

**THE CORRELATION BETWEEN THE DURATION OF USE OF 3-MONTH
INJECT-ABLE CONTRACEPTION AND THE INCREASE IN BODY
WEIGHT OF CONTRACT ACCEPTORS IN THE WIRATA
DAYA BANGUN PERSADA III PLANTATION
UNIT CLINIC WORK AREA IN 2025**

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ABSTRACT

Family planning initiatives across Indonesia are predominantly driven by injectable contraceptive adoption, with body mass expansion standing as the most frequently reported adverse effect. Preliminary field evaluations at the Kebun Wirata Daya Bangun Persada III Clinic demonstrated that 80% of quarterly injection clients experienced an upward shift in body weight, typically ranging from 1 to 5 kg within the first year of initiation. This study aimed to analyze the association between the duration of 3-month injectable contraceptive use and body weight changes among family planning acceptors within the clinic's operational area in 2025. Analytical survey research design is using cross sectional approach. The population in this study was 132 of 3 months syringe acceptor. The 57 sample of 3-month acceptors was taken by purposive sampling, selecting the number of samples and populations according to the inclusion and exclusion criteria. Research instruments used questionnaires and scales. The results showed that more than half (60%) of 3 months injection users >1 year and more than half (68%) had gained weight. The results of the chi square test were $p = 0.010 < \alpha = 0.05$. The researcher conclude There is a relationship between the length of use of 3-month injectable contraception and weight gain in 3-month injectable contraception acceptors in the Wirata Daya Bangun Persada III Plantation Unit Clinic Work Area. Suggestions for health workers is to provide support and improve services to 3-month injection KB acceptors

Keywords: Duration Of Contraceptive Use For 3 Months Injection KB, Increased Body Weight.

INTRODUCTION

Family planning (KB) is one of the strategic efforts to improve reproductive health, reduce maternal and infant mortality rates, and control population growth. According to the World Health Organization (WHO), in 2021 there were approximately 1.1 billion women of reproductive age in need of family planning services, and approximately 874 million women were using modern contraceptive methods. The use of modern contraception plays a crucial role in preventing unintended pregnancies, spacing births, and improving the health of mothers and children.

In Indonesia, injectable contraception is one of the most popular methods among couples of reproductive age because it is considered practical, effective, relatively inexpensive, and highly effective in preventing pregnancy. One widely used type of injectable contraception is commonly referred to as Depo-Medroxyprogesterone Acetate (DMPA). Administered on a quarterly basis, this progestin-only option functions by suppressing ovulation and modifying the endometrial lining to prevent implantation.

Although highly effective, the use of the 3-month injectable contraceptive can also cause various side effects, such as menstrual irregularities, amenorrhea, headaches, mood swings, and weight gain. Weight gain is one of the most common complaints reported by contraceptive users.

Research by Pratiwi et al. (2023) established a clear link between 3-month hormonal injection use and body mass shifts. Similarly, Efi demonstrated that long-term reliance on this contraceptive method—especially exceeding twelve months is strongly associated with weight gain.

Meanwhile, a study by Darmawati et al. (2022) showed that most users of injectable contraceptives experience weight changes caused by fluid retention due to progestin or estrogen, which leads to the accumulation of subcutaneous fat, particularly in the hips, thighs, and breasts.

METHODS

An analytical survey framework incorporating a cross-sectional approach was employed. From an overall population of 132 quarterly injection users, a representative cohort of 57 participants was selected via purposive sampling... Statistical testing using the Chi-Square method yielded $p = 0.010 < \alpha = 0.05$. The author sought to determine the relationship between the duration of use of the 3-month injectable contraceptive and weight gain among contraceptive users in the service area of the Kebun Wirata Daya Bangun Persada III Clinic in 2025.

RESULT

Table 1 Frequency Distribution Based on Duration of Use of the 3-Month Injectable Contraceptive in the Service Area of the Kebun Wirata Daya Bangun Persada III Clinic in 2025

Analysist Univariate :

The distribution and frequency of the respondents' characteristics regarding each specific variable were evaluated through univariate analysis to investigate the potential association between the independent and dependent variables, a bivariate analysis was performed:

No	Duration of Use of the 3-Month Injectable Contraceptive	f (n=57)	%
1	>1 year	34	60
2	1 year	23	40

Table 1 illustrates that out of 57 respondents using the 3-month injectable contraceptive, 34 individuals (60%) had been using it for more than 1 year, whereas 23 individuals (40%) had been using it for 1 year.

Table 2 Frequency Distribution of Weight Gain Among Users of the 3-Month Injectable Contraceptive in the Service Area of the Kebun Wirata Daya Bangun Persada III Clinic in 2025

No	Weight Gain	Number
		f (n=57) %
1	There has been an increase	47 82
2	No increase	10 18

Table 2 shows that, of the 57 respondents, 47 (82%) experienced an increase in body weight, while 10 (18%) did not.

Analysis Bivariate

Bivariate analysis aims to determine whether there is a relationship between the independent variables and the dependent variable. The results are as follows:

Table 3 Relationship Between Duration of Use of the 3-Month Injectable Contraceptive and Weight Gain Among Users of the 3-Month Injectable Contraceptive in the Service Area of the Kebun Wirata Daya Bangun Persada III Clinic in 2025

Usage	Weight gain				Number		P=0,010
	There has been an increase		no increase				
	f	%	f	%	f	%	
>1 year	32	68	2	20	34	60	
1 year	15	32	8	80	23	40	
Number	47	100	10	100	57	100	

As detailed in Table 3, among the 34 acceptors using the injection for over a year, 32 individuals (68%) experienced weight gain, while 2 (20%) did not... The Chi-Square test yielded $p = 0.010 < \alpha = 0.05$, resulting in the rejection of H_0 and acceptance of H_a .

H_0 was rejected, indicating that there is a relationship between the duration of use of the 3-month injectable contraceptive and weight gain among contraceptive users in the service area of the Kebun Wirata Daya Bangun Persada III Clinic in 2025.

DISCUSSION

As a method of family planning, injection-based contraceptives offer exceptionally high efficacy, primarily due to their minimal failure rates. This approach delivers several distinct benefits, such as durable pregnancy prevention without the necessity of daily adherence, and it preserves intimacy between partners. Furthermore, because this formulation is free of estrogen, it minimizes the likelihood of developing cardiovascular complications or thromboembolic disorders. It is also safe for lactating mothers as it does not disrupt milk supply, and remains a viable option for premenopausal women over the age of 35. Clinical advantages additionally extend to a lower risk of ectopic pregnancies, endometrial malignancies, pelvic infections, and non-cancerous breast abnormalities. Conversely, users may encounter drawbacks, including persistent disruption to menstrual cycles, a continuous reliance on clinical providers for administration, and the inability to instantly reverse its effects mid-cycle. It also lacks protective capabilities against sexually transmitted infections. Notably, body mass fluctuations represent the most frequent adverse reaction, with documented annual weight increases typically

spanning from 1 to 5 kg.protection against the transmission of infectious diseases. The most common side effect is weight gain; the average annual weight gain varies between 1 kg and 5 kg.

According to the study's assumptions, based on these findings, the use of the 3-month injectable contraceptive for a period of 1 year or longer may contribute to weight gain. This suggests that if weight continues to increase, the injectable contraceptive can be replaced with another non-hormonal method of contraception.

CONCLUSIONS

Following the study titled "The Relationship Between Duration of Use of the 3-Month Injectable Contraceptive and Weight Gain Among Contraceptive Users in the Service Area of the Kebun Wirata Daya Bangun Persada III Clinic in 2025," the author draws the following conclusions:

1. Of the 57 respondents, 34 (60%) had been using the 3-month injectable contraceptive for more than 1 year, while 23 (40%) had been using it for 1 year.
2. Of the 57 respondents, 47 (82%) experienced weight gain, while 10 (18%) did not.
3. There is a significant association between the duration of use of the 3-month injectable contraceptive and weight gain among users of this method.

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CONFLICT OF INTEREST AND FUNDING DISCLOSURE

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AUTHOR CONTRIBUTIONS

NRNN: conceptor, data curation, investigation, methodology, formal analysis, validation, visualization, writing original draft, writing review and editing.

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