

Case Report on DMPA Contraceptive Users with Weight Gain Side Effects at PMB Arini Agustiningrum, Bangkalan Regency

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ABSTRAK

Depo Medroxyprogesterone Acetate (DMPA) merupakan salah satu jenis kontrasepsi hormonal jangka panjang yang dikenal efektif dan mudah digunakan. Namun demikian, penggunaannya sering disertai dengan efek samping, salah satunya adalah peningkatan berat badan. Penelitian ini bertujuan untuk menggambarkan asuhan kebidanan yang diberikan kepada akseptor DMPA yang mengalami kenaikan berat badan di Praktik Mandiri Bidan (PMB) Arini Agustiningrum, Desa Bator, Kecamatan Klampis, Kabupaten Bangkalan. Penelitian ini menggunakan desain deskriptif dengan pendekatan studi kasus. Subjek dalam penelitian adalah seorang akseptor DMPA yang telah menggunakan kontrasepsi ini selama tiga tahun. Selama periode penggunaan, terjadi kenaikan berat badan dari 90,00 kg menjadi 99,40 kg (penambahan 9,40 kg) dengan Indeks Massa Tubuh (IMT) mencapai 38,82 kg/m², yang dikategorikan sebagai obesitas tingkat II. Teknik pengumpulan data meliputi wawancara, observasi, pemeriksaan fisik, studi dokumentasi, serta pemantauan berat badan secara berkala selama tiga kali kunjungan dari bulan Maret hingga Mei 2025. Intervensi yang diberikan terdiri dari edukasi mengenai gizi seimbang, pengaturan pola makan, distribusi leaflet menu diet, peningkatan aktivitas fisik, serta pemantauan berat badan secara teratur. Hasil intervensi menunjukkan adanya penurunan berat badan dari 99,40 kg menjadi 97,00 kg dalam kurun waktu satu bulan. Sebelum pelaksanaan intervensi, peneliti memberikan penjelasan rinci mengenai tujuan, manfaat, prosedur, serta hak partisipan. Subjek menyetujui partisipasinya melalui penandatanganan informed consent sesuai dengan prinsip-prinsip etika penelitian. Temuan dari studi ini menunjukkan bahwa pendekatan edukatif dan modifikasi gaya hidup dapat memberikan hasil positif berupa penurunan berat badan secara bertahap pada akseptor DMPA. Oleh karena itu, integrasi pemantauan berkala dan konseling gizi ke dalam layanan kebidanan sangat dianjurkan untuk

Keywords:

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mengatasi efek samping kontrasepsi hormonal secara optimal.

ABSTARCT

Depo Medroxyprogesterone Acetate (DMPA) is a long-acting hormonal contraceptive method known for its effectiveness and practicality. However, its prolonged use is often associated with side effects, one of the most common being weight gain. This study aims to describe the midwifery care provided to a DMPA acceptor who experienced weight gain at the Independent Midwifery Practice (PMB) of Arini Agustiningrum, located in Bator Village, Klampis District, Bangkalan Regency. This research employed a descriptive design with a case study approach. The subject was a DMPA user who had been on the contraceptive for three years. During this period, her body weight increased from 90,00 kg to 99,40 kg (a gain of 9,40 kg), with a Body Mass Index (BMI) of 38,82 kg/m², indicating grade II obesity. Data were collected through interviews, observations, physical examinations, documentation review, and routine weight monitoring conducted over three visits between March and May 2025. The interventions included education on balanced nutrition, dietary regulation, distribution of a diet menu leaflet, increased physical activity, and regular weight tracking. Results showed a reduction in body weight from 99,40 kg to 97,00 kg within one month. Prior to the implementation of the case study, the researcher provided detailed information regarding the study's purpose, benefits, procedures, and participants' rights. The subject gave written consent by signing an informed consent form, in accordance with ethical research standards. The findings indicate that educational interventions and lifestyle modifications can gradually reduce body weight in DMPA users. Therefore, regular monitoring and nutritional counseling should be integrated into midwifery care to effectively address the side effects of hormonal contraceptive use.

Introduction

Injectable hormonal contraceptives, particularly *Depo Medroxyprogesterone Acetate* (DMPA), are among the most widely used family planning methods among women of reproductive age in Indonesia. High effectiveness, ease of use,

and long-acting protection are the primary reasons this method is preferred by many acceptors (Kurniasari et al., 2020). However, despite its reliability in suppressing ovulation and preventing pregnancy, DMPA is frequently associated



with side effects, the most prominent being significant weight gain.

Weight gain as a side effect of DMPA has been the focus of numerous studies. The progesterone component in DMPA is known to increase appetite and slow down metabolism by influencing the hypothalamus, the part of the brain that regulates hunger (Ekawati et al., 2024). Previous research indicates that approximately 77,8% of DMPA users experience weight gain within the first year of use (Pratiwi et al., 2023). This condition affects not only physical health but also psychological well-being and the overall quality of life of the acceptors (Hasanah et al., 2024).

According to data from the National Population and Family Planning Board (BKKBN, 2024), out of 35,765 family planning participants in Bangkalan Regency, 68.29% used injectable contraception, highlighting the community's high dependency on this method. However, the lack of long-term monitoring for side effects such as weight gain and obesity poses a challenge to the sustainability of the family planning program.

The role of midwives in managing contraceptive side effects especially weight

gain is crucial, particularly in primary care settings like PMB. Midwifery care involving nutrition education, lifestyle modification, and regular weight monitoring can serve as both preventive and curative strategies to address these side effects (Noviantari et al., 2019).

This study aims to describe the midwifery care provided to a DMPA contraceptive acceptor experiencing weight gain at the Independent Midwifery Practice of Arini Agustiningrum, located in Bator Village, Klampis District, Bangkalan Regency. The findings are expected to serve as a foundation for the development of more systematic and structured interventions to manage DMPA side effects in primary healthcare services.

Method

This study employed a descriptive design using a case report approach. The research was conducted at PMB Arini Agustiningrum, located in Bator Village, Klampis District, Bangkalan Regency, East Java, Indonesia. The study took place over a two month period, from March to May 2025.

The subject of this case report was a woman of reproductive age who had been using the DMPA injectable contraceptive method continuously for approximately

three years and presented with a chief complaint of weight gain. Her body weight had increased from 90 kg to 99,40 kg, with a Body Mass Index (BMI) of 38,82 kg/m², classified as obesity class II according to the Indonesian Ministry of Health standards.

Data collection methods included anamnesis (interview), physical examination, and document review. The midwifery care process was carried out over three consecutive visits. Interventions included nutritional counseling, dietary planning, increasing physical activity, and routine monitoring of weight and general health parameters.

Informed consent was obtained prior to the intervention. Ethical approval was granted by the relevant institutional authority, and all procedures were conducted in accordance with ethical standards for health research.

The outcome of care was measured by changes in body weight and improvements in dietary behavior and physical activity adherence across the intervention period.

Results

The subject in this case report was a 25 year old female who had been regularly using injectable DMPA contraception for around three years. Over this period, she

experienced a notable increase in body weight, rising from 90 kg to 99,40 kg, resulting in a Body Mass Index (BMI) of 38,82 kg/m², which falls under the classification of class II obesity. Although she did not present with any chronic medical conditions, several contributing factors were identified, including a habitual intake of high-calorie foods, sedentary lifestyle, and a familial predisposition to obesity.

Midwifery care was delivered through three visits conducted between March and May 2025. The care plan involved nutritional counseling, formulation of a tailored low-calorie meal plan, education on balanced dietary practices, promotion of routine physical activity, and regular monthly weight assessments. Recommended lifestyle adjustments included replacing fried and sugary foods with steamed vegetables, fruits, and whole grains, establishing consistent mealtimes, reducing portion sizes, and increasing water intake. For physical activity, the client was encouraged to engage in daily 30-minute walks or perform simple home-based exercises at least five days per week.

During the initial consultation, the client was informed about the potential side effects of DMPA, particularly its influence

on appetite regulation and metabolic rate, and was assisted in developing a practical weight loss strategy. By the second session, she had begun implementing the dietary and physical activity recommendations, which led to a weight reduction to 97,75 kg. By the third session, her weight had further declined to 97,00 kg, totaling a 2,40 kg loss within a one month period.

These findings suggest that the structured midwifery care intervention successfully supported the initiation of healthier lifestyle practices. Although the client remained within the obese category, the positive changes in her dietary habits and physical activity levels indicate progress. This case highlights the significant role midwives can play in managing side effects associated with long-term DMPA use through targeted education and consistent support.

Discussion

The findings of this case report indicate that the client, a long-term user of *Depo Medroxyprogesterone Acetate* (DMPA) injectable contraception, experienced a significant increase in body weight, which was successfully managed through structured midwifery care. Weight gain is one of the most frequently reported side

effects of DMPA, generally attributed to hormonal changes that influence appetite regulation and fat metabolism (Muayah & Sari, 2022). In this case, the client's body weight increased by 9,40 kg over a period of three years, with a Body Mass Index (BMI) placing her in the category of class II obesity.

Several contributing factors to the weight gain were identified, including prolonged DMPA use, frequent consumption of high-calorie foods, low physical activity, and a family history of obesity. These findings are consistent with previous studies that report a strong correlation between extended DMPA use (more than two years) and an increased risk of weight gain, particularly among individuals with unhealthy lifestyle patterns (Fenniokha et al., 2022).

Lifestyle modification was the primary approach used to address this side effect. The midwifery care provided included education on low-calorie, balanced diets, reduction of high-fat and sugary food intake, portion control, and increased physical activity through light exercises such as 30-minute daily walks. The client was also encouraged to maintain consistent meal times and increase water intake. These

interventions effectively improved the client's awareness of the importance of maintaining an ideal body weight through consistent dietary and physical activity management.

After one month of intervention, the client showed a weight reduction of 2,40 kg. This result indicates positive behavioral change and supports the effectiveness of lifestyle-based interventions in managing long-term side effects of hormonal contraceptive use. Supporting studies have also confirmed that combining nutritional education with regular physical activity can help reduce body weight in hormonal contraceptive users (Lucin & Herlinadiyaningsih, 2023).

The role of midwives is crucial in this context, not only as providers of contraceptive services but also as facilitators of healthy behavioral change. Continuous counseling, regular follow up, and a personalized, empathetic approach are essential to ensuring the successful use of long-term hormonal contraception without compromising the client's quality of life (Marhaeni et al., 2024). In addition, psychological support has been shown to enhance weight loss outcomes, especially when combined with educational and

motivational reinforcement (Novarianda et al., 2023).

Therefore, the integration of contraceptive services with healthy lifestyle promotion should be embedded as part of the standard of midwifery care. This approach not only improves client satisfaction and adherence to the chosen contraceptive method but also contributes to the prevention of obesity and related metabolic disorders.

Conclusion

This case report presents a 25 year old woman who had been using Depo Medroxyprogesterone Acetate (DMPA) injectable contraception for three years, during which her body weight increased from 90,00 kg to 99,40 kg, with a Body Mass Index (BMI) of 38,82 kg/m², categorizing her as class II obese. Contributing factors included a high-calorie diet, low levels of physical activity, and a family history of obesity. Following three midwifery care visits that involved nutritional education, dietary planning, and encouragement of increased physical activity, the client experienced a weight loss of 2,40 kg within one month, reducing her weight to 97,00 kg. These findings suggest



that structured and consistent midwifery interventions can produce meaningful outcomes in managing weight gain among long term DMPA users.

Abbreviation

DMPA : Depo Medroxyprogesterone
Acetate
IMT : Indeks Massa Tubuh
PMB : Praktik Mandiri Bidan
BMI : Body Mass Index

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