Syndicate Group Method for Newborn Care with the Knowledge of Posyandu Cadres in the Working Area of the Tamalanrea Health Center, Makassar City

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Abstract

Learning methods are the methods used by teachers in carrying out their functions as a tool to achieve learning goals. The PAI learning method is more procedural in nature. “There is a method for everything, and the method of entering heaven is knowledge. Newborn babies have a high risk of death. The reason is that knowledge and simple care practices such as preventing hypothermia, giving colostrum and exclusive breastfeeding are still very lacking. Cadres are one of the closest people who can influence changes in the behavior of BBL mothers, so that cadres can provide correct information and influence the knowledge of mothers and families if the cadre's knowledge is good. This research aims to obtain information from the analysis of the influence of newborn care education using the Syndicate Group method on the knowledge of posyandu cadres in the working area of the Tamalarea Community Health Center. The method used in this research was a pre-experiment with a one group pretest-posttest approach with a sample of 24 posyandu cadres in the Tamalarea posyandu working area registered by the village midwife. Before the intervention, 58.3% of posyandu cadres were classified as having sufficient knowledge and 66.7% of posyandu cadres were classified as good knowledge after the intervention. Hypothesis analysis using the Wilcoxon Signed Rank Test with α = 0.05 obtained p value = 0.001, which shows that there is a significant influence of newborn care education using the Syndicate Group method on the knowledge of posyandu cadres. It is hoped that the community health center and village midwives can continue efforts to increase cadre knowledge using interactive methods such as Syndicate Groups and other methods, so that the role of cadres becomes more optimal.
1. Introduction

The Infant Mortality Rate (IMR) in Indonesia continues to decline every year. However, there is still a long way to go in fighting IMR. The results of the Indonesian Demographic and Health Survey (SDKI) show that the IMR has experienced a significant decline from year to year. From 68 deaths per 1,000 live births in 1991, to 24 deaths per 1,000 live births in 2017. However, recent developments from several regions in the country show that the IMR has fluctuated.

Infant death can be caused by many things. Starting from pregnancy poisoning, bleeding during childbirth, respiratory failure (asphyxia), low birth weight, infection, and other factors. Accelerating the reduction of IMR is one of four priorities that are the focus of the Healthy Indonesia program through a family approach held by the Indonesian Ministry of Health. In efforts to reduce MMR and IMR, commitment and support across programs, across sectors and active community participation are very necessary. All the efforts above must be carried out continuously and sustainably. (Anindhita Maharani, 2019).

Newborn babies (BBL) have a high risk of death. The reason is that knowledge and practice of simple treatments such as preventing hypothermia and exclusive breastfeeding are still very lacking. Cadres are one of the closest people who can influence the behavior of BBL mothers, so that cadres can provide correct information and influence the knowledge of mothers and families if the cadre's knowledge is good. Before the intervention, 50% of posyandu cadres were classified as having sufficient knowledge and 58.3% of posyandu cadres were classified as good knowledge after the intervention was carried out. (Rizqi Fauziyah Rofif, et al, 2019).
Health education is an effort to persuade or teach the community so that people want to take action to maintain and improve the level of their health. So it can be concluded that health education is a form of activity to convey material about health which aims to change target behavior (Notoatmodjo, 2010).

a. Goals of health education
   1) There has been a change in attitude
   2) Individual behavior
   3) Family
      Special groups and communities in developing and maintaining healthy living behavior and playing an active role in efforts to achieve optimal health status. (Nursalam and Efendi, 2008)

b. Health education goals
   1) Primary target (Primary Target) The community in general is the direct target of all educational or health promotion efforts.
   2) Secondary targets are community leaders, religious leaders, traditional leaders, and so on.
   3) Tertiary targets: Decision makers or policy makers at both the central and regional levels. (Notoatmodjo, 2010)

c. Scope of health education the scope of health education is divided into 3 dimensions, namely:
   1) Target dimensions
      a) Individual health education and its targets, namely individuals.
      b) Group health education and its targets, namely certain community groups.
      c) Public health education and its target is the wider community.
   2) Dimensions of the implementation location
      a) Health education in hospitals and its targets are patients and families.
      b) Health education in schools and its targets are students.
      c) Health education in the community or workplace and the target is the community or workers.
3) Dimensions of health service levels
   a) Education (Health Promotion)
   b) Special protection health education (Specific Protection)
   c) Health education on early diagnosis and appropriate treatment (Early diagnostic and prompt treatment)
   d) Health education and rehabilitation (Rehabilitation)

   According to Minister of Home Affairs Regulation Number 19 of 2011, cadres are community members who are willing to volunteer and have the time to organize regular Posyandu activities. Health cadres, also called health promoters (prokes), are people elected by the community and tasked with improving community health voluntarily. (Gunawan, 1980 in Zulkifli, 2003).

   Posyandu is a forum for communication in health services in the community, by the community. and for the community with the support of health workers (Sembiring, 2004). Posyandu is a form of community participation in the health sector with the main service targets being babies, toddlers, pregnant women, postpartum mothers, breastfeeding mothers, women of childbearing age (WUS) and couples of childbearing age (PUS) with management by health cadres. (Rahaju et all, 2006).

   The purpose of organizing Posyandu
   1. Health Services for Pregnant Women
   2. Services for Postpartum and Breastfeeding Mothers
   3. Nutrition Services
   4. Family planning services
   5. Immunization

**Implementation of Posyandu**

   Posyandu is established in each sub-district, village or hamlet and in each RW or RT if possible. Each Posyandu can ideally serve 80-100 mothers or toddlers. Health services at Posyandu are provided by health workers, cadres and posyandu administrators who are selected voluntarily. Posyandu cadres and administrators are responsible for the smooth implementation of Posyandu. (Rahaju et all, 2009)
Posyandu is carried out at least once every month. The determination of the Posyandu schedule is agreed upon by LKMD, Cadres, Village/Subdistrict PKK Mobilization Teams and health workers from the Community Health Center (Sembiring, 2009).

**Cadre Training**

Cadre training aims to increase cadre knowledge and skills. Cadres are educated to have high dedication, so that they develop self-confidence to be able to carry out their duties as cadres in serving the community (Kusumawati and Darnoto, 2008).

Cadre training is held twice a year. The priority for cadres who are trained are cadres who can read and write and cadres who have never been trained or who do not have the skills. The method used in the training is lectures and questions and answers. The effectiveness of the cadre training method depends on the activeness of the cadre trainers (Syafei et al, 2008).

The trainers for cadres consist of cross sectors and cross programs. Determining training materials through cross-program coordination meetings in posyandu activities. Cadre training can take the form of training on posyandu implementation, training on filling out KMS or training on how to refer sick mothers or toddlers (Syafei et al, 2008).

Learning methods are the methods used by teachers in carrying out their functions as a tool to achieve learning goals. The PAI learning method is more procedural in nature. "For everything there is a method, and the method of entering heaven is knowledge." (HR. Dailami). (Hamzah B. Uno, 2012).

**Various Learning Methods**

**Demonstration Method**

**Discussion Method**

Types of discussion

1. **Whole group** is a form of class discussion where the participants sit in a semicircle. In this discussion the teacher acts as the leader and the topics discussed are planned beforehand.

2. **Buzz group**, which consists of a class that has been divided into several small groups consisting of 3-4 participants. Seating is arranged in such a way that students can exchange ideas and meet face to face easily. This discussion is usually held in the middle
of a lesson or at the end of a lesson with the aim of clarifying and sharpening the framework of the lesson material or as an answer to questions that arise.

3. Panel, is a discussion consisting of 3-6 participants who will discuss a certain topic and sit in a semi-circular shape led by a moderator. For example, a panel discussion consisting of experts who discuss a topic on television. (E. Mulyasa, 2015)

4. Syndicate group, this method was first introduced by Coller, et al in 1966. Coller was an early pioneer in the use of syndicate group discussions in his experiments at universities. Syndicate Group is a group (class) divided into several small groups consisting of 3-6 people. Each small group carries out its duties. The teacher explains the outline of the problem to the class, he describes the aspects of the problem, then each group (syndicate) is given the task of studying a specified aspect. The teacher provides references or other sources of information. Each syndicate meets separately and reads materials, discusses and prepares a report in the form of the syndicate's conclusions. Each report is brought to the plenary session for further discussion. (Hasibuan & Moedjiono, 2010) Usefulness of the Syndicate Group Discussion Method.

5. Group discussion is an orderly process that involves a group of people in very informal face-to-face interaction with various experiences, drawing conclusions or solving problems. For example, students discuss in small groups under the leadership of the lecturer for various information on problem solving or decision making. Group discussions have proven useful as a tool to achieve most or even all of these goals. Stages of Implementing the Syndicate Group Discussion Method.

2. Research methods

   This type of research is quantitative research where the quantitative approach is research where the data is in the form of numbers and analyzed statistically to find answers to a research problem formulation. (Sugiyono, 2015)

   The research design is Pre-Experimental with a one-group pre post test design approach which is very important in research which allows maximum control of several factors that can influence the accuracy of research results. (Nursalam, 2018)
The research method used in the research was a one-group pre-post test design, which revealed that this research aimed to assess the difference in influence before the questionnaire was distributed and after the questionnaire was given. This research analyzes the influence of newborn care education using the Syndicate Group method on the knowledge of posyandu cadres.

3. Results and Discussion

a. Results

The research results are divided into 2, namely analysis of the characteristics of the cadres involved presented in the form of a frequency distribution, while bivariate analysis is for see knowledge cadre about maintenance baby new born before And after in give intervention, as well as the influence of new baby care education born with method Syndicate Group to knowledge cadre.

Data characteristics cadre

Characteristics of cadres in research it is an identity that spans a long age become cadre, education final, certain jobs and beliefs in newborn care. Data regarding Cadre characteristics can be seen in the table following.

**Table 1**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Amount</th>
<th>Percentage(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-25</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td>26-35</td>
<td>10</td>
<td>41.7</td>
</tr>
<tr>
<td>36-45</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>46-55</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td>56-65</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Amount</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

Results analysis distribution cadre based on table 4.1 obtained that age cadre in study This is varies from 17-55 years, the youngest cadre 17 years old and the oldest is
Table 2
Distribution characteristics according to long become cadre, in care of newborns in cadres posyandu in the Puskesmas Working Area Tamalarea

<table>
<thead>
<tr>
<th>Long to be cadre</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 5 year</td>
<td>9</td>
<td>37.6</td>
</tr>
<tr>
<td>≥ 5 year</td>
<td>15</td>
<td>62.4</td>
</tr>
<tr>
<td><strong>Amount</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Serve data that part Most cadres have been cadres for ≥ 5 year, that is 15 people (62.4%), during ≤ 5 years namely 9 person (37.6%).

Table 3
Distribution characteristcs according to Level education final, in newborn care cadre Integrated Healthcare Center in Region Work Public health center Tamalarea

<table>
<thead>
<tr>
<th>Level Education</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>elementary school</td>
<td>10</td>
<td>41.7</td>
</tr>
<tr>
<td>JUNIOR HIGH SCHOOL</td>
<td>9</td>
<td>37.5</td>
</tr>
<tr>
<td>SENIOR HIGH SCHOOL</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>D3/D4/S1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Amount</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Serve data that part big cadre Education final cadre varies. From Elementary /Middle/Senior High School with amount cadre the most is educated elementary school, that is 10 person (41.7%), educated JUNIOR HIGH SCHOOL that is 9 person (37.5%), educated SENIOR HIGH SCHOOL that is 5 person (20.8%).

Table 4
Distribution characteristics according to Work in maintenance newborn babies at posyandu cadres in Tamalarea Community Health Center Working Area
Serve Data cadre based on type of work found that almost all over cadre that is 22 person (91.7%) is a housewife, other- other that is 2 person (8.3%).

### Table 5
**Distribution characteristics according to trust certain in care of newborns in cadres posyandu in the Puskesmas Working Area Tamalarea**

<table>
<thead>
<tr>
<th>Trust certain</th>
<th>Amount</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>75</td>
</tr>
<tr>
<td>Amount</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

Presents the distribution of characteristics cadre based on trust certain in maintenance baby new born (BBL) showing that part big that is as much 18 person (75%) state Already No There is trust certain in BBL treatment, as many as 6 people (25%) state Already There is trust certain in maintenance BBL. Table 5 presents data on differences in knowledge of posyandu cadres in the Tamalarea Health Center Working Area before and after being given education on newborn care using the Syndicate Group method. Based on these data, it is known that the majority of posyandu cadres' knowledge in the Tamalarea Community Health Center working area before being given newborn care education using the Syndicate Group method, 7 cadres (29.2%) were classified as lacking knowledge, 14 people (58.3%) is classified in the sufficient knowledge category, and 3 cadres (12.5%) are classified in the good knowledge category, whereas after being given education on newborn care using the Syndicate Group method, the majority of the cadres, namely 16 people (66.7%) are classified as In the good knowledge category, 4 cadres (16.7%) are in the sufficient knowledge category and 4 cadres (16.7%) are in the poor.
knowledge category.

The results of the analysis using the Wilcoxon Sign Rank Test also showed p-value = 0.001, which means there is a significant difference in the knowledge of posyandu cadres regarding newborn care before and after being given newborn care education using the Syndicate Group method.

b. Discussion

Cadre Characteristics

a) Age

The research results in table 1 show that the age of the cadres is in the range 17-65 years. Most of the cadres, namely 10 cadres (41.7%) are in the age range of 26-35 years. Age affects a person's ability to understand and think. Increasing age will influence the development of a person's grasping power and thinking patterns so that the knowledge they gain will improve (Budiman and Riyanto, 2018). (Notoatmodjo 2005 in Hardiani, 2019) states that age greatly determines the level of understanding and mindset for decision making. Each age range also has its own stage of cognitive development, which means that the level of understanding of knowledge will also be different (Suparno, 2018).

The conclusion obtained is that age has an effect on increasing knowledge because of the mental abilities needed to learn and adapt to new situations, such as remembering things previously learned, analog reasoning and thinking creatively and maturely, but age can also have an effect on decreasing status. cognitive abilities of early, late and elderly adult cadres.

b) Been a cadre for a long time

The length of time you have been a cadre can influence the knowledge and implementation of the role of posyandu cadres because the length of time you have been a cadre is an indicator of cadre productivity. The results of research related to characteristics based on length of time as a cadre are presented in table 2. Data shows that the number of cadres whose tenure as a cadre is <5 years is 9 people (37.5%), while the number of cadres whose tenure as a cadre is ≥5 years.
were 15 people (62.5%). The period/length of being a cadre to be called an active cadre is a minimum of having been a cadre for 60 months (5 years) (Razak, 2006 in Fatmawati, 2018). This statement is supported by the research results of Widagdo and Husodo (2017), where the results showed that the percentage of cadres with years of service who were in the new category was almost the same (19 people) as the percentage of cadres who had years of service in the old category (17 people). The number of absences from work and the number of job changes in senior cadres is smaller than in junior cadres, so the productivity level of senior cadres is higher than that of junior cadres.

c) Last education

The level of education also influences a person's knowledge, where knowledge is closely related to education. Most of the cadres in this study, as presented in table 4.3, had 10 people (41.7%), 9 people (37.5%), 9 people (37.5%), and 5 people from high school (20.8%), so it can be concluded that the last education of the cadres in this study was elementary school/MI. A person who has a higher education is expected to have broader knowledge, because the level of education will influence the response to something that comes from outside. People with higher education tend to respond more rationally to the information they get, and think about the benefits they will get (Budiman and Riyanto, 2019).

d) Type of work

Characteristics of cadres based on type of work in this research based on table 4, it is known that the majority of cadres, namely 22 people (91.7%) are housewives, and only 2 cadres (8.3%) work as teachers and farmers. Work is a person's activity or activities to obtain income, either in the form of money or goods to meet their daily needs.

Widagdo and Husodo’s research (2019) states that cadres who make good use of the KIA book are cadres who have worked at home >8 hours (62.96%) compared to cadres who have worked <8 hours (29.73%). So it can be concluded
that cadres who work as housewives should have better knowledge than respondents who work outside the home as teachers and farmers.

e) Certain beliefs in the care of newborns (BBL)

Certain beliefs in newborn care (BBL) are certain beliefs that are embedded in a person to do or not do certain things in the care of newborn babies. The research data shown in table 5 shows that 6 cadres (25%) stated that in their surrounding environment there was still a certain belief in BBL care, while 18 cadres (75%) stated that there was no particular trust in BBL care. Trust is one of the predisposing factors that can influence changes in individual behavior. This trust is usually obtained from previous people such as grandparents, or parents. This is believed by individuals without being based on previous scientific evidence (Notoatmodjo, 2018).

a. Knowledge of posyandu cadres in the Tamalarea Community Health Center Working Area after providing education on newborn care using the Syndicate Group method

Table 4 also presents data on the knowledge of posyandu cadres in the Tamalarea Community Health Center working area after providing newborn care education using the Syndicate Group method. It was found that there was an increase in cadres' knowledge about caring for newborns, namely those in the category of lacking knowledge decreased from 7 people (29.2%) to 4 people (16.7%), as many as 14 people (58.3%) to 4 people. (16.7%) were in the sufficient knowledge category and 3 people (12.5%) increased to 16 people (66.7) were in the good knowledge category. Cadres who are still classified as lacking knowledge after providing newborn care education using the Syndicate Group method can be caused by the age of the cadres, most of whom are > 35 years old.

b. The Influence of Newborn Care Education using the Syndicate Group Method on the knowledge of posyandu cadres in the working area of the Tamalarea Community Health Center
The results of statistical tests using the Wilcoxon Sign Rank Test as shown in table 4.6 show a p value of 0.001 with an alpha of 0.05 or 5%, so it can be concluded that there is a significant influence of newborn care education using the Syndicate Group method on the knowledge of posyandu cadres in the Tamalarea Community Health Center Working Area. The results of this research are in accordance with the following statement which states that education is all planned methods to influence other people, whether individuals, groups or society, so that they do what is expected by educational practitioners (Notoatmodjo, 2015).

4. Conclusion

1. The characteristics of the cadres in this study are mostly in the early adult age range, namely 26-35 years (33.3%), most have been cadres >5 years (62.4%), are Madurese (62.5%), the majority have Primary/MI education (41.7%), almost all cadres work as housewives (91.7%), and 75% of cadres stated that they no longer had any particular confidence in BBL care.

2. Knowledge of Posyandu Cadres Before Newborn Care Education was carried out using the Syndicate Group Method, there were 8 people (33.3%) in the poor knowledge category, 12 people (50%) in the sufficient knowledge category and 4 people in the good knowledge category.

3. Knowledge of Posyandu Cadres After the Newborn Care Education was carried out using the Syndicate Group Method, there were 4 people (16.7%) who were classified as having insufficient knowledge, 6 people (25%) who were in the sufficient knowledge category and 14 people (58.3%) belonging to the good knowledge category.

4. The difference in knowledge of Posyandu cadres before and after being given education using the Syndicate Group method can be seen from the decrease in the number of cadres in the less than knowledge category from 33.3% to 16.7%, the sufficient knowledge category from 50% to 25% and an increase in the number of cadres who classified into the good knowledge category from 16.7% to 58.3%. The
results of statistical tests show that there is a significant influence between newborn care education using the Syndicate Group method on cadre knowledge with p value = 0.001.

5. Compliance with ethical standards

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Disclosure of conflict of interest
This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

Statement of informed consent
Every action we take as authors is a mutual agreement or consent.

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