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Effectiveness of Health Promotion on Family Planning at Lospalos Internal Health Center

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Abstract

Background: Family planning is a deliberate process in which couples decide on the number, spacing, and timing of their children's births. The data and chronology show that the use of contraceptives is still low in Timor-Leste. **Objective:** This study aims to describe the health promotion effectiveness for family planning at the Lospalos Health Center. **Method**: A descriptive quantitative study with a pre-test and post-test design was conducted. Samples were taken with a purposive sampling type. The sample size of this study is 67. The data collection technique used a questionnaire. Pre-test and post- test data were analyzed using SPSS with an analysis using Paired Sample T-test. **Results**: The results of the pre-test survey on family planning showed that the number of respondents who scored less than 50% (≤50%) was 53 (79.1%) with the Negative category, and the respondents who scored more than 50% (>50%) were 14 (20.9%) with the Positive category. In addition, on the results of the post-health promotion study (post-test) on family planning, the number of respondents who scored less than 50% (≤50%) amounted to 12 (17.9%) with a negative category, and respondents who scored above 50% (>50%) amounted to 82 (155%) with a positive category. The results of this study were also further strengthened by the T-test analysis test which obtained a significance value of p= < 0.001 (p< 0.05) indicating the existence of a highly significant difference between the pre-test and post-test. **Conclussion**: Health promotion had a great influence on the participants' improved knowledge, as most of the respondents began to understand and understand well about the Family Planning program.

Keywords: effectiveness, family planning, health promotion

INTRODUCTION

Family planning is a practice that helps individuals or couples manage the spacing between births [1]. Family planning is a conscious process in which couples decide on the number, spacing, and timing of the birth of their children [2]. Its purpose is to improve the well-being of mothers and children as well as create ideal, happy, and prosperous families through birth control and population growth control [3].

According to the World Health Organization [4], the prevalence rate of contraceptive use is 63% and is increasing in parts of the world, particularly in North America, Latin America, and the Caribbean, where it is higher than 75%, and lowest in Sub-Saharan Africa, where it is less than 36%. Among the 1.9 billion women of reproductive age (15–49 years) worldwide in 2021, 1.1 billion needed family planning, of these, 874 million used modern contraceptive methods, and 164 million had unmet contraceptive needs

In the Asian Region the proportion of couples aged 15-49 years who report using modern contraceptive methods has increased at least in the last 6 years from 60.9% to 61.6% [5].

According to the Statistical Report [4], shows that the population of women aged 15-49 years in Timor-Leste is 21% [6]. According to the report shows that the prevalence rate of family planning in the municipality of Lautem, with the total prevalence rate of contraceptives is 15% composed of injectables 762 (5%), implants 748 (4.8%), IUDs 453(3%), POPs 211 (1.3%), COPs (1.1%), vasectomies (11%) 13(0.08%), condom 2 (0%) and Tubectomy 0 (0%) [7].

The estimated population of married women aged 15-49 is 15,537 [8]. The continuous users of family planning are 823 injectables, 1369 implants, 356 IUDs, 110 condoms, 1 natural from the number mentioned above [9]. Based on the data and chronology obtained, it can be interpreted that the use of contraceptives is still low [10. This is caused by several factors, one of which is lack of knowledge and lack of information about contraceptives [11].

METHOD

This study utilized a descriptive quantitative method of pre-test and post- test nature for a group. According to [12], states that pre-test post-test for a group is an activity researcher provides initial test (pre-test) before receiving health promotion, and after receiving health promotion, after the final test (post-test) [13]. Model This is more perfect because it allows the researcher to measure the effect of Health promotion [14]. This research was conducted by the researcher at the Lospalos Internal Health Center [15]. The survey was conducted for 7 days from 06 to 13 October 2025.

The population in this research is the reproductive age partner (age 15-49) who were present at the research site during the research period conducted at the Lospalos Internal Health Center [16]. The univariable research variable was "Effectiveness of Patient Health Promotion Regarding Family Planning" [17]. In the data collection using a questionnaire with 20 questions. In the research data pre-test and post-test analysis using SPSS 31 in the analysis using Paired Sample T-test is a type of statistical test that wants to compare the means of two pairs of groups or in relationship [18].

RESULTS AND DISCUSSION

Respondents were predominantly female (69%). The largest age group was 15–24 years old (48%), and the lowest was 35–49 years old (13%). The highest level of education for respondents was secondary school (61%), and the lowest was primary school (3%). The highest level of unemployment was 42%), and the lowest was civil servants (5%).

Tabel 1. Characteristics of respondents (n= 67)

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

The level of respondents' knowledge about family planning before the counseling was mostly negative (79.1%), but changed to positive (82.1%) after receiving educational materials (Tabel 2).

Table 2. Family planning knowledge of respondents

Category	Pre-test		Post-test	
	n	%	n	%
Negative (≤ 50%)	53	79.1	12	17.9
Positive (> 50%)	14	20.9	55	82.1
Total	67	100.0	67	100.0

Based on the table above, the results of T-Test analysis showed that respondents received pre-test results with an average value of 9 with a negative category, that is, the correct answer is less than 10 questions (≤ 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%) (Figure 1). From this result shows that there is a difference between pre-test and post-test that has an impact on health promotion.

The T-Test analysis obtained a significance value of p= 0.001 that there is a very significant difference between pre-test and post-test [19]. 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 [20]. The results of T-Test analysis showed that respondents received pre-test results with an average value of 9 with a negative category, that is, the correct answer is less than 10 questions (≤ 50%), but after respondents received health promotion counseling on family planning, there was a strong change in the post-test result with an average value of 14, which falls into the positive category respondents gave the correct answer, more than 10 questions (>50%) [21]. The results of this research are also further strengthened by the T-test analysis test which obtained a significance value of p = < .001 (p< 0.05) that there is a very significant difference between pre-test and post-test. This research aligns with the research conducted by [22], who stated that counseling with visual media such as leaflets significantly increased (significance value p=0.001) knowledge about family planning programs. Similarly, research [23], showed that after receiving counseling with leaflet media, knowledge about family planning increased by 100% of total respondents with T Test analysis results p= 0.000.

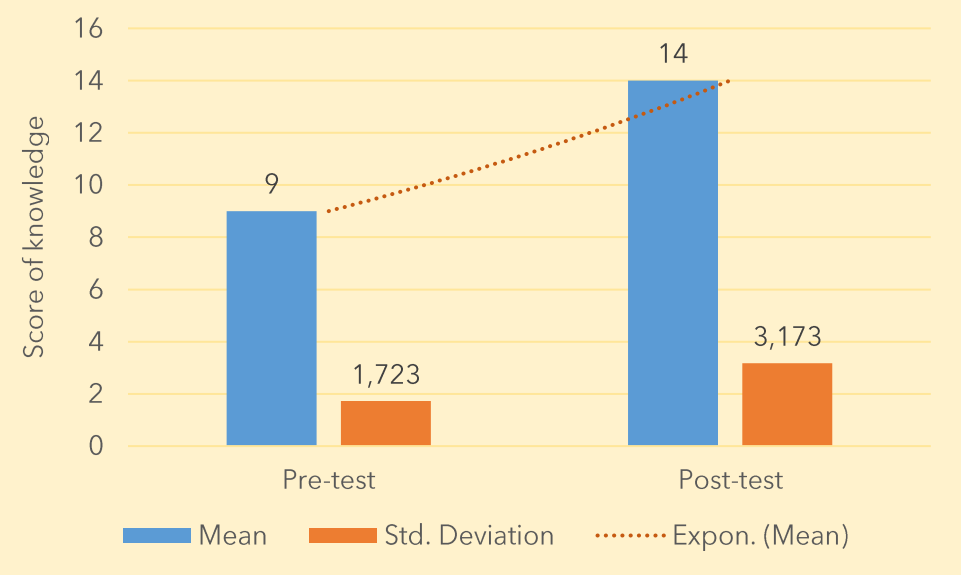

Figure 1. Mean of knowledge before and after intervension

This result shows that when conducting the pre-test, the majority of respondents do not understand well about family planning, and some respondents also have sufficient knowledge about the importance of family planning [24]. And through the post-test results indicate that the intervention through health promotion using leaflet media counseling methods, has a positive impact on increasing knowledge about family planning. Respondents' increased knowledge occurred after receiving health promotion through leaflet media counselling [25].

CONCLUSION

Health promotion activities are very effective in increasing knowledge about family planning. Healthcare institutions should consistently conduct health promotion activities to increase knowledge about family planning.

REFFERENCES

[1] United Nations Department of Economic and Social Affairs, Population Division. World family planning 2022: meeting the changing needs for family planning–contraceptive use by age and method. New York: United Nations; 2022. p. 25.

[2] Fatimah S, Septiani T. Factors causing low acceptance of implant contraceptors. 2025;9:2731–2740.

[3] Ministériu Saúde Timor-Leste. Relatóriu estatistika saúde: periodo fulan Janeiru–Dezembro 2019. Dili: Ministériu Saúde; 2019. p. 36.

[4] Putryani DM, L. MA. Family planning (KB) education to increase knowledge about contraceptive selection in women of childbearing age (WUS). J Global Health Sci Group [Internet]. 2025; 7:1–6. https://jurnal.globalhealthsciencegroup.com/index.php/JPM

[5] Alam RTGM. Comparative analysis between pre-test/post-test model and post-test-only model in achieving learning outcomes. Pak J Ophthalmol [Internet]. 2019;35(1). https://pjo.org.pk/index.php/pjo/article/view/855

[6] Werna N, Wardihan S, Mardiana A, Nilawati U, et al. The influence of leaflet media counseling on knowledge. Juriskesbdg. 2020; 12(2): 236–244. https://doi.org/10.34011/juriskesbdg.v12i2.1751

[7] Utami ANU. The effectiveness of leaflet media in increasing knowledge in the selection of long-term contraception methods (MKJP) at Puskesmas G. J Ilmu Kesehatan. 2023;11(1):45–52.

[8] Ministériu Saúde Timor-Leste. Relatóriu estatistika saúde: periodo fulan Janeiru–Dezembro 2022. Dili: Ministériu Saúde; 2022.

[9] Escobar M, Olson S. Fertility, Family Building, and Contraception. Varney's Midwifery. 2023 Sep 25;403.

[10] Karlsson T, Johansson T, Höglund J, Ek WE, Johansson Å. Time-dependent effects of oral contraceptive use on breast, ovarian, and endometrial cancers. Cancer research. 2021 Feb 15;81(4):1153-62.

[11] D'Souza P, Bailey JV, Stephenson J, Oliver S. Factors influencing contraception choice and use globally: a synthesis of systematic reviews. The European Journal of Contraception & Reproductive Health Care. 2022 Sep 3;27(5):364-72.

[12] Wills J. Foundations for Health Promotion-E-Book: Foundations for Health Promotion-E-Book. Elsevier health sciences; 2022 Mar 31.

[13] Ariawan R, Wahyuni A. The effect of applying TPS type cooperative learning model assisted by SPSS software on students' skills in IT-based statistical data analysis course. InJournal of Physics: Conference Series 2020 Jul (Vol. 1581, No. 1, p. 012027). IOP Publishing.

[14] Bekele D, Surur F, Nigatu B, Teklu A, Getinet T, Kassa M, Gebremedhin M, Gebremichael B, Abesha Y. Knowledge and attitude towards family planning among women of reproductive age in emerging regions of Ethiopia. Journal of Multidisciplinary Healthcare. 2020 Nov 4:1463-74.

[15] Yuliasih ND, Sari P, Bestari AD, Martini N, Sujatmiko B. Does Health Education Through Videos and E-Leaflet Have a Good Influence on Improving Students' Reproductive Health Knowledge, Attitudes, and Practices? an Intervention Study in Jatinangor, Indonesia. Advances in Medical Education and Practice. 2025 Dec 31:29-39.

[16] Hasanica N, Ramic-Catak A, Mujezinovic A, Begagic S, Galijasevic K, Oruc M. The effectiveness of leaflets and posters as a health education method. Materia socio-medica. 2020 Jun;32(2):135.

[17] Johnson SA, Kaggwa MN, Lathrop EV. How it started, and how it's going: global family planning programs. Clinical obstetrics and gynecology. 2021 Sep 1;64(3):422-34.

[18] da Silva Sarmento TM, Nahak M, Soares D, Silva V, Correia AG. The Influence Of The Level Of Knowledge And Attitudes Of Acceptors On The Low Use Of Intra Uterine Contraception Devices In The Comoro Health Center, Dili, Timor-leste, 2024.

[19] Pal SK. Linkages Between High-Risk Fertility Behaviour and Anaemia Among Ever-Married Women (1549 Years) in India. InNutrition and Food Security in India: Enriching the Cycle of Research, Public Policy and Practice 2025 Oct 1 (pp. 47-64). Singapore: Springer Nature Singapore.

[20] Lubos LC. Health Assessment of the Employees of the Provincial Government. Asian Journal of Health. 2021 Jan 25;11(1).

[21] dela Cruz JA. Knowledge, Attitude and Practices on Long-Acting Reversible Contraceptive (LARC) Method of Women of Reproductive Age at Likhaan Center for Women's Health Inc.Quezon City Clinic.

[22] Supriyono S, Kesuma S. Comparative Study of Pre-Test Score and Post-Test on Regional Health Planning Training. Jurnal Ilmu Kesehatan. 2021 Dec 29;9(2):97-105.

[23] Alotaibi N, Al-Sayegh N, Nadar M, Shayea A, Allafi A, Almari M. Investigation of Health Science Students' Knowledge Regarding Healthy Lifestyle Promotion During the Spread of COVID-19 Pandemic: A Randomized Controlled Trial. Frontiers in public health. 2021 Nov 8;9:774678.

[24] Güney E, Karakaş S, Doğan Y. Effects of family planning education given to married illiterate women of reproductive age via visual material support on family planning related attitudes and contraceptive preferences: the example of Viranşehir, Türkiye. BMC Women's Health. 2025 May 9;25(1):219.

[25] Salama BM. The importance of health promotion in the prevention of COVID-19. Ann Clin Anal Med. 2020;11(suppl 3).