

## Side Effects of Using Depo Medroxy Progesterone Acetate Contraceptive Contraceptives in Midwife Practices

Ni Wayan Kusmiati <sup>1</sup>, Putu Sukma Megaputri <sup>2</sup>  
Program Studi Kebidanan, Sekolah Tinggi Ilmu Kesehatan Buleleng,  
Bali, Indonesia

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### ABSTRACT

Injectable contraception is the most choice used by women of childbearing age as a delay in pregnancy or termination of pregnancy. Many acceptors do not know optimally about the side effects that are often felt by mothers who use contraception. The purpose of this study was to identify the side effects felt by mothers using 3-month injectable contraception. This research method is descriptive quantitative with cross sectional approach. The sampling technique in this study was purposive sampling with a total sample of 67 respondents. The results of the study reported that the side effects experienced were that the mother felt that she had difficulty having menstruation (87.9%), then the mother did not experience menstruation while using DMPA (84.8%), the mother felt there was an increase in fat (40.9%), an increase in body weight (40.9%). Furthermore, none of the acceptors felt a decrease in activity, acne, vaginal discharge, hair loss and menstruation that was faster than usual.

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### Corresponding Author:

Putu Sukma Megaputri  
Sekolah Tinggi Ilmu Kesehatan Buleleng  
Email: [megaputri\\_sukma@yahoo.com](mailto:megaputri_sukma@yahoo.com)

### INTRODUCTION

Contraception is one of the tools for spacing pregnancies and births, this is usually called family planning. Broadly speaking, family planning is an effort made to regulate the birth of children, the ideal spacing and age of childbirth, regulate pregnancy, through promotion, protection and assistance in accordance with reproductive rights to create quality families (WHO, 2020). Currently, Indonesia's population is experiencing a growth rate of 1.6% annually (Kusumawardani & Machfudloh, 2021). This is a very high number where the effect is that the number of agricultural lands decreases, the ability to produce decreases, basic needs are no longer affordable and employment is tight (JNPKKR, 2014).

One type of contraception or family planning that is often used by mothers is the 3-month injectable contraceptive or Depo Medroxy Progesterone Acetate (DMPA) which contains only progesterone. Based on data from Indonesia's Health Profile in 2021, 59.9% of injecting contraceptive users and most contraceptive services are served at Independent Midwife Practices (PMB) of 33.1%. Meanwhile, judging from the data in the Province of Bali, it appears that injectable contraception also dominates its use in women of childbearing age, as much as 42.6% (Ministry of Health RI, 2021). If we take an in-depth look at Jembrana Regency, it appears that in 2021 women of childbearing age will use injection contraception as much as 53.2% of the 57,649 couples of childbearing age (PUS) (Bali Provincial Health Office, 2021). It can be concluded that injecting contraceptive users have always dominated both nationally and in the Province of Bali and especially in Jembrana Regency with the facilities chosen by the most mothers in independent midwife practice.

The fact is that many mothers do not understand the side effects of using contraception. Some of the results of previous studies indicate that the majority of injecting contraceptive user acceptors do not understand the side effects of these contraception. They just think that it's not too much for repeat visits and it's practical. As many as 58.3% of respondents did not understand the side effects caused by the 3-month injection contraception (Artesiana et al., 2022).

The 3-month injection contraceptive method that contains progestin has a way of working to thicken the cervix so that sperm cells become difficult to activate towards the uterus. In addition, this progestin also blocks ovulation and the lining of the uterus becomes no longer conducive for a fertilized egg. The performance of hormones can have side effects on the body of family planning acceptors (Kusumawardani & Machfudloh, 2021). Side effects that are sometimes felt are changes in the menstrual cycle (menstruation can be shorter, longer, spots/spotting, then menstruation will become rare or stop altogether), weight gain, cannot become fertile instantly, decreased sex drive, pain headaches, breast pain, mood changes and acne (S. W. Sari et al., 2015). In addition, side effects were also found, namely weight gain, vaginal dryness, decreased libido, emotional disturbances, headaches, nervotaxis (Susilowati, 2011).

A preliminary study conducted at the Independent Midwife Practice reported that the number of 3-month injecting users in the last 3 months was 80 acceptors. Almost all experienced different side effects or some even experienced no side effects at all when using the 3-month injection. This is the background of the researchers regarding any side effects experienced by acceptors during the use of contraception.

## METHOD

This research is a descriptive quantitative study, where the variable is the side effect of using contraception. The research approach was cross-sectional, the population of this study were all acceptors of 3-month injection contraception in the independent practice of the midwife "KS". The samples of this study were acceptors of 3 months contraception who were willing to be respondents and acceptors of depomedroxyprogesterone acetate injections with a minimum use of 3 months of injectable contraception. The sampling technique used purposive sampling where samples were taken according to the inclusion and exclusion criteria. The sample size taken in this study was 67 samples by calculating the sample formula. The time for the research was from December 2022-January 2023. The data collection instrument used a questionnaire given to respondents regarding the side effects of using 3 months of injectable contraception at PMB. The previous questionnaire was tested and tested for validity and reliability. The results of data collection were then analyzed univariately using frequency distribution analysis.

## RESULTS

In this section, the results of univariate analysis will be described including the characteristics and side effects of using DMPA injection contraception as follows

**Table 1. Characteristics of DMPA Acceptor Respondents**

Characteristic	f (%)
Ages (Mean ±SD)	26,25±4,01
Last Education	
Junior High School	11 (16,7)
Senior High School	27 (40,9)
University	28 (42,4)
Work	
Housewife	44 (66,7)
Privat	12 (18,2)
Laborer	2 (3,0)
Trader	8 (12,1)
Parity	
1	36 (54,5)
2	17 (25,8)
3	12 (18,2)
4	1 (1,5)

Based on Table 4.1 it can be explained that the average age of DMPA acceptors is 26 years. Most of the respondents currently have higher education (D1, D3, S1) of 42.4%. The majority of DMPA acceptors were housewives 66.7% and only had 1 child or were primigravidas, namely 54.5%. The side effects experienced by acceptors who use 3-month injections are reported according to table 2 below:

**Table 2 Side Effects of DMPA**

Side Effect	f (%)
The mother feels the absence of menstruation while using contraception	56 (84,8)
Mother feels bleeding in the form of spots/spots	8 (12,1)
Mother feels menstrual bleeding that is faster than usual	0 (0)
Mother felt an increase in fat on some users	27 (40,9)
Mothers feel the increase in body weight contraception users	27 (40,9)
Mothers feel an increase in appetite for some users.	11 (16,7)
Mother feels a decrease in activity in her body	0 (0)
Mother has acne on the face of contraception users	0 (0)
The mother has melasma (dark spots) on the face of the contraceptive user	6 (9,1)
Mother experienced vaginal discharge when using injections for 3 months	0 (0)
The mother feels hair loss on the 3-month injectable contraceptive user	0 (0)
Mother feels that it is difficult for her to menstruate now after using 3 months of injectable birth control	58 (87,9)
Mother feels the mood is sometimes excessive and affects emotions	3 (4,5)
Mother does not enjoy sexual intercourse	19 (28,8)

The results above show that almost all side effects from using DMPA are felt by the mother. It's just that when viewed from the highest percentage of side effects experienced, the mother felt that she had difficulty having her period (87.9%), then the mother felt that she did not experience menstruation during the use of DMPA (84.8%), the mother felt there was an increase in fat (40.9%), increased body weight (40.9%). Furthermore, none of the acceptors felt a decrease in activity, acne, vaginal discharge, hair loss and menstruation that was faster than usual.

Contraception is the only way to limit births and limit pregnancy. Every couple of childbearing age should be able to use contraception properly to get protection and help limit births and pregnancies. Contraception consists of various choices, some use hormonal and some don't. There are also simple methods to make it easier for couples of childbearing age to use contraception.

The results of this study reported that many types of side effects were felt by acceptors using depomedroxiprogesterone acetate (DMPA) contraception, namely the mother felt amenorrhea. The results of this study are in line with previous research which stated that menstrual disorders are the most common side effect experienced by mothers who use 3-month injection contraception (Arisandi, 2020). 3-month injectable contraception (DMPA) has a mechanism of action to inhibit hormone secretion so that women who use 3-month injections will not menstruate. The mechanism is in the form of inhibiting the secretion of FSH and LH thereby inhibiting the surge of LH, the implantation of ovum cells is not supported by the endometrium because it experiences atrophy, the mucus becomes thick and becomes difficult for sperm to penetrate and it is difficult for sperm to survive (Mulyani & Rinawati, 2014).

Amenorrhea is the most common side effect felt by acceptors who use 3-month injections. As many as 81.3% of acceptors experienced nonmenstrual side effects while using 3 months of injectable contraception (Margiyati & Wulandari, 2014). Amenorrhea is a menstrual disorder that is usually temporary and slightly disruptive to health.

The 3-month injectable contraceptive is used by people of various demographic backgrounds. Similarly, the results of this study reported that most of them were housewives with the last education from high school and were primigravidas. This result is in line with previous research that users of 3-month injection contraception are dominated by housewives aged 20-30 years as multiparas (Septianingrum et al., 2018).

Apart from not having menstruation, the complaints that are often felt by acceptors of the 3-month injection, there are also those who feel complaints about experiencing spots or spots that are felt. Acceptor complaints related to the presence of amenorrhea are usually given counseling to the mother regarding the physiology of the mother experiencing these complaints. This disorder often occurs due to the effects of the progestin hormone (Susilowati, 2011). So it is very important to increase mother's knowledge regarding the

use of 3-month injection contraception so that its effectiveness increases and disorders can be resolved properly (M. H. N. Sari et al., 2021).

The large number of acceptors who terminated or stopped using contraception because the mother was uncomfortable with the complaint or the mother felt inferior due to the complaint experienced. Improving the quality of 3-month injection contraception services must provide adequate knowledge and understanding to prospective acceptors so that there is little possibility of dropout for 3-month injection acceptors (Kusumawardani & Machfudloh, 2021).

## CONCLUSION

The conclusions from this study were that the side effects experienced were mothers who felt they had difficulty having menstruation (87.9%), then mothers felt they did not experience menstruation while using DMPA (84.8%), mothers felt there was an increase in fat (40.9%), weight gain (40.9%). Furthermore, none of the acceptors felt a decrease in activity, acne, vaginal discharge, hair loss and menstruation that was faster than usual.

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