

RELATIONSHIP LONGING IN 3-MONTH CONTRACEPTION TOOLS WITH BODY INCREASE IN KB ACCEPTORS IN CIBURAYUT VILLAGE, CIGOMBONG DISTRICT BOGOR DISTRICT

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ABSTRACT

Kontepsi is an effort to prevent pregnancy. The contraceptive injection is the most common contraceptive used by married women (32%), followed by birth control pills (13.6%), and IUDs (3.9%).

The purpose of this study is to know the relationship between the length of time using injection contraceptives for 3 months with changes in body weight in family planning acceptors in Ciburayut Village, Cigombong District, Bogor Regency in 2019. This

type of research is descriptive analytic with research design *cross sectional*. This research was conducted in Ciburayut Village, Cigombong District, Bogor Regency in 2019 in December with a sample of Kb acceptors using 3 months injection Kb. The number of samples was 67 respondents *sampling technique was consecutive sampling*. The data collection was obtained through observation sheets. The data analysis used was univariate and bivariate data analysis (*Kendall's tau-b*).

Based on observations by 67 respondents, it was found that the duration of using kb injection 3 months with a long use of ≥ 1 year amounted to 52 people (77.6%), changes in body weight in kb acceptors did not increase, namely 51 respondents (76.1%). The results of the test *Kendall's tau-b* correlated with the length of time using injection contraceptives for 3 months with changes in body weight for family planning acceptors in Ciburayut Village, Cigombong District, Bogor Regency in 2019, the value of *P Value* = 0.046, which means that there is a relationship between 3 months of injection contraceptive use and changes in body weight in family planning acceptors in ciburayut village, cigombong sub-district, bogor district in 2019 with a result *Odds Ratio (OR)* of 4.181 meaning that the long duration of use will have the opportunity to influence weight change not to increase by 4 times compared to new use. So that at the final conclusion of the statistical test, then there is a relationship between the length of time using injection contraceptives for 3 months with changes in body weight in family planning acceptors in the village of Ciburayut, Cigombong sub-district, Bogor district in 2019.

Keywords : Old Use, Change in Body Weight

INTRODUCTION

Contraception is an effort to prevent pregnancy. This effort can be temporary, it can also be permanent. Contraceptive use is one of the variables that affect fertility. The type of injection contraception that is often used is *Depo*

Medroxy Progesterone Acetate (DMPA) which is given every 12 weeks (3 months) by means of intramuscular injection. The contraceptive injection is the most common contraceptive used by married women (32%), followed by birth control pills (13.6%), and IUDs (3.9%).¹ The side effect of injection contraceptives with the highest

frequency is weight gain, the continuing effect of weight gain is obesity, which can cause an increase in blood fat, high blood pressure, coronary heart disease, and stroke.²

According to the *World Health Organization* (WHO) (2014) contraceptive use has increased in many parts of the world, especially in Asia and Latin America and lowest in Sub-Saharan Africa. Globally, users of modern contraceptives have increased insignificantly from 54% in 1990 to 57.4% in 2014. Regionally, the proportion of couples of reproductive age 15-49 years reporting that users of modern contraceptive methods have increased for at least the last 6 years. In Africa from 23.6% to 27.6%, in Asia it has increased from 60.9% to 61.6%, while Latin America and the Caribbean increased slightly from 66.7% to 67.0%. An estimated 225 million women in developing countries want to delay or stop fertility but do not use any contraceptive method for the following reasons: limited choice of contraceptive method and experience of side effects. The unmet need for contraception is still too high, an injustice driven by population growth.³

From the data of West Java province in 2016 the number of couples of childbearing age / PUS was 9,715,469 and the number of active family planning users including IUD 798,654 MOW 177,664 MOP 53,226 condoms 334,039 implants 392,978 injections 3,665,048 pills 1,665,048. Data from the Bogor City Health Office in 2016 were 153,463 fertile aged couples / PUS. And the number of active family planning

users includes IUDs 1,176.55 Injections 371,800 Pills 13.7418 Implants 48,956 MOW 27,384 MOP 2309 Condoms 18,792.⁴

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survey conducted by the National Family Planning Coordinating Board (BKKBN) in 2014 stated that the number of active family planning acceptors in Indonesia from January to December 2014 was 30,613,578 couples or around 75.31%. Based on the survey results, the largest number of family planning acceptors in Indonesia were injection family planning acceptors, namely 14,763,917 or 48.13% of active family planning participants. This shows that injectable contraception is indeed one of the most widely used types of contraception.⁵

In Indonesia, the combined category of overweight and obesity is 21.7% with the highest prevalence of obesity is North Sulawesi (37.1%) and the lowest is 13.0% in the province of East Nusa Tenggara. The prevalence of obesity in men is lower (16.3%) than women (26.9%). Some weight gain and obesity can be due to fluid retention, but it tends to result from increased food intake, but one potential contributor to weight gain in adolescents and adult women is the effect of using hormonal contraceptives.⁶

Changes in body weight were one of the side effects complained of by the 3 month injection family planning acceptors. The side effect of a contraceptive method is a factor that needs to be considered in determining the decision to continue using

the contraceptive method. So it is necessary to seek protection from side effects as well as its preservation. The effect of weight gain on 3-month injection contraception is due to DMPA stimulating the appetite control center in the hypothalamus which causes the acceptors to eat more than usual. Therefore, the use of contraception often complains of weight gain.⁷ Changes in weight gain are the most common metabolic disorders experienced by humans. Changes in weight gain can be influenced by various factors such as hormonal factors contained in hormonal birth control, namely *estrogen* and *progesterone*.⁸

Based on research conducted by Murniawati Sri Endang with the title of the Old Relationship of 3-month Injectable Contraceptive Use with the Incidence of Weight Gain in Independent Practical Midwives in Semarang City with the results of research on the relationship between 3 months of injection contraceptive use and weight gain in independent practicing midwives, Mrs. Ely Tyaningsih Am.Keb, there were 15 respondents (75.0%) who experienced weight gain in the obesity category with 3 months of injection contraceptive use between 4-6 years.¹

Based on the results of a preliminary study that researchers conducted on December 13, 2017. To 10 respondents, 7 (70%) of 10 respondents said that their body weight increased after using 3-month injection contraceptive with a period of use ≥ 3 years, 2 (20%) of respondents said that

their body weight gained after using injection contraceptive for 3 months with a period of less than 3 years, and 1 (10%) of respondents said that they did not gain weight after using injectable contraceptives with a period of less than 3 years.

Based on the above background, the researcher wanted to know the relationship between the duration of use of injectable contraceptives for 3 months with changes in body weight in Ciburayut Village, Cigombong District, Bogor Regency in 2019. Theto know the long relationship between the use of injectable purpose of this study iscontraceptives 3 months with changes in body weight in Ciburayut Village, Cigombong Subdistrict, Bogor Regency, 2019.

RESEARCH METHOD

The type or design of this research is descriptive analytic, namely research that tries to explore how and why this health phenomenon occurs. Then perform a dynamic analysis of the correlation between phenomena or between risk factors and effect factors. The design in this study used a *cross sectional study*. The research method is aapproach *cross sectional* (cross-sectional), which is a study to study the dynamics of the correlation between risk factors and effects, by approaching, observing, or collecting data at once (*point time approach*). That is, each research subject is observed only once and measurements are made of the character

status or subject variables at the time of examination.⁹

This research was conducted in Ciburayut Village, Cigombong District, Bogor Regency in December 2019. The sample in this study were family planning acceptors using 3-month injection family planning in Ciburayut Village, Cigombong District, Bogor Regency in 2019, totaling 203 family planning acceptors who met the inclusion and exclusion criteria. .. The sampling technique in this study using *consecutive sampling technique*. The number of samples in this study amounted to 67 respondents.

The variables of this study consisted of the length of time using injection contraceptives for 3 months and changes in body weight for family planning acceptors. Data processing and data analysis using the *computer program SPSS for windows* series 16. The analysis consists of univariate and bivariate analysis, where bivariate analysis analyzes the relationship between the length of time using the injection contraceptive method for 3 months and changes in body weight in the family planning acceptors.

RESEARCH RESULTS

Table 1 Distribution of the age frequency of respondents in Ciburayut Village, Cigombong District, Bogor Regency

Age	Frequency	Percentage
17-25 years	28	41.79%
26-35 years	24	35.82%
36-46 years	15	22.38%
Total	67	100%

Based on Table 1 regarding the age frequency distribution of respondents can be seen that of the 67 respondents most of the respondents were 17-25 years old as many as 28 people (41.79%).

Table 2 Frequency distribution of respondents' occupation in Ciburayut Village, Cigombong District, Bogor Regency

Occupation	Frequency	Percentage of
Not Working	39	58.20%
Civil Servants	1	1.49%
Self-employed	12	17.91%
Teachers	8	11.94%
Private Employees	7	10.44%
Total	67	100%

Based on Table 2 regarding the frequency distribution of the respondent's work, it can be seen that of the 67 respondents most of the respondents were 39 people (58.20%) who did not work.

Table 3 Frequency Distribution of Duration of Use of 3-Month Injectable Contraceptives in Ciburayut Village, Cigombong District, Bogor Regency, 2019.

N o	Duration of Use	Frequency	Percentage
1	New	15	22.4%
2	Old	52	77.6%
Total		67	100%

Based on table 3 Old Frequency Distribution The usage showed that the results of 67 respondents were mostly Kb acceptors with a long duration of use, namely ≥ 1 year, totaling 52 people (77.6%).

Table 4 Frequency Distribution of Body Weight Change in Ciburayut Village, Cigombong District, Bogor Regency in 2019.in Weight Loss

No	Change	Frequency	Percentage%
1	Increased	16	23.9%
2	Not increased	51	76.1%
Total		67	100%

Based on table 4 Frequency Distribution of Weight Change It shows that the results of 67 respondents most of the changes in body weight did not increase as many as 51 respondents (76.1%).

Table 5 Relationship Lama Use of Contraceptive Injection 3 Months With Changes Weight in the Village Ciburayut the District Cigombong Bogor District 2019

Old Use	Change Weight					Total n%	OR (CI 95%)
	Increase		No Increase				
New	7	43, 8	8	15.7	15	22.4	4.181

Old	9	56.2	43	84.3	52	84.3
Total	16	100	51	100	67	100

Based on table 5, the results of the analysis of the relationship between the length of time using injection contraceptives for 3 months and changes in body weight for family planning acceptors in Ciburayut Village, Cigombong District, Bogor Regency, in 2019, it was known that of the 52 respondents with a long duration of use and changes in body weight did not increase, 43 respondents (84.3%). With a p value = 0.046 so that the p value ≤ 0.05 , then H_0 is rejected and H_a is accepted, which means that there is a relationship between the length of time using injection contraceptives for 3 months and changes in body weight for family planning acceptors in Ciburayut Village, Cigombong District, Bogor Regency in 2019 and the results The analysis also shows the value *Odd Ratio* (OR) of 4.181 means that the old usage time will have the opportunity to influence changes in body weight not to increase by 4 times compared to the new use.

DISCUSSION

a. Duration of Use of 3-Month Injectable Contraceptives in Ciburayut Village, Cigombong District, Bogor Regency,

2019
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Table 4.3 shows that out of 67 respondents, some family planning acceptors with 3 months of injection contraceptive use in the old category, ≥ 1 year, total 52 respondents (77.6%).

This is supported by research conducted by Sendri Mayanti, 2017 concerning "The Old Relationship of Using 3-Month Injectable Contraceptives with Changes in Body Weight and Changes in Libido in the KIA Poli Room, Puskesmas Puwatu." or most of its duration of use of the old category is ≥ 1 year.¹⁰

According to (Maria Kurnia Dewi Ulfah, 2013) in the Textbook on Reproductive Health and Family Planning for Midwives, there are many advantages of 3 months injection of family planning, namely very effective, long-term pregnancy prevention, no effect on husband and wife relationships, few side effects, clients There is no need to store injectable drugs, and can be used by women over 35 years of age until *perimenopause*.¹¹

There are two types of injectable contraceptives that contain progestins, namely Depo Mendroksi Progesterone (DMPA), containing 150 mg of DMPA given every 3 months by way of intramuscular injection (in the buttocks area) and Depo Noretisteron Enantat (Depo Noristerat), containing 200mg of Noretisterone Enantat, given every 1 month by way of intramuscular injection (buttocks or buttocks area).¹¹

Injectable contraceptives are one of the most widely used methods of contraception. These contraceptives have good effectiveness, but have some side effects. These side effects are menstrual

disorders in the form of amenorrhoea, spotting and bleeding outside the menstrual cycle. In addition, there is an increase in body weight when using 3-month injection contraception.¹²

Based on the results of the research and the theory above, the researchers concluded that there are many advantages of using 3-month injection contraception, one of which is that it is more practical and effective because acceptors do not need to store drugs. The same is the case in the field where most family planning acceptors have used family planning for a long period of time, namely ≥ 1 year.

b. Changes in body weight for family planning acceptors in Ciburayut Village, Cigombong District, Bogor Regency in 2019

Table 4.4 shows that out of 67 respondents, some family planning acceptors with changes in body weight category did not increase, namely 51 respondents (76.1%).

This is in line with the research conducted by Sri Hadi 2017 with the title "The Old Relationship of Using 3-Month Injectable Family Planning with Weight Gain for Family Planning Acceptors in the KIA Pusekesmas Puwatu Poli Room in 2017". From 67 respondents, there was a correlation between the duration of 3 months of injection contraceptive use and the increase in body weight ($P\text{ value} = 0.000 < 0.05$).

As the theory put forward by Hartanto (2013) that from the use of

injection contraceptives for a long time can cause weight gain due to the content of the hormone progesterone which can cause appetite to increase if the use of high or excessive doses because it can stimulate the hypothalamic appetite control center which causes the acceptor to eat more.¹⁰

Basically, changes in body weight are influenced by several factors. In general, these factors can be divided into two major groups, namely internal factors and external factors. Internal factors are factors that can affect a person's weight and originate from or on the body itself. In this case it is divided into 4 parts, namely: age, psychology and heredity. As for external factors, it means that all factors that can affect changes in body weight directly and originate from outside the body are divided into two parts, namely: food and the physical environment.¹³

Based on the results of the research and the theory above, the researchers concluded that changes in body weight in the use of 3-month injection contraception are strongly influenced by many factors, namely internal factors (genetic, thermal regulation, metabolism, hormonal disorders) and external (physical activity and nutritional intake).¹³ One of the most influencing factors is hormones, similar to what happened in the field where the acceptors of many respondents experienced an increase in body weight but the increase was only a few kg and was not included in

the increased weight category so that many family planning acceptors whose changes in body weight did not experience it. enhancement.

c. The Old Relationship of Using 3-Month Injecting Contraceptives with Changes in Body Weight for Family Planning Acceptors in Ciburayut Village, Cigombong District, Bogor Regency in 2019

Based on table 4.5 Analysis results of the long relationship between the use of 3-month injection contraceptives and changes in body weight for family planning acceptors in Ciburayut Village, Cigombong District, Regency Bogor in 2019. It can be seen that from 67 respondents there were 43 (84.3%) family planning acceptors who used a long period of use and changes in body weight did not increase. With a *P value* of 0.046, this means that $P \text{ value} \leq 0.05$ so that the alternative hypothesis (H_a) is accepted and the null hypothesis (H_o) is rejected. This shows that there is a relationship between the length of time using injection contraceptives for 3 months and changes in body weight in family planning acceptors in Ciburayut Village, Cigombong District, Bogor Regency in 2019.

This is in line with research conducted by Anisa Putri Pinasti, 2013 regarding the title "The Effect of Contraceptive Use. Injecting Against Weight Gain at Family Planning Acceptors at the Public Health Center, Sukodono District, Sragen Regency ". Of the 41 respondents, there was an effect

of using injection contraceptives on weight gain for family planning acceptors (P value = 0.002 < 0.05).

In general, the use of injectable contraceptives for a long period of time can cause weight gain due to the content of the hormone progesterone which can cause appetite to increase when using high or excessive doses because it can stimulate the appetite control center in the hypothalamus which causes acceptors to eat more.¹⁰

Based on the results of the research and the theory above, the researchers concluded that the duration of using injection contraceptives for 3 months can affect weight changes due to several things as described above, besides that the researchers argue that many respondents experience weight gain but the increase is only a few kg and is not included in an increased weight category so that many family planning acceptors whose weight changes did not experience an increase.

CONCLUSION

1. It is known that the results of research in Ciburayut Village, Cigombong District in 2019, from 67 respondents, most of the family planning acceptors with a long duration of use were 52 respondents (77.6%).
2. It is known that the results of research in Ciburayut Village, Cigombong District in 2019, from 67 respondents, most of the family planning acceptors with changes in body weight did not

increase as many as 51 respondents (76.1%).

3. Based on the statistical test *Kendall's tau-b*, the results are obtained P value 0.046. P value ≤ 0.05 this means that H_0 is rejected. It can be concluded that there is a relationship between the length of time using an injection contraceptive for 3 months with changes in body weight in family planning acceptors in Ciburayut Village, Cigombong District, Bogor Regency in 2019.

ADVICE

1. for STIKes Wijaya Husada Bogor
It is hoped that it can serve as a reference material regarding the length of time using injection contraceptives 3 months with changes in body weight in family planning acceptors, especially in maternity nursing at STIKes Wijaya Husada, Bogor City.
2. For Ciburayut Village
Providing a choice of contraceptive methods for health workers and the community to choose contraception with minimal side effects in Ciburayut Village, Cigombong District, Bogor Regency.

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