

Effectiveness of Health Promotion on Family Planning at Lospalos Health Center

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Abstract

Introduction: Family planning enables individuals and couples to determine the number and spacing of their children. Its primary goal is to improve maternal and child health and to support the development of healthy and prosperous families through birth control and population management strategies. **Objective:** This study aimed to determine the effectiveness of health promotion on family planning. **Method:** The research was conducted at Lospalos Health Center. A quantitative approach with a pre-experimental design using a one-group pre-test and post-test method was employed. The study population consisted of 67 participants, and purposive sampling was used. Data were collected using a structured questionnaire completed by the respondents. Univariate and bivariate analyses were performed, with the paired t-test applied for bivariate analysis. **Result and Discussion:** The results showed that the majority of participants had negative family planning knowledge and practices before the health promotion intervention, while most demonstrated positive outcomes afterward. The intervention was statistically significant ($p = 0.000$, $p < 0.05$), indicating that health promotion was effective in improving family planning knowledge and practices. **Conclusion:** This study provides valuable references for future research to further explore the effectiveness of health promotion in enhancing community knowledge

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Introduction

Family planning (FP) is an important strategy to help reduce the number of children and promote healthy and prosperous families. To ensure the successful implementation of family planning programs, various contraceptive methods are used. Contraception is a method used to prevent pregnancy (Simanjuntak, Handayani, Raudah, & Ivana, 2023); (Putra, Meutia, & Yulianti, 2022). In Indonesia, a wide range of contraceptive methods is available, including implant contraception. However, the use of implant contraception has not yet gained widespread popularity compared to other methods, as many family planning acceptors remain less interested in using this method (Fatimah & Septiani, 2025); (Asmiranti, Parellangi, & Imelda, 2023); (Hasnita, Firawati, & Sari, 2025)

According to the World Health Organization (WHO), the use of modern contraceptive methods is one of the most effective strategies for reducing unintended pregnancies and enabling women and couples to plan the number and timing of their children safely. Globally, modern contraceptive use has increased substantially—rising from about 467 million users in 1990 to 874 million in 2021—yet unmet need persists, with an estimated 164 million women still lacking access to contraception in 2021 (World Health Organization [WHO], 2025). These trends show that improvements in availability do not automatically translate into optimal utilization, underscoring the continuing importance of effective health promotion and client-centered counseling (Lestari, Lieskusumastuti, & Sari, 2024).

In local primary-care settings, one persistent challenge is the gap between contraceptive availability and clients' knowledge and decision-making readiness. In places such as Lospalos, limited exposure to structured counseling materials and inconsistent information delivery may contribute to suboptimal understanding of contraceptive options and lower uptake or continuation of modern methods. Therefore, this study is designed to address a practical local gap by evaluating whether leaflet-assisted counseling can improve family planning knowledge and practice among women of reproductive age in Lospalos. Despite global improvements, disparities persist across regions. Developed areas report higher contraceptive prevalence compared to less developed regions, with sub-Saharan Africa exhibiting some of the lowest rates. Modern contraceptives, including injectables, implants, intrauterine devices (IUDs), oral pills, and condoms, play a critical role in reducing unintended pregnancies and enhancing reproductive health outcomes (UNDP, 2025).

In Timor-Leste, general knowledge of family planning methods among individuals aged 15–49 is relatively widespread; however, actual contraceptive use remains low. Recent demographic health data indicate that only about 26% of married women of reproductive age use any form of family planning, while approximately 25% report an unmet need for contraceptive services. These figures reveal persistent gaps in access, awareness, and utilization of family planning services, which may be influenced by limited information dissemination, cultural barriers, and restricted access to services (Survey, 2016)

Addressing these gaps is essential to improving family planning uptake. Health promotion interventions, particularly those targeting knowledge, attitudes, and practices, have been identified as effective strategies in enhancing community engagement and adoption of contraceptive methods (Tyotswam & Iseme, 2024). Therefore, this study aimed to evaluate the effectiveness of health promotion on family planning among clients at Lospalos Health Center. By assessing the impact of health promotion interventions, this research seeks to provide evidence-based recommendations to improve family

planning knowledge, attitudes, and practices, ultimately contributing to better maternal and child health outcomes in Timor-Leste (Silumbwe et al., 2020)

Method

This study employed a quantitative research design with a pre-experimental approach using a one-group pre-test and post-test design. This design allows researchers to measure changes in participants' knowledge, attitudes, and practices regarding family planning before and after an intervention (Notoatmodjo, Gusman, Notoatmodjo, & Aprilia, 2021)

The study was conducted at Lospalos Health Center. The research population consisted of 67 couples of reproductive age (15–49 years) who visited the health center during the data collection period. Purposive sampling was used to select participants who met the inclusion criteria.

Data were collected using a structured questionnaire consisting of 20 items. Participants completed the questionnaire both before (pre-test) and after (post-test) the health promotion intervention. The instrument was designed to assess knowledge and practices related to family planning (Adiputra, Trisnadewi, Oktaviani, & Munthe, 2021)

Data analysis was performed using SPSS version 31. Univariate analysis was used to summarize participant characteristics and the distribution of pre-test and post-test scores. Bivariate analysis was conducted using the Paired Sample t-test to compare the mean pre-test and post-test scores. A p-value < 0.05 was considered statistically significant (Sugiyono, 2013)

Research and Discussions

1. Result

Respondent Characteristics

Table 1

Frequency distribution of respondent characteristics based on sex, age, education level and profession in Lospalos Health Internment Center, 2025.

Category	Frequency	Percentage (%)
Gender		
Male	21	31%
Female	46	69%
Total	67	100%
Age		
15-24	32	48%
25-34	26	39%
35-49	9	13%
Total	67	100%
Education Level		
Primary	2	3%
Pre-secondary	17	25%
Secondary	41	61%
University	7	11%
Total	67	100%
Profession		
Unemployment	28	42%
Farmer	23	34%
Student	13	19%
Civil Servant	3	5%
Total	67	100%

Based on the table 1 respondent characteristics are mostly sex category female frequency 46 (69%). Based on age majority age group (15-24) frequency 32 (48%). Based on education level mostly secondary frequency 41 (61%) and based on profession mostly unemployed frequency 28 (42%).

Distribution of Pre-test Results

Table 2

Frequency distribution of pre-test results for families in Lospalos Health Internment Center, 2025

No	Category	Frequency	Percentage (%)
1	Negative ($\leq 50\%$)	53	79.1%
2	Positive ($> 50\%$)	14	20.9%
	Total	67	100%

Based on the results of the pre-test, it was shown that the majority of respondents received negative values ($\leq 50\%$) totaling 53 (79.1%).

Distribution of Post-test Results

Table 3

Frequency distribution of post-test results for families in Lospalos Health Internment Center

No	Category	Frequency (n)	Percentage (%)
1	Negative ($\leq 50\%$)	12	17.9%
2	Positive ($> 50\%$)	55	82.1%
	Total	67	100%

Based on the results of the post-test, it was shown that the majority of respondents received positive values ($\leq 50\%$) totaling 55 (82.1%).

Distribution of Results Based on T-test

Table 4

Distribution of results of pre-test and post-test values based on T-test analysis

Pair	Paired Samples Statistics			
	Mean	N	Std. Deviation	Std. Error Mean
Pre-test	9	67	1.723	.211
Post-test	14	67	3.173	.388

Based on the table above, the results of T-Test analysis showed that respondents received pretest results with an average value of 9 with a negative category, that is, the correct answer is less than 10 questions ($\leq 50\%$), but after respondents received health promotion counseling on family planning, there was a strong change in the post-test results with an average value of 14 into the positive category, that respondents gave the correct answer, more than 10 questions ($> 50\%$). From this result shows that there is a difference between pre-test and post-test that has an impact on health promotion. To further confirm the effectiveness of health promotion is significant or not can be seen in the following table.

Table 5

Distribution of pre-test and post-test value results based on analysis using Paired Sample T-test

Pair Pre-test-Post-test	Paired Samples Test				
	Mean	Std. Deviation	Std. Error Mean	Significance	
				One-Sided p	Two-Sided p
	-5.687	2.141	.262	< .000	< .000

Based on the table, the T-Test analysis obtained a significance value of $p = < .000$ ($p < 0.05$) that there is a very significant difference between pre-test and post-test. It can be declared that health promotion in this research is effective and has a great effect on the knowledge of the participants that increases, because most respondents began to understand and understand well about the Family Planning program

2. Discussion

The results of this study demonstrated a significant improvement in respondents' knowledge following the health promotion intervention. Prior to the intervention, most respondents had limited knowledge of family planning, indicating inadequate exposure to structured health information. This finding aligns with health promotion theory, which emphasizes that knowledge acquisition is a key outcome of educational interventions.

After the intervention, respondents' knowledge significantly improved, as reflected by higher post-test scores. The statistically significant difference between pre-test and post-test scores ($p < 0.000$) confirms that health promotion interventions play an important role in enhancing understanding of family planning

These findings are consistent with previous studies. (Werna et al., 2020) reported that counseling using visual media such as leaflets significantly improved knowledge of family planning programs. Similarly, (Puskesmas & Surakarta, 2023) demonstrated that leaflet-based counseling resulted in a significant increase in participants' knowledge ($p < 0.05$).

The findings of this study have important implications for nursing practice and public health programs. Health promotion using simple and accessible educational media, such as leaflets, can be effectively integrated into routine health services to improve community knowledge and support informed decision-making regarding family planning. This approach may contribute to increased utilization of family planning services and improved maternal and child health outcomes.

Conclusion

For health education institutions, strengthening family planning education is justified because these institutions have the academic capacity and social mandate to function as reliable sources of reproductive health information for communities. By procuring standardized visual and audiovisual materials (e.g., leaflets, posters, flipcharts, and short educational videos), institutions can ensure message consistency and improve the quality of information dissemination beyond classroom settings. Establishing a routine monthly counseling schedule through community outreach or collaboration with health centers is also justified to provide continuous exposure and reinforcement, which is necessary for sustained learning and better decision-making.

To ensure accountability, implementation should be accompanied by clear evaluation indicators such as the number of sessions conducted, participant attendance, pre-post knowledge improvement, and referral uptake to family planning services. From a sustainability standpoint, funding justification can be drawn from the need to institutionalize health promotion activities through local government support (APBD) while allowing supplementary financing through community fundraising partnerships to maintain materials and outreach continuity.

For health centers, expanding family planning education is justified because frontline services directly influence client knowledge, method selection, and continuation. Providing comprehensive information from the first client visit is essential to reduce misinformation and to support informed contraceptive choice, particularly in settings where counseling exposure is inconsistent. Procuring and displaying visual materials at key service points (registration area, MCH/ANC services, and the family planning unit) is justified to increase exposure and reinforce key messages during waiting times. Implementing a structured monthly counseling schedule—integrated with ANC days, Posyandu sessions, or routine clinic services—is justified to ensure regular program delivery and broad community reach.

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Program effectiveness should be monitored using indicators such as counseling coverage, documentation completeness, changes in knowledge, method uptake or continuation, and follow-up compliance, so that improvements can be based on measurable outcomes. Funding can be justified through APBD allocations and routine operational resources, with additional support potentially sourced from community fundraising or partnerships with local organizations to sustain education materials and outreach activities

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