

LONG USE OF KB IMPLANT WITH INCREASED WEIGHT ON KB ACCEPTERS IMPLANT

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ABSTRAK : PENGGUNAAN IMPLAN KB YANG LAMA DENGAN PENINGKATAN BERAT PADA PENERIMA KB IMPLAN

Latar Belakang: Keluarga Berencana (KB) merupakan salah satu layanan kesehatan preventif paling dasar dan utama bagi perempuan. Cakupan peserta KB implan menurut metode kontrasepsi modern pada tahun 2020 adalah 8,5%. Penggunaan kontrasepsi implan dapat menimbulkan beberapa efek samping dan masalah, salah satunya adalah kenaikan berat badan.

Tujuan: Untuk mengetahui hubungan antara lama penggunaan KB Implan dengan peningkatan berat badan pada akseptor KB Implan di Puskesmas Rawat Inap Rejo Katon tahun 2022.

Metode: Jenis penelitian ini adalah kuantitatif dengan rancangan penelitian observasi analitik dengan rancangan cross sectional. Populasi dalam penelitian ini adalah seluruh akseptor KB Implan di Puskesmas Rawat Inap Rejo Katon tahun 2019-2021 dengan jumlah 241 orang dan sampel sebanyak 211 orang. Teknik pengambilan sampel dalam penelitian ini adalah purposive sampling. Analisis data menggunakan chi square.

Hasil: Lama penggunaan KB Implan pada akseptor KB Implan didapatkan 149 (70,6%) responden menggunakan KB implan 1 tahun dan peningkatan berat badan pada akseptor KB Implan didapatkan 140 (66,4%) responden mengalami peningkatan berat badan. Hasil uji chi square didapatkan pvalue 0,000 < 0,05. Kesimpulan: Terdapat hubungan antara lama penggunaan KB Implan dengan peningkatan berat badan pada akseptor KB Implan di Puskesmas Rawat Inap Rejo Katon tahun 2022. Saran bagi pengguna KB Implan jangka panjang untuk menjaga berat badan dengan mengatur pola dan frekuensi makan serta menyeimbangkannya dengan olahraga teratur.

Kata Kunci: Lama penggunaan, KB Implan, Berat Badan

ABSTRACT

Background: Family Planning (KB) is one of the most basic and main preventive health services for women. The coverage of implant family planning participants according to modern contraceptive methods in 2020 is 8.5%. The use of implant contraceptives can cause several side effects and some problems, one of which is weight gain.

Purpose: To determine the relationship between the duration of the use of KB Implants with increased body weight in KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2022.

Methods: This type of research is quantitative with a research design analytic observation with cross sectional design. The population in this study is all acceptors of KB Implants at the Rejo Katon Inpatient Health Center in 2019-2021 with a total of 241 people and a sample of 211 people. The sampling technique in this study is purposive sampling. Data analysis using chi square.

Results: The duration of the use of KB Implants in KB Implant acceptors obtained 149 (70.6%) respondents using KB implants 1 year and the increase in body weight in KB Implant acceptors obtained 140 (66.4%) respondents experienced an increase in body weight. Test results chi square get pvalue 0.000 < 0.05.

Conclusion: there is a relationship between the length of use of KB Implants and the increase in body weight in KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2022. Suggestions users of long-term KB implants to maintain their weight by adjusting the pattern and frequency of eating and balancing it with regular exercise.

Keywords : Length of use, KB implants, Weight

INTRODUCTION

Family Planning (KB) is one of the most basic and main preventive health services for women. Several types of contraception with hormonal methods are injections, pills, and implants. Implant is a contraceptive method that only contains progestin with a long duration of action, low dose, reversible for women (Speroff in Haslan, 2020). According to the BKKBN, active family planning participants among fertile age couples (PUS) in 2020 amounted to 67.6%. This figure increased compared to 2019 of 63.31% based on data from the Indonesian Family Profile in 2019. Meanwhile, active family planning participants in Lampung Province were 68.7%. Meanwhile, the coverage of active family planning participants according to modern contraceptive methods in 2020 is 72.9% using injectable family planning, 19.4% using pills, 8.5% IU/IUD users, 8.5% using implants, 2.6% using MOW, 1.1% used condoms, and 0.6% used MOP (Kemenkes RI, 2021).

The use of implant contraceptives can cause several side effects and several health problems including causing menstrual disorders, namely being unable to menstruate and irregular bleeding occurs, gaining weight, causing acne, breast tension, and feeling of dry intercourse (Haslan, 2020).

Weight gain in KB implant acceptors is caused by several factors including genetics, hormones, duration of use of KB implants, diet, physical activity. The increase in body weight in KB implant acceptors is caused by the influence of the hormone progesterone, which facilitates the conversion of carbohydrates and sugars into fat, so that the fat under the skin increases and causes increased appetite and decreased physical activity (Muliani, 2020).

The increase in body weight in family planning acceptors occurs due to increased fat in the body and not due to body fluid retention. Body weight is an illustration of the amount of protein, fat, water, and minerals in bone tissue. Changes in weight to increase or increase if the result of weighing is greater than the previous weight. This weight gain is influenced by the increase in the size of the weight resulting from the consumption of food that is converted into fat which is then stored in the subcutaneous tissue (Yusro, 2013).

The reason the researchers examined the side effects of using KB Implants was because the implant is a hormonal contraceptive that only contains progestins with a long duration of action and low doses. In addition, the respondent's interest

in using Implant KB is still low compared to other hormonal KB such as injectable KB and Pill KB. KB Implant users at the Rejo Katon Inpatient Health Center in 2019 there were 96 was, in 2020 there were 145 was, and in 2021 there were 237 was who used KB Implants. Based on the results of a pre-survey of 10 users of KB Implants, 6 (60%) mothers said they had increased weight, 1 said they had lost weight, and 2 (20%) said they had menstrual cycle disorders. Meanwhile, in terms of 10 acceptors of 3-month injections, it was found that 5 (50%) respondents experienced weight gain, 3 (30%) respondents did not gain weight, and 2 (20%) respondents experienced weight loss. In addition, when a survey was conducted of 10 acceptors of KB pills, it was found that 3 (30%) respondents experienced weight gain and 7 (70%) respondents did not experience weight gain.

RESEARCH METHODS

In this study, the author uses quantitative research and cross sectional research design. The population in this study was taken from the total number of KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2019-2021 with a total of 241 people and the sample in this study was 211 people. The sampling technique used in this research is purposive sampling. Data analysis used univariate and bivariate (chi square) analysis.

RESEARCH RESULTS

Table 1
Characteristics of Respondents

Characteristics of Respondents	Frequency	Percentage (%)
Age		
<20 years	14	6.6
20-35 years old	144	68.2
>35 years old	53	25.1
Parity		
Primipara	50	23.7
Multipara	161	76.3

Based on the table above, it is known that from 211 respondents, 144 (68.2%) respondents aged 20-35 years and 161 (76.3%) respondents with multiparity parity.

Based on the table above, it is known that from 211 respondents, 62 (29.4%) respondents used KB implants <1 year and 149 (70.6%) respondents used KB implants 1 year.

experience weight gain and 140 (66.4%) respondents experienced weight gain.

Table 2
Frequency distribution of the duration of use of KB Implants in KB Implant acceptors at Inpatient Health Centers Rejo Katon 2022

Length of Use of KB Implants	Frequency	Percentage (%)
<1 year	62	29.4
1 year	149	70.6

Based on the table 3, it is known that from 211 respondents, 71 (33.6%) respondents did not

Table 3
Distribution of the frequency of weight gain in KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2022

Weight Gain	Frequency	Percentage (%)
Not up	71	33.6
Go on	140	66.4

Table 4
The relationship between the duration of the use of KB Implants with the increase in body weight in KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2022

The duration of using the KB Implant	Weight Gain				Total		P value	OR
	Not Up		Go on					
	n	%	n	%	n	%		
<1 year	40	64.5	22	35.5	62	100	0.000	6,921
1 year	31	20.8	118	79.2	149	100		(3,600 – 13,304)

Based on the table above, it is known that from 62 respondents who used KB implants <1 year, 40 (64.5%) respondents did not experience weight gain and 22 (35.5%) respondents experienced weight gain. Meanwhile, from 149 respondents who used KB implants for 1 year, 31 (20.8%) respondents did not experience weight gain and 118 (79.2%) respondents experienced weight gain.

The results of the chi-square test obtained p value 0.000 <0.05, meaning that there is a relationship between the length of use of KB Implants and weight gain in acceptors of KB Implants at the Rejo Katon Inpatient Health Center in 2022. 6,921 times risk for weight gain.

DISCUSSION

Frequency distribution of the duration of use of KB Implants in KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2022

The results of this study indicate that from 211 respondents, 62 (29.4%) respondents used KB implants <1 year and 149 (70.6%) respondents used KB implants 1 year.

Implant is a type of contraception in the form of an implant made of a kind of silastic rubber containing hormones, which is attached to the upper arm. Implants can be used for a long term of 3-5 years and are reversible. The implant contains levonorgestrel which is the hormone progesterone (Purwoastuti, 2015).

Users of KB implants will feel comfortable and more practical because in the long term, such as KB implants with a term of 3 years, they can provide comfort and convenience for a long time and do not need to think about using KB every day during intercourse to space out pregnancies. The content contained in the 3-year implant KB is the hormone progestin which can stimulate the hormone progesterone (Ameidia, 2021).

This study is in line with research conducted by Qoyyimah (2017) which showed that most of the respondents in this study used implant contraceptives >1 year, namely 29 respondents (60.4%) while respondents who used implants 1 year were 19 respondents (39, 6%).

According to the researcher, the majority of respondents used implant contraceptives for >1 year because this contraceptive implant is one of the long-term contraceptives. So that most users of KB implants use this contraception for a long time.

Distribution of the frequency of weight gain in KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2022

The results of this study indicate that from 211 respondents, 71 (33.6%) respondents did not experience weight gain and 140 (66.4%) respondents experienced weight gain.

Body weight is an illustration of the amount of protein, fat, water, and minerals in bone tissue.

Changes in weight to increase or increase if the result of weighing is greater than the previous weight. This weight gain is influenced by the increase in the size of the weight resulting from the consumption of food that is converted into fat which is then stored in the subcutaneous tissue (Yusro, 2013).

This study is in line with research conducted by Qoyyimah (2017) which showed that most of the respondents who used implant contraceptives experienced weight gain, namely 28 respondents (58.3%) and respondents who did not experience weight gain, namely as many as 20 respondents (41, 7%).

According to the researchers, weight gain in respondents was caused by daily food containing energy that exceeds needs, lack of physical activity, and prolonged (long-term) use of the hormone progesterone such as birth control implants causing weight gain due to anabolic changes and appetite stimulation. Meanwhile, respondents who experience weight loss can be caused by sick KB implant acceptors and new KB implant acceptors. In addition, it can also be caused by the physical respondent who was thin before becoming a family planning implant acceptor.

The relationship between the duration of the use of KB Implants with the increase in body weight in KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2022

The results of this study indicate that from 62 respondents who used KB implants <1 year, 40 (64.5%) respondents did not experience weight gain and 22 (35.5%) respondents experienced weight gain. Meanwhile, from 149 respondents who used KB implants for 1 year, 31 (20.8%) respondents did not experience weight gain and 118 (79.2%) respondents experienced weight gain.

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The mechanism of action of the active ingredients of implant contraceptives is the same as hormonal contraceptives containing progestins (Gallo, 2016). The content of these active ingredients can stimulate the hormone progesterone in the body which will trigger appetite (Wahyuni, 2011). Systematic administration of progesterone for a long period of time causes the effect of the hormone progesterone to facilitate the conversion of carbohydrates and sugars into fat, so that the fat

under the skin increases and causes increased appetite and decreased physical activity (Muliani, 2020).

Weight gain has something to do with the use of birth control implants. This is due to increased fat in the body and not due to retention of body fluids. Body weight is an illustration of the amount of protein, fat, water, and minerals in bone tissue. Progesterone hormone in excessive doses can cause irregular menstruation, increased appetite with weight gain, acne, alopecia, sometimes breast shrinkage, flour albus, and hypomenorrhea. Weight gain due to progesterone increases appetite and the metabolic effects of the hormones themselves. Implanted contraceptives affect changes in body weight. The effect of implant contraceptives on changes in body weight is that the content of the hormone progestin stimulates the hormone progesterone, which facilitates the metabolism of carbohydrates and sugars into fat so that fat under the skin increases and decreases physical activity. According to (Rahayu, 2017) Progesterone is also stored in adipose tissue (fat). As a result, the use of implants can cause weight gain. This is in accordance with the theory that the limitation of progestin hormonal contraception is that there is a change in serum lipids in long-term use (Affandi, 2015).

This study is in line with research conducted by Haslan (2020) which showed there was a relationship between implant use and weight gain ($p < 0.05$). In addition, according to research by Qoyyimah (2017) which shows that there is a relationship between the length of use of contraceptive implants and weight gain in the working area of the Juwiring Health Center.

Supported by research by Yusro (2013) which showed that there was a significant effect between the use of implant contraceptives and an increase in body weight ($p = 0.013$). Acceptors who use implant contraceptives are 1.9 times more likely to gain weight than those who use non-implanted contraceptives (OR=1.9; 95%CI: 1.175 – 3.175).

According to researchers, the long-term relationship between implant contraceptive use and weight gain is due to the presence of progestin hormones that can stimulate the hormone progesterone and can increase appetite if long-term use can stimulate the appetite control center in the hypothalamus which causes acceptors to eat more than usual. So with this incident it can trigger weight gain in users of KB implants.

In this study there were 10 respondents who did not gain weight after using implants. This is

because there are 7 respondents who are new family planning implant acceptors (<1 year) and 3 respondents are family planning acceptors >1 year. Judging from the parity of the respondents, it was found that the respondents who did not experience weight gain were WUS with an average age of 30-35 years. This is because the hormonal influence of family planning will be more visible in the bodies of acceptors with a younger age compared to older family planning acceptors.

In addition, the absence of weight gain in respondents was also due to other external factors such as food intake that was less than the energy used, there were other diseases that affect the body's metabolism, stress conditions, and so on.

Based on the results of the study, it is suggested that efforts should be made by providing counseling to family planning acceptors regarding the side effects of using implant contraceptives including some hormonal contraception that causes weight gain as well as regulating and controlling the intake of nutrients consumed daily. The need for regular weight control for implant acceptors, for example once a month to weigh weight that can be done in conjunction with Posyandu activities, to be emphasized, it is to be able to detect weight gain early. For acceptors who experience weight gain, it is necessary to be given an understanding of the importance of doing various adequate physical activities, and exercising regularly, so that this weight increase does not continue in obesity conditions.

CONCLUSION

1. The frequency distribution of the duration of using KB Implants on KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2022 found 62 (29.4%) respondents using KB implants <1 year and 149 (70.6%) respondents using KB implants 1 year
2. The distribution of the frequency of weight gain in KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2022 found 71 (33.6%) respondents did not experience weight gain and 140 (66.4%) respondents experienced weight gain.
3. There is a relationship between the duration of the use of KB Implants with the increase in body weight in KB Implant acceptors at the Rejo Katon Inpatient Health Center in 2022 with a p value of 0.000.

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