



Factors Influencing the Participation of Couples of Reproductive Age in the Family Planning Program in East Sumalata District, North Gorontalo Regency

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ABSTRACT

This study examines the factors influencing the participation of couples of reproductive age in the Family Planning Program in East Sumalata District, North Gorontalo Regency. The data used in this study consist of primary data collected through questionnaire surveys. The research population comprised 125 respondents, and a census method was employed. The analytical technique used to address the research problems and test the hypotheses was multiple regression analysis, conducted with the assistance of the Statistical Product and Service Solutions (SPSS) software for data processing. The findings of the study indicate that: (1) service delivery plays a positive and significant role in influencing the participation of couples of reproductive age; (2) promotion has a positive and significant effect on the participation of couples of reproductive age; (3) socialization activities have a positive and significant effect on the participation of couples of reproductive age; and (4) cultural factors have a positive and significant effect on the participation of couples of reproductive age. Furthermore, simultaneously, service delivery, promotion, socialization, and cultural factors have a positive and significant influence on the participation of couples of reproductive age in the Family Planning Program.

Service Delivery, Promotion, Socialization, Cultural Factors, Couples of Reproductive Age

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INTRODUCTION

The Family Planning Program (KB) constitutes a strategic instrument in public health development aimed at improving family quality of life and ensuring sustainable development. This program is not merely intended to reduce birth rates, but also to provide couples of reproductive age (CRA) with opportunities to plan their family lives in a healthier, more systematic, and socioeconomically balanced manner. Effective implementation of family planning has been proven to contribute to declining fertility rates, improved

family welfare, and enhanced human development indicators (Adam, I., Rachman, M. A., & Suryani, 2021)

Nevertheless, the implementation of the family planning program in Indonesia continues to exhibit regional disparities. Urban areas generally enjoy better access to health services, whereas rural and remote regions face limitations in facilities, health personnel, and access to information. These conditions adversely affect the participation of couples of reproductive age in the family planning program and result in uneven program achievements at the national level (Irwanto, 2021) (Andiawa, H., Yusuf, M., Karim, 2025).

East Sumalata District, North Gorontalo Regency, represents one of the regions reflecting these challenges. Although the family planning program has been implemented through community health centers, integrated health posts (posyandu), and Family Planning Villages (Ahmad, Evi., Tahir, Arifin., 2025), the participation rate of couples of reproductive age remains below the established targets. This low level of engagement is attributable not only to limited infrastructure but also to insufficient public understanding of the benefits of family planning and the persistence of negative perceptions toward contraceptive methods (Souza et al., 2022). These conditions indicate that the success of the family planning program cannot be separated from the quality of interaction between the community and the health service system.

A number of studies have emphasized that the quality of health services plays a crucial role in encouraging the participation of couples of reproductive age. Health services that are not accompanied by adequate counseling and effective communication tend to diminish public trust in the family planning program (Maharani & Ekoriano, 2023). In addition, promotional activities that are limited and lack continuity result in incomplete dissemination of family planning information, thereby reducing community interest in participation (Oktavianita, R., & Arbain, 2021) (Kamalatu, N., Hasan, R., & Lano, 2022)

The socialization process also constitutes an important factor in shaping public attitudes toward the family planning program. Formal and one-way socialization patterns often fail to provide sufficient space for dialogue, leading to suboptimal public understanding. Limited outreach and low male involvement in counseling activities further weaken the effectiveness of the family planning program (Octavia, A., Rahman, D., & Siregar, 2022). In fact, spousal support particularly from husbands plays a significant role in family-level decision-making regarding contraceptive use.

Beyond service quality, promotion, and socialization, cultural factors also influence the participation of couples of reproductive age in the family planning program. Strong patriarchal values often result in contraceptive-related

decisions being dominated by husbands, while family planning is frequently perceived as the responsibility of women. Moreover, traditional beliefs and certain religious perspectives shape community attitudes toward family planning, generating resistance to the use of modern contraceptive methods (Sari, N., & Hadi, 2023). Culture therefore plays a dual role, functioning both as a barrier and as a strategic potential when appropriately integrated into family planning program implementation.

Most previous studies have examined service quality, promotion, socialization, and cultural factors separately. However, in rural contexts such as East Sumalata, these factors are interrelated and collectively shape a complex dynamic of participation among couples of reproductive age. Therefore, a comprehensive study that analyzes the combined influence of these factors is necessary to obtain a holistic understanding of the causes of low participation in family planning programs. From an academic perspective, this study contributes to the development of public health and social marketing management research by positioning family planning as a social product whose success is determined by service quality, promotional effectiveness, socialization intensity, and the local cultural context (Amadita Apriani, Ninda, Subowo, Ari, Eidowati, 2024). The novelty of this study lies in the simultaneous analysis of these four factors within an integrated research model, particularly in regions characterized by strong sociocultural dynamics. Accordingly, the objective of this study is to analyze the effects of service quality, promotion, socialization, and cultural factors, both partially and simultaneously, on the participation of couples of reproductive age in the Family Planning Program in East Sumalata District, North Gorontalo Regency.

RESEARCH METHOD

This study was conducted in three stages, namely data collection, data processing, and data analysis. The analysis aimed to examine the partial and simultaneous effects of service quality, promotion, socialization, and culture on the participation of couples of reproductive age, thereby providing a comprehensive understanding of the relationships among variables. These relationships are illustrated in the research model shown in the following figure.

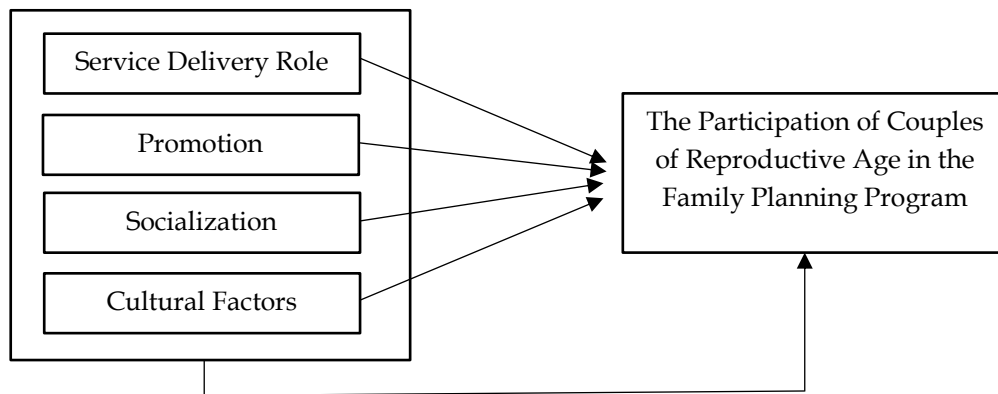


Figure 1.
Conceptual Framework

This study adopts a quantitative approach using an explanatory survey design to examine the influence of service delivery, promotion, socialization, and cultural factors on the participation of couples of reproductive age (CRA) in the Family Planning Program in East Sumalata District, North Gorontalo Regency. The study population includes all couples of reproductive age in the research area. As the exact population size is unknown, the sample size was determined based on Hair et al.'s guidelines, resulting in 125 respondents selected through purposive sampling, with criteria including residency in the study area and prior or current participation in the family planning program.

Data were collected using a structured questionnaire based on a five-point Likert scale. Service delivery, promotion, socialization, and cultural factors were measured through indicators reflecting service quality, communication effectiveness, community engagement, and local sociocultural values. Participation of couples of reproductive age was assessed through contraceptive use, continuity of use, and partner involvement. Data were analyzed using multiple linear regression to test both partial and simultaneous effects of the independent variables. Classical assumption tests confirmed that the regression model was appropriate. Instrument validity and reliability were established using Pearson correlation and Cronbach's Alpha. Statistical analyses included the t-test, F-test, and coefficient of determination (R^2). The study employed a cross-sectional design and was limited to East Sumalata District.

RESULT AND DISCUSSION

The instrument testing results indicate that all items measuring service delivery, promotion, socialization, cultural factors, and the participation of couples of reproductive age meet the validity criteria, as evidenced by item-

total correlation values exceeding the critical r-value. Furthermore, the reliability test results demonstrate that all variables exhibit good internal consistency, with Cronbach's Alpha coefficients exceeding the required threshold. Accordingly, the research instruments are deemed appropriate for subsequent data analysis.

Multiple Linear Regression Equation

Table 1.
Multiple Linear Regression Test Results

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	14.043	4.812		2.918	.004		
	Service Delivery Role	.189	.041	.286	4.613	.000	.954	1.048
	Promotion	.163	.038	.275	4.247	.000	.876	1.142
	Socialization	.185	.044	.265	4.214	.000	.922	1.084
	Cultural Factors	.276	.043	.398	6.345	.000	.932	1.073

a. Dependent Variable: Participation of Couples of Reproductive Age

Based on the multiple linear regression analysis using standardized coefficients (Beta), the regression model is expressed as:

$$Y = 14.043 + 0.286X_1 + 0.275X_2 + 0.265X_3 + 0.398X_4$$

The constant value (14.043) represents the baseline level of participation of couples of reproductive age (CRA) in the Family Planning Program when service delivery role, promotion, socialization, and cultural factors are held constant. This indicates that a basic level of participation exists prior to the influence of the examined independent variables.

The service delivery role (X_1) has a positive effect on CRA participation ($\beta = 0.286$), indicating that improvements in service quality, counseling, and accessibility enhance participation in the Family Planning Program. This finding is consistent with previous studies emphasizing that effective health services strengthen community trust and encourage participation in public health programs (Jufri, 2021).

Promotion (X_2) also demonstrates a positive influence on CRA participation ($\beta = 0.275$). This result suggests that intensive and well-targeted promotional activities increase public awareness and motivation to engage in family planning programs. These findings align with earlier research

highlighting the importance of promotional strategies in improving program outreach and community engagement (Oktavianita, R., & Arbain, 2021) (Kamalatu, N., Hasan, R., & Lano, 2022)

The socialization variable (X_3) shows a positive effect on CRA participation ($\beta = 0.265$), indicating that effective information dissemination and community-based socialization enhance understanding and acceptance of family planning. This result supports prior studies which found that participatory and interactive socialization approaches contribute to higher levels of program participation (Octavia, A., Rahman, D., & Siregar, 2022).

Among all independent variables, cultural factors (X_4) exert the strongest influence on CRA participation ($\beta = 0.398$). This finding indicates that local values, norms, and belief systems play a dominant role in shaping reproductive health decisions. Consistent with previous research, cultural and religious perspectives significantly affect attitudes toward family planning and contraceptive use, particularly in communities with strong traditional values. (Sari, N., & Hadi, 2023)

Overall, these findings confirm that service delivery role, promotion, socialization, and cultural factors simultaneously and positively influence the participation of couples of reproductive age in the Family Planning Program in East Sumalata District, North Gorontalo Regency.

Table 2.
Correlation and Coefficient of Determination

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.749 ^a	.561	.546	1.093	2.638
a. Predictors: (Constant), Cultural Factors, Service Delivery Role, Socialization, Promotion					
b. Dependent Variable: Participation of Couples of Reproductive Age					

The R Square (R^2) value of 0.561 indicates that 56.1% of the variation in the participation of couples of reproductive age can be explained jointly by the variables of service delivery role, promotion, socialization, and cultural factors. Meanwhile, the remaining 43.9% is influenced by other factors not examined in this study. The Adjusted R Square value of 0.546 suggests that the model's explanatory power remains relatively strong after adjusting for the number of independent variables included. In addition, the Std. Error of the Estimate value of 1.093 indicates a relatively low level of prediction error, demonstrating that the regression model has good predictive accuracy.

Partial Test (t-Test)

Table 3.
Partial Test (t-Test)

	Model	t	Sig.
1	(Constant)	2.918	.004
	Service Delivery Role	4.613	.000
	Promotion	4.247	.000
	Socialization	4.214	.000
	Cultural Factors	6.345	.000

The partial test (t-test) results indicate that all independent variables have a positive and statistically significant effect on the participation of couples of reproductive age (CRA) in the Family Planning Program. The service delivery role shows a significant effect ($t = 4.613$; $p < 0.05$), indicating that improvements in service quality and delivery significantly enhance CRA participation. Promotion also has a significant positive influence ($t = 4.247$; $p < 0.05$), suggesting that effective promotional activities increase public awareness and participation in the program.

Furthermore, socialization demonstrates a significant effect on CRA participation ($t = 4.214$; $p < 0.05$), highlighting the importance of effective information dissemination and community engagement. Among all variables, cultural factors exhibit the strongest influence ($t = 6.345$; $p < 0.05$), indicating that local values, norms, and cultural beliefs play a dominant role in shaping participation in the Family Planning Program.

Overall, these findings confirm that each independent variable individually contributes to increasing the participation of couples of reproductive age, supporting the results of the multiple linear regression analysis.

Simultaneous Test (F-test)

Table 4.
F Test Results

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	183.123	4	45.781	38.288	.000 ^b
	Residual	143.485	120	1.196		
	Total	326.608	124			
a. Dependent Variable: Participation of Couples of Reproductive Age						
b. Predictors: (Constant), Cultural Factors, Service Delivery Role, Socialization, Promotion						

DISCUSSION

The results of the simultaneous hypothesis testing (F-test) show an F-value of 38.288 with a significance level of 0.000 (< 0.05). Therefore, hypothesis H_5 is accepted and H_0 is rejected, indicating that service delivery role, promotion, socialization, and cultural factors simultaneously have a significant effect on the participation of couples of reproductive age in the Family Planning Program in East Sumalata District.

The research findings indicate that service quality has a positive and significant effect on the participation of couples of reproductive age (CRA) in the Family Planning Program ($t = 4.613$; sig. = 0.000; $\beta = 0.286$). This finding is consistent with the studies of (Rahardja, 2011), which emphasize that informative, friendly, and sustainable family planning services enhance acceptors' trust and participation.

Promotion also has a significant effect on CRA participation ($t = 4.247$; sig. = 0.000; $\beta = 0.275$). This result supports the findings of (Sari, N., & Nugroho, 2022) as well as (Widyaningsih, R., Lestari, D., & Prabowo, 2023), who argue that the intensity and clarity of family planning promotion contribute to increased public knowledge and positive attitudes toward contraceptive use.

Furthermore, socialization is shown to have a significant effect on CRA participation ($t = 4.214$; sig. = 0.000; $\beta = 0.265$). This finding is consistent with the research of (Lestari, D., & Handayani, 2022) and (Pratiwi, R., Suryani, N., & Putra, 2023), which demonstrates that community-based socialization and direct dialogue are effective in enhancing understanding and participation of couples of reproductive age in family planning programs.

Meanwhile, cultural factors emerge as the most dominant variable influencing CRA participation ($t = 6.345$; sig. = 0.000; $\beta = 0.398$). This result aligns with the studies of (Sulastri, S., & Hidayat, 2021) and (Putri, A. N., Wibowo, 2023), which highlight the strong influence of social norms, gender roles, and the support of traditional and family leaders in family planning decision-making.

Simultaneously, service delivery role, promotion, socialization, and cultural factors have a significant effect on CRA participation ($F = 38.288$; sig. = 0.000), with an R^2 value of 0.561. These findings reinforce the view that CRA participation is the result of multidimensional interactions among service quality, communication strategies, and cultural context, and underscore the novelty of this study in positioning cultural factors as the primary determinant within the context of East Sumalata District.

CONCLUSION

The findings of this study indicate that service delivery role, promotion, socialization, and cultural factors have a positive and significant effect on the participation of couples of reproductive age (CRA) in the Family Planning Program in East Sumalata District, North Gorontalo Regency. Partially, friendly and informative service delivery, continuous and well-targeted promotion, as well as community-based socialization are proven to enhance trust, understanding, and participation among couples of reproductive age.

Among all variables, cultural factors emerge as the most dominant determinant, indicating that local values, norms, and beliefs play a central role in shaping family planning participation decisions. Simultaneously, these four variables significantly influence CRA participation, confirming that the success of the Family Planning Program depends on the integration of service quality, communication strategies, and the sociocultural context of the community.

REFERENCES

- Adam, I., Rachman, M. A., & Suryani, N. (2021). The impact of free family planning services on fertility decline in rural communities. *Journal of Population and Social Studies*, 29(2), 145–160.
- Ahmad, Evi.,Tahir,Arifin., S. (2025). Health Management Strategies to Improve Family Planning Participation: A Qualitative Study in Monano District, North Gorontalo Regency. *JURNAL PROMOTIF PREVENTIF*, 8(5), 1235–1245.
<https://journal.unpacti.ac.id/index.php/JPP/article/view/2268/1195>
- Amadita Apriani, Ninda.,Subowo, Ari.,Eidowati, N. (2024). Efektifitas Program Keluarga Berencana (KB) Pada Dinas Sosial Pemberdayaan Perempuan Dan KEluarga Berencana Dalam Meningkatkan Kepedulian Masyarakat Menggunakan Alat Kontrasepsi Di Akbupaten Rembang. *Nova Idea : Jurnal Ilmu Administrasi Publik*.
- Andiawa, H., Yusuf, M., Karim, L. (2025). Mobile clinics as a strategy to improve access to family planning in remote areas. *BMC Health Services Research*, 25(1), 87–95.
- Irwanto. (2021). The role of communication, information, and education (CIE) in improving contraceptive adoption. *Indonesian Journal of Health Promotion*, 19(1), 75–84.
- Jufri, A. (2021). Door-to-door health services and contraceptive use among rural communities. *Journal of Rural Health Studies*, 5(2), 112–123.
- Kamalatu, N., Hasan, R., & Lano, A. (2022). Educational campaigns and behavioral change towards family planning: Evidence from community

- interventions. *Global Health Science and Practice*, 10(4), 650–659.
- Lestari, D., & Handayani, S. (2022). Pengaruh sosialisasi terhadap partisipasi pasangan usia subur dalam program keluarga berencana. *Jurnal Kesehatan Reproduksi*, 13(2), 95–104.
- Maharani, A., & Ekoriano, M. (2023). Health insurance and contraceptive use , Indonesian Family Planning Census 2021. *Research Health Insurance and Contraceptive Use, May*, 513–521. <https://doi.org/doi:10.2471/BLT.22.289438>
- Octavia, A., Rahman, D., & Siregar, R. (2022). Cultural values and contraceptive preferences: A study in Indonesian traditional communities. *Asian Population Studies*, 18(1), 32–48.
- Oktavianita, R., & Arbain, M. (2021). Effectiveness of Kampung KB promotion in increasing public awareness. *Jurnal Kesehatan Reproduksi*, 12(3), 210–220.
- Pratiwi, R., Suryani, N., & Putra, A. (2023). Peran sosialisasi dan tokoh masyarakat dalam meningkatkan partisipasi keluarga berencana. *Jurnal Promosi Kesehatan Indonesia*, 19(1), 56–65.
- Putri, A. N., Wibowo, A. (2023). Pengaruh norma sosial dan dukungan keluarga terhadap partisipasi pasangan usia subur dalam keluarga berencana. *Jurnal Kesehatan Masyarakat*, 18(3), 201–210.
- Rahardja, M. B. (2011). Kualitas Pelayanan Keluarga Berencana dan Penggantian Kontrasepsi di Indonesia. *Pusat Penelitian Dan Pengembangan Kependudukan Badan Kependudukan Dan Keluarga Berencana Nasional*, 6(3). <https://doi.org/10.21109/kesmas.v6i3.105>
- Sari, N., & Hadi, P. (2023). Patriarchy and men's involvement in family planning programs. *Gender and Society Review*, 7(2), 145–160.
- Sari, N., & Nugroho, A. (2022). Pengaruh promosi keluarga berencana terhadap sikap dan partisipasi pasangan usia subur. *Jurnal Kesehatan Masyarakat*, 17(2), 123–131.
- Souza, P. D., Bailey, J. V, Stephenson, J., Oliver, S., Souza, P. D., Bailey, J. V, Stephenson, J., & Oliver, S. (2022). Factors influencing contraception choice and use globally : a synthesis of systematic reviews. *The European Journal of Contraception & Reproductive Health Care*, 27(5), 364–372. <https://doi.org/10.1080/13625187.2022.2096215>
- Sulastri, S., & Hidayat, R. (2021). Faktor budaya dan keikutsertaan pasangan usia subur dalam program keluarga berencana. *Jurnal Kesehatan Reproduksi*, 12(1), 45–53.
- Widyaningsih, R., Lestari, D., & Prabowo, Y. (2023). Peran komunikasi, informasi, dan edukasi dalam meningkatkan partisipasi keluarga berencana. *Jurnal Promosi Kesehatan Indonesia*, 18(1), 45–54.