Dominant factors on selection of contraception toward new family planning acceptors in public health center area in Padang

Chamy Rahmatiqa*, Helena Patricia

Department of Public Health, STIKES Syedza Saintika, Padang, Indonesia

Received: 09 March 2020
Revised: 13 April 2020
Accepted: 15 April 2020

*Correspondence:
Dr. Chamy Rahmatiqa,
E-mail: chamyrahmatiqa@gmail.com

ABSTRACT

Background: The use of family planning or as known as KB in Indonesia from 1970 to 2017 has increased significantly. The most use of KB in non MKJP was injection 70% and pill 21%. The use of this method was very influential on the level of family planning continuity. Viewed from the 2012 SDKI, the dropout rate in the injection method was 40.7%. This phenomenon has contributed to the stagnation of the total fertility rate and ultimately still impact to the high maternal mortality rate in Indonesia.

Methods: This analytic study was conducted with a cross sectional approach. The populations in this study were all new family planning acceptors and samples of 114 people were taken by random sampling technique. The data collection was a questionnaire with data analysis using chi-square test.

Results: More types of contraception were non MKJP (66.4%), more early adult age (60.8%), education level was more than half of low education (54.4%), and most of the mothers were unemployed (76.8). The parity were more than 1 and 2 children (52.8%), more contraceptive goals who did not want their children (60%), and the low support of their husbands was more than the high support of their husbands (55%). There was a relationship between age, education level, work status, parity, contraceptive goals, and husband support with the selection of contraceptive methods in new family planning acceptors.

Conclusions: The dominant factor on selection of contraception toward new family planning acceptors was husband support.

Keywords: External factor, Family planning acceptor, Internal factor

INTRODUCTION

According to WHO in 2017 in developing countries and developed countries, users of contraception are mainly women who have reasons for using contraception, as biological, individual and social reasons, avoiding extra-marital or premarital pregnancy and preventing unwanted pregnancies after reaching the number of children as their will. According to Huang (2014), the success of KB program from year to year is seen in the increase in contraceptive prevalence rate (CPR) as well as the average rate of decline in the number of children born total fertility rate (TFR). According to Bowers, contraceptive failure causes around 20 million unwanted pregnancies in developing countries each year. This has consequences for women and children they bear in terms of health as well as others. Indonesian women receive contraception after childbirth usually obtained from various health facilities and various types of providers such as in hospitals with doctors or in maternity clinics with midwives. The 2012 SKDI data states that the highest contraceptive failure rates are women who use periodic contraception (28.9%), interrupted intercourse (24.6%) condoms (14.5%) and pills (10.9%).
The success of family planning is not only measured by the increased prevalence of CPR and TFR due to the demographic influence of contraceptive use but also the effectiveness and duration of contraceptive use. Huang et al revealed that the selection of contraceptive use desired by prospective users of contraception after childbirth is one indication where users use contraception properly, consistently, and correctly so that the number of contraceptive failure becomes relatively low. Many alternative contraceptives can be used as needed, but users must be selective because not all contraceptives are suitable for everyone. Inconsistencies in using contraception are improper use and the right result in unwanted pregnancy. In the Septalia et al research study, explained that the choice of contraception was in accordance with the conditions and needs at the time. Couples of childbearing age whose conditions are only adequate with traditional contraception thus this couple only uses it and vice versa. Uncontrolled birth control results in an uncontrolled TFR also indirectly and directly is the number of unwanted pregnancies becoming uncontrolled. In addressing this problem, the government has implemented a rational, effective and efficient contraceptive use policy, including the use of the long-term contraception method (MKJP). Based on the data, there is a tendency for contraceptive use patterns which are considered irrational, where out of 57.9 percent of the CPR, 47.3 percent use the non-long term contraception method (Non MKJP) and only 10.6 percent use MKJP. The pattern of using the long-term contraception method even tended to decrease, namely 18.7 percent in 1991 to 10.6 percent in 2012. The high use of non MKJP also occurred in new KB acceptors, which was 82.48 percent, while those using MKJP were only 17.52 percent, whereas nationally the MKJP target was 27 percent.

By seeing the high discontinuation rates for Non MKJP users, it is feared that more drop out will occur. This has contributed to the stagnation of the TFR and ultimately the impact of the still high maternal mortality rate in Indonesia. The low use of MKJP in Indonesia is caused by many factors, including internal factors (age, education, work status, number of children, purpose of using contraception) and external factors (family including support from husband, community and officers).

METHODS

This analytic observational study was carried out using a cross sectional study approach. This research was conducted from May to December 2019 in five (5) working area of Padang City Health Center which included Lubuk Buaya, Nanggalo, Air Tawar, Padang Pasir, and Lubuk Begalung.

The population of this research was the new KB acceptor with a sample of 114 people. Random sampling technique was based on individual groups. The inclusion criteria in this study was a pair of new wear KB whereas exclusion criteria were the couples who do not want to be interviewed three times. Participants were given informed consent for ethical approval in the study. Data collected included the type of contraception, age, level of education, parity, employment status, in the form of categories. The process of data collection was by means of the respondents filling out the questionnaire provided. Data analysis was done using SPSS 10.07 program. The data analysis model used was the chi-square test.

RESULTS

The results showed that the most dominant type of contraception in new KB acceptors was the use of non-MKJP such as injections, pills, and condoms compared to MKJP. Analyzing internal factors in the selection of new family planning to get results was at the age of early adulthood more than late adulthood, the level of education of respondents more at low levels of education, mothers who do not work more than mothers who work, more respondents only have 1-2 child, as well as the purpose of using contraception is not wanting the child. In external factors was the lower support of husbands in new KB acceptor users in the city of Padang (Table 1).

| Variable                  | F  | %  |
|---------------------------|----|----|
| **Type of contraception** |    |    |
| Non-MKJP                  | 83 | 66.4 |
| MKJP                      | 42 | 33.6 |
| **Age**                   |    |    |
| Early adult               | 76 | 60.8 |
| Late adult                | 49 | 39.2 |
| **Education level**       |    |    |
| Low                       | 68 | 54.4 |
| High                      | 57 | 45.6 |
| **Working status**        |    |    |
| Work                      | 29 | 23.2 |
| Jobless                   | 96 | 76.8 |
| **Parity**                |    |    |
| Less than 2 kids          | 66 | 52.8 |
| More than 2 kids          | 59 | 47.2 |
| **Aim of contraception**  |    |    |
| Willingness of having child | 50 | 40  |
| Unwillingness             | 75 | 60  |
| **Husband’s support**     |    |    |
| High                      | 56 | 44.8 |
| Low                       | 69 | 55.2 |
| Total                     | 125| 100 |

In the bivariate analysis it was found that there was a relation between age, education level, work status, parity, and contraceptive goals (internal factors) with the selection of new contraception. On the external factor was the husband’s support there was a relation with the choice of contraception in new family planning acceptors in the city of Padang (Table 2).
In multivariate analysis, it was found that choosing variables that were considered important to enter the model by maintaining variables that have a p-value < 0.05 and removing variables that p-value > 0.05. Variable expenditure incremental starts from the variable that has the largest p-value. The results of the multivariate modeling analysis above show that there were several variables that have a p-value > 0.05 so that they must be phased out from the modeling starting with the variable that has the largest p-value. Variables issued sequentially are contraceptive goals and age (Table 3).

After being issued one by one, it is seen the change in OR value for other variables. There is no change in the value of OR > 10% after the variables are released gradually. Multivariate test results indicate that the variables that are significantly related to the selection of contraception in new family planning acceptors are husband support, education level, employment, and parity. The results of the multivariate final modeling also showed that New KB acceptors who have low husband support have 7.3 times the chance to choose non-MKJP contraceptives compared to New KB acceptors who have high husband support, New KB acceptors who have a parity of more than two.

### Table 2: Bivariate analysis.

| Variable                  | Type of contraception | Non MKJP |       | MKJP |       | Total |       | P value |
|---------------------------|-----------------------|----------|-------|------|-------|-------|-------|---------|
|                           |                       | N       | %    | N    | %    | N     | %     |         |
| **Age**                   |                       |         |      |      |      |       |       |         |
| Early adult               |                       | 57      | 68.7 | 19   | 45.3 | 76    | 60.8  | 0.019   |
| Late adult                |                       | 26      | 31.3 | 23   | 54.8 | 49    | 39.2  |         |
| **Education level**       |                       |         |      |      |      |       |       |         |
| Low                       |                       | 51      | 61.4 | 17   | 40.5 | 68    | 54.4  | 0.042   |
| High                      |                       | 32      | 38.6 | 25   | 59.5 | 57    | 45.6  |         |
| **Working status**        |                       |         |      |      |      |       |       |         |
| Work                      |                       | 70      | 84.3 | 26   | 61.9 | 96    | 76.8  | 0.010   |
| Jobless                   |                       | 13      | 15.7 | 16   | 38.1 | 29    | 23.2  |         |
| **Parity**                |                       |         |      |      |      |       |       |         |
| Less than 2 kids          |                       | 52      | 62.7 | 14   | 33.3 | 66    | 52.8  | 0.004   |
| More than 2 kids          |                       | 31      | 37.3 | 28   | 66.7 | 59    | 47.2  |         |
| **Aim of contraception**  |                       |         |      |      |      |       |       |         |
| Willingness of having child |                   | 27      | 32.5 | 23   | 54.8 | 50    | 40    | 0.028   |
| Unwillingness             |                       | 56      | 67.5 | 19   | 45.2 | 75    | 60    |         |
| **Husband’s support**     |                       |         |      |      |      |       |       |         |
| High                      |                       | 44      | 53   | 12   | 28.6 | 56    | 44.8  | 0.016   |
| Low                       |                       | 39      | 47   | 30   | 71.4 | 69    | 55.2  |         |
| **Total**                 |                       | 83      | 100  | 42   | 100  | 125   | 100   |         |

Source: Data processing for the 2012 IDHS, unweighted data

### Table 3: Multivariate modeling.

| Variables         | B     | Wald | P value | OR   | 95% CI     |
|-------------------|-------|------|---------|------|------------|
| Husband’s support | 2.230 | 15.259 | 0.000 | 9.296 | 3.037-28.452 |
| Age               | 0.852 | 3.031 | 0.082  | 2.344 | 0.898-6.6114 |
| Education level   | 1.056 | 4.831 | 0.028  | 2.875 | 1.121-7.371 |
| Occupation        | 1.185 | 4.835 | 0.028  | 3.270 | 1.137-9.403 |
| Parity            | 1.548 | 8.584 | 0.003  | 4.702 | 1.669-13.245 |
| Aim of contraception | -0.612 | 1.446 | 0.229  | 0.542 | 0.200-1.470 |

### Table 4: Final modeling.

| Variables         | B     | Wald | P value | OR   | 95% CI     |
|-------------------|-------|------|---------|------|------------|
| Husband’s support | 1.996 | 14.217 | 0.000 | 7.359 | 2.608-20.767 |
| Education level   | 1.144 | 5.785 | 0.016  | 3.045 | 1.229-7.545 |
| Occupation        | 1.351 | 6.801 | 0.009  | 3.861 | 1.399-10.656 |
| Parity            | 1.807 | 13.135 | 0.000 | 6.092 | 2.293-16.186 |
children have a 6 chance times to choose non-MKJP contraceptives compared to New KB acceptors who have who have a parity of less than two children.

New KB acceptors who do not work have a 3.8 times chance of choosing non-MKJP contraceptives compared to new KB acceptors who work, new KB acceptors with a low education level have a 3 times chance of choosing non-MKJP contraception compared to new KB acceptors with higher education. Husband's support has the highest OR value, so it can be concluded that husband's support is the most influential variable in the selection of contraceptives in the new KB acceptor (Table 4).

DISCUSSION

The results of this study found that there was a relationship between age, education level, parity, and employment status with the type of contraception. In this age variable, age is the length of time of life or existence (since birth or held). A person's age determines the method of contraception to be chosen. The older age of a person will increase the likelihood of not wanting another pregnancy and choosing the right and effective method of contraception. According to the assumptions of age researchers determine the chosen contraception. In women of childbearing age <20 years is the phase of delaying pregnancy so many choose simple contraceptive methods such as pills. Women of childbearing age aged 20-35 years are sparse phases of pregnancy so they tend to choose the short-term contraceptive method, namely injection. Meanwhile, >35 years may not have it. In this educational variable, education is one of the factors that determine the choice of a contraceptive method because a higher level of education is able to absorb information and side effects for health related to the use of a contraceptive method. According to the analysis of researchers, there is a relationship between the level of education with the selection of new family planning acceptors because education is one of the very determining factors on a person's knowledge and perception of the importance of something, including the importance of participation in family planning. It is caused highly educated people will generally have broader views and are more receptive to new ideas and things (innovative). The higher the level of one's education is the more rational in making various decisions.

On work variable, work is a task that is carried out every day where the task can be done for a living earning a living. Work is to do work with the intention of obtaining or helping to earn income or profits and the duration of working at least one hour continuously, including unpaid family workers who help in a business or economic activity. In general, the main reason for women to work is to help the family economy. The current situation is uncertain, the price of basic family needs has increased but family income has not increased so the result is disruption of family stability. According to opinion of researchers, women who work will get a lot of information from peers so that it can expand knowledge. Later, women of childbearing age will be able to easily determine which contraception is the most effective and efficient.

This parity variable, parity is the number of live births a woman has. Parity and children are still living very closely related to the level of welfare. In families with high levels of welfare, it is generally more concerned with the quality of children than the quantity of children. Meanwhile, in poor families children are considered to have economic value. Thus, poor families have more children than well-off families. According to the researchers' analysis, there is a significant relationship between parity and contraceptive selection. Mothers who give birth once or more will tend to choose to use contraception. Childbirth is 1 or 2 times more likely to choose a non-MKJP contraceptive method and a short-term contraceptive method. While mothers who give birth >2 times prefer long-term contraceptive methods. On the purpose variable to use contraception, the use of contraception aims to delay the birth of the first child, spacing and terminating pregnancy. Acceptors are free to choose the method of contraception; women who have two children are preferred to have the most effective method of contraception. According to the researchers' analysis, the purpose of using contraception is related to the choice of contraception. Women who want to have children tend to use short-term contraception such as injections, pills, and condoms. While women who do not want to have children tend to use long-term contraception such as IUDs, Implants, and sterilizers. In the husband's support variable, the use of contraception is a joint responsibility of men and women as a partner, so the method of contraception chosen reflects the needs and desires of husband and wife. Husband and wife must support each other in the use of contraceptive methods.

According to the researchers' analysis, there is a relationship between husband's support and the selection of contraceptives for new KB acceptors. Support from the husband in the use of contraception is needed because of the sense of comfort to use contraception. A married couple together chooses what is comfortable in order to make it comfortable when having intercourse, thinking about the costs of the two of them as well as noticing signs and dangers. The compatibility between a contraceptive methods for each person depends on a number of factors. In deciding which method to use is influenced by personal interests, health considerations, costs, accessibility, and cultural environment. According to the researchers' assumptions, the greatest influence in the decision making to choose a contraceptive method is the husband. This is because the Indonesian people, especially Padang, still assume that the husband is making all the decisions that exist in a family. Therefore, the tendency to follow the husband's orders is greater. Thus, in providing family planning services it is necessary to involve the husband.
CONCLUSION

Conclusion in this study, has the dominant factor of this research is the support of the husband. In Padang, the husband is the most obeyed in the family. This is the culture of the east and still strong in the area of Padang.

ACKNOWLEDGEMENTS

Authors show gratitude to the Ministry of Research and Technology and the Ministry of Higher Education in particular given the beginner lecturer grant in the 2019 period. They also convey to those who helped in this research, namely students of the STIKES Syedza Sainitka.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. WHO U, Mathers C. Global strategy for women's, children's and adolescents' health (2016-2030). Organization. 2017;2016(9).
2. Huang Y, Merkatz R, Zhu H, Roberts K, Sitruk-Ware R, Cheng L, et al. The free perinatal/postpartum contraceptive services project for migrant women in Shanghai: effects on the incidence of unintended pregnancy. Contraception. 2014;89(6):521-7.
3. Bowers RC, Hatfield Kresch M, Roy A, Lancaster D, Yoost JL. Failure of effective contraception in opioid addicted mothers: a disparity in planned and actual usage. Marshall J Med. 2019;5(1):41-9.
4. Saptarini I, Suparmi S. Determinants of unwanted pregnancy in Indonesia (Riskesdas 2013 secondary data analysis). Indonesian J Reprod Health. 2016;7(1):15-24.
5. Nasional BK. Survey demografi dan kesehatan Indonesia (SDKI) 2012. Jakarta: BKKBN. 2013.
6. Huang YM, Merkatz R, Kang JZ, Roberts K, Hu XY, Di Donato F, et al. Postpartum unintended pregnancy and contraception practice among rural-to-urban migrant women in Shanghai. Contraception. 2012;86(6):731-8.
7. Nuryanti S, Fitria D. The effect of internal factors and external factors on selection of contraception tools in new kb acceptors in Bogor regency. J Ilmiah Kesehatan Diagnosis. 2014;5(5):632-8.
8. Septalia R, Puspitasari N. Factors that influence the choice of contraception method. J Biometrika dan Kependudukan. 2017;5(2):91-8.
9. Nasional BK. Keluarga berencana dan kesehatan reproduksi: kebijakan, program, dan kegiatan tahun 2014-2019. Jakarta, 2018.
10. Nasution SL. Factors affecting the use of mkjp in six areas of Indonesia. National planning and development center for prosperous family and population family and national planning in 2011. Jakarta: BKKBN. 2011.
11. Asih L, Oesman H. Further Analysis of the 2007 IDHS. Factors Influencing Long-Term Use of Contraception. Research Report. Jakarta: KB and Kespro, BKKBN, Jakarta, Indonesia, 2009.
12. Salviana S, Hasifah H, Suryani S. Factors affecting the low interest for using the hormonal contraception method (implant) in KB acceptors in Puskesmas Kassi-Kassi Makassar. J Ilmiah Kesehatan Diagnosis. 2013;2(4):117-26.
13. Province V. Related factors to the use of hormonal contraceptives methods in family planning acceptor in Pasarwajo village Pasarwajo district Buton region province of south east Sulawesi: Jour; 2013.
14. Mahmudah LTN, Indrawati F. Analysis of factors related to the selection of long term contraception method (MKJP) in women's kb acceptors in Banyubiru district, Semarang district. Unnes J Public Health. 2015;4(3).
15. Budiarti I, Nuryani DD, Hidayat R. Determinants of long-term contraception method (MKJP) use in family planning acceptors. Jurnal Kesehatan. 2017;8(2):220-4.
16. Bernadus JD, Madianung A, Masi G. Factors related to selection of contraception tools in Rahim (IUD) for KB acceptors in Jailolo health center. e-NERS. 2013;1(1).
17. Afsari S. Factors influencing family planning acceptors in choosing contraception at the Jumpandang Baru Health Center in Makassar. Undergraduate (S1) thesis, Alauddin State Islamic University Makassar; 2017.

Cite this article as: Rahmatiqa C, Patricia H. Dominant factors on selection of contraception toward new family planning acceptors in public health center area in Padang. Int J Community Med Public Health 2020;7:2100-4.