

OBSTETRIC CARE OF 3-MONTH INJECTABLE KB ON MRS. "N" WITH SIDE EFFECTS OF WEIGHT GAIN AT BATARAGURU HEALTH CENTER

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A B S T R A K

Background: Depo Medroxyprogesterone Acetate (DMPA) is a hormonal contraceptive given every three months at a dose of 150 mg by intramuscular injection in the buttocks. One of the side effects of using this injection is weight gain due to stimulation of the appetite control center in the hypothalamus, which leads to increased food intake and decreased physical activity. **Objective:** This Final Project Report aims to carry out midwifery care for a three-month DMPA injectable birth control user who experienced side effects of weight gain at the Bataraguru Health Center, using Varney's seven-step management approach and SOAP documentation. **Methods:** This study used a descriptive method with a case study design, conducted at the Bataraguru Health Center, Baubau City, from January to March 2023. The research subject was Mrs. "N", a 34-year-old woman who used DMPA injectable birth control and experienced side effects in the form of weight gain. Data collection techniques included primary data, namely physical examination, interviews, and observations, and secondary data in the form of medical record document studies. **Results:** Obstetric care showed that the subject's general condition was good, with *compos mentis* consciousness. Vital signs included blood pressure 120/80 mmHg, pulse 92 times/minute, respiratory rate 20 times/minute, and body temperature 36.5°C. Body Mass Index (BMI) was in the good enough category. **Conclusion:** No potential diagnoses were found, because the treatment given was effective so that the subject's weight stabilized at 70 kg in the last two months. There is no gap between theory and application in this case.

INTRODUCTION

Indonesia is ranked fourth as the country with the largest population, reaching 271,349,889 people. (National Population and Family Planning Agency (BKKBN 2021)). BKKBN predicts that the population could become the largest in the world if the growth rate is not suppressed, which affects the health status of productive-age mothers. High maternal and infant mortality rates are associated with pregnancy at too young, too old, close birth intervals, and large numbers of children.

According to WHO, family planning is an effort to help couples manage pregnancy, timing of birth, and number of children. (Setyani, R. 2019) The family planning program aims to control population growth in accordance with the laws and morals of Pancasila for the welfare of the family.

Various contraceptive methods are available in Indonesia, including IUDs, injectables, pills, implants, and condoms. (National Population and Family Planning Agency (BKKBN) 2014). Injectable family planning, which is popular in Indonesia, uses Depo Medroxyprogesterone Acetate (DMPA) which is administered every three months at a dose of 150 mg. (Rusmini, R., Rahmawati, D., and Andriyani, R. 2017).

Menopause is characterized by a decrease in the production of the hormones estrogen and progesterone, which leads to the cessation of menstruation and affects overall reproductive health. This research highlights the symptoms that often arise during menopause, such as hot flashes, night sweats, sleep disturbances, and mood changes. In addition, the study also discussed the increased postmenopausal health risks, such as osteoporosis and cardiovascular disease, associated with hormone decline. Researchers emphasized the importance of health monitoring and appropriate medical intervention for women going through menopause to reduce the risk of long-term health problems. (Wa Ode Sitti Justin, 2023)

Although useful for preventing pregnancy, injectable birth control can cause side effects such as menstrual irregularities, headaches and weight gain. DMPA stimulates the appetite center in the

hypothalamus, increasing food consumption and reducing physical activity. (Nirvana, M., Pratiwi, S. D, and Putri, R. 2013)

In Baubau City, family planning acceptor coverage reached 17,991 participants, with 34.84% using injectable family planning. The use of injectable family planning at the Bataraguru Health Center reaches 862 people per year, with 80% of them experiencing weight gain. (Southeast Sulawesi Central Bureau of Statistics. 2020) The coverage of family planning acceptors in Baubau City was 17,991 participants with the use of injections of 7,449 (34.84%), pills of 7,024 (32.85%), implants of 1,731 (8.79%), IUDs of 514 (2.40%), condoms of 581 (2.71%), male surgery methods (MOP) of 11 (0.5%), and female surgery methods (MOW) of 681 (3.18%). (Southeast Sulawesi Central Bureau of Statistics. 2020)

Based on data collection conducted during comprehensive practice in the working area of the Bataraguru City Baubau health center every year, it was found that there were 1,984 participants who used family planning with the use of injections of 862 people, pills of 876 people, implants of 106 people, IUDs of 51 people, condoms of 25 people, female surgery methods (MOW) of 52 people, male surgery methods (MOP) of 2 people and MAL of 10 people. From the results of data collection, it was found that the use of 3-month injectable birth control was 80% with complaints of weight gain.

Acceptors of 3-month injectable family planning who experienced weight gain claimed that since using this contraceptive their appetite had increased while the fulfillment of nutrients that were not balanced with the use of energy for activities, supported the accumulation of fat and increased weight which caused anxiety and insecurity.

Based on the above background, the authors are interested in conducting "Obstetric Care of 3-Month Injectable Family Planning in NY. "N" With Side Effects of Weight Gain at the Bataraguru Health Center, Baubau City in 2023".

METHODOLOGY

In this study, midwifery care was provided to Mrs. N, a 3-month injectable birth control acceptor who experienced side effects of weight gain. The 7-step midwifery management method was used to understand health conditions in depth, identify emerging problems, and provide evidence-based interventions. Data collection was carried out comprehensively through interviews, physical examination, and direct observation of Mrs. N, as well as secondary data obtained from medical records and relevant literature. (Notoatmodjo, S. 2005)

RESULTS AND DISCUSSION

Subjective Data

Mrs. "N", a 34-year-old woman from the Buton tribe, Muslim, with a high school education, has been married for seven years to Mr. "J", who is 40 years old, has a bachelor's degree, and works as a civil servant. They live in Bataraguru. The main complaint reported was on February 28, 2024 at 09.50 with the main complaint in the form of increased weight gain every month since using 3-month injectable contraceptives for \pm 2 years and the mother expressed feeling anxious and less confident because of the weight gain.

Mrs. "N"'s reproductive history showed that she had a regular menstrual cycle of 28 days with a duration of 6-7 days. There was no significant medical history or dependence on drugs or alcohol in the family. The pattern of fulfillment of basic needs such as nutritional needs and personal hygiene during pregnancy has been well met. Mrs. "N" also reported that she had no chronic chronic illnesses such as hypertension or diabetes. Medical history showed that Mrs. "N" had two children born with normal weight and had no previous serious health problems.

Objective Data

The examination showed that Mrs. N's general condition was good, with compos mentis consciousness. The mother's initial weight when starting injectable birth control was 63 kg and currently weighs 72 kg, which shows an increase of 10 kg in \pm 1 year. The mother's height is 162 cm, so the Body Mass Index (BMI) reaches 27.4 kg/m², which is included in the overweight category. Vital signs showed blood pressure 130/80 mmHg, pulse 92 times/minute, respiration 20 times/minute, and temperature 36.5°C. Physical examination included The patient's head and hair were clean without hypersensitivity or hair loss. There was no edema or swelling of the face. Both eye conjunctiva were normal without polyps or secretions. The nose is symmetrical on both sides without polyps. Ears are also symmetrical and there is no discharge. The mouth and teeth are clean, lips are moist, and there is no dental caries.

There is no enlargement of the thyroid gland, lymph nodes, or jugular veins in the neck. Breast examination shows symmetry on both sides with prominent nipples and no tenderness. Upper and lower extremities, and genitalia. There are no significant signs of abnormality or complaints.

Analysis

Mrs. "N" was diagnosed with side effects of 3-month injectable birth control, specifically significant weight gain. This is in accordance with the information that hormonal contraceptives, such as Depo Progestin injections, can affect metabolism and cause fat accumulation. Obstetric care will focus on weight management, education about contraceptive use, and counseling about healthy lifestyles.

Management

On February 28, 2023, the management of Mrs. N included several important steps. First, counseling was provided on the side effects of 3-month injectable birth control, especially related to weight gain, and ways to overcome them through appropriate diet and exercise. Mrs. N was advised to follow a balanced low-calorie diet, by eating low-fat and high-fiber foods, such as lean chicken, eggs, vegetables, and fruits, to help maintain her weight. In addition, Mrs. N was also advised to engage in regular physical activity, such as walking, aerobic exercise, or swimming, to support weight loss. Next, a re-injection of 3-month injectable family planning (Depo Progestin) with a dose of 150 mg intramuscularly was performed. Further counseling on family planning was also provided, covering seven important aspects of contraceptive use, including advantages, disadvantages, and potential side effects. Finally, Mrs. N was scheduled for a repeat visit on May 21, 2023 or earlier if any complaints or complications arose.

DISCUSSION

Subjective Data

On February 28, 2023, Mrs. N, a 34-year-old mother, came to Bataraguru Health Center to receive a 3-month family planning re-injections (Depo Progestin). The main complaint reported was on February 28, 2024 at 09.50 with the main complaint in the form of increased weight gain every month since using 3-month injectable contraceptives for \pm 2 years and the mother expressed feeling anxious and lack of confidence because of the weight gain.

Depo Progestin is an injectable contraceptive that exclusively contains progestin 150 mg Depo Medroxy Progesterone Acetate (DMPA) every 3 months. The use of injectable contraceptives is known to cause various side effects, one of which is weight gain caused by increased appetite. (Nirvana, M., Pratiwi, S. D, and Putri, R. 2013)..

The pattern of fulfillment of basic needs such as nutritional needs and personal hygiene during pregnancy has been well met. Mrs. "N" also reported that she had no chronic chronic illnesses such as hypertension or diabetes. Medical history showed that Mrs. "N" had two children born with normal weight and had no previous serious health problems.

Mrs. N stated that she had no history of chronic diseases such as hypertension, heart disease, infectious diseases, or hereditary diseases. In addition, she had never experienced symptoms associated with severe headaches. She had used combined pill contraception for 2 years after giving birth to her first child in 2017, and then switched to 3-month injectable birth control since 2021. Mrs. N's relationship with her husband and family was good, and her husband agreed to the use of injectable contraception.

Objective Data

On February 28, 2023, Mrs. N's general condition was good, with *compos mentis* consciousness. Mrs. N's weight was currently 72 kg, an increase of 10 kg from the initial weight before using injectable birth control which was 63 kg. Mrs. N's height is 162 cm, so her BMI is 27.4 kg/m². Based on the BMI classification, Mrs. N is categorized as overweight (BMI > 25) which increases the risk of other health problems. This is in line with research (Utami, A. P., Sari, R. N., and Rahmah, E. 2015), which states that long-term use of DMPA is closely associated with the risk of overweight and obesity due to increased levels of the hormone progesterone. Vital signs included blood pressure 130/80 mmHg, pulse 92 times/minute, respiration 20 times/minute, and body temperature 36.5°C.

The rest of the physical examination showed good condition, with no complaints or abnormal findings in the head, eyes, nose, mouth, neck, breasts, and abdomen. No edema or varicose veins were found on the extremities, and genitalia examination also showed no signs of abnormality.

Analysis

Mrs. N was diagnosed as a 3-month injectable birth control acceptor (Depo Progestin) with the main sideeffect of weight gain of 10 kg within ± 1 year. This weight gain is a common side effect of DMPA use, which triggers an increase in appetite through the influence of the hormone progesterone on the hypothalamus. (Rusmini, R., Rahmawati, D., and Andriyani, R. 2017).. In line with this, research by (Kusuma, D., Lestari, A., and Hartini 2018) also showed that injectable birth control users experience weight gain due to metabolic changes and increased appetite triggered by the hormone progesterone. Ways to overcome these side effects include dietary management and increased physical activity, as well as regular monitoring of body weight and vital signs to prevent further complications such as obesity and hypertension.

Management

On February 28, 2023, management of Mrs. N was carried out which included several important steps. Mrs. N was a 3-month injectable birth control acceptor (Depo Progestin) and experienced the main side effect of weight gain of 10 kg within ± 1 year. This weight gain is a common side effect of DMPA use, which triggers an increase in appetite through the influence of the hormone progesterone on the hypothalamus. (Rusmini, R., Rahmawati, D., and Andriyani, R. 2017).. This is also supported by research from (Kusuma, D., Lestari, A., and Hartini 2018) , which shows that injectable birth control users experience weight gain due to metabolic changes and increased appetite triggered by the hormone progesterone. In response, Mrs. N was counseled about the side effects of 3-month injectable family planning, especially regarding weight gain.

When Mrs. N arrived at the Puskesmas, her welcome was done by applying the 5S principles (smile, greeting, greeting, politeness, and courtesy) to create a warm and trusting atmosphere between the midwife and the patient. Afterwards, Mrs. N was informed that she had gained 10 kg, from 63 kg to 72 kg since using injectable family planning. Steps to manage this weight gain were explained to Mrs. N, including appropriate diet and exercise. Mrs. N was advised to follow a balanced low-calorie diet by eating low-fat and high-fiber foods, such as lean chicken, eggs, vegetables and fruits, to maintain her weight. In addition, Mrs. N is recommended to regularly engage in physical activities, such as walking, aerobics, or swimming, to help her lose weight.

Subsequently, a re-injection of the 3-month injectable contraceptive (Depo Progestin) at a dose of 150 mg intramuscularly was performed. Further family planning counseling was provided to Mrs. N, covering seven important aspects of contraceptive use, including advantages, disadvantages, and potential side effects. As part of the management, Mrs. N was scheduled for a follow-up visit on May 21, 2023 or earlier if complaints or complications arose.

This management is in line with the Concept and Strategy for Realizing the Healthy Indonesia Program with a Family Approach (PIS-PK) proposed by (Anita, L. F. V. G., 2022). The PIS-PK program emphasizes the importance of comprehensive health services with a family approach, where individuals are not only assessed from a medical aspect but also in a social and lifestyle context. In this case, the counseling given to Mrs. N regarding diet and exercise is in accordance with the PIS-PK approach, where the family is expected to participate in supporting Mrs. N in living a healthy lifestyle recommended by health workers. The application of PIS-PK principles ensured that Mrs. N's health was managed as a whole, both in terms of physical and psychosocial aspects, so that the management results could be more optimal.

CONCLUSION

After providing care to Mrs. "N" by applying midwifery management, the author discusses and compares the theory and results of the implementation study and the application of theory with the reality that occurs when providing care to Mrs. "N", a 3-month injectable family planning acceptor with side effects of weight gain. Injectable birth control is an effective contraceptive method, but it also has side effects, such as weight gain, which need to be managed properly. The data shows that proper midwifery management can reduce these negative effects and improve the acceptor's quality of life.

From the observation, Mrs. "N" showed a good understanding of post-contraceptive care, despite concerns regarding weight gain. Collaborative measures such as dietary adjustments and physical activity are essential to maintain weight balance and overall health. In addition, social support from the family also played a role in improving Mrs. "N"'s mental well-being. Overall, the implementation of

integrated midwifery care at the Bataraguru Health Center has had a positive impact on the management of injectable family planning acceptors, which is expected to improve acceptor satisfaction and health.

In this study, the authors found that there is harmony between theory and practice applied in midwifery care, although there are still potential problems to be aware of, such as the possibility of obesity in the future if weight gain is not managed properly. Therefore, it is important to continuously evaluate and adjust midwifery care to ensure the health and well-being of acceptors is maintained. It is hoped that comprehensive and collaborative care can reduce the risk of future complications and improve the success of family planning programs in the community.

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