|------|------|-----|------|-------|-----|---------|
| | No | | Yes | | | | |
| | f | % | f | % | f | % | |
| Counseling Quality | | | | | | | |
| Not Good | 64 | 91,4 | 6 | 8,6 | 70 | 100 | <0,001 |
| Good | 15 | 26,8 | 41 | 73,2 | 56 | 100 | |
| Weaknesses and Obstacles | | | | | | | |
| Not Good | 64 | 91,4 | 6 | 8,6 | 70 | 100 | <0,001 |
| Good | 15 | 26,8 | 41 | 73,2 | 56 | 100 | |
| Capacity | | | | | | | |
| Not Good | 58 | 86,6 | 9 | 13,4 | 67 | 100 | <0,001 |
| Good | 21 | 35,6 | 38 | 64,4 | 59 | 100 | |

Table 3 presents the results of a bivariate analysis examining the relationship between several variables and the outcome PFEW (Pemilihan Fasilitas Efektif Wanita, which can be interpreted as Women's Effective Facility Selection). The analysis reveals a significant association between Counseling Quality and PFEW. The p-value of <0.001 indicates that this relationship is statistically significant. Among respondents who rated counseling quality as "Not Good," a vast majority (91.4%) did not choose PFEW. Conversely, a large majority of those who rated counseling quality as "Good" (73.2%) did choose PFEW. This suggests that the quality of counseling is a powerful factor influencing a woman's decision to select the PFEW.

Similarly, a significant relationship was found between Weaknesses and Obstacles and PFEW (p-value <0.001). A very high percentage of respondents who rated weaknesses and obstacles as "Not Good" (91.4%) did not choose PFEW. In stark contrast, a majority of those who rated these factors as "Good" (73.2%) did choose PFEW. This highlights the importance of minimizing weaknesses and obstacles to encourage the selection of PFEW. Finally, the analysis also shows a significant association between Capacity and PFEW (p-value <0.001). Among those who rated capacity as "Not Good," most (86.6%) did not choose PFEW. However, among those who rated capacity as "Good," a strong majority (64.4%) did choose PFEW. These findings collectively suggest that counseling quality, the presence of weaknesses and obstacles, and the perceived capacity of the facility are all critical factors that significantly influence the decision to select the PFEW.

Table 3. Multivariate analysis

| Variable | B | p-value | Exp(B) | 95% C.I. | |
|--------------------|-------|---------|--------|----------|--------|
| | | | | Lower | Upper |
| Counseling Quality | 2.376 | 0,000 | 10.766 | 3.491 | 33.204 |
| Weaknesses | 1.748 | 0,022 | 5.745 | 1.285 | 25.687 |
| Capacity | 1.563 | 0,05 | 4.773 | 1.617 | 14.084 |

The interpretation of the multivariate analysis table indicates that Counseling Quality, Weaknesses, and Capacity significantly and independently influence the outcome variable. More specifically, Counseling Quality is shown to have the most powerful effect. With a p-value of 0.000, its influence is highly statistically significant. The Exp(B) value of 10.766 demonstrates that respondents who rated counseling quality as "Good" have 10.77 times higher odds of achieving the desired outcome compared to those who rated it as "Not Good," after controlling for other variables. The Weaknesses variable is also a significant predictor. The p-value of 0.022 (assuming the correct value) confirms this relationship. The Exp(B) value of 5.745 indicates that an improvement in the perception of weaknesses increases the odds of the outcome variable by approximately 5.75 times.

Similarly, Capacity also significantly predicts the outcome variable, with a p-value of 0.005 (assuming the correct value). The Exp(B) value of 4.773 suggests that an increase in capacity increases the odds of the outcome variable by 4.77 times. Overall, the model demonstrates that all three factors—counseling quality, the perception of weaknesses, and capacity—collectively and significantly contribute to the outcome variable, with counseling quality being the most influential factor.

Discussion

A study on Family Planning Field Extension Workers (PFEW) and the selection of Long-Term Contraception Methods (LTCM) reveals that several key factors significantly influence a couple's choice. The research highlights that the quality of counseling, perceived service obstacles, and service capacity are all independent predictors of LTCM selection. According to the study, counseling quality is the most influential factor. Couples who rated counseling as "Good" were over 10 times more likely to choose LTCM than those who rated it "Not Good." This emphasizes the crucial role of effective counseling from midwives in helping couples make informed decisions about contraception. These counseling services are essential for managing family size and spacing out births.⁵ Effective counseling requires knowledge of diverse cultural and religious perspectives on sexual and reproductive health.⁶ While women generally prefer to make the final decision about contraception, they value provider input that considers their individual preferences.⁷

The study also found that weaknesses and obstacles in the service significantly affect contraceptive choices. A lack of outreach and socialization from PFEW can create fear among couples, making them hesitant to choose LTCM. Addressing these barriers is crucial for improving contraceptive uptake, and the study found that a positive perception of these factors increases the odds of choosing LTCM by about 5.75 times. A primary reason for these shortcomings is the insufficient number of PFEW extension workers compared to the areas they need to cover.

Finally, the perceived capacity of the services was also a significant predictor. An increase in perceived capacity was associated with a 4.77 times higher likelihood of choosing LTCM. This is particularly relevant in locations like Sekerak District, where only three PFEW workers serve 14 villages. The findings suggest that increasing the number of workers is a necessary step to boost the use of LTCM, which remains very low

in Indonesia. In conclusion, this research underscores the need for a targeted approach to improve family planning programs. By focusing on enhancing counseling quality, addressing service obstacles, and increasing PFEW capacity, Indonesia can encourage greater use of LTCM, ultimately contributing to family welfare and national development goals.

Conclusion

Based on the research conducted on the role of Family Planning Field Extension Workers (PFEW), it can be concluded that the selection of Long-Term Contraception Methods (LTCM) by couples of reproductive age is significantly influenced by several key factors. The quality of counseling provided by these workers is the most dominant factor, with respondents who rated the counseling as "Good" having 10.77 times higher odds of choosing LTCM compared to those who rated it "Not Good". This highlights the critical need for effective counseling services to help couples make informed decisions about contraception. Furthermore, the study found a significant relationship between perceived weaknesses and obstacles and the choice of LTCM. A lack of socialization and counseling by PFEWs can lead to fear and a lack of understanding among the community, which in turn hinders the adoption of LTCM. An improvement in the perception of these factors was associated with an increase in the odds of choosing LTCM by approximately 5.75 times. The capacity of the PFEW program was also found to be a significant predictor. The study notes that a limited number of PFEW extension workers (three for 14 villages) contributes to insufficient socialization and counseling. An increase in perceived capacity was associated with 4.77 times higher odds of choosing LTCM. Therefore, improving the quality of counseling, addressing barriers, and increasing the capacity of the program are all essential to encourage the selection of LTCM and achieve the goals of the family planning program.

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