INTRODUCTION
Child malnutrition has been a major national concern in Indonesia for the past ten years. According to reports, the national stunting rate for children under five was over 37%, higher than the average rate for developing nations, which is 25%.\(^1\) Data from the Basic Health Survey (Riskesdas) for Indonesia reveal that the rate of stunting increased from 36.8% in 2007 to 27.2% in 2013 to 30.6% in 2018.\(^2,3\) According to statistics from the 2019 Indonesian Toddler Nutrition Status Survey (SSGBI), 27.67% of toddlers were stunted. Although the incidence of stunted toddlers has reduced, more than a fifth of toddlers in Indonesia still have stunted growth, making the issue of stunted toddlers a public health concern. This condition got worst due to the COVID-19 pandemic. This condition got worst due to the COVID-19 pandemic. In Indonesia, the COVID-19 pandemic has hampered access for mothers and children to optimal health services. Thus, This study aims to assess the effect of empowerment of the “Mahatta” cadre on the health status of the first thousand days of birth. The COVID-19 pandemic has hampered access for mothers and children to optimal health services. Thus, This study aims to assess the effect of empowerment of the “Mahatta” cadre on the health status of the first thousand days of birth.

Method: The research design was quasi-experimental, with consecutive sampling techniques to determine. The study was conducted in Sampang City. In this study, we divided into two groups. Each group consists of 58 respondents. The intervention group was a group that got empowerment from Mahatta cadres, and the control group was not. The instrument used in this study was a questionnaire sheet. The statistical analysis for the analytic study was man Whitney and Wilcoxon and chi-square. The significant p-value was less than 0.05.

Results: The average age in the intervention group (43.59 ± 7.910 years old) was higher than the control group (42.53 ± 8.236 years old). Our findings show an enhancement of the test result in the control group of Mahatta's health workforce empowerment aspect. The empowerment of Mahatta cadres significantly increases the health status score (p=0.000) in the intervention group. The mean value in the intervention group was even higher than in the control group. This showed the potential for Mahatta cadres to improve the health status of pregnant women and children under two years of age.

Conclusion: The empowerment of Mahatta cadres significantly increases the health status score in the intervention group.

Keywords: Empowerment, first thousand days of birth, Mahatta cadre.


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increase in parents’ anxiety about bringing their babies and toddlers to the posyandu during the Covid-19 pandemic due to parents’ ignorance of Covid-19 prevention and the absence of posyandu technical instructions available during this period. The Covid-19 pandemic. Moreover, the role of the community in improving these conditions is very necessary. Thus, this study aims to assess the effect of empowerment of the “Mahatta” cadre on the degrees of health ahead of the first thousand days of birth.

METHODS

Design and Sample
The research design was quasi-experimental, with consecutive sampling techniques to determine. The study was conducted in Sampang City. The inclusion criteria were a pregnant mother without any complication or congenital disease detected and a mother with children under two years old without any severe illnesses. Exclusion criteria needed to be completed the inclusion and exclusion criteria. All of the samples that refused to become a sample.

This study’s total sample was 116 respondents divided into two groups. Each group consists of 58 respondents. The intervention group was a group that got empowerment from Mahatta cadres, and the control group was a group that did not get empowerment from Mahatta cadres. The instrument used in this study was a questionnaire sheet.

Data Collection Procedures
After obtaining permission for this research, the next step was to collect data on the number of pregnant women and mothers with children under two. Then, the subject will be selected according to the inclusion and exclusion criteria. All of the samples have agreed to participate in this study. After that, they divided into the treatment and control groups. Group classification was done randomly. Furthermore, interviews were conducted with respondents using a questionnaire. The interview data was collected by the Mahatta cadre and informed to the doctors. After that, the doctors gave education to both of us. Then Mahatta cadre takes the data again after being educated. The results of the interview will be extracted and coded for further analysis.

Data Analysis
All of the data were extracted in Excel. After that, the data was coded and analyzed in SPSS 25. The data were analyzed descriptively and analytically. For the descriptive data was presented in frequency, percentage and mean. The statistical analysis for the analytic study was man Whitney and Wilcoxon for numeric data and chi-square for categoric data. The significant p-value was less than 0.05.

RESULTS

The average age in the intervention group (43.59 ± 7.910 years old) was higher than the control group (42.53 ± 8.236 years old). Most of both groups consisted of primigravidas (intervention group: 55.17% vs. control group: 70%), and the rest of the sample was multigravida. Based on their level of education, the majority of the sample graduated in senior high school (intervention group: 60.24% vs. control group: 63.79%), followed by college and junior high school. In addition, most of the samples in both groups were workers, and the rest were housewives (Table 1).

Based on bivariate analysis, no relationship was found between the variables age, parity, education, occupation, and type of family on the effect of empowerment of the “Mahatta” cadre in pregnant women and mothers with children under two years of age (Table 1).

In the table below, we reported a significant increase in the Empowerment Of Mahatta Health Personnel between the intervention and control groups. This research found that the mean of quality of life before and after the intervention was 0.069.

DISCUSSION

Gaining knowledge of and control over one’s own social, economic, political, and personal circumstances enables one to take
actions that might enhance their health. Both private and public venues fall under the scope of this concept. The fundamental tenet of WHO-endorsed health promotion is empowerment. Targeting socially disadvantaged populations, empowerment involves a method that encourages involvement, increases awareness, and develops problem-solving abilities.*

For that empowerment of cadres can help in the field. Friska et al. reported about a health cadres empowerment program through smartphone application-based educational videos to promote child growth and development. In the study, they found a significant improvement from pre-test to post-test total scores (p<0.001). Smartphone application-based educational videos are effective and reliable child health promotion media for Puskesmas staff and parents.*

Other similar research found a significant (p=0.048) relationship between the empowerment of Posyandu cadres and the improvement in improving the nutritional status of toddlers in Suka Makmur Village, Patilanggio District. Thus, it can impact the health condition of toddlers further.* According to our findings, we can see an enhancement of the test result in the control group of Mahatta’s health workforce empowerment aspect. Unfortunately, there was no increase in the score in the intervention group in the post-test (Table 2). However, the empowerment of Mahatta cadres significantly increases the health status score (p=0.000) in the intervention group. The mean value in the intervention group was even higher than in the control group. This showed the potential for Mahatta cadres to improve the health status of pregnant women and children under two years of age.

Empowering health cadres and involving health workers with community leaders or people trusted by the community to provide knowledge and their behavior to the surrounding community will make it easier for the district to imitate or take their knowledge as important information in changing their behavior. According to Leinenger’s theory, increasing knowledge and behavior by developing a theoretical model will benefit and be easily accepted by the community because it adapts to the situations and conditions in society.† Based on our results, it can be concluded that by empowering Mahatta cadres who have the function of facilitating existing health workers or researchers, the knowledge and behavior of pregnant women towards mothers who have children aged two years will increase knowledge and behavior, this is because the health of staff who know to become competent in providing knowledge and discussing directly with the target where the target wants (not in a health service) regarding the problems they face. So that respondents feel closer to health workers without having to visit services.

Regarding our research process, assistance from competent people and people trusted by the community, such as clerics or community leaders, will greatly influence the development of existing knowledge and behavior related to preventing the spread of the Covid 19 virus. The concern of Mahatta cadres and health workers will be able to provide more knowledge and skills. The limitation of this study was this study only conducted in one center, and we did not measure the health status of children under two years old such as body weight, upper arm circumstance, body mass index, and many others related to the effect of empowering health cadre.

Table 3. The value of the difference in behavior and status of health pre and post-in the intervention and control groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>T</th>
<th>p-value</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mahatta’s health workforce empowerment</td>
<td>Intervention</td>
<td>8.259</td>
<td>0.312</td>
<td>-2.085</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>0.179</td>
<td>1.129</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior and Status of Health</td>
<td>Intervention</td>
<td>20.93</td>
<td>0.152</td>
<td>1.677</td>
<td>0.096</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>0.069</td>
<td>0.048</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CONCLUSION

There was a significant difference in behavior (covering knowledge, attitudes and behavior) between the intervention and control groups with p=0.000. In subsequent studies, researchers developed research on providing interventions to children from infancy to children aged before two years using cohort research and follow-up education videos or skills to welcome the first 1000 days of life.

ACKNOWLEDGMENT

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DISCLOSURE

Conflict of Interest
The authors declare there is no conflict of interest in this paper.

Ethical Clearance
Application for permits and coordination with village heads, administrators of the Dharma Tanjung Mosque, Provincial and City Health Offices of Sampang, community leaders and teams in research activities. This study also has been approved by our institution.

Author Contribution
All of the authors contributed to this study.

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