



## Relationship Between the Use of Injectable Contraceptives Based on Use at Posyandu Melati

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### ABSTRACT

In Indonesia, the number of heads of household is 60,349,706 and the number of couples of childbearing age is 36,993,725 as much as 61.29% of the number of heads of families. Nationally, there are 23,361,189 family planning participants, 63.14% of the number of couples of childbearing age in Indonesia. The aim of the study was to use injectable contraceptives based on the length of use at the Melati Posyandu, Sukaraya Village, Pancur Batu District, Deli Serdang Regency 2021. The type of research used was observational analytic by design. cross-sectional study. The population in this study amounted to 25 mothers who accept injections at Posyandu Melati, Sukaraya Village, Pancur Batu District, Deli Serdang Regency 2021. The sampling technique used was purposive sampling. Data analysis used the chi square test. The results showed that mothers who experienced an increase in body weight of injectable family planning acceptors amounted to 64.0% and those who did not experience an increase were 36.0%. The results of the chi square test obtained a value of value = 0.017 <0.05. Meanwhile, the mothers of injecting family planning acceptors who experienced menstrual cycle irregularities amounted to 76.0% and those who did not experience menstrual disorders were 24.0%. The results of the chi square test obtained p value = 0.006 <0.05. There is a relationship between the use of 3-month injectable contraceptives based on the length of use at the Melati Posyandu, Sukaraya Village, Pancur Batu District, Deli Serdang Regency 2021.

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### ABSTRAK

Di Indonesia, jumlah kepala keluarga sebanyak 60.349.706 dan jumlah pasangan usia subur 36.993.725 sebanyak 61.29% dari jumlah kepala keluarga. Peserta kb secara nasional sebanyak 23.361.189 sebanyak 63.14% dari jumlah pasangan usia subur di Indonesia. tujuan penelitian untuk mengetahui hubungan penggunaan kontrasepsi suntik berdasarkan lama pemakaian di posyandu melati desa Sukaraya kecamatan Pancur Batu Kabupaten Deli Serdang 2021. Jenis penelitian yang digunakan adalah observasional analitik dengan desain penelitian studi potong lintang (cross sectional). Populasi dalam penelitian ini berjumlah 25 ibu akseptor suntik di posyandu melati desa sukaraya kecamatan Pancur Batu Kabupaten Deli Serdang 2021. teknik pengambilan sampel yang digunakan adalah purposive sampling. analisis data menggunakan uji chi square. hasil penelitian menunjukkan ibu yang mengalami kenaikan berat badan ibu akseptor KB suntik yang berjumlah 64,0% dan yang tidak mengalami kenaikan berjumlah 36,0%. Hasil uji chi square diperoleh nilai pvalue=0,017<0,05. sedangkan ibu akseptor kb suntik yang mengalami ketidakteraturan siklus haid berjumlah 76,0% dan yang tidak mengalami gangguan haid 24,0%. hasil uji chi square diperoleh nilai pvalue=0,006<0,05.

ada hubungan antara penggunaan kontrasepsi suntik 3 bulan berdasarkan lama pemakaian di posyandu melati desa Sukaraya kecamatan Pancur Batu Kabupaten Deli Serdang 2021.

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## INTRODUCTION

Government Regulation of the Republic of Indonesia Number 87 of 2014 concerning Occupational Development and Family Development, Family Planning, and Family Information Systems states that the Family Planning Program (KB) is an Effort to Regulate Childbirth, Distance and Ideal Age of Childbirth, Regulate Pregnancy, Through Promotion, Protection, And Assistance In Accordance With Reproductive Rights To Realize A Quality Family. In its implementation, the implementation targets for children, how many years of age gap between children, and when will they stop having children (Indonesian Health Profile, 2017).

In Indonesia, the number of heads of household is 60,349,706 and the number of couples of childbearing age is 36,993,725 as much as 61.29% of the number of heads of families. National Family Planning Participants as many as 23,361,189, 63.14% of the number of couples of childbearing age in Indonesia (BKKBN, 2016).

Based on the 2018 National Mid-Term Development Plan Survey, the use of contraceptives for all methods among married women in Indonesia fell from 60.9 percent in 2016 to 59.7 percent in 2017 and in the results of the 2018 Program Accountability Performance Survey (Skap). Up To 60 Percent. The use of modern contraceptives among married women 15-49 years is 57 percent and has not reached the national target set by the 2015-2019 Strategic Plan, in 2018 which is 61.1 percent. The highest use of modern contraception is in the provinces of Bangka Belitung and Bengkulu, 65 percent, while the province of Papua has the lowest prevalence of modern family planning, which is 27%. The use of a family planning method is the highest in Bangka Belitung Province 69 percent, while the lowest in Papua is 28 percent (BKKBN, 2018)

East Java Is The Province With The 2nd Largest Population In Indonesia After West Java. Based on the 2017 Population Projection, the population in East Java is 39,292,972 people and the population growth rate is below 1% per year. In other words, this figure is lower than the average rate of population growth in Indonesia of 1.49% per year. The population growth rate can be suppressed through the optimization and revitalization of the implementation of the family planning program (KB) which is currently managed by the National Population and Family Planning Agency (BKKBN, 2018).

Data obtained from the North Sumatra Province BkKbN in 2016 the coverage of active family planning is 71.63% and the coverage of new family planning is 13.35%. In active family planning participants the use of contraceptive pills was 29.09%, condoms 8.04%, injections 30.71%, IUD 10.11%, implants 14.15%, Mow 6.95%, and Mop 0.95%. And in new family planning participants the use of contraceptive pills is 36.81%, condoms 14.6%, injections 43.8%, IUDs 7.29%, implants 20.8%, MOW 4.05%, and Fools 0.79%

Progestin Injectable Contraceptives Are Injectable Contraceptives That Only Contain Progestin Hormones. There are 2 types of Progestin Injectable Contraception, including

Depo Medrosi Progesterone Acetate (Depoprevera), Containing 150 Mg Dmpa Given Every 3 Months By Intramuscular Injection (In the Buttock Area). How It Works Is Preventing 3 Ovulation, Inhibiting Gamete Transport By The Tubes, Making The Uterine Mucous Membrane Thin And Atrophic.

The purpose of this study was to determine whether there is a relationship between increased body weight and menstrual cycle irregularities with injectable contraceptives in family planning acceptors. (Journal of Midwifery: Journal of Medical Science Health Sciences Budi Mulia Midwifery Academy Palembang (2019).

Weight Gain Changes in the size of body weight, either increased or decreased as a result of consumption of food that is converted into fat and stored under the skin. The purpose of this study was to determine the factors that influence weight gain in mothers using 3-month injectable contraception in the working area of Meda City (Journal Of Health, Education And Liferacy 2019). Weight Gain the Most Frequently Complained By Injectable Family Planning Acceptors. Complaints experienced are weight gain, according to research results from the Indonesian Ministry of Health for Depo Provera, the average weight gain per year varies between 2.3-2.9 kg per year (Irianto, 2014).

The cause of weight gain is because the hormone progesterone facilitates the conversion of carbohydrates and sugar into fat and stimulates appetite and reduces physical activity, so that this 3-month injection can cause an increase in body weight (Varney, 2014).

## METHOD

Analytical research with a "cross sectional" approach, namely by observing the independent variable (use of injectable contraceptives) and the dependent variable (changes in body weight and menstrual cycle irregularities) at the same time. Time and place of research The research was carried out in June at the Melati Posyandu, Sukaraya Village, Pancur Batu District, Deli Serdang Regency in 2021

## RESULTS AND DISCUSSIONS

### Result

Description of the research location. The data collection of this research was carried out at Posyandu Melati, Sukaraya Village, Pancur Batu District, Deli Serdang Regency in 2021.

### Characteristics of Respondents

The study was conducted to determine the effect of using 3-month injections based on the duration of use at the jasmine posyandu, Sukaraya village, Pancur batu sub-district, Deli Serdang district in 2021. Respondents in this study with

different duration of use, weight gain and research results as follows:

### 1. Univariate Analysis

Univariate analysis in this study is to see the frequency distribution of the characteristics of the variables in this study.

#### Distribution of Research Subject Characteristics

##### A. Usage Time

Characteristics of respondents based on length of use can be seen in the table below:

Table : 1 Frequency distribution based on respondents' duration of use

No.	Usage Time	Frequency
1.	≤12 month	9
2.	>12 month	16
Amount		25

Source: Primary Data 2021

Based on table 1, it can be seen that the duration of use of injectable contraception for 3 months in respondents in the most dominant case group was >12 months, as many as 16 respondents (64.0%). And the lowest case group in the use of injectable contraceptives for 3 months is the age between 12 months, namely 9 respondents (36.0%)

##### B. Occurrence of Weight Gain

Characteristics of respondents based on the occurrence of weight gain can be seen in the table below:

Table : 2 Frequency distribution based on the respondent's weight gain.

No	Weight gain	Frequency	Presentase %
1.	Up	16	64,0%
2.	No increase	9	36,0%
Quantity		25	100,0%

Table .4

The relationship between the use of 3-month injectable contraceptives with weight gain

Usage Time	Weight Gain				P-value
	Go on		Not up		
	f	%	F	%	
≤12 Month	6	24,0	3	12,0	0,017
>12 Month	3	12,0	13	52,0	
Amount	9	36,0	16	100	

Source: Primary Data 2021

Based on table 4 above shows the results of p (0.017) <0.05 then Ho is rejected and Ha is accepted. This means that there is a relationship between mother's knowledge and

1.	Up	16	64,0%
2.	No increase	9	36,0%
Quantity		25	100,0%

Source: Primary Data 2021

Based on table 2, it can be seen that there was an increase in weight gain in the respondents in the case group, the most dominant being an increase in as many as 16 respondents (64.0%). And the group of cases that did not gain weight on the use of injectable contraceptives for 3 months were 9 respondents (36.0%).

##### C. Menstrual cycle disorders

Characteristics of respondents based on the occurrence of menstrual cycle disorders can be seen in the table below:

Table : 3 Frequency distribution based on respondent's menstrual cycle disorders

	Frequency	Percentage %
Menstrual disorder	19	76,0%
No Menstrual disorder	6	24,0%
Total	25	100,0%

Source: Primary Data 2021

Based on table 3, it can be seen that the occurrence of menstrual cycle irregularities in respondents in the case group is the most dominant experiencing menstrual disorders, as many as 19 respondents (76.0%). And the group of cases that did not experience menstrual disorders for 3-month injection contraceptives were 6 respondents (24.0%).

### 2. Bivariate Analysis

In this bivariate analysis to see whether or not there is a relationship between the use of 3-month injectable contraceptives with increased body weight and menstrual cycle irregularities as follows:

weight gain on the use of 3-month injection KB in the working area of Posyandu Melati Sukaraya, Pancur Batu District, Deli Serdang Regency 2021.

Table 5

The relationship between the use of 3-month injectable contraceptives with the menstrual cycle

Usage Time	Weight Gain				P-value
	Regular		Irregular		
	F	%	F	%	
≤12 Month	4	16,0	5	20,0	0,006
>12 Month	15	60,0	1	4,0	
Amount	19	76,0	6	100	

Source: Primary Data 2021

Based on table 5 above, the results of  $p(0.006) < 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted. This means that there is a relationship between the mother and the menstrual cycle on the 3-month injection KB in the Working Area of Posyandu Melati Sukaraya, Pancur Batu District, Deli Serdang Regency 2021.

### 3. Use of injectable contraceptives

The results of the study were conducted on 25 respondents, from table 4.2 it can be seen that most of the respondents in Sukaraya village, Pancur Batu sub-district, Deli Serdang district in 2021. Injecting family planning acceptors are dominated by housewives as many as 15 acceptors from 25 injection family planning acceptors (60.0%) and a small part of the work, namely employees as many as 4 acceptors from 25 injectable family planning acceptors (16.0%). Injectable contraception is a drug to prevent pregnancy which is used by injecting the drug into fertile women. One of the main goals of this contraception is to develop a contraceptive method that is long-acting (long) does not require daily use or every time you have intercourse, but is reversible.

### 4. Weight Gain

The results of the study were conducted on 25 respondents. From table 2, it can be seen that most respondents in Sukaraya Village, Pancur Batu Sub-district, Deli Serdang Regency in 2021 injecting family planning acceptors do not work as many as 15 acceptors of 25 injection family planning acceptors (60.0%). Body weight is the volume of the human body consisting of body fluids and body tissues, which is measured using an adult weight scale in kilograms. Weight gain is a change in the size of the weight, either increased or decreased as a result of the consumption of food that is converted into fat and stored under the skin. From the results of the study, most of the respondents who participated in injectable family planning experienced an increase in body weight, because the injections contained the hormones estrogen and progesterone. Where weight gain is the most common metabolic disorder experienced by humans.

### Discussion

The results of the test conducted found that active users of injectable contraceptives for 3 months had a significant relationship with weight gain. Thus, an acceptor who uses injectable contraception for a long period of 1 year will relatively experience an increase in body weight ( $\geq 2.9$  kg/year). Several factors that affect body weight include genetic factors, age factors, psychosocial factors, developmental factors, physical activity and drugs. The use of injectable contraception for 3 months has one of the side effects that result in changes in body weight. Excessive weight gain is one of the side effects of using 3-month injectable contraceptives. However, not all acceptors will gain weight, because the effects of these drugs are not always the same in each individual. Changes in body weight may be caused by the hormone progesterone, which facilitates the conversion of carbohydrates and sugars into fat, so that a lot of fat accumulates under the skin and is not due to retention (accumulation) of body fluids, besides that, 3-month injections of birth control stimulate the appetite control center in the hypothalamus which can stimulate the

appetite control center in the hypothalamus. causes the acceptor to eat more than usual. As a result, the use of injections causes weight gain. In the answers of respondents in the questionnaire, it can be clearly seen that on average, mothers who actively use injectable contraceptives for 3 months have more than one change in their eating patterns where the mother's appetite increases. So that most of the mothers who have used injectable contraceptives for a long time will affect their weight gain from before.

Another side effect of using 3-month injectable contraceptives is menstrual cycle disorders. From the results of this study, it showed that of the 25 studied, most of them experienced abnormal menstrual cycles using 3 months injectable contraception (100%) with abnormal cycles. The results showed that many 3-month injection acceptors experienced menstrual disorders, this is because the 3-month injection only contains the hormone progesterone, where the progesterone content can cause menstrual disorders, while high amenorrhea is caused by the progesterone hormone suppressing Lutein Hormone (LH) so that the endometrium becomes thicker. shallow and regress so that the glands become inactive. The results of this study are in accordance with Hartanto's opinion that hormonal contraceptives, especially those containing progestins, can change menstruation. According to Everett, menstrual disorders in the form of amenorrhea are caused by the progesterone in the 3-month injection contraceptive component suppresses LH so that the endometrium becomes shallow and atrophic with inactive glands.

### CONCLUSION

Based on the results of research conducted by researchers in the Posyandu Melati Region, Sukaraya Village, Pancur Batu District, Deli Serdang Regency in 2021. It can be concluded that:

1. The majority of respondents' knowledge level in this study is included in the category of weight gain 16 respondents (64.0%)
2. The majority of respondents' knowledge level in this study is included in the category of menstrual disorders 19 respondents (76.0%)
3. Of the 25 respondents showed a relationship between 3-month injections and body weight with a p-value  $(0.017) < 0.05$ .
4. Of the 25 respondents indicated that there was a relationship between 3-month injections and the menstrual cycle with a p-value  $(0.006) < 0.05$ .

### B. Suggestion

1. For Researchers

It is hoped that the results of this study can provide additional information to open more insights, especially regarding the relationship between the use of 3-month injectable contraception with weight gain and menstrual cycle irregularities.

2. For Educational Agencies

It is hoped that the results of this research can be additional information and teaching materials, especially the subjects related to this research

### 3. For Mother

It is hoped that the results of this study can increase mother's knowledge about 3-month injection family planning

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