

The Relationship Between 3 Months Of Injecting Kb Use With 3 Months Of Injecting Kb Acceptors' Weight Gain At Mahdalena Pane Clinic

Arva Rochmawati¹, Nurdiana Manurung²^{1,2}D-III Midwifery Study Program, Darmo Midwifery Academy

ARTICLE INFO**Keywords:**Contraception,
injection 3 months

ABSTRACT

Women are very afraid of gaining weight, because in addition to making their physical appearance unattractive, being overweight can have serious consequences for health. This study aims to determine the relationship between duration of use of 3 months injectable contraception and weight gain of 3 months injectable family planning acceptors at the Mahdalena Pane Clinic. This research method uses analytic observational method with a cross-sectional approach. The population in this study were 105 acceptors of 3-month injections in Mahdalena Pane. sampling by accidental sampling, namely 35 acceptors of 3-month injections at Mahdalena Pane in 2019. The results of the Chi-Square test obtained a value of = 0.000, this means that the p-value is smaller than (0.05), which means that there is a relationship between the duration of the use of injectable contraception for 3 months and the increase in body weight of the 3 month injection KB acceptor. It is hoped that health workers, especially midwives, will provide counseling about acceptors of 3-month injection KB at the Mahdalena Pane Clinic in 2019 to increase knowledge about 3-month injection KB.

E-mail:mawatiarva86@gmail.com

Copyright © 2019 Science Midwifery.

1. Introduction

Currently, the population is increasing day by day. The government continues to suppress the rate of population growth through the Family Planning (KB) program. Because if there is no increase in family planning participants, the population will experience a tremendous explosion. According to WHO (World Health Organization) 2013, the total population worldwide reached 7,126,098,000 people. Meanwhile, according to the 2013 World Population Data Sheet, Indonesia is the fifth country in the world with an estimated population of 249 million. Among ASEAN countries, Indonesia with the largest area remains the country with the most population, far above the other 9 member countries. With a Total Fertility Rate (TFR) of 2.6, Indonesia is still above the average TFR of ASEAN countries, which is 2.4 (Anggraini, 2014).

According to WHO (*World Health Organization*) states that family planning is an action that helps married couples to avoid unwanted pregnancies, get births that are very desirable, regulate the interval between pregnancies, control the time at birth in relation to the age of husband and wife and determine the number of children in the family (Suratun, 2015).

There are several methods used in contraception. Simple Methods and Modern Methods. Modern methods consist of: hormonal contraception, *Intra Uterine Devices* (IUD) and sterilization. The types of hormonal contraception consist of: oral contraceptives, injections and implants. Injectable contraceptives consist of: combination injections and progestin injections (3 months injectable contraception) (Arum, 2014).

Progestin injection is a contraceptive method that is given intramuscularly every three months. Injectable contraception is an effective contraceptive method, which is a method that in its use has a relatively higher effectiveness or level of continuity of use (Mulyani, 2013).

According to the 2012 IDHS, the problems that injection family planning acceptors often complain about are no menstruation (2.9%), weight gain (2.7%), dizziness and headaches (2.3%), and so on (2012 IDHS)..

Science Midwifery

journal homepage: www.midwifery.iocspublisher.org

According to Prawirohardjo, DMPA injection contraception affects changes in body weight. The effect of injectable contraception on changes in body weight is that the content of the hormone progesterone in the form of the synthetic hormone Depo Medroxy Progesterone Acetate (DMPA) facilitates the metabolism of carbohydrates and sugar into fat so that fat under the skin increases and decreases physical activity. In addition, the hormone progesterone also stimulates the appetite control center in the hypothalamus which causes appetite to increase so that the acceptor eats more than usual. As a result, the use of contraception can cause changes in body weight, including weight gain.

(Afelian, 2014)

The impact of the 3-month injection KB is associated with an increase in belly fat, a component of the metabolic syndrome that is associated with an increased risk of heart disease, stroke and diabetes mellitus. Users of 3-month injectable contraceptives have a 2-fold risk compared to other users of conception to be obese for 3 years of use (Taufiq, 2013).

Healthy People Stats2010 showed that overweight and obesity are the main contributors to preventable deaths (Hackley, 2014).

Based on the information obtained in the initial survey in November 2018 at the Mahdalena Pane Clinic, the author conducted interviews with 3 month injection family planning acceptors, apparently from the interviews, 5 out of 8 mothers who used 3 months injection family planning said they had increased weight.

Based on the description above, the writer is interested in conducting a research entitled "The Relationship Between Duration of Use of 3-Month Injectable KB With Increased Body Weight of 3-Month Injectable KB Acceptors at Mahdalena Pane in 2019".

2. Methods

The research used was analytic observational with a cross sectional approach. The population in this study were 105 acceptors of 3-month injections in Mahdalena Pane. sampling by accidental sampling, namely 35 acceptors of 3-month injections at Mahdalena Pane 2019. The study was conducted from January to May 2019.

3. Results

TABLE 1
DISTRIBUTION OF 3 MONTHS OF INJECTABLE KB USE

Usage Time	f	%
Not long	5	14.3
Long enough	6	17.1
Long	24	68.6
Total	35	100

Based on the results, it can be seen that from 35 respondents, the majority were categorized as long in the use of 3-month injection contraception, namely as many as 24 people (68.6%).

TABLE 2
DISTRIBUTION OF WEIGHT GAIN OF 3 MONTHS INJECTABLE KB ACCEPTORS

Weight gain	f	%
Increase	19	54.3
Not increasing	16	45.7
Total	35	100

Based on the results above, it can be seen that of the 35 respondents, the majority were categorized as gaining weight using 3-month injectable contraception, as many as 19 people (54.3%).

TABLE 3
CROSS TABULATION OF THE RELATIONSHIP BETWEEN 3 MONTHS OF INJECTABLE KB USE WITH 3 MONTHS INCREASE IN BODY WEIGHT OF INJECTABLE KB ACCEPTORS

Weight gain	Total	Test
-------------	-------	------

Science Midwifery

journal homepage: www.midwifery.iocspublisher.org

Usage time	Increase		not dead-kat		Chi Square	
	N	%	N	%	N	%
Not long	0	0	5	14.3	5	14.3
Long enough	0	0	6	17.1	6	17.1
Long	19	54.3	5	14.3	24	68.6
Total	19	54.3	16	45.7	35	100

Based on the results above, it can be seen that of the 5 respondents who did not use the 3-month injection KB for a long time, the majority did not increase their weight, namely 5 people (14.3%), of the 6 respondents who used the 3-month injection KB the majority did not increase their weight, namely as many as 6 people (17.1%), and of the 24 respondents who had used injection contraception for 3 months the majority increased their weight as many as 19 people (54.3%).

Statistical test results Chi-Square obtained p value = 0.000. This means that the value of p is smaller than χ^2 (0.05) and thus H_0 is rejected and H_a is accepted, i.e. There is a relationship between the duration of use of 3 months injectable KB with an increase in body weight of 3 months injectable KB acceptor.

4. Discussion

The duration of the use of injectable contraception is 3 months

The results of the analysis showed that of the 35 acceptors of 3-month injections, the majority of the use of 3-month injections were 24 people (68.6%). The use of 3 months injectable family planning that is quite long is 6 people (17.1%) while the use of short 3 months injection family planning is 5 people (14.3%).

Affandi's theory which says that the advantages of 3-month injectable contraception are: very effective, prevent long-term pregnancy, have no effect on marital relations, do not contain estrogen so that it does not have a serious impact on heart disease, and blood clotting disorders, has no effect on breast milk, few side effects, and so on (Affandi, 2013).

The results of the study are in line with Afandi's 2013 theory. The duration of the use of 3 months injectable KB is the length of time it takes for 3 months of injecting KB acceptors to use 3 months of injectable KB until this research is conducted. The results of this study indicate that many acceptors of long 3-month injection KB use 3-month injection KB, which is more than 12 months. The reason for acceptors of 3-month injectable KB in using 3-month injectable KB is because 3-month injectable KB can be used for a long time, every 3 months. So that the acceptor has a long grace period to re-inject. Mothers who are breastfeeding use three-month injections because they do not interfere with milk production. In addition, remote service places also trigger 3-month injection KB acceptors not to change other contraceptives.

Weight Gain of 3 Months Injectable KB Acceptors

The results of the analysis showed that of the 35 acceptors of 3-month injections, the majority experienced weight gain, as many as 19 people (54.3%). The results of this study indicate that the increase in body weight of 3-month injection KB acceptors is influenced by the duration of 3-month injection KB use, which is more than 1 year. Meanwhile, it was found that there were 16 people (45.7%).

Prawirohardjo's theory, says that the effect of 3-month injections of family planning on changes in body weight is that the synthetic form of the hormone progesterone facilitates the metabolism of carbohydrates and sugar into fat so that fat under the skin increases and decreases physical activity. In addition, the hormone progesterone also stimulates the appetite control center in the hypothalamus which causes appetite to increase so that the acceptor eats more than usual. As a result, the use of contraception can cause changes in body weight, including weight gain (Afelian, 2014).

The results of the study are in line with Mulyani's 2013 theory and Prawirohardjo's 2014 theory, that the increase in body weight of 3-month injection family planning acceptors is an increase in body weight of more than 3 kg per year. The results of this study indicate that 3 months of

Science Midwifery

journal homepage: www.midwifery.iocspublisher.org

injectable contraceptives are at risk for increasing body weight. This is because the acceptor experienced a greater increase in appetite after being an acceptor of 3-month injection KB. In addition, acceptors also experienced a decrease in carrying out activities.

Analysis of the Relationship between Length of Use and Weight Gain of 3 Months Injectable KB Acceptors

Judging from the results of research conducted on 35 3 month injection family planning acceptors at the Mahdalena Pane Clinic in 2019, out of 24 3 month old injectable family planning acceptors using 3 months injectable family planning who experienced an increase in body weight, 19 people (54.3%), and Of the 6 acceptors of KB injecting 3 months long who used 3 months of injectable KB the majority did not experience an increase in body weight, namely 6 (17.1%) and of 5 acceptors of KB injecting 3 months who did not use 3 months of injectable KB did not experience an increase in body weight as many as 5 people (14.3%).

The duration of the use of 3 months injectable KB greatly affects the increase in body weight of the 3 month injection KB acceptor. Where the longer the use of injectable contraception for 3 months, the greater the possibility of increasing the weight of the 3 month injection KB acceptor. The results of the Chi-Square statistical test obtained p value = 0.000. This means that the p value is smaller than x^2 (0.05) and thus H_0 is rejected and H_a is accepted.

The results of this study are in line with the research of Hana Liando, Rina Kundre and Yolanda Bataha (2015) entitled Factors related to increasing maternal body weight using DMPA injection contraceptives (Depo Medroxy Progesterone Acetate) at Kumelembau Health Center, South Minahasa Regency. research on 35 respondents found 21 mothers (63.6%) experienced an increase in body weight with statistical test results obtained p = 0.021, which means that there is a relationship between the duration of the use of DMPA injection KB with the increase in body weight of DMPA injection KB acceptors.

Thus, it can be concluded in this study that there is a relationship between the duration of use of 3 months injectable KB with an increase in body weight of 3 months injectable KB acceptors, which means that the longer the use of 3 months injectable KB, the weight of 3 months injectable KB acceptors will increase. This is due to the acceptor experiencing a greater increase in appetite after becoming an acceptor of 3-month injection KB. In addition, acceptors also experienced a decrease in carrying out activities. So from the results of this study, no gaps were found between the results of the study and the theory stated above.

5. Conclusion

Based on the results of research regarding the relationship between duration of use of 3-month injectable contraceptives and weight gain of 3-month-injected family planning acceptors at the Mahdalena Pane Clinic in 2019, the following conclusions can be drawn:

1. The duration of the use of 3 months injectable family planning at the Mahdalena Pane Clinic in 2019 was mostly long, namely 68.6% and the minority did not use 3 months injectable contraception, namely 14.3%.
2. The increase in the weight of the 3-month injection family planning acceptors at the Mahdalena Pane Clinic in 2019 increased by 54.3% and did not increase their weight at 45.7%.
3. There is a significant relationship between the duration of use of KB injections for 3 months and the increase in body weight of 3 month injection KB acceptors where the longer the use of KB injections for 3 months, the greater the possibility of an increase in body weight of 3 months injection KB acceptors, with p value = 0.000

Reference

1. Affandi, et al. 2013. Practical Guidebook for Contraceptive Services. Jakarta : Bina Pustaka Sarwono Prawirohardjo.
2. Anggraini, Yetti and Martini. 2014. Family Planning Services. Yogyakarta : Rohima Press.
3. Arum, DN S and Sujiyatini. 2014. Complete Guide to Current Family Planning Services. Yogyakarta : Nuha Medika.

Science Midwifery

journal homepage: www.midwifery.iocspublisher.org

4. Dewi, MUK 2013. Reproductive Health and Family Planning. Jakarta : Trans Info Media.
5. Hackley, et al. 2014. Textbook of Primary Health Care Midwives. Jakarta : EGC.
6. Hasdianah, et al. 2014. Utilization of Nutrition, Diet, and Obesity. Yogyakarta : Nuha Medika.
7. Liando, et al. 2015. Factors Associated with Weight Gain in Mothers Users of DMPA Injectable Contraceptive Devices at the Kumelembuai Public Health Center, Kab. South Minahasa. Essay. Nursing Science, Faculty of Medicine, University of Samratulangi Manado.
8. Minadiarly. 2012. Obesity as a Risk Factor for Several Diseases. Jakarta: Popular Torch Library.
9. Mulyani, N. S and Mega. R. 2013. Family Planning and Contraceptive Devices. Yogyakarta : Nuha Medika.
10. Notoatmodjo, Soekidjo. 2012. Health Research Methodology. Jakarta : Rineka Cipta.
11. Proverawati, Atikah and Siti Asfauh. 2015. Textbook of Nutrition for Midwifery. Yogyakarta : Nuha Medika.
12. Suratun, et al. 2015. Family Planning Services and Contraceptive Services. Jakarta : Trans Info Media.
13. <http://www.SDKI> 2012. Accessed on 22 May 2016 at 15.20 WIB.
14. <http://www.Trends In Contraceptive Use Worldwide> 2015. Accessed on May 22, 2016 at 15.30 Wib.
15. <http://www.World Population Data Sheet> 2013. Accessed on 22 May 2016 at 14.30 WIT.