IMPACT OF HEALTH VOLUNTEER TRAINING TO IMPROVE UTILIZATION OF MATERNAL CHILD HEALTH (MCH) BOOK IN KALIBAGOR INDONESIA

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ABSTRACT

Background: Health volunteer role in utilization of Maternal Child Health Book is simply to fill health card for children to appraisal nutritional status. Utilization MCH Book by health volunteers have to included detection of high risk pregnant women, and birth planning programs and the prevention of complications, but its not yet maximized. The purposes of the study are to improve the knowledge and skills of utilization MCH Book on health volunteers.

Methods: This research is quasi experiment study designed to be applied for a group, tested before and after gave training. The group selected for this study includes 61 health volunteer in Kalibagor village. The sampling was done by using simple random sampling. Techniques of data collection was done by interview using a questionnaire that has been tested for validity and reliability. Skills utilization MCH Book measurement done by observation using observation sheet.

Results: Statistical test analysis showed significan difference between knowledge and skills utilization MCH Book (p=0.000). Evaluation is done by providing pre-test and post-test showed knowledge about the function of the utilization of MCH Book increased 30.60%. Utilization achievement of MCH Book on skills among health volunteer increased by 23.13%, skills views in charge health card for children to appraisal nutritional status, detection of high risk pregnant women, delivery planning and complication prevention program.

Conclusion: There is increasing knowledge and skills health volunteer for utilization MCH Book. Suggestion trained health volunteer can provide information and maximize skills utilization MCH Book.

Keywords: utilization MCH books, health volunteer, knowledge, skills
1.0 Introduction

Various programs undertaken by the district health center in Banyumas Indonesia to improve the health status of mothers and child have been carried out. Maternal Child Health (MCH) programs include integrated antenatal care, resource midwife optimization, the optimization MCH program, optimization of MCH coverage, village guard ready program. Application program are also strengthening essensial obstetric maternal and neonatal in community health centers and comprehensive obstetric village health forum, the increase of family planning, Expanding Maternal Neonatal Survival (EMAS) Programs (1).

The number of cases of maternal mortality in the Banyumas district calculate maternal mortality until 34 cases. Sourced data from maternal and child health in the region’s of Banyumas district is Kalibagor subdistrict, 5 a number of cases maternal mortality. Pregnant women to detect high risk reached 197 cases (22.43%), referral to hospital are 245 cases of high risk pregnancy (27.90 %). These data indicate that the number of pregnant women belonging to the category of high risk pregnancies, still found babies born with low birth weight remains a problem of maternal and child health (2). Results of research on health volunteer in Kalibagor, showed relationship between knowledge health volunteer with the utilization MCH book. The role of health volunteer to utilization MCH book is not maximized, role health volunteer to give information about early detection of danger signs of pregnancy and postpartum (35.9%), role to providing information on delivery planning and prevention complications (3).

The functions of MCH Book are including function of recording, education and communication (4). Research results was found that the recording function of recording MCH Book is still not complete, namely regarding service records postpartum (82.4%), family planning services (100%), stickers delivery planning and prevention complications not filled and labeled (58%). Educational function which has not been made suggestions sticking stickers (42.95%), delivery assistance with planning recommendations childbirth and prevention of complications (25.31%). Communication functions are still rarely carried out, namely utilization MCH Book by health volunteer as an effort to improve MCH (12.1%). Recording function in the utilization of MCH Book that can be done by a health volunteer of helping activity recording maternal and child health status after examination by midwife, provision of vitamin A recording status, recording status and the immunization record of growth and development in children. Recording function can also be done by checking the completeness of book entries and the MCH book ownership status. Health volunteer also can perform monitoring of the delivery assistance and prevention of complications program (5).

Integrated Health Center (IHC) is one approach to community participation in the health sector. IHC is managed by a health volunteer who have received training by the trained midwife. Health volunteer task in the activities of the Maternal and Child Health (MCH) was doing registration, weighing, noting the mother and child care in the MCH Book and utilization of MCH Book as an extension materials, to report the maternal and child health status to midwife. Health volunteer allowed to perform charging and checking MCH Book. Things to do, among others, help the administration records related matters identity of the mother and child, delivery planning and complication prevention program, charging health card for children to appraisal nutritional status on MCH book. The role of health volunteer in charging MCH book are intended to assist midwifere in getting the complete recording in
The purpose of the research-based service activities such as increasing the knowledge and skills of health volunteer regarding the utilization of MCH book.

2.0 Materials & Methods

This research is quantitative research. Design research using quasi experimental method. The approach used to pretest and posttest without control groups. Evaluation design used instrument, questionary to determine in knowledge about utilization MCH book, and checklist to determine in skill about utilization MCH book. The evaluation of a pre-test and post-test. collective data using inquiry package filled by health volunteer. Structured questionnaire with precoded closed and open ended questions about utilization of maternal and child health book were used before and after gave training to health volunteer. Instrument to determine the achievement skills utilization maternal and child health book using observation checklist.

The validity of which is used in this study using the construct validity. This questionnaire is done on the validity to be analyzed using product moment correlation. Validity testing is done by comparing the test result with p value. This results using indicators p values since the value of p <0.05, so it can be valid. Reliability testing is done by comparing the test results with Cronbach alpha values. Questionnaire reliable if the alpha value of at least 0.7.

Ethical considerations of research carried out by explaining the study to health volunteer selected as the study sample. Subsequently asked to approve a health volunteer interviewed and observed on utilization MCH book. Health volunteer prove this willingness in research activities by means of signed informed consent after receiving explanations. Explanation of health volunteer carried out the study to include the confidentiality of research results. This study also does not give a negative impact to health volunteer.

The research was used both univariate and bivariate analysis. Univariate analysis was used to evaluated the level of knowledge and skills about utilization MCH Book. Bivariate analysis to determine the effect of health education using the training method against the health volunteer knowledge and skills about utilization of MCH book. The statistical analysis is using wilcoxon rank test. This results using indicators p value <0.05, so that it can be shown significant differences in knowledge and skills about utilization MCH book among health volunteer.

3.0 Results

The characteristics of health volunteers included; 36 (59%) aged 31-40 years old, duration of working more than 10 years 32 (52.5%), education level was senior high school 33 (54.1%). Table 1 displayed the demographic characteristics of participant.
Table 1: Demographic Characteristics of Participant

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Classification</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age</td>
<td>20-30 years</td>
<td>6</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31-40 years</td>
<td>36</td>
<td>59.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41-50 years</td>
<td>10</td>
<td>16.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More than 50 years</td>
<td>9</td>
<td>14.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>61</td>
<td>100.0</td>
</tr>
<tr>
<td>2</td>
<td>Duration of working</td>
<td>0-10 years</td>
<td>29</td>
<td>47.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More than 10 years</td>
<td>32</td>
<td>52.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>61</td>
<td>100.0</td>
</tr>
<tr>
<td>3</td>
<td>Education Level</td>
<td>Primary school</td>
<td>13</td>
<td>21.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Junior high school</td>
<td>13</td>
<td>21.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Senior high school</td>
<td>33</td>
<td>54.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diploma/Academy</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>61</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Increased knowledge and skills about utilization MCH book based on the results of pre-test mean score and post-test mean score. Increased health volunteer knowledge and skills are calculated as follows:

Posttest-pretest X 100% = Score health volunteer knowledge and skill pretest

From the knowledge of utilization MCH book results, an increase of 1.72 points (Figure 1), the percentage increase in knowledge of utilization MCH book are 30.60%. From the skills results, an increase of 1.52 points (Figure 2) The percentage increase in skills are 23.13%.

Figures 1: Achievement Knowledge about Utilization MCH Book
Results of statistical test analysis showed difference between knowledge and skills about utilization MCH Book of pre-test and post-test, because the value of $p = 0.000$, since the value of $p < 0.05$. The analysis showed significant differences about knowledge and skills about utilization MCH Book. (Table 2 and 3)

**Table 2:** Result test different grade pre-post test knowledge utilization MCH Book

<table>
<thead>
<tr>
<th>Grade</th>
<th>Mean Score</th>
<th>Test Analysis</th>
<th>P value</th>
<th>Alpha Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Post</td>
<td>5.62-7.34</td>
<td>Wilcoxon</td>
<td>0.000</td>
<td>0.05</td>
<td>There is difference knowledge</td>
</tr>
</tbody>
</table>

The results showed that there is an increase in the average score of knowledge between pre-test to post-test of 5.62 to 7.34. Analysis to examine the difference in average scores this knowledge using the Wilcoxon test. The results obtained are found differences in knowledge before and after training about utilization MCH book on health volunteers.

**Table 3:** Result test different grade pre-post test utilization skills MCH book

<table>
<thead>
<tr>
<th>Grade</th>
<th>Mean Score</th>
<th>Test Analysis</th>
<th>P value</th>
<th>Alpha Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Post</td>
<td>5.05-6.57</td>
<td>Wilcoxon</td>
<td>0.000</td>
<td>0.05</td>
<td>There is difference skills</td>
</tr>
</tbody>
</table>

The results showed that there is an increase in the average score of skills between pre-test to post-test of 5.05 to 6.57. Analysis to examine the difference in average scores this knowledge using the Wilcoxon test. The results obtained are found differences in skills before and after training about utilization MCH book on health volunteers.
4.0 Discussion

The results characteristics analysis of the respondents described 59% respondents age 31-40 years. In general these characteristics are included in the middle adulthood stage, where the intellectual abilities well. Education level of respondents are 54.1% senior high school. Health volunteer should have a sufficient level of education. Health volunteer must have an adequate educational background so that the training provided is acceptable and understandable. Based mostly educational background health volunteer who have high school education level, the activities of this training have good results to improve the ability of health volunteer in the use MCH Book.

Defining volunteering is only formal volunteering, which we take to mean unpaid work that benefits others to whom one owes no obligation (7). We do not focus on health trainers in this review on the basis that most health trainers are paid for their services rather than working on a voluntary basis. The Community Health Volunteer (CHV) often consist of people living in the community who contribute to primary health care (PHC) in order to improve health outcomes. Their roles were depending on the level of training (8).

The roles health volunteer are participation in planning, consultation, advice and research in health, service delivery, structured behaviour change intervention, supporting clients through lifestyle changes – giving people the skills to set their own behavioural goals, acting as a lifestyle coach, motivator, knowledge giver, practical demonstrator counselling, advocacy and advice, respite support, accompaniment, supporting families, fundraising and administration. The most commonly cited settings for volunteer support were community settings (9,10,11,12,13).

Based of result showed an increase in knowledge utilization MCH book among health volunteer. The results study appropriate literature review about the training will increase the skills for preparing Community Health Volunteers(CHV) to become active contributors in life-saving in emergency care training and education are essential parts of preparedness and to gained skills for CHVs while handling a disaster response (14). This study may be the initial stage in which health volunteer can play an active role in improving the quality of utilization MCH book in health services. Improving the quality of utilization MCH book can be to prevent complication obstetri in women with high risk pregnancy and child health status.

Health volunteer who have long time working years may gain more experience and mastery on knowledge and skills related to emergency care (15). Similarly, a study conducted by Maulidar (16) knowledge regarding disaster nursing management and duration of working in a disaster was correlated with improvement in skills of health care providers, health volunteer will act more adequately than those who had less duration of working. This research as many 52.5% included duration of working more than 10 years. The results of the health volunteer have long experience so that they have understanding of the utilization of MCH book. They have been accustomed to understand things related to maternal and child health in integrated health community.

Based of Wonorejo, Samarinda research on incentives and health volunteer performance showed that variables related to the performance of health volunteer are gift operational assistance, charter, transport aid and training (17). Health volunteer have supports of training...
about utilization MCH book and training purpose to increase the performance health volunteer on efforts to utilization MCH book. Health volunteer can also drop out to increase utilization MCH Book. Drop out can also be caused due to incentives money is too small, less support facilities and infrastructure, the lack of training (18,19).

Improving only knowledge is not enough, but there are other things that must be considered is the difficulty directing health volunteer to actively. Difficulties can lead to volunteers becoming demotivated, including not being able to meet pregnant women and child expectations, poor quality, volunteering opportunities, and burnout. volunteering has the potential to play a number of important roles.

The conclusions of research in Tegal is there a difference health volunteer skills in anthropometric measurements before and after training (19). Provision of refresher training, community support and health care workers professional and apparatus government that support performance improvement health volunteer (20,21). Training to increase skills utilization MCH Book most important because improve awareness health volunteer primary utilization MCH Book.

There is a relationship training with the performance of health volunteer. Perez et al and Herman et al says that training and adequate supervision can as an incentive to improve performance health volunteer in rural areas. Pittman et al states that midwives given the motivation in training, will be able to improve the quality of health services. (22,23,24). The lack of skills and training often an effective barrier in performance. Training community health worker can provide the opportunity for learn skills, receive education and interact with professional staff higher. Training not only provides preventive, curative, or other relevant services to the public, but also to teach and communicating with the local communities. Therefore, the need for a program innovative training. Utilization MCH Book training is the way to maximize utilization MCH Book quality.

5.0 Conclusion

There is an increasing health volunteer knowledge and skills about the utilization MCH Book. There is an increase of utilization MCH book skills especially about charging child health card in the MCH Book, delivery assistance and prevention of complications program. Conclusion essential needed to prepare health volunteer for utilization MCH Book on pregnant women and child. Moreover, midwives need to develop utilization MCH Book through monitoring utilization MCH Book on themselves.

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