

The Correlation Between Long-Term Use Of Injecting Contraception Of Dmpa And Reproductive Reversibility Atworking Area Of Pekauman Public Health Center Banjarmasin

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ABSTRACT

Objective: To analyze the correlation between long-term use of injecting contraception of DMPA and reproductive reversibility atworking area of Pekauman Public Health Center Banjarmasin.

Method: Quantitative research using Cross Sectional research design. The population in this study was pregnant women who visit Pekauman Public Health Center and had used DMPA injection in December 2016. There were 109 people. The sample was 30 people, taken by Purposive Sampling. Data were analyzed by using chi-square test.

Results: Of the 30 average respondents using DMPA > 2 years injectable contraception and reproductive reversibility was after 15 months. There were 6 respondents who used contraception <2 years but experienced reproductive reversibility > 4 months. The long-term use of contraception on post acceptors of DMPA contraceptive acceptor atworking area of Pekauman Public Health Center Banjarmasin (p-value = 0,272 > α -value = 0,05).

Conclusion: There is no correlation between long-term use of injecting contraceptive of DMPA and reproductive reversibility.

Keywords: contraception, injecting contraception of DMPA, long-term use of contraception, reproductive reversibility.

I. INTRODUCTION

Family Planning (FP) is one of the most basic and primary preventive health services for women. Family Planning Services (FP) is one of the Essential Reproduction Health Services packages should be paid more attention. It is

expected to improve the level of health and welfare. Family Planning Program aims to control population growth in Indonesia [1].

Generally fertile age couples definitely have a plan in using contraception. The Planning is classified into 3 phases, delaying pregnancy,

pregnancy interval and terminating pregnancy [2].

BKKBN data in 2015 shows that the most preferred method of contraception are the injectable contraceptive method (31.4%) and oral contraceptives as much (13.4%) and contraceptive use by married women for birth banding (7.9%) and for feignancy delaying (6.5%)[3].

The research that has been done on the Factor of *Drop Out* of 3 months injections of FP program in Sidokaton Village, Kudu Sub-district of Jombang Regency, Ariska, P (2014) found that they want to conceive or want to have children immediately (35.13%) and due to negative side effect (24.32%) [4].

Many couples in their fertile age choose to delay pregnancy by contraceptive methods. The most common is injectable contraception. It is widely used for practical reasons, easy to get and no longer. In using injectable contraception, especially DMPA with the intention of having a baby, some acceptors who have problems related to post fertility delay after using injectable contraception DMPA.

When the use of DMPA is discontinued, it takes time for the return of fertility and the new menstruation will normally be back in general after 6 months. If after 3-6 months the menstruation is not accured yet, then the

client must return to the doctor or health care to find out[5].

Based on the preliminary study that has been done at *Puskesmas*(Public Health Center) Banjarmasin on 14 February 2017, to 10 pregmance women that had used the DMPA;there were 6 of them using it < 1 year, 4 women \geq 2 years, 7 of them gained her fertility / get pregnant after > 1 year of not using it and 3 of them after 6 – 8 months. The purpose of this study is to determine the correlation between the use of contraceptive DMPA and reproductive reversibility at *Puskesmas*Pekauman Banjarmasin.

II. RESEARCH METHODS

The research method was Descriptive Analytic with Cross Sectional approach. Population was all pregnant women who did pregnancy examination at working area of *Puskesmas* Pekauman Banjarmasin on December 2016, they were 109 pregnant women and number of sample was 30 pregnant women by Purposive Sampling. Data analyzed by using Chi-Square Test.

III. RESULTS

There were the respondent's age, parity, duration of DMPA injection, reproduction reversibility, and correlation between long-term use of DMPA contraception and reproduction reversibility.

Table 1. Respondents base on age

No	Age	Frequency	Percentage (%)
1	20-35 Years	24	80.0
2	> 35 Years	6	20.0
amount		30	100

Based on table 1, from 30 respondents, there were 24 (80.0%) in fertile age (20-35 years) and 6 (20.0%) > 35 years old.

Table 2. Respondents base on Parity

No	Parity	Frequency	Percentage (%)
1	Primipara	12	40.0
2	Multipara	17	56.6
3	Grande multi	1	3.4
Total		30	100

Based on table 2, there were primipara category 12 (40,0%) respondents, multipara category 17 (56,6%) and grande multi 1 (93,4%) respondent.

Table 3. Respondents Based on Long-Term use of DMPA

No	Duration of Use	Frequency	Percentage (%)
1	≤ 2 Years	6	20.0
2	> 2 Years	24	80.0
Total		30	100

Based on table 3, there were 6 respondents (20%) used DMPA ≤ 2 years and 24 (80%) used it > 2 years.

Table 4. Respondents Based on the Reproductive Reversibility

No	Reproductive Reversibility	Frequency	Percentage (%)
1	≤ 4 Months	2	6.7
2	> 4 Months	28	93.3
Total		30	100

Based on table 4, there were 2 (6.7%) respondents got the reversibilities ≤ 4 months after they released DMPA and 28 (93.3%) got the reversibilities > 4 months after the release it.

Table 5. The Correlation Between Long-Term use of DMPA and Reproductive Reversibility

Long-Term use of	Reproductive Reversibility				Total	P-value	
	≤ 4 Months		> 4 Months			N	%
	N	%	N%				
≤ 2 Years	1	17	5	83	6	100	0.272
> 2 Years	1	4	23	96	24	100	
Total	2		28		30		

Based on Table 5, there was 1 respondent used DMPA > 2 years and experienced reproductive reversibility ≤ 4 months.

Statistical test results using a computerized program found that *chi square p-value score* was 0.272 which was longer than *α-value* that was (0.05), so it can be concluded that *H₀* was accepted that it can be said there was no correlation between long-term use DMPA and the reproductive reversibilities.

IV. DISCUSSION

Based on the results of research that has been done at *Puskesmas Pekauman Banjarmasin* to pregnant women who use DMPA injectable contraception can be seen in table 1.

This is evidenced in the theory that age can affect acceptors in using contraceptives. Age can be determined phases in using contraception. Women

aged less than 20 years are pregnancy delayed phase, 20-30 years is pregnancy phase and women's age more than 30 is the phase of ending fertility [6].

This is appropriate to the theory, age affects acceptors in using contraceptives. In women <20 years of age tend to use contraception to delay or prevent pregnancy so that some women use contraceptives with high reversibility / the return of fertility can be 100% guaranteed by using oral contraceptive pills, condom use. Period age of women over 30 years, especially > 35 years should end the pregnancy after having 2 children. So the main choice of contraceptive method is to use steady contraception like MOW (Female Operative Method) [7].

The researcher assumes in accordance to the theory has been found that the average respondents who have a fertility age, 25-35 years, easy way of fertilization and have a lower risk for the mother and fetus. they had faster reproductive reversibility than respondents with age > 35 years, because fertility was influenced by the age of the respondents themselves.

In pregnant women who have used DMPA injections based on parity can be seen from table 2. Research done by Fienalia (2012), the number of children ever born to a woman will affect the level of contraceptive usage. Women of high age who generally have children are more likely to use contraception, especially to

limit births. Conversely the use of contraception in young women who have not had children or who have new children in small numbers tend to be shown to delay and postpone the pregnancy [8].

It is in line with the research that has been done by Ekarini (2010), the number of live children affecting fertile couples in determining the method of contraception to be used. Couples with a low number of live children tend to use contraceptive methods with low effectiveness, whereas in couples with more live children tend to use contraception with high effectiveness [9].

According to the researcher, based on the previous research that the respondents who already have children tend to use contraceptives which according to the respondent is safe and effective to be used, because they want to get or widen the age between the first child and the second child, so many respondents using hormonal contraception especially DMPA contraception because it has a high effectiveness, few side effects, easy to get and easy to stop if the mother wants.

In pregnant women who have used long-term DMPA injections can be seen in table 3. This is reinforced by the theory, the use of contraceptive DMPA after the use of more than 2 years should be considered to change the way with other contraceptives, for example by replacing by using combination pill or IUD (uterine

contraceptive device) that can be given immediately without waiting for menstruation, since the purpose of using the contraceptive is to make birth and make a normal menstruation [10].

According to the researcher, many acceptors have used DMPA injections get many benefit from DMPA contraception compared to other types of contraceptives, prevent long-term pregnancy, practical, does not affect the relationship of husband and wife, low failure rate and few side effects, so many acceptors who use DMPA contraception > 2 years of usage without seeing the side effects arising on the acceptor body and feel comfortable using DMPA syringe contraception. But by using hormonal contraceptives in the long term will cause various side effects due to the use of hormonal contraceptives.

In pregnant women with reproductive reversibility can be seen in table 4. Because DMPA is a method of old birth control, it takes some time after the last injection is given. In a many studies of women in the United States who stopped using DMPA to get pregnant, data is available from 61% of them. Sixty-eight percent of women who become pregnant are conceived within 12 months, 83% conceived within 15 months and 93% conceived within the last 18 months of injection. The average time for conception for those who are pregnant is 10 months after the last injection [11].

It is based on the theory (BKKBN, 2011) which states that on average 4 months will return fertility after the use of DMPA syringe contraception. The late return of fertility is not due to the occurrence of damage / abnormalities in the genetic organs, but because of the inexhaustible release of injections of DMPA [5].

Menstrual pattern after DMPA injection is delayed and difficult to predict. In premenopausal women generally take 6-8 months after the last injection to start ovulating and have regular menstruation [12].

Researcher's opinion is in accordance to the existing theory that the reproductive reproduction of respondents > 4 months is not due to a disease in the reproductive organs of respondents, but because of the inexhaustible release of injections of DMPA. The occurrence of fertility with reproductive reversibility that <4 months can be influenced by the age of the respondent, the nutritional status of the respondent and psychology factor.

It is supported by the research that has been done by Agustin R (2016) said that the average post-mortem fertility return using DMPA is for 13.9 months with the standard 7.1 months deviation, while the fastest return of fertility 2 months and 30 month [13]. As well as the research that has been done by Handayani R (2010) with the results of the average research

duration of return of fertility is 8 months with the fastest time of return of fertility is 6 months at most 13 months [14].

Correlation between long-term injectable contraceptive DMPA and Reproductive Reversibility can be seen in table 5. The result of statistical test by using computer program Chi-square obtained p-value 0.272 which means bigger than α -value (0,05) hence can be concluded that H_0 accepted so that it can be said there is no relationship between the duration of contraceptive use DMPA with reproductive reversibility on post DMPA contraceptive acceptor.

It is supported by Risser et al who reported that although overall average small increase in body weight was observed in both DMPA patients who stated that weight gain occurred. The investigator also suggests that the higher initial mass index may be associated with weight gain among DMPA Acceptors. Average Mass Weight The initial index was significantly greater among DMPA users who gained more than 6 Kg [15].

There is little evidence that DMPA causes weight gain when compared with non-hormonal contraceptives. In general, two studies comparing long-term DMPA users and intrauterine T copper devices (IUDs) found weight-varying effects [16].

It is appropriate to the theory of nutritional status. Most DMPA Injectable contraceptive acceptors often experience

side effects of excessive weight gain. Obesity can be a factor that affects fertility because in obese women will experience irregular menstruation that will affect the level of fertility [6].

In the United States, it is not surprising that weight gain is often cited by women as the reason for stopping hormonal contraceptives. However, their perception of hormonal contraception is the cause of weight gain. Observational studies have reported the effect of DMPA variables on body weight. Among adolescents and older women who used DMPA for up to 1 year, some studies reported an insignificant change in weight [17].

Based on previous research, there is no evidence that long-term use of DMPA injections increases the delay in female fertility returns [14].

Researchers argue that based on existing theories that using DMPA injectable contraception with a > 2 year old can affect the reproductive Reversibility of a woman. Long-term use of DMPA injectable contraceptives should replace more effective contraceptive methods such as IUD contraceptives that will help prevent longer reproductive reversibility.

V. CONCLUSION

There is no correlation between long-term use of injecting contraceptive of DMPA and reproductive reversibility.

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