LEVEL OF KNOWLEDGE OF DEPO-PROVERA CONTRACEPTIVE INJECTION AND RE-INJECTION SCHEDULES COMPLIANCE

[1]Sri Rahayu,[2]Wahidin,[3]Dina Raidanti

[1]Rahayuengajar2016@gmail.com, [2]didin.wahidin1977@gmail.com,[3] draidanti@gmail.com

[1] Faculty of Health, Aisyah University Pringsewu Lampung, Indonesia,[2]Faculty of Health Sciences,Universitas Muhamadiyah Tangerang Indonesia,[3]Sekolah Tinggi Ilmu Kesehatan RSPAD Jakarta, Indonesia

ABSTRACT

Family planning is an effort to measure the desired number and spacing of children. Depo-Provera injection is a way to prevent pregnancy by administering a hormonal injection. The failure of the Depo-Provera contraception method is caused by the acceptor's delay in receiving a re-injection. The accuracy of mothers in receiving the Depo-Provera injection is influenced by the mother's knowledge of the Depo-Provera injection and supported by a good memory. Compliance in receiving the re-injection impacts the effectiveness of the Depo-Provera contraception used by the acceptor. One of the failures of the contraception method in the acceptor is non-compliance or delay in receiving the injection. This study aims to determine the level of knowledge of contraceptive injection, compliance with the re-injection schedules, and the correlation between the level of knowledge of contraceptive injection and the re-injection schedules compliance. The type of research was a *cross-sectional* study with *accidental sampling*. The estimated sample size was 50 respondents who met the inclusion criteria. The research was conducted by giving questionnaires to acceptors who made repeat visits to the Tanah Abang Sub-District Health Center from November 2019-January 2020. The analytical test used in this study was *chi-square* to determine the correlation between the level of knowledge of injecting contraception as the independent variable and compliance with the re-injection schedules as the dependent variable. Hypothesis testing was carried out using the *chi-square* test formula with a significance level of *the p*-value of 0.05 and one degree of freedom. The *chi-square* calculation of p-value 0.05 is obtained, while the *chi-square* table is 0.007. Then, Ho is rejected, and Ha is accepted. It means there is a correlation between the level of knowledge of contraceptive injection and re-injection schedules compliance.

Keywords: Knowledge, Contraceptive Injection, Compliance.

INTRODUCTION

Among the 1.9 billion Women of Reproductive Age, (15-49 years) worldwide in 2019, 1.1 billion require family planning. It is known that 842 million use contraceptive methods, while 270 million have unmet contraceptive needs (Kantorová et al., 2020). The proportion of family planning needs to be met by modern methods, *Sustainable Development Goals* (SDG) indicator 3.7.1, has stagnated globally at around 77% from 2015 to 2020 but has increased from 55% to 58% in the African region (Donovan & Wulf, 2002). Only one method of contraception, the condom, can prevent pregnancy and the transmission of sexually transmitted infections, including HIV. Contraceptive use advances the human right to determine the number and spacing of children born.

Indonesia is a country with a large population. Every year the population of Indonesia is increasing. In 2019, Indonesia's population reached 267 million people. A

large population can cause various problems, such as slowing economic growth, increasing unemployment, and increasing crime. The government continues to try to improve or restrain the proportion of the population. One of Indonesia's government's efforts to reduce population growth is the Family Planning Program (KB). Family planning service programs are important in realizing a prosperous Indonesian population, in addition to education and health programs. Awareness of the importance of contraceptives in Indonesia needs to be further increased to avoid population growth in Indonesia in 2016 (BKKBN, 2016). The use of contraceptive injections tends to increase lately. Based on the results of the 2018 Indonesian Demographic and Health Survey (IDHS), the largest forms of contraception used were injections 31.6%, pills 13.2%, IUDs .8%, implants 2.8%, condoms 1.3%, permanent contraception for women 3.1%, permanent contraception for males 0.2%, calendar method or rhythm method 1.5%, other methods 0.8%. The number of injecting contraceptive use increased from 2017 to 2018. In 2017 it was 11.7%. In 2018 it was 15.2% (BKKBN, 2016). Based on the pattern in choosing the type of contraceptive as presented in Figure 5.19, the majority of Active Family Planning participants chose injections and pills as contraceptives and were even very dominant (more than 80%) compared to other methods; injections (63.71%) and pills (17.24%) (Ministry of Health of the Republic of Indonesia, 2018). Injections and pills are included in short-term contraception methods so that the effectiveness of injections and pills in controlling pregnancy is lower than other types of contraception.

The contraceptive injection is a way to prevent pregnancy through hormonal injections. Hormonal contraceptive injections are increasingly used in Indonesia because they work effectively, are practical, and are relatively cheap and safe (Simbolon, 2018). Before being injected, the mother's condition must be checked first to ensure compatibility. Injections are given when the mother is not pregnant. In general, users of birth control injections have the same requirements as pill users (contraception injections are contraceptives in the form of a liquid containing the hormone progesterone, which is injected into a woman's body periodically (once a month or once every three months). The advantages of contraceptive injection are practical, effective, and safe, with a success rate of more than 99%, no age limit, and contraception injections that once every three months do not affect breast milk and are suitable for breastfeeding mothers. Contraception injections are birth control drugs that are injected once a month or once every three months for those that once a month contain estrogen and progesterone and for those that contain only progesterone once every three months. For breastfeeding women, it is better not to use the one for one month because it will affect milk production. Contraception injections are effective for women who do not have metabolic disease problems such as diabetes, hypertension, blood clotting disorders, and a history of stroke and are not suitable for women who smoke because smoking can cause blockage of blood vessels (Proverawati & Misaroh, 2009).

Based on the coverage report on active family planning participants in Indonesia in 2018, the highest active family planning was found in Bengkulu (71.15%) and the lowest in Papua (25.73%), for DKI Jakarta province at 57.29% (Ministry of Health of the Republic of Indonesia 2018). Meanwhile, based on sectoral statistics for DKI Jakarta Province, the Office of Empowerment, Child Protection, and Population Control (DPPAPP) shows that new Family Planning (KB) participants in the last three years have increased by around 10.37%. The growth of active family planning participants each year also followed this increase. The average growth in the number of active family planning participants in DKI Jakarta is 2.06%. In April 2019, there were 1,463,483 active reproductive-aged couples. The East Jakarta area has the highest number of active family planning participants each year,

followed by West Jakarta and North Jakarta. South Jakarta experienced a significant increase in active family planning participants in 2017, an increase of 273.64% from the previous year. Meanwhile, East Jakarta in 2017 experienced a significant decrease in active family planning participants, namely 30.33%. Active family planning participants in DKI Jakarta were dominated by contraceptive injection participants, 36.04% of the total family planning participants, followed by the type of pill and IUD. (https://statistik.jakarta.go.id). In general, acceptors prefer the contraceptive injection method because it is practical, simple, and there is no need to be afraid of forgetting. To prevent pregnancy, you do a family planning injection promptly. The mother's accuracy in family planning injections is influenced by the mother's knowledge about family planning injections and is supported by a good mother's memory. In choosing a contraceptive injection method, women must consider various factors, including their health status, potential side effects of a method, consequences of unwanted pregnancies, desired family size, partner cooperation, cultural norms, and recognizing the ability to have children. Factors causing non-compliance are understanding instructions, interaction quality, social isolation, beliefs, attitudes, and personality. The disadvantage of using unscheduled injection contraception is that it leads to pregnancy, so it is necessary to provide appropriate information for acceptors to choose a good contraceptive method. Although contraceptive injection is very effective in preventing pregnancy, it is necessary to pay attention to its use because the problem that often occurs in injecting contraception is a delay in the acceptor getting the injection. If it is more than 12 weeks late since the last injection with unprotected coitus, there is a high probability of pregnancy. It could be influenced because the acceptor forgot the re-injection schedules and could also be influenced by the acceptor's lack of knowledge and attitude regarding the re-injection schedules compliance. Compliance is the accuracy of an individual's behavior towards the advice given by health workers in using a drug and using it at the right time. The factors that influence compliance are knowledge, attitudes, and family support. The impact of non-compliance allows acceptors to experience pregnancy. It is because the hormones contained in injectable birth control cannot work optimally. So that it allows injectable birth control acceptors to experience unwanted pregnancies; this condition can make contraceptive injection acceptors panic so that they carry out high-risk abortions, such as abortions (Gu, 2012).

The researchers conducted secondary data regarding the number of contraceptive injection acceptors at the Tanah Abang Sub-District Health Center for September 2019 to November 2019, totaling 280 people recorded in the register book of the Tanah Abang Sub-District Family Planning Polyclinic. For IUD acceptors, there were 68 people (24.2%), implant acceptors 82 people (29.2%), injection acceptors totaled 110 people (39.2%), birth control pill acceptors 13 (4.6%) people and condom acceptors amounted to 7 people (2.5%).

From the results of secondary data research regarding compliance with the re-injection schedules, the number of contraceptive injection acceptors was 110 at the Tanah Abang Sub-District Health Center period 2, September 2019 to November 22nd, 2019. Then, in September 2019, there were 52 re-injection acceptors, 32 compliance acceptors, and 20 non-compliance acceptors. In October 2019, there were 25 re-injection acceptors, with eight compliance acceptors and 17 non-compliance acceptors. In November 2019, there were 33 re-injection acceptors, 15 compliance acceptors, and 18 non-compliance acceptors.

Based on the preliminary study conducted by the researchers through interviews and giving questionnaires to 10 contraceptive injection acceptors at the the Tanah Abang Sub-District Health Center, it was found that out of 10 respondents, 4

respondents (40%) returned on time. In contrast, 6 respondents (60%) were late. Based on the research study described above, the authors are interested in researching the title "The Correlation between the Level of Knowledge of Contraceptive Injection and Re-injection Schedules Compliance at the Tanah Abang Sub-District Health Center for the Period November 25th, 2019 - January 3rd, 2020."

RESEARCH METHOD

This study used a cross-sectional research design to determine the correlation between the level of knowledge of contraceptive injections and re-injection schedules compliance. Compliance with the re-injection schedule at the Tanah Abang Sub-District Health Center from November 25th, 2019, – January 3rd, 2020. This research is an analytical/explanative research method that aims to find correlations between variables that are not causal by conducting descriptive research first to look for basic data. The research design used is a cross-sectional design, which is a research design by measuring or observing simultaneously (one time) between the dependent variable and the independent variable (Hidayat, 2014).

RESULTS

The results of the research conducted are presented as follows:

1. **Univariate analysis**
   a. **Table of Respondents' Knowledge Level of Contraceptive Injection at the Tanah Abang Sub-District Health Center for November 2019 – January 2020**

Level of Knowledge	Total	Percent
Good (76-100%)	45 respondents	90 %
Sufficient (56-76%)	5 respondents	10 %
Low (<56%)	0 respondents	0 %
Total	50	100%

Primary data sources, 2020

Based on the table above, from the 50 respondents, 45 people (90%) have good knowledge, and 5 people (10%) are sufficient.

   b. **Compliance with the re-injection Schedules at the Tanah Abang Sub-District Health Center for November 2019 – January 2020**

Compliance	Total	Percent
Compliance	26 respondents	52 %
Non-compliance	24 respondents	48 %
Total	50 respondents	100 %

Primary data sources, 2020.

Based on the table above, out of 50 respondents, 26 (52%) comply with re-injections schedules. *In comparison, 24 respondents (48%) are non-compliance with re-injections* schedules.

2. Bivariate analysis

a. Correlation between Level of Knowledge of Contraceptive Injection and Re-injection Schedules Compliance at the Tanah Abang Sub-District Health Center for November 2019 – January 2020

No.	Level of knowledge of contraceptive injection	Compliance with the re-injection schedules				Total		P
		Compliance		Non-compliance				
		F	%	F	%	F	%	**0,007**
1.	Good	25	96,2	20	83,3	45	100	
2.	sufficient	1	3,8	4	16,7	5	100	
3.	Low	0	0	0	0	0	0	
Total		26	100	20	100	50	100	

P = 0.007 <0.05 = H_0 is rejected

Hypothesis testing was carried out using the chi-square test formula with a significance level of p-value of 0.05 and one degree of freedom. The chi-square calculation of p 0.05 is obtained, while the chi-square table is 0.007. Thus, H_0 is rejected, and H_a is accepted, which means there is a correlation between levels of knowledge of acceptors' compliance with re-injection schedules.

From the results of research conducted regarding the correlation between the level of knowledge about injecting contraception and the re-injection schedules *compliance at the Tanah Abang Sub-District Health Center for the period November 25th, 2019 – January 5th, 2020, based on the variables studied, namely mothers' knowledge and compliance with injecting family planning acceptors, in this chapter the researchers link the variables to see if there is a gap between the existing implementation and theory.*

DISCUSSION

1. Level of Knowledge of Contraceptive Injection

Knowledge results from knowing and has six levels: knowing, understanding, application, analysis, synthesis, and evaluation (Notoatmodjo, 2014). Based on the results of research conducted on 50 respondents at the Tanah Abang Sub-District Health Center, it was found that most respondents had different levels of knowledge. The level of knowledge in the good category was 45 respondents (90%). The results of this study align with research conducted by (Batan & Dion, 2018) found that most respondents had good knowledge of 61 people (74.4%). Formal education factors influence knowledge. Knowledge is closely related to education, where it is hoped that the person's knowledge will broaden with higher education. However, it needs to be emphasized; it does not mean that someone with low education is also low in knowledge. It reminds us that an increase in knowledge is not obtained from formal education but can be obtained through non-formal education. Other factors that affect knowledge are internal factors (Education, employment, age) and external factors (environmental and sociocultural factors) (Notoatmodjo, 2012).

2. Compliance with re-injection Schedules

Compliance is influenced by several factors, namely, predisposing factors, which

include knowledge and the husband's support. Supporting factors include the physical environment, availability of health facilities or facilities, and driving factors that include the attitude of health workers and community leaders (Notoatmodjo, 2012). Compliance is an action related to a person's behavior. Compliance begins with individuals complying with an officer's recommendations or instructions without a willingness to take action and often because they want to avoid punishment or sanctions for not complying. Based on the research results obtained from 50 respondents, 26 people (52%) were compliant in making repeat visits, and 24 people (48%) were non-compliance in making repeat visits. This research is in line with (Betan & Dion, 2018). Based on the results of the study, it was found that the respondents who had the highest level of compliance were 76 people (92.69%). A person's behavior in complying with every recommendation from a health professional is influenced by several factors, including the level of knowledge, education, socio-economic, and culture. In addition, health facilities, the physical environment, and intervention or support from health workers also strengthen the formation of a person's behavior.

The results showed that of the 50 respondents, 45 (90%) had good knowledge. It is the theory put forward by Lawrence and Green (Notoatmodjo, 2014), which states that a person with a good level of knowledge will more easily absorb health concepts to have more awareness to change his behavior to be better than have insufficient or low knowledge. According to the researchers' assumptions, the knowledge of knowledgeable respondents is good because they understand and understand the side effects if they do not do re-injections. Meanwhile, respondents who are well-informed but disobedient make repeat visits because the respondent's knowledge has not yet reached the implementation level of the application, still at the known level, so they only know but do not implement it.

3. Correlation between Level of Knowledge of Contraceptive Injection and Re-Injection Schedules Compliance at the Tanah Abang Sub-District Health Center

Based on the results of the study, it was found that there is a correlation between the level of knowledge of injecting contraception and compliance with the re-injection schedules. It is evidenced by the results of *statistica*l tests using the *chi-square* formula with a confidence level of p 0.05. The *chi-square* p (0.05) is obtained when the *chi-square* value is compared with *the chi-square* table value (0.007). It can be concluded that *the chi-square* value p 0.05 > table *chi-square* value 0.007.

The results showed a significance value of 0.05 > 0.007, and the level of knowledge of the closeness relationship was low (between 0.05 and 0.007). From these results, it can be concluded that Ho is rejected and Ha is accepted, so there is a correlation between the level of knowledge of contraceptive injections and compliance with the re-injection schedules. It means the higher a person's level of knowledge, the better the level of compliance to re-injection.

Knowledge or cognition is dominant, which is important in forming one's actions *(Overt behavior).* According to (Notoatmodjo, 2014), three factors influence behavior change: *predisposing factors, enabling factors, and reinforcing factors.* Knowledge influences shaping one's behavior, and obedience is related to one's behavior. Thus, knowledge is very important in shaping a person's actions, such as the acceptor's compliance with the re-injection schedules. It can be interpreted that the higher the mother's level of knowledge about contraceptive injections, the more obedient the mother is to do the re-injection according to the scheduled time. It is in line with research conducted by (Noriani, M.Kes, Nurtini, M.Kes, and Riza Kurnia Indriana, M.Kes, 2019) showing the level of compliance to repeat visits with the level of knowledge obtained results that the level of

compliance to repeat visits (83.3 %). According to the researcher's assumption that respondents with high knowledge are not always obedient to repeat injections due to myths, respondents assume that re-injections are carried out after menstruation. Even though the exact re-injection on the specified date has no risk factors for menstruation, high knowledge cannot be a benchmark for compliance re-injection schedules. High knowledge must be followed by the behavior of someone who can comply with every recommendation from health workers. Therefore, if high knowledge is followed by obedient behavior, this research will have a close relationship. Mothers' knowledge about injecting contraception is very important because mothers with good knowledge about injecting contraception will be obedient to repeat injections. In contrast, mothers with less knowledge can lead disobedience to repeat injections. Nonetheless, regular use depends on the level of knowledge of the mother.

CONCLUSION AND SUGGESTIONS:

Based on the results of the research and discussion, it can be concluded that:

The number of family planning acceptors at the Tanah Abang Sub-District Health Center for November 25th - January 3rd is 86 respondents. The respondents' knowledge level is mostly in the good category, namely 45 respondents (90%). Most respondents comply with re-injections schedules. There is a correlation between the level of knowledge of contraceptive injections and compliance with the re-injection schedules at the Tanah Abang Sub-District Health Center. It means that the better a person's level of knowledge, the better his needs will be. Midwives need to increase counseling about contraception, especially injecting birth control for patients and their families, so patients remain obedient in repeated injections. Future researchers should examine other variables related to compliance with the re-injection schedules.

REFERENCES

Betan, Yasinta, and Yohanes Dion. 2018. "Chmk Midwifery Scientific Journal Chmk Midwifery Scientific Journal." 2(April): 2–6.

BKKBN. 2016. "Analisis Data Kependudukan Dan Kb Hasil Susenas 2015." *Rapat Koordinasi Nasional BKKBN*.

Donovan, P., & Deirdre Wulf. (2002). "Family Planning Can Reduce High Infant Mortality Levels." *Issues in brief (Alan Guttmacher Institute)* (2): pp. 1–4.

Gu, Diajukan. 2012. "N Bidan Dalam Konsel SUntik Dmpa DIPuskesmasMegangYogyakarta Tahun 2012."

Hidayat, Aziz Alimul. 2014. *Metode Penelitian Keperawatan Dan Teknik Analisis Data*. Jakarta: Salemba Medika.

Kantorová, Vladimíra, Mark C. Wheldon, Philipp Ueffing, and Aisha N.Z. Dasgupta. (2020). "Estimating Progress towards Meeting Women's Contraceptive Needs in 185 Countries: A Bayesian Hierarchical Modelling Study." *PLoS Medicine* 17(2): 1–23.

Kementerian Kesehatan Republik Indonesia. 2018. Riskesdas 2018 *Basic Health Research 2018*.

Noriani, M.Kes, Ni Ketut, Ni Made Nurtini, M.Kes, and Putu Riza Kurnia Indriana, M.Kes. 2019. "Hubungan Pengetahuan Dan Motivasi Akseptor Kb Suntik 3 Bulan Dengan Kepatuhan Kunjungan Ulang Di Bpm Koriawati Tahun 2017." *Jurnal Riset Kesehatan Nasional* 3(2): 35–39.

Notoatmodjo. (2014). "Perilaku Kesehatan Dan Promosi Kesehatan." *Proceedings of the 8th Biennial Conference of the International Academy of Commercial*

and Consumer Law.

Notoatmodjo, Soekidjo. 2012. Jakarta: Rineka Cipta *Promosi Kesehatan & Ilmu Perilaku*.

———. 2014. *Metodologi Penelitian Kesehatan*. Jakarta: PT Rineka Cipta.

Proverawati, Atikah, and Siti Misaroh. 2009. Yogyakarta: Nuha Medika *Panduan Memilih Kontrasepsi*.

Simbolon, Dewi Fiska. 2018. "Kurangnya Pendidikan Reproduksi Dini Menjadi Faktor Penyebab Terjadinya Pelecehan Seksual Antar Anak." *Sumatra Law Review* 1(1): 43.

(https://statistik.jakarta.go.id). Diakses pada 12 April 2023