A Comparison of Natural Family Planning Knowledge among Family Planning Counselors in South Sulawesi

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Abstract—The research is a descriptive study aimed to investigate the understanding of Family Planning counselors on Natural Family Planning (NFP) methods. Although the information about Family Planning Services already available, the level of participation on Family Planning is still low, especially on NFP. One of the factors causing this phenomenon is the inadequate information provided by doctors, nurses, and family planning counselors. In order to encourage community participation through NFP methods, their understanding of how reproductive cycles relate with a fertile period should be enhanced. For this purpose, Family planning counselors play an important role, as they are responsible for providing reliable information for the community. Accordingly, an assessment of the counselors’ level of knowledge on NFP as well as the different level of knowledge among Family Planning counselors in cities and districts. The study population was all family planning counselors in South Sulawesi, and a total of 45 counselors from two regencies and one city participated as the study sample. The data of the counselors’ knowledge were collected using an objective test and essay questions regarding NFP methods. The result showed that the average knowledge regarding NFP methods of Family Planning counselors in Makassar City was higher than the counselors from Maros and Gowa regencies.

Keywords—family planning, natural family planning, family planning counselor

I. INTRODUCTION

The jargon of “two children are better” is repeatedly used by family planning counselors to replace the jargon of “two children is enough.” Family planning awareness for the middle and higher economic class has begun to grow, especially for mothers who work as an employee in the public or private sector. Moreover, the National Population and Family Planning Board in Indonesia as an information provider for family planning services generally cooperates with Maternal and Child health services at Hospitals, and in clinics of Doctors and Midwives. As a service provider, it should act like a cafeteria of Family Planning services. In other words, it should provide all information regarding various methods of family planning, and the society as prospective consumers have the right to decide the type of family planning methods they want to use.

There are various family planning methods, from the simpler to the more complex methods, from the natural to the modern methods, and from the methods that can be used independently by consumers to the method that requires expert supervision.

All important information regarding family planning methods is actually available in the various form of written sources. However, the availability of the information provided by health workers, doctors, midwives and also by The National Population and Family Planning Board through family planning counselors is still inadequate. In this sense, they're still family planning counselors in The National Population and Family Planning Board who don't know much about various natural family planning methods. When referring to natural family planning, they only explain calendar and coitus interruptus methods, despite the fact that there are various methods of natural family planning from the simple methods without technology, methods with simple technology, to a more complex method with the use of nanotechnology.

There are several benefits of Natural Family Planning Methods for its users, including the absence of side effect, the absence of goods cost, the flexibility to be started and to be stopped at any time. Most importantly, the effectiveness of the natural family planning method can be up to 98% with the correct implementation of the method. The natural family planning methods are deemed free from side effects, while the modern methods usually cause various complaints from its users, such as headaches, obesity, the appearance of dark spots, and heart palpitations. Besides that, natural family planning methods are also considered cheaper compared with the modern methods which require the cost, either to purchase the pills and condoms or to purchase medical treatment for the use of spiral, tubectomy, vasectomy, etc. However, there are also limitations of Natural Family Planning, such as requiring the acceptor understanding regarding how their body works naturally, including an understanding of how their reproductive...
system works, and whether or not they are reproductively healthy.

Another limitation of the natural family planning is its popularity among Indonesian society which is still lower when compared with the popularity of modern methods. Considering the potential of the natural family planning method to be used by the Indonesian society, it is deemed important to invest in the improvement of human resources which can be the sources of information regarding natural family planning. In the Indonesian context, an effort to introduce natural family planning to the society in each district would require natural family planning instructors as part of The National Population and Family Planning Board. Therefore, this study aimed to assess the level of knowledge of the family planning counselors regarding natural family planning. Besides that, this study will also investigate whether or not there is a difference in knowledge level between counselors works in the city and in the Regency. Accordingly, this study aimed to provide a description regarding the knowledge level of natural family planning methods of family planning counselors in South Sulawesi, Indonesia.

II. LITERATURE REVIEW

The Indonesian government has been implementing The Family Planning Program in order to control population growth in Indonesia which has reached 1.3% or around 2.8 million per year. However, the success of the program in controlling population growth in Indonesia is deemed less optimal, as the public participation in the program is still relatively low [1]. There are various factors that cause the low participation of the society in the family planning program, including the lack of knowledge on contraception methods, the fear of possible side effects [1][2], or the view that contraceptive use is contrary to religious beliefs, especially in Indonesian society [3].

Natural family planning is a government program which initially aims to regulate and limit the number of childbirths in every fertile age couple (FEC). However, there was a paradigm shift after the International Conference on Population and Development, as it was agreed that the population control and fertility reduction approach would be better directed towards the reproductive health approach by taking into account reproductive rights and gender equality [4].

Natural family planning method is a method that can be applied to support the implementation of family planning programs promoted by the Indonesian government. The application of natural family planning methods can be used either to plan or to postpone pregnancy by controlling natural biological indicators. In developed countries such as Australia, America, and Japan, and in some Muslim countries, the application of natural family planning has been very developed, since it is considered safer, impermanent, require lower to zero cost. Besides that, the implementation of the natural methods does not require medical supervision and can be learned through self-study method. Moreover, the implementation of the natural family planning methods had been found effective in increasing one’s awareness of body functions and reproductive health, as well as enhancing husband-wife communication and reducing divorce rates [5].

Various natural family planning methods, such as periodic abstinence, coitus interruptus, observation of cervical mucus, and the recording of basal body temperature, are carried out by detecting the fertile period of a woman. This is based on the principle that women can only get pregnant for just a few days in each menstrual cycle, which is known as the fertile period. Therefore, the fertile age couple who participate in a natural family planning program must know how to detect their fertile period. Hence, they would be able to adjust their sexual activity in accordance with their initial purpose of implementing the program, either to delay or to plan a pregnancy. In this case, sexual activity must be avoided during fertile period in order to delay pregnancy, and vice versa in order to plan for pregnancy [6].

III. RESEARCH METHOD

This study is a descriptive study. The study population was family planning counselors in South Sulawesi, and a total of 45 counselors participated in this study. The participants in this study represent three different regions in South Sulawesi, namely Makassar City which represent city area, Maros Regency which represents Bugis tribe, and Gowa regency which represents Makassar tribe. The instrument used in this study consisted of 10 items of objective test questions and 2 items of the essay question. For the objective test question, each correct answer would be given score 1, and each wrong answer would be given score 0. Meanwhile, for the essay question, each correct answer would be given score 5. The data were analyzed by calculating the total score obtained by each individual in each area, then comparing the total score of each area one another. Meanwhile, a thematic qualitative analysis was conducted for the essay questions.

IV. RESULT AND DISCUSSION

A. Descriptive Analysis of Natural Family Planning Knowledge

![Fig. 1. The Result of Descriptive Analysis of Counselor Knowledge of Natural Family Planning](image)

The level of knowledge of family planning counselors in three regions of South Sulawesi Province, namely Makassar, Maros, and Gowa, in this study was measured by using a questionnaire consisting of ten multiple choice items. The results of the descriptive analysis (Fig.1) shows that the average score of counselors in Makassar City is seven, which is higher than the other two regencies. The maximum
and minimum scores of counselors in Makassar City are 9 and 3, respectively. Meanwhile, the maximum and minimum values of counselors in the other two regions are 7 and 1, respectively. 

![Graph showing percentage of correct answers on item P1 to P5](image1)

**Fig. 2. Percentage of Correct Answers on Item P1 – P5**

![Graph showing percentage of correct answers on item P6 to P10](image2)

**Fig. 3. Percentage of Correct Answers on Item P6 – P10**

The results of the question item analysis showed that more than 70% of family planning counselors in the three regions could correctly answer both item one (P1) and item seven (P7). P1 measures the counselors' knowledge about the types of natural family planning methods and can be answered correctly by 93% of Makassar counselors, 73% of Maros counselors, and 80% of Gowa counselors. Meanwhile, P7 measures the knowledge of the observed characteristics on a woman's body at the time of ovulation, namely an increase in basal body temperature. For item P7, Makassar City receives the highest percentage of the correct answer, where all the counselors from Makassar city (100%) could answer the question item correctly. Meanwhile, the percentage of a counselor from Maros and Gowa districts who answered item P7 correctly was 73% and 80%. The high percentage of counselors who can answer both questions (P1 and P7) correctly shows that most counselors in the three regions have known the types of natural family planning methods and the role of body basal temperature as an indicator that can be used to detect fertility.

In addition to the question items with a high percentage of correct answers, two items were found with a low percentage of the correct answer in the three regions, namely item two (P2) and item nine (P9). P2 which measures the knowledge of an effective combination of natural family planning methods can only be answered correctly by 27% of Maros counselors, 13% of Makassar counselors, and 7% of Gowa counselors. This shows the low number of counselors who understand how natural family planning methods can be combined with one another so that their application becomes more effective. Meanwhile, P9, which measures knowledge about the types of menstrual cycles required in order that a woman can successfully implement the natural family planning methods, can only be answered by 7% of counselors from Makassar City and Gowa District. Whereas for Maros Regency, there were no counselors (0%) who answered item nine correctly. The low percentage of counselors who can answer item 9 correctly indicates a misconception among the counselors in South Sulawesi that the natural family planning method is only suitable for women with certain types menstrual cycles, especially women with regular menstrual cycles. Meanwhile, those with irregular menstrual cycle length generally deemed unsuitable to implement the natural family planning method. Such misconception may cause women with an irregular menstrual cycle to decide not to participate in the natural family planning method, despite the fact that there are natural family planning methods that can be implemented by women with an irregular cycle.

In addition to the items with the percentage of correct answers that tend to be uniform in the three regions, there are also items that show a significant difference in the percentage of correct answers among the counselors of three regions, namely item five (P5). P5 measures the knowledge of counselors in recognizing the characteristics of vaginal mucus which can be used as an indicator of the fertile period. Most instructors from Makassar City (80%) can answer item P5 correctly. Meanwhile, only a small percentage (27%) of counselors from Maros Regency and no counselors from Gowa Regency (0%) who were able to answer the item correctly.

The difference in the percentage of correct answers on item P5 indicating that there is a difference in the level of knowledge among family planning counselors in the three regions regarding the vaginal mucus observation as a method of determining fertile period. One of the factors that may lead to the differences was due to the natural family planning training that had been attended by the counselors from Makassar City. In this case, a natural family planning training had been provided for family counselor in Makassar City in 2013. Meanwhile, the counselors from Maros and Gowa have never attended natural family planning training before.

In addition to the difference in their participation in a natural family planning training, observations of the level of education of the counselor in the three regions showed that 46% of Makassar City counselors participated in this study were graduated from Public Health Department and 26% of them already hold a Masters’ degree in Public Health. Meanwhile, an analysis of the educational qualifications of counselors from Gowa District shows that 13% were graduated from social major, 0.06% are Masters of Science, and the rest are high school and Diploma graduates. Meanwhile, for Maros regency, 0.06% were graduated from the education department, and the rest were high school and diploma graduates. The suitability of family planning counsellors’ education qualifications in the city of Makassar with their role as a family planning counsellor that requires an understanding of the human reproductive cycle,
especially to provide knowledge about natural family planning methods, could be one of the factors that led to the high achievement of counsellors from Makassar City on the natural family planning tests.

B. Thematic Qualitative Analysis of Essay Test Item

An essay question assessing the initial knowledge of the counselors regarding natural family planning methods showed that the counsellors from Makassar City could explain the type of Natural Family Planning methods. Their answer to the question including methods to prevent pregnancy without using modern contraceptives, without using condoms, without using hormones which are chemicals, with coitus interruptus, by calculating the fertile period (calendar system), observation of fertile mucous, measurement of body temperature, the menstrual cycle must be regular. It was also explained that the natural family planning is methods that are adapted to the physiology of the female body in the menstrual cycle, which does not require medical supervision during its implementation.

When required to calculate fertile period of a woman, a counselor explained that if the first day of the previous menstruation of a woman is on August 20, 2018, the estimated date of the fertile period peak is on September 3rd, 2018, with the fertile period ranged from August 31st to September 7th, 2018. Most of the counselors from Makassar city could provide a correct calculation, particularly in determining the ovulation day in day-14 after the first day of the previous menstruation. However, most of the counselors could not provide a correct prediction of the fertile period.

Counselors from Maros regency provided various responses toward question item which assess their initial understanding regarding natural family planning method. There were counselors who explained natural family planning as a calendar method; a method which utilizes a fertile period; a method without the use of hormone; a method without the use of chemical and contraception. Besides that, there were also counselors who hear the term natural family planning from the first time, thus could not provide any explanation regarding the method. Meanwhile, while required to calculate the fertile period of a woman, most of the counselors from Maros regency provided incorrect answers, as they explained that the fertile period is one or two weeks after menstruation. There were also several counselors who could not provide any calculation to predict fertile period.

Counselors from Gowa regency explained that natural family planning is a method for people who do not want or does not suitable with the use of either the contraceptive device or the pills to avoid pregnancy. However, there are also counselors from Gowa regency who explained that natural family planning is a highly safe method for the fertile-aged couple as it is based on the natural characteristics of body physiology. Besides that, several counselors also explained that natural family planning is the method for women to detect fertile period by utilizing calendar with a regular menstrual cycle. There were also several counselors who could not provide an answer to the question. Meanwhile, while required to calculate the fertile period of a woman, most of the counselors from Gowa provided an incorrect calculation of ovulation and fertile period. Moreover, several counselors could not provide an answer to such a question.

V. CONCLUSION

The study found that the average knowledge of family planning counsellors from Makassar regarding natural family planning methods was higher than the counsellors from Maros and Gowa regencies.

REFERENCES