

## THE IMPACT OF SIDE EFFECTS ON DISCONTINUATION OF LONG-TERM CONTRACEPTIVE METHODS (LTCM) AT BPM MELIA LISNA, SOUTHEAST ACEH, 2024

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### ABSTRACT

Uncontrolled population growth poses a serious challenge to national development, including in Indonesia. One of the government's efforts to control the population is through the Family Planning (FP) program, particularly by promoting the use of Long-Term Contraceptive Methods (LTCM). However, the high rate of discontinuation (dropout) in LTCM use, especially due to side effects, hinders the effectiveness of the program. This study aims to examine the relationship between side effects and the dropout incidence of LTCM use at BPM Melia Lisna, Gusung Batu Village, Deleng Pokhkisen Subdistrict, Southeast Aceh Regency, in 2024. This research employed a descriptive-analytic design with a quantitative cross-sectional approach. The sample consisted of 15 respondents—women who had previously used LTCM and visited BPM Melia Lisna—selected using total sampling. Data were collected using questionnaires and analyzed with the chi-square statistical test. The results showed that most respondents experienced side effects such as weight changes, irregular menstrual cycles, vaginal discharge, and facial pigmentation, which led to discomfort in daily activities. Out of 15 respondents, 9 (60%) discontinued LTCM use due to these side effects. Statistical analysis indicated a significant relationship between side effects and the incidence of LTCM discontinuation ( $p < 0.05$ ). In conclusion, there is a significant correlation between side effects and the dropout rate of LTCM use. Therefore, improving the quality of counseling services before and after contraceptive use is crucial to reduce dropout rates and enhance the effectiveness of the family planning program.

**Keywords:** *Side effects, dropout, long-term contraceptive methods, contraception, family planning*

### Introduction

Population growth that exceeds the capacity of a country can become a burden to national development. In Indonesia, rapid population growth contributes to poverty, limited access to education, and

lower future opportunities. As the fourth most populous country in the world, Indonesia continues to face increasing population numbers each year.

To address this, the Indonesian government implements the Family Planning (FP) program, promoting the use of contraceptives, especially Long-Term Contraceptive Methods (LTCM), such as implants and intrauterine devices (IUDs). These methods are effective, long-lasting, and reversible. However, despite their benefits, LTCM dropout rates remain high, reducing the program's effectiveness in controlling population growth (Sinaga, 2022).

Several factors contribute to this dropout, with side effects being a primary reason. Reported side effects include weight changes, menstrual irregularities, vaginal discharge, and skin pigmentation, which lead to discomfort and dissatisfaction among users. A preliminary survey conducted by the researcher at BPM Melia Lisna, Southeast Aceh, showed that 9 out of 15 women discontinued LTCM use due to such side effects.

This situation highlights the need for deeper analysis to understand the relationship between contraceptive side effects and discontinuation. Such understanding is essential for improving counseling, ensuring continued use, and supporting national health strategies.

Therefore, this study aims to examine the relationship between side effects and the dropout incidence of LTCM use at BPM Melia Lisna, Gusung Batu Village, Southeast Aceh Regency, in 2024

#### **Research method**

##### **Type and Design of the Study:**

This study is an analytical observational research using a cross-sectional design, where data on risk factors (side effects) and outcomes (contraceptive method dropout) are collected simultaneously.

##### **Population and Sample:**

The population consists of all contraceptive acceptors who visited BPM Melia Lisna in Gusung Batu Village, Deleng Pokhkisen Subdistrict, Southeast Aceh Regency, totaling 101 individuals.

The sample size was determined using the Slovin formula with a precision level of 10%, resulting in 45 respondents.

##### **Sampling Technique:**

The study used proportional random sampling, which involves selecting samples randomly without considering population strata.(Manurung, 2020)

##### **Study Location:**

BPM Melia Lisna, Gusung Batu Village, Deleng Pokhkisen Subdistrict, Southeast Aceh Regency.

##### **Data Collection:**

Primary Data: Collected using a closed-ended questionnaire completed directly by respondents (self-administered).

Secondary Data: Obtained from BPM Melia Lisna's records and documentation.

Tertiary Data: Sourced from literature reviews, previous studies, theses, and library references.

##### **Data Analysis Techniques:**

Univariate Analysis: Describes the frequency distribution of each variable.

Bivariate Analysis: Uses the Chi-Square test at a 95% confidence level ( $\alpha = 0.05$ ) to examine the relationship between side effects (independent variable) and long-acting contraceptive method dropout (dependent variable).

#### **Result**

##### **Univariate Analysis**

##### **-Out of 39 respondents:**

Side Effects: 51.1% (20 respondents) experienced side effects, while 48.9% (19 respondents) did not.

Long-Acting Contraceptive Use (LARC): 71.1% (28 respondents) had dropped out of using LARC methods, and

only 28.9% (11 respondents) remained active users.

#### - Bivariate Analysis

A chi-square test showed a significant relationship between side effects and LARC dropout with a p-value of 0.006 ( $p < 0.05$ ). Respondents who experienced side effects were more likely to discontinue LARC usage.

1. Distribution of Side Effects After Installation at BPM Melia Lisna, Gusung Batu Village, Deleng Pokhkisen District, Southeast Aceh Regency, 2024

Side Effects	Number	%
No side effects	19	48.9%
Side effects present	20	51.1%
Total	39	100%

2. Distribution of Long-Term Contraceptive Method (MKJP) Usage at BPM Melia Lisna, Gusung Batu Village, Deleng Pokhkisen District, Southeast Aceh Regency, 2024

MKJP Usage	Number	%
Active acceptors	11	28,9 %
Dropout acceptors	28	71,1 %
Total	39	100 %

## Discussion

The study found a significant relationship between side effects and discontinuation of long-acting contraceptive methods (LACM), with a p-value of 0.006 ( $p < 0.05$ ). The majority of respondents (51.1%) experienced side effects, and 71.1% of them were classified as dropouts from LACM usage.

These findings are consistent with previous research indicating that side effects such as irregular menstruation, weight gain, and increased blood pressure contribute to discontinuation. Additionally, a lack of understanding among users regarding side effects may influence their decision to stop using the method.

Therefore, the role of healthcare workers is crucial in providing clear education about potential side effects and how to manage them, in order to reduce

The results indicate that side effects significantly influence the dropout rate of LARC methods. This aligns with Sukardi's 2022 study in Mamuju Tengah, which found a similar correlation. Common side effects include irregular menstruation, weight gain, acne, headaches, and increased blood pressure—factors that often lead to disconti

dropout rates and improve the effectiveness of family planning programs

## Conclusion and suggestion

The majority of respondents (51.1%) experienced side effects after the insertion of long-term contraceptive methods (LTCM) at BPM Melia Lisna.

Most respondents (71.1%) discontinued the use of LTCM (dropout).

There is a significant relationship between side effects and the incidence of dropout in the use of LTCM ( $p = 0.006$ ). - Suggestions

### For Educational Institutions

The results of this study can serve as reference material to enrich student knowledge, particularly on the use of LTCM, especially at STIKes Mitra Husada Medan

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