

Literature Review: Factors Associated with the Selection of Long-Term Contraceptive Methods (LTCM)

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Article Info	Abstract
Article History Submitted, 2026-05-14 Accepted, 2026-05-19 Published, 2026-06-30	The use of Long-Term Contraceptive Methods (LTCM) such as IUD, implant, MOW (female sterilization/tubal ligation), and MOP (male sterilization/vasectomy) is one of the most effective family planning strategies to control population growth. LTCM offers high effectiveness in preventing unwanted pregnancies over an extended period of protection. Various factors are known to influence the choice of LTCM, including knowledge, husband support, education level, parity, age, occupation, income, access to information, and health service quality. This literature review aims to identify and analyze factors associated with the selection of Long-Term Contraceptive Methods (LTCM) among family planning acceptors. This study employed a Systematic Literature Review (SLR) approach using the PICO framework to collect, identify, and evaluate existing research data. A Systematic search was conducted through Google Scholar for articles published between 2020 and 2025. Only articles with quantitative design and full text were included. Inclusion criteria included articles focused on LTCM selection factors, published in Indonesian or English, and classified as research articles. Articles in the form of theses or dissertations and those not freely accessible were excluded. The article selection process followed PRISMA guidelines. A total of 200 records were identified, 180 were excluded after title/abstract screening and full-text assessment, leaving 10 studies included in this review. The majority of studies found significant relationships between knowledge, husband support, education, parity, health service quality, age, occupation, and income level with LTCM selection. Conclusion of this study was most studies indicate that knowledge, husband support, and health service quality appear to be key factors associated with LTCM selection. Sociodemographic factors such as education, parity, age, occupation, and income also play a role, though less consistently. Health education and counseling efforts need to be improved to increase LTCM acceptance rates.
Keywords: Long-term contraceptive methods, selection factors, family planning acceptors, LTCM, knowledge, husband support	

Introduction

Family Planning (FP) is a national program aimed at controlling population growth and improving the quality of Indonesian families. One important component of the FP program is the use of Long-Term Contraceptive Methods (LTCM), which include Intrauterine Devices (IUD), implants, Female Sterilization (MOW/tubal ligation), and Male Sterilization (MOP/vasectomy). LTCM is known for its high effectiveness in preventing unwanted pregnancies over an extended period of protection (Anggraini & Murtiningsih, 2021; Hartati & Tripertiw, 2025).

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The 3th International Conference on Health, Faculty of Health, Vol 3 No 1 2026
Universitas Ngudi Waluyo

According to data from the National Population and Family Planning Board (BKKBN), LTCM usage rates in Indonesia remain significantly lower compared to non-LTCM contraceptives (Kurniasih & Cahyati, 2020). This low acceptance rate is a serious concern as it contributes to high birth rates and uncontrolled population growth. Various factors are thought to influence the low selection of LTCM by family planning acceptors, including knowledge, attitude, husband support, education level, parity, age, occupation, income, access to information, and quality of health services (Arta & Sari, 2025; Herniyatun et al., 2024; Utami & Prasetyo, 2023).

A comprehensive understanding of the factors influencing LTCM selection is essential for designing appropriate interventions to increase LTCM coverage in the community (Susanti & Handayani, 2022). Although several primary studies on LTCM factors in Indonesia have been published, the findings are fragmented across different region and study design. Inconsistencies remain regarding the relative contribution of knowledge, husband support, and health service quality. Therefore, a systematic synthesis is needed to consolidate the evidence, identify gaps, and provide a clear conceptual map for policymakers. Based on this background, this study aims to conduct a Systematic Literature Review (SLR) on factors associated with the selection of Long-Term Contraceptive Methods (LTCM) among family planning acceptors in Indonesia.

Methods

This study is Systematic Literature Review (SLR) conducted in accordance with the PRISMA guidelines, the review aimed to identify factors associated with the selection of Long-Term Contraceptive Methods (LTCM) among family planning acceptors in Indonesia. Systematic searches were performed using Google Scholar and PubMed. The search was limited to articles published between 2020 and 2025. Keywords use included “LTCM”, “Long-Term Contraceptive Methods”, “Contraceptive selection”, “contraceptive factors”, and “family planning acceptors”.

Inclusion criteria established in this literature review process were: 1) Articles focused on factors associated with LTCM selection among family planning acceptors; 2) Full-text articles published between 2020 and 2025; 3) Articles in Indonesian or English; 4) Research articles. Exclusion criteria: 1) Articles in the form of undergraduate or graduate theses; 2) Articles not freely accessible.

Results and Discussion

The literature review was conducted on 10 articles published between 2020 and 2025. The results of the journal analysis are presented in Table 1 below:

Table 1. Results of Journal Analysis

No	Research	Method	Results
1.	Relationship Between Knowledge and Quality of Family Planning Services with the Selection of Long-Term Contraceptive Methods (LTCM) in Pamboang District (Arta & Sari, 2025)	Quantitative study with cross-sectional approach. Population: all active family planning acceptors in Pamboang District. Purposive sampling technique. Data analysis using Chi-Square test.	Significant relationship between knowledge ($p<0.05$) and quality of family planning services ($p<0.05$) with LTCM selection. Acceptors with good knowledge and satisfaction with services were more likely to choose LTCM.
2.	Factors Influencing the Selection of LTCM Among Family Planning Acceptors at UPTD Puskesmas Babulu (Hartati & Tripertiw, 2025)	Quantitative study with cross-sectional design. Population: active family planning acceptors at UPTD Puskesmas Babulu. Accidental sampling. Data analysis using logistic regression.	Knowledge, husband support, and parity significantly influenced LTCM selection. Acceptors with high parity and good husband support chose LTCM more frequently than non-LTCM.
3.	Factors Associated with the Selection of Long-Term Contraceptive Methods Among Couples of Reproductive Age (Herniyatun et al., 2024)	Quantitative study with cross-sectional approach. Population: couples of reproductive age (CRA) who are active family planning acceptors. Stratified random sampling. Chi-Square test.	Significant association between education, knowledge, attitude, and husband support with LTCM selection among couples of reproductive age ($p<0.05$). Higher education level positively correlated with LTCM selection.
4.	Relationship Between Husband Support and Mother's Knowledge	Analytical study with cross-sectional design. Population: active family planning acceptors	Significant relationship between husband support ($p=0.002$) and mother's knowledge ($p=0.001$)

	with LTCM Selection at Puskesmas Perawatan Sukaraja (Mayasari & Dewi, 2023)	in Puskesmas Sukaraja working area. Total sampling. Chi-Square test.	with LTCM selection. Mothers receiving husband support and with good knowledge chose LTCM more frequently.
5.	Relationship Between Parity, Age, and Education with LTCM Selection in the Working Area of Puskesmas Tanjung Batu (Rahayu & Septiani, 2023)	Analytical observational study with cross-sectional approach. Population: all active family planning acceptors. Simple random sampling. Chi-Square and logistic regression analysis.	Parity (p=0.001), age (p=0.003), and education (p=0.012) were significantly associated with LTCM selection. Multiparous acceptors, those of mature reproductive age, and those with secondary-higher education chose LTCM more often.
6	Effect of Knowledge, Attitude, and Access to Information on the Use of Long-Term Contraceptive Methods in Grobogan Regency (Utami & Prasetyo, 2023)	Quantitative study with analytical cross-sectional survey approach. Sample of 120 active family planning acceptors via cluster random sampling. Chi-Square and multiple logistic regression analysis.	Knowledge (p=0.001), positive attitude (p=0.004), and good access to information (p=0.031) significantly influenced LTCM use. Knowledge was the most dominant factor in LTCM selection.
7	Relationship Between Occupation, Income, and Cost Affordability with LTCM Selection Among Women of Reproductive Age at Puskesmas Kendal Kerep (Wulandari & Fitriani, 2022)	Quantitative study with cross-sectional design. Population: women of reproductive age (WRA) using active family planning. Purposive sampling with 85 respondents. Chi-Square analysis.	Employment status (p=0.021), income level (p=0.003), and cost affordability (p=0.015) were significantly associated with LTCM selection. Employed WRA with adequate income chose LTCM more frequently.
8	Relationship Between Healthcare Worker Roles and Quality of Family Planning Counseling with Interest in LTCM Use at Puskesmas Ambarawa (Susanti & Handayani, 2022)	Analytical observational study with cross-sectional design. Population: active family planning acceptors in Puskesmas Ambarawa working area. Sample of 95 via systematic random sampling. Chi-Square analysis.	Healthcare worker roles (p=0.000) and quality of family planning counseling (p=0.001) were significantly associated with interest in LTCM use. Good counseling from healthcare workers significantly increased acceptors' interest in LTCM.
9	Determinants of Long-Term Contraceptive Method Selection Among Postpartum Mothers at RSUD dr. Soedirman Kebumen (Anggraini & Murtiningsih, 2021)	Quantitative study with cross-sectional design. Population: all postpartum mothers at RSUD dr. Soedirman Kebumen. Consecutive sampling. Binary logistic regression analysis.	Parity (OR=3.2; p=0.001), husband support (OR=2.8; p=0.002), and knowledge of LTCM (OR=2.5; p=0.005) were the main determinants of LTCM selection among postpartum mothers. Parity was the most dominant factor.
10	Factors Associated with the Use of Long-Term Contraceptive Methods Among Women of Reproductive Age at Puskesmas Summersari Jember (Kurniasih & Cahyati, 2020)	Analytical observational study with cross-sectional approach. Population: women of reproductive age who are active family planning acceptors. Simple random sampling with 100 respondents. Chi-Square test. uji Chi Square.	Knowledge (p=0.003), education (p=0.018), occupation (p=0.042), husband support (p=0.001), and quality of family planning services (p=0.007) were significantly associated with LTCM use among WRA. Husband support was the most influential factor.

Based on the review of 10 articles, several key factors associated with LTCM selection were identified. Knowledge was the most consistently found factor across nearly all analyzed studies. Acceptors with good knowledge of the types, benefits, and side effects of LTCM tended to choose LTCM more frequently compared to those with poor knowledge (Arta & Sari, 2025; Hartati & Triptertiwi, 2025; Kurniasih & Cahyati, 2020; Mayasari & Dewi, 2023; Utami & Prasetyo, 2023). This is consistent with Lawrence Green's theory, which states that knowledge is an important predisposing factor in health behavior change.

Husband support was also consistently associated with LTCM selection (Hartati & Triptertiwi, 2025; Herniyatun et al., 2024; Kurniasih & Cahyati, 2020; Mayasari & Dewi, 2023). In Indonesian culture, husbands play an important role in decision-making, including contraceptive selection. Acceptors who received support and approval from their husbands found it easier to decide to use LTCM. Parity also played an important role, as multiparous women (those with two or more children) were more likely to choose LTCM since they no

longer desired additional pregnancies (Anggraini & Murtiningsih, 2021; Rahayu & Septiani, 2023).

The quality of family planning services, including the quality of counseling by healthcare workers, was also found to be significantly associated with LTCM selection (Arta & Sari, 2025; Kurniasih & Cahyati, 2020; Susanti & Handayani, 2022). Comprehensive and informative counseling from healthcare workers can improve acceptors' understanding of the advantages of LTCM, thereby motivating them to choose LTCM. Sociodemographic factors such as education, occupation, and income were also associated with LTCM selection, though less consistently than knowledge and husband support (Herniyatun et al., 2024; Rahayu & Septiani, 2023; Wulandari & Fitriani, 2022).

Conclusion and Suggestions

Based on the literature review of 10 articles published between 2020 and 2025, factors associated with the selection of Long-Term Contraceptive Methods (LTCM) include: acceptor knowledge, husband support, parity, quality of family planning services, education level, age, occupation, income, attitude, and access to information. Knowledge and husband support were the most dominant and consistently identified factors across all studies. Therefore, efforts to increase LTCM coverage should focus on improving education and counseling for acceptors and promoting male involvement in family planning strengthening the quality of family planning services provide by healthcare workers is also essential to support informed decision-making.

Based on the results of this literature review, several recommendations can be made: (1) For healthcare workers, it is recommended to improve the quality of counseling and education for family planning acceptors and their husbands regarding the benefits, advantages, and safety of LTCM, in order to increase interest in and acceptance of LTCM in the community. (2) For community health centers and healthcare facilities, there is a need to improve the overall quality of family planning services, including healthcare workers' communication skills in providing comprehensive counseling. (3) For BKKBN and local governments, health promotion programs should be designed to actively promote male involvement in family planning in contraceptive decision-making to increase husband support for LTCM use. (4) For future researchers, it is recommended to broaden the search to various research databases and consider qualitative studies to gain a deeper understanding of LTCM selection behaviors and barriers in various sociocultural contexts.

Acknowledgments

The authors would like to thank all the lecturers at Ngudi Waluyo University and fellow classmates who assisted in the preparation of this literature review.

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