Family Approach Model in Affecting Cognitive and Psychomotor of Women of Reproductive Age to Use Long-term Contraceptive Method

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ABSTRACT

Background: Family planning and birth control is a program launched by the government to overcome population problems. Based on the Indonesian health profile in 2016, the new and active family planning participants mostly preferred injections and tablets (short-term contraception). The use of short-term contraception tends to decrease the continuity of contraceptive use. It may affect the fertility rate. The family approach model was expected to be able to contribute in overcoming population problems, especially in making decisions for the use of the Long-term Contraceptive Method. This study aimed to determine the family approach model in affecting cognitive and psychomotor of women of reproductive age to use long-term contraceptive method.

Subjects and Method: This was a quasi experimental study with pre and post designs. This study was conducted at the Ngampel village, Mojoroto District, Kediri City, East Java, from June to July 2019. This study population was all women of reproductive age. A sample of 30 women of reproductive age was selected by purposive sampling. The dependent variable were the cognitive and psychomotor aspects. The independent variable was the family approach. The data was collected by questionnaire. The data were analyzed with Mann Whitney.

Results: The cognitive and psychomotor aspects after giving a family approach model to the treatment group (Mean= 6.60) were higher than the control group (Mean= 6.00). The result was statistically significant (p<0.001).

Conclusion: Family approach model can be used as an alternative solution to population problems. The family approach model can affect cognitive and psychomotor aspects. It can contribute to the decision making for the use of the Long-term Contraceptive Method.

Keywords: family approach model, long-term contraceptive method


Cite this as:
Family Approach model”. The targets have been set out in the 2015-2019 National Medium Term Development Plan (RPJMN) (Ferdiansyah, 2016). The family approach was used by the Community Health Center to increase the target and to get closer or increase access to health care in the working area by visiting the family. (Ministry of Health RI, 2016b).

Based on the Indonesia health profile, the new and active KB participants mostly preferred injections and tablets (short-term contraception) as contraception. The use of the Long-term Contraceptive Method for the new KB participants were 20.51% and for the active KB participants were 25.99% (Ministry of Health RI, 2016). Long-term Contraceptive Method is a modern family planning method consisting of implants, Intrauterine Device (IUD), tubectomy, and vasectomy. Besides, the non-Long-term Contraceptive Method consisted of injections, pills, diaphragms, and condoms (Mahmudah and Indrawati, 2015). The use of short-term contraception caused a decrease in the continuity of the use of contraception, thus increasing fertility rate (Manurung, 2015). The low use of Long-term Contraceptive Method was affected by many factors, including age, a number of children, education level, residence, family stages, purposes, and reasons for having KB (Christiani, Diah, and Bambang, 2013).

The family approach model as a health development was expected to overcome basic health problems. Family was the smallest unit of society that has a significant role in determining the degree of public health (Ferdiansyah, 2016). The family approach was expected to be able to contribute in overcoming population problems, especially in making decisions for the use of Long-term Contraceptive Method. Based on the description above, this study aimed to determine the family approach model in affecting cognitive and psychomotor of women of reproductive age to use long-term contraceptive method.

**SUBJECTS AND METHOD**

1. **Study Design**
   This study was a quasi-experimental study with pre and post design. This study was conducted at the Ngampel village, Mojoroto District, Kediri, East Java, Indonesia, from June to July 2019.

2. **Population and Sample**
   The population of the study was all women of reproductive age in Ngampel Village, Mojoroto District, Kediri, East Java, Indonesia. The sample was some of women of reproductive age who met the inclusion criteria. There were 30 respondents as the sample; 15 respondents in the treatment group and 15 respondents in the control group. The inclusion criteria were women of reproductive age who were willing to become respondents, used KB with non-Long-term Contraceptive Method, physically and mentally healthy. The exclusion criteria were women of reproductive age who were pregnant, had a history of infectious diseases, had hereditary diseases such as diabetes mellitus, hypertension, heart disease, or asthma.

3. **Study Variables**
   The independent variable was the family approach. The dependent variables were the cognitive and psychomotor aspects.

4. **Operational Definition of Variables**
   Family approach model was one of the strategies used by health workers to provide health services by visiting families. The health workers officers used the Long-term Contraceptive Method booklet. Cognitive aspects were all things that were known by the women of reproductive age about Long-term Contraceptive Method. Psychomotor aspects were responses that could be assessed by direct intervention or by...
instruments that indicated willingness and efforts that have been conducted.

5. Study Instruments
This study used a set of questionnaires to measure cognitive and psychomotor aspects.

6. Data analysis
The data were analyzed by Whitney test with a significance level of $\alpha=0.05$.

7. Research Ethics
This study was conducted based on the study ethics which consisted of an informed consent form, anonymity, confidentiality by giving a code to each respondent. The ethics test was conducted at the Academy of Midwifery Dharma Husada, Kediri, on 24 June 2019, with Reg. No:003/KEPK-DHARMA HUSADA/2019.

RESULTS
1. Sample Characteristics
Table 1 shows the characteristics of the respondents. Table 1 shows that most of the respondents aged more than 40 years old (43.3%), had high school education level (60.0%), and had a family income of Rp 500,000 to Rp 2,000,000 (46.7%).

Table 1. Sample Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>20-30 years</td>
<td>8</td>
<td>26.7%</td>
</tr>
<tr>
<td></td>
<td>31-40 years</td>
<td>9</td>
<td>30.0%</td>
</tr>
<tr>
<td></td>
<td>$\geq40$ years</td>
<td>13</td>
<td>43.3%</td>
</tr>
<tr>
<td>Education</td>
<td>Elementary School</td>
<td>1</td>
<td>3.3%</td>
</tr>
<tr>
<td></td>
<td>Junior High School</td>
<td>8</td>
<td>26.7%</td>
</tr>
<tr>
<td></td>
<td>Senior High School</td>
<td>18</td>
<td>60.0%</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>3</td>
<td>10.0%</td>
</tr>
<tr>
<td>Family Income</td>
<td>&lt; Rp 500,000</td>
<td>10</td>
<td>33.3%</td>
</tr>
<tr>
<td></td>
<td>Rp 500,000 to Rp 2,000,000</td>
<td>14</td>
<td>46.7%</td>
</tr>
<tr>
<td></td>
<td>$\geq$Rp 2,000,000</td>
<td>6</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

2. Bivariate Analysis
Table 2 shows the differences in cognitive and psychomotor aspects between the control and treatment groups after giving a family approach model. Table 3 shows that cognitive and psychomotor aspects after giving a family approach model to the treatment group (Mean=6.60) were higher than the control group (Mean=6.00). The results were statistically significant ($p<0.001$).

Table 2. The differences in the cognitive and psychomotor aspects between the control and treatment groups using long-term contraceptive method after giving a family approach model

<table>
<thead>
<tr>
<th>Cognitive and Psychomotor Aspects</th>
<th>N</th>
<th>Mean</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>15</td>
<td>5.50</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Treatment</td>
<td>15</td>
<td>6.83</td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>15</td>
<td>6.00</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Treatment</td>
<td>15</td>
<td>6.60</td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION
Based on the result of the study, the family approach model could improve cognitive and psychomotor aspects of women of reproductive age to use Long-term Contraceptive Method. Family was the smallest unit of society that had a significant role in determining the degree of public health
The family approach model was considered to be more effective in overcoming various health problems, including problems in the area of the population through the KB program with Long-term Contraceptive Method. It was different with the counseling. The families were visited directly. This model involved family, especially the husband in making decisions. Besides, counseling was an educational process carried out on a particular group that was assembled at the same time (Majid, 2017).

The implementation of the family approach model could further affect the cognitive aspects of the respondents. Besides the educational process, this model was able to filter out various misinformation that the respondents most likely had, which they received from their relatives, friends, or the mass media which incidentally raised negative issues from the Long-term Contraceptive Method. The family involvement in the educational process, especially husband, would lead to a better understanding because there would be a discussion between husband and wife as a family that would make choices. The educational process was easier because it was supported by the majority of the knowledge level of the respondents that graduated from college. This would facilitate the researchers in the process of facilitating discussion. Increasing cognitive aspects of Long-term Contraceptive Method with a family approach would bring positive changes in determining the use of Long-term Contraceptive Method and increasing participation from husbands as a family in decision making.

The psychomotor aspects in Simpson’s taxonomy came from the observational findings which included perception, set, guided response, mechanism, complex overt response, adaptation and origination (Nurtanto and Sofyan, 2015). The psychomotor aspects assessed in this study consisted of the status of contraceptive use, the activeness in finding information about Long-term Contraceptive Methods, the desire to turn to the Long-term Contraceptive Method, and the efforts if the respondents would or have used Long-term Contraceptive Method. The participation level of Couples of Reproductive Age in using Long-term Contraceptive Method was still very low. There were still many couples who did not want to turn from the non-Long-term Contraceptive Method to the Long-term Contraceptive Method. Based on the result, the majority of the respondents aged more than 40 years (43.33%).

Besides, non-hormonal Long-term Contraceptive Methods such as the IUD, tubectomcy, and vasectomy were highly recommended in high-risk groups; aged more than 35 years. The family approach model could facilitate the husbands and wives in sharing opinions because it required active participation not only by the health workers but also from the prospective acceptors. By visiting the family, it would educate the families to make decisions after going through discussion. As the head of the family, the husbands would always be involved. The implementation of the family approach model was able to overcome the issue of expensive costs from the use of Long-term Contraceptive Method due to the family income of the majority of respondents between Rp 500,000 to Rp 2,000,000 (46.7%). There were free facilities to implant the Long-term Contraceptive Method through KB safari programs that were routinely organized by Women Empowerment and Family Planning Agency (BPPKB). Besides the expensive issue, the family approach model would dismiss the issue of the low participation of men in family planning, because they did
not understand the benefits of Long-term Contraceptive Method (especially Male Fertilization) (Maziyah, 2015). According to Lubis and Lubis (2017), beliefs, hopes, and perceptions motivated husbands to participate in the vasectomy programs. The implementation of the family approach model would further strengthen the cognitive aspects which lead to better understanding. Therefore, the prospective acceptor would consciously make choices (psychomotor aspects) that have been carefully considered. Psychomotor aspects that came from careful and planned considerations would lead to the sustainable use of KB with Long-term Contraceptive Method.

AUTHOR CONTRIBUTION
All authors took participation in writing the manuscript, running data analysis, and suggesting the discussion based on their competencies. All authors read and approved the final version of the manuscript.

CONFLICT OF INTEREST
This study did not have any conflicts of interest.

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REFERENCE
Nurtanto M, Sofyan H (2015). Implemen-
tasi problem-based learning untuk meningkatkan hasil belajar kognitif, psikomotor, dan afektif siswa di SMK.