



Determinant Analysis related to the use in Public Health Center Ogan Ilir of Medical Injection Contraception in 2019

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Abstract Contraceptive injection is a way to prevent pregnancy by injection containing a liquid containing substances in the form of the hormones estrogen and progesterone or only progesterone for a certain period of time. This study aims to analyze the factors associated with the use of injection contraceptives at the Ogan Ilir Health Center in 2019. This study used an analytical survey design with a cross sectional approach. The number of samples used was 199 respondents. The results of this study show that women are of childbearing age ($p = 0.005$), history of contraception ($p = 0.007$), number of children ($p = 0.015$), education ($p = 0.024$) and occupation ($p = 0.007$). Multivariate analysis found that the variable with the greatest influence on the use of injection contraceptives was the variable of women of childbearing age and if this was done the order was as follows: women of reproductive age OR: 2.496 (95% CI: 1.249 - 4.986) $p = 0.010$, occupation OR: 2.177 (95% CI: 1.169 - 4.055) $p = 0.014$. Suggestions are that it is hoped that health workers, especially midwives, in collaboration with health agencies, conduct counseling and counseling activities to provide information on married couples risk factors for contraceptive failure so that they can determine which contraception is best for them to use.

Keywords: Reproductive age of women, history of contraception, number of children, education and employment, injection contraception

I. INTRODUCTION

Family planning is an effort to space out or plan the number and distance of pregnancies using contraception (Gupta N, 2011). The purpose of implementing the family planning program is to form a small family in accordance with the socio-economic strength of a family by controlling the birth of a child in order to obtain a happy and prosperous family that can fulfill their daily needs (Westhoff C, 2016). The advantages of injection contraceptives are high effectiveness, last up to 8-12 weeks, decreased dysmenorrhoea which causes reduced anemia, success rate between 99% and 100% in preventing pregnancy, can be given post-delivery, post-miscarriage, does not interfere with the excretion of milk and development of the baby and does not decrease because of diarrhea, vomiting, or use of antibiotics (Williams JK, 2010). Contraceptive injection is a way to prevent pregnancy by injection containing a liquid containing substances in the form of the hormones estrogen and progesterone or only progesterone for a certain period of time (Hall PE, 2018)

II. Case report

Data for Ogan Ilir Regency in 2017 the number of kb injection acceptors was 27012 people, in 2018 the number of kb injection acceptors was 28510 people, while in 2019 the number of kb injection acceptors was 30636 people (public health Office, 2019). Initial data obtained from the Community Health Center Igan Ilir based on the 2019 the report, the total of 1534 acceptors as many as 1264 active participants, and 270 postal family planning participants.

Table 4.1
Frequency Distribution Based on Injection Contraceptive Use

| Injection Contraceptive | Frequency (N) | Percentage (%) |
|-------------------------|---------------|----------------|
| Yes | 116 | 58,3 |
| No | 83 | 41,7 |
| Amount | 199 | 100 |

Table 4.2
Relationship Between Fertile Age Women Against Use of Injectable Contraceptives

| Women of childbearing age | Injection Contraceptive | | | | Amount | | OR 95% CI | p Value |
|---------------------------|-------------------------|------|----|------|--------|-----|---------------------|------------|
| | Yes | | No | | N | % | | |
| | n | % | n | % | | | | |
| Women of childbearing age | 98 | 64,1 | 55 | 35,9 | 153 | 100 | 2,772 (1,407-5,460) | 0,005 |
| Women are not fertile | 18 | 39,1 | 28 | 60,9 | 46 | 100 | | |
| Amount | 116 | | 83 | | 199 | | | |

Table 4.3
The Relationship Between History of Contraceptives and Use of Injectable Contraceptives

| History of Contraceptives | Injection Contraceptive | | | | Total | | OR 95% CI | p Value |
|---------------------------|-------------------------|------|----|------|-------|-----|------------------------|------------|
| | Yes | | No | | N | % | | |
| | n | % | n | % | | | | |
| Yes | 95 | 64,2 | 53 | 35,8 | 148 | 100 | 2,561 (1,335-4,910) | 0,007 |
| No | 21 | 41,2 | 30 | 58,8 | 51 | 100 | | |
| Amount | 116 | | 83 | | 199 | | | |

Table 4.4
Relationship Between Number of Children and Use of Injectable Contraceptives

| Number of Children | Injection Contraceptive | | | | Amount | | OR 95% CI | p Value |
|--------------------|-------------------------|------|----|------|--------|-----|-----------------------------|------------|
| | Yes | | No | | | | | |
| | N | % | n | % | N | % | | |
| High | 92 | 63,9 | 52 | 36,1 | 144 | 100 | 2,285 (1,215 – 4,300) | 0,015 |
| Low | 24 | 43,6 | 31 | 56,4 | 55 | 100 | | |
| Amount | 116 | | 83 | | 199 | | | |

Tabel.4.5
The Relationship Between Education and the Use of Injectable Contraceptives

| Education | Injection Contraceptive | | | | Amount | | OR 95% CI | p Value |
|-----------|-------------------------|------|----|------|--------|-----|-----------------------------|------------|
| | Yes | | No | | | | | |
| | n | % | n | % | N | % | | |
| High | 92 | 63,4 | 53 | 36,6 | 145 | 100 | 2,170 (1,151 – 4,092) | 0,024 |
| Low | 24 | 44,4 | 30 | 55,6 | 54 | 100 | | |
| Amount | 116 | | 83 | | 199 | | | |

Tabel.4.6
The Relationship Between Work and Use of Injection Contraceptives

| Work | Injection Contraceptive | | | | Total | | OR 95% CI | p Value |
|------------|-------------------------|------|----|------|-------|-----|-----------------------------|------------|
| | Yes | | No | | | | | |
| | n | % | n | % | N | % | | |
| Work | 88 | 65,2 | 47 | 34,8 | 135 | 100 | 2,407 (1,311 – 4,420) | 0,007 |
| Don't Work | 28 | 43,8 | 36 | 56,2 | 64 | 100 | | |
| Amount | 116 | | 83 | | 199 | | | |

Tabel.4.6
Independent Variables Entering the Multivariate Model Candidates

| Variabel | Log-Likelihood | OR | P Value |
|---------------------------|----------------|-------|---------|
| Women of childbearing age | 261,432 | 2,772 | 0,005 |
| History of Contraceptives | 262,192 | 2,561 | 0,007 |
| Number of Children | 263,721 | 2,285 | 0,015 |
| Education | 264,585 | 2,170 | 0,024 |
| Work | 262,119 | 2,407 | 0,007 |

Tabel.4.7
Results of Logistic Regression Multivariate Analysis Between Fajr and Occupational Women With Injectible Family Planning Incidents

| Variabel | B | P-Value | OR | 95 % CI |
|---------------------------|--------|---------|-------|---------------|
| Women of childbearing age | ,915 | ,010 | 2,496 | 1,249 - 4,986 |
| Work | ,778 | ,014 | 2,177 | 1,169 - 4,055 |
| Constant | -2,503 | ,000 | ,082 | |

III. DISCUSSION

Based on the Chi-Square statistical test, p value = 0.005 means $\leq \alpha$ (0.05) which indicates that there is a significant relationship between women of childbearing age and the use of injection contraceptives, so the hypothesis that there is a relationship between women of childbearing age and the use of injection contraceptives statistically. the Chi-Square statistical test, p value = 0.007 means $\leq \alpha$ (0.05), which indicates that there is a significant relationship between family planning history and injection contraceptive use, so the hypothesis that there is a relationship between family planning history and use injectable contraceptives statistically. Based on the Chi-Square statistical test, p value = 0.001 means $\leq \alpha$ (0.05) which indicates that there is a significant relationship between the number of children and the use of injectable contraceptives, so the hypothesis that there is a relationship between the number of children and the use of injectable contraceptives is statistics. And than the Chi-Square statistical test, the p value = 0.002 means $\leq \alpha$ (0.05) which indicates that there is a significant relationship between education and the use of injectable contraceptives, so the hypothesis that there is a statistical relationship between education and injection contraceptive use. Based on the Chi-Square statistical test, p value = 0.007 means $\leq \alpha$ (0.05) which indicates that there is a significant relationship between work and the use of injectable contraceptives, so the hypothesis that there is a relationship between work and the use of injectable contraceptives is statistically.

IV. CONCLUSION

The results of this study are known to have a significant relationship between women of reproductive age, history of family planning, number of children, education and work with injection contraceptives where women of reproductive age ($p = 0.005$), history of family planning ($p = 0.007$), children ($p = 0.015$), education ($p = 0.024$) and work ($p = 0.007$). Multivariate analysis showed that the variable with the greatest influence on the use of injection contraceptives was women of childbearing age and if this was done the order was as follows: women of reproductive age OR: 2.496 (95% CI: 1.249 - 4.986) $p = 0.010$, occupation OR: 2.177 (95% CI: 1.169 - 4.055) $p = 0.014$

REFERENCES

- [1.] Bahamondes L, Juliato CT, Villarreal M, Sobreira- Lima B, Simoes JA, Dos Santos Fernandes AM. Bone mineral density in users of two kinds of once-a-month combined injectable contraceptives. *Contraception*. 2016;74:259–63. [PubMed] [Google Scholar]
- [2.] Cromer BA, Smith RD, Blair JM, Dwyer J, Brown RT. A prospective study of adolescents who choose among levonorgestrel implant (Norplant), medroxy progesterone acetate (Depo-Provera), or the combined oral contraceptive pill as contraception. *Pediatrics*. 2019;94:687–94. [PubMed] [Google Scholar]
- [3.] D’Arcangues C, Snow RC. Injectable contraceptives for women. In: Rabe T, Runnebaum B, editors. *Fertility Control-Update and Trends*. Berlin: Springer-Verlag; 2009. pp. 121–49. [Google Scholar]
- [4.] Fraser IS, Dennerstein GJ. Depo-Provera use in an Australian metropolitan practice. *Med J Aust*. 2009;160:553–6. [PubMed] [Google Scholar]
- [5.] Garza-Flores J, Moraks del Olmo A, Fuziwarra JL, Figueroa JG, Alonso A, Monroy J, et al. Introduction of cyclofem once-a-month injectable contraceptive in Mexico. *Contraception*. 2018;58:7–12. [PubMed] [Google Scholar]
- [6.] Gupta N, O’Brien R, Jacobsen LJ, Davis A, Zuckerman A, Supran S, et al. Mood changes in adolescents using depot-medroxy progesterone acetate for contraception: a prospective study. *J Pediatr Adolesc Gynecol*. 2011;14:71–6. [PubMed] [Google Scholar]
- [7.] Hall PE. New once-a-month injectable contraceptives, with particular reference to Cyclofem/ Cyclo-Provera. *Int J Gynecol Obstet*. 2018;62:S43–56. [PubMed] [Google Scholar]
- [8.] Warwick DP. Culture and the management of family planning programs. *Stud Fam Plann*. 2018;19:1–18. [PubMed] [Google Scholar]
- [9.] Westhoff C. Depot medroxy progesterone acetate contraception. Metabolic parameters and mood changes. *J Reprod Med*. 2016;41:401–6. [PubMed] [Google Scholar]
- [10.] Williams JK. Noncontraceptive benefits of oral contraceptive use: an evidence-based approach. *Int J Fertil Womens Med*. 2010;45:241–7. [PubMed] [Google Scholar]