

Utilization of MCH (Mother and Child Health) Handbook as a Media for Educating Pregnant Women during the Covid-19 Pandemic

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Article	Abstract
<p><i>Article History</i> <i>Submitted:2022-01-15</i> <i>Accepted: 2022-03-17</i> <i>Published:2022-03-25</i></p> <p><i>Keywords:</i> <i>MCH Handbook,</i> <i>Knowledge of Pregnant Women,</i> <i>Media Educating</i></p>	<p>The MCH handbook is a communication tool and information media needed for pregnant women and health workers, especially during the COVID-19 pandemic. Banyumas Regency at the end of 2018 promoted the MCH Book Reading movement with the slogan "one sheet a day, healthy mother healthy child" for pregnant women and their families as a form of government attention to the health of pregnant women. During the COVID-19 pandemic, classes for pregnant women are temporarily suspended. This research is a correlation study. The research approach uses cross-sectional. The sample in this study is 73 pregnant women in the working area of Kalibagor Public Health Center, Banyumas Regency. All pregnant women already have an MCH handbook. The results showed that there was a relationship between the frequency of reading and the level of knowledge of pregnant women (p-value <0.05), there is a relationship between the duration of reading and the level of knowledge of pregnant women (p-value <0.05). In Conclusion, there is a relationship between the use of MCH books and the level of knowledge of pregnant women. Pregnant women who are willing to read MCH books with frequent frequency and sufficient duration will increase the knowledge of pregnant women.</p>

Introduction

Regulation of the Minister of Health of the Republic of Indonesia Number 97 of 2014 concerning Health Services for the Pre-pregnancy, Pregnancy, Childbirth, and Postnatal Periods, Implementation of Contraceptive Services, and Sexual Health Services regulate health services during the pre-pregnancy, pregnancy, delivery, and postnatal period. after giving birth. The implementation of these health services aims to ensure maternal health so that they can give birth to a healthy and quality generation, reduce morbidity and mortality rates for mothers and newborns, ensure the achievement of quality of life and fulfillment of

reproductive rights. In addition, to maintain and improve the quality of quality, safe, and useful health services by the development of science and technology (Ministry of Health RI, 2014).

Success maternal health efforts, one of which can be seen from the Maternal Mortality Rate (MMR). This indicator is not only able to assess maternal health programs but also able to assess the degree of public health. MMR in Indonesia has increased from 2007 which was 228 per 100,000 live births to 305 per 100,000 live births in 2015. This figure exceeded the target set in 2015

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which was 102 per 100,000 live births. The number of maternal deaths compiled from the recording of the family Health program at the Ministry of Health in 2020 shows 4.627 deaths in Indonesia. This number shows an increase compared to 2019 of 4.221 deaths (Ministry of Health RI, 2020).

Table 1. Maternal Mortality Cases in Central Java

2016	2017	2018	2019	2020
109,65	85,85	78,6	76,93	98,6

From the table above, it can be seen that the MMR trend experienced a significant decline from 2016 to 2019 from 109.65/100.000 live births to 76.93/100.000 live births. Then there was an increase in 2020 to 98.6/100.000 live births. This is due to the COVID-19 pandemic, which has resulted in major changes in public health facilities. MCH services are disrupted, including ANC, referral systems, and community participation during the pandemic. Some Health facilities are selective in providing services due to major changes to Health Resources and the availability of infrastructure (Central Java Health Office, 2021).

Table 2. Maternal Mortality Cases in Banyumas District

2016	2017	2018	2019	2020
22	14	18	10	11

Based on table 2, it can be seen that the case of maternal mortality in Banyumas Regency in the last 4 years has decreased. This shows the quality of maternal and child health services. Although in 2020 the number of cases of maternal mortality increased to 11 cases (Dinas Kesehatan Kabupaten Banyumas, 2020).

The government has so far implemented various policies to reduce the maternal mortality rate, including the Gerakan Sayang Ibu (GSI) program, the Making strategy Pregnancy Safer (MPS), and family empowerment with the MCH (Maternal and Child Health) book. The

Ministry of Health of the Republic of Indonesia in collaboration with the Japan International Cooperation Agency (JICA) has published the MCH Handbook in Indonesia since 1993. The Decree of the Minister of Health of the Republic of Indonesia Number 284/MENKES/SK/III/2004 concerning the MCH Handbook which was ratified in 2004 has provided a sound basis strongly against this program as one of the national strategies in reducing Maternal Mortality Rate and Infant Mortality Rate (Kemenkes RI, 2016).

The use of the MCH Handbook is expected to improve the quality of maternal and child health and nutrition services so that one of the national health development goals, namely the reduction of MMR and IMR, can be achieved. Dissemination of the use of the MCH Handbook is carried out through Public Health Center, hospitals, Posyandu activities, and others to increase the knowledge and skills of health workers and increase the quality of services. In addition, the MCH Handbook can also be used as a monitoring tool for maternal and child health, as well as education and health education for the community, especially mothers (Kemenkes RI, 2016). The MCH handbook is a simple tool as an information, education, and communication tool in disseminating important information about Maternal and Child Health (MCH) to families. The MCH handbook is a tool for early detection of disturbances or problems in mothers and children, a means of communication and counseling with important information for mothers, families, and communities regarding maternal and child health services including referrals and packages (standards) of MCH services, nutrition, immunization and toddler growth (Kemenkes RI, 2015).

The MCH handbook is a mandatory book for pregnant women, husbands, and family members to read because it contains important and useful



information for maternal and child health. The health book, apart from being a record of maternal and child health, is also intended as a health monitoring tool and a communication tool between health workers and patients, so that community participation can be expected in controlling maternal and child health. One of the objectives of the Maternal and Child Health Program (MCH) is to increase family independence in maintaining maternal and child health. To realize family independence in maintaining maternal and child health, one of the program's efforts is to increase family knowledge and skills through the use of Maternal and Child Health Books (Kemenkes RI, 2015).

The Banyumas District Health Office at the end of 2018 promoted the "Movement to Read Maternal and Child Health Books (MCH) for pregnant women and their families as a form of government attention to the health of pregnant women and their families. Based on data from the Banyumas District Health Office, the MCH handbook has been given to all pregnant women in Banyumas District, mothers often carry the book with them during pregnancy check-ups. During the COVID-19 pandemic, classes for pregnant women are temporarily suspended. This is meant to reduce crowds. Even though there are no classes for pregnant women, midwives still try to

motivate pregnant women to diligently read MCH books (Dinas Kesehatan Kabupaten Banyumas, 2020). Based on the background above, the authors are interested in examining the effectiveness of mentoring the use of MCH books on the level of knowledge of pregnant women.

Method

This type of research is a correlation study with a cross-sectional design. This research was conducted for one month, namely December 2021. The population of this study was pregnant women in the working area of the Kalibagor Health Center, Banyumas Regency, a total of 73 pregnant women. The sampling technique used in this research is total sampling. The research instrument uses a questionnaire in the form of a google form, where this questionnaire covers the use of MCH books as an educational media (reading frequency and duration of reading), and mother's knowledge about the contents of MCH books (examination services pregnancy, daily care of pregnant women, activities that should be avoided by mothers during pregnancy, physical activity, danger signs of pregnancy, preparation for childbirth, danger signs of childbirth).

Results and Discussion

Respondents obtained from data collection on pregnant women at the Kalibagor Health Center

Table 3. The relationship between the frequency of reading MCH books and the respondent's knowledge

Reading frequency	Knowledge				Quantity	%	<i>p-value</i>
	Good	%	Enough	%			
Sometimes	24	70.6%	10	29.4%	34	100%	0.013
Often	37	94.9%	2	5.1%	39	100%	
Amount	61	83.6%	12	16.4%	73	100%	

Table 3 shows that 39 respondents read MCH books frequently, with the proportion having good knowledge of 37 (94.9%) and 2 people having sufficient

knowledge (5.1%). There is a relationship between the frequency of reading with the level of knowledge of pregnant women ($p\text{-value } 0.013 < 0.05$)



Table 4. The relationship between the duration of reading the MCH book and the respondent's knowledge

Reading duration	Knowledge				Quantity	%	<i>p-value</i>
	Good	%	Enough	%			
Short	23	69.7%	10	30.3%	33	100%	0.01
Enough	38	95%	2	5%	40	100%	
Amount	61	83.6%	12	16.4%	73	100%	

Table 4 shows that 40 respondents read MCH books with sufficient duration, with the proportion having good knowledge of 38 people (95%) and 2 people having sufficient knowledge (5%). There is a relationship between the duration of reading with the level of knowledge of pregnant women (p -value $0.01 < 0.05$).

Kalibagor has a midwife who actively empowers the community. Although during the COVID-19 pandemic, the class for pregnant women was postponed, the midwife created a communication group via "Whatsapp" with pregnant women. The group's activities include reminding pregnant women to read MCH books, discussions between midwives and pregnant women about pregnancy, preparation for childbirth, and breastfeeding. The information obtained is that pregnant women, especially primigravida, are very enthusiastic to participate in the discussion. Most of the respondents have good knowledge (83.6%). This indicates that the respondents already have a good understanding of the information in the MCH handbook. These results are in line with research in Kenya in 2015 which stated that the MCH handbook is an effective tool for increasing maternal and child health knowledge (Kawakatsu et al., 2015).

This study proves that the use of MCH books by reading has a significant relationship with the knowledge of pregnant women. This is also evidenced by the acquisition of the score of a respondent who occupies the highest rank supported by reading habits, both reading frequency, and duration. By theoretical studies people who always

cultivate reading habits will increasingly master reading and the level of reading comprehension will also increase. By reading, pregnant women will get a variety of information that had never been obtained before. Therefore, reading is a window to the world, anyone who opens the window can see and know everything that is happening. What is the meaning of a reader, when reading a passage or discourse without understanding what is written in the reading. Reading comprehension is a skill to understand information or discourse conveyed by other parties through writing. This research is in line with Purnamasari's previous research (2013) with the title The Relationship Between Reading Habits and Reading Comprehension for Class VIII Junior High School Students in The Kalasan District, Sleman. This study concludes that there is a significant relationship between reading habits and reading comprehension of class VIII junior high school students in The Kalasan Sleman sub-district. Students who always cultivate an interest in reading habits will increasingly master their reading comprehension. On the other hand, a decrease in the level of students' reading comprehension can occur if reading interest is low. Thus, the higher the level of reading habits, the higher the level of reading comprehension, and vice versa This research is in line with Purnamasari's previous research (2013) with the title The Relationship Between Reading Habits and Reading Comprehension for Class VIII Junior High School Students in The Kalasan District, Sleman. This study concludes that there is a significant relationship between reading habits and reading comprehension of class VIII junior high



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students' reading comprehension can occur if reading interest is low. Thus, the higher the level of reading habits, the higher the level of reading comprehension, and vice versa (Purnamasari, 2013).

Previous research stated that mothers who used MCH books during pregnancy had a higher level of knowledge than those who did not use MCH books during pregnancy. A strong significant effect of MCH is seen on knowledge of antenatal care visits, mothers who receive MCH during pregnancy have safer practices by skilled birth attendants and give birth in health facilities, MCH handbook shows the effect of knowledge on child health care (Nakamura, 2012). It is also in line with previous research that the proportion of mothers who know the need for exclusive breastfeeding for the first six months increases significantly between before and after the intervention. The proportion of mothers practicing exclusive breastfeeding also increased significantly between before and after the intervention. Thus, the MCH handbook has most likely contributed to increasing knowledge and practice about exclusive breastfeeding (Aiga et al., 2015). One of the behavioral domains is an application, namely the ability to use the material that has been learned in real situations or conditions. The application here means that the health behavior contained in the MCH book has been read by pregnant women, understood, and carried out in the form of behavior (Notoatmodjo, 2012).

The MCH handbook is not the final destination but the starting point. It is not a tool that can directly reduce maternal and child mortality. However, it can increase knowledge and change behavior related to MCH through strengthening communication between health workers and mothers and children. It can be used as a basic tool to ensure the quality of life of mothers, children, and families around the world (Nakamura, 2019).



The use of MCH books by pregnant women is assessed from their active role in reading and understanding the contents of MCH books. The need for knowledge of pregnant women in the use of MCH books aims to enable mothers to carry out independent care related to the health of pregnant women so that it is hoped that comprehensive and sustainable MCH services will be achieved. That way, pregnant women will be able to detect complications that may occur as early as possible and seek help from quality health services (Hartiningrum, 2021).

Conclusion and Suggestions

1. The level of knowledge of respondents about the majority of MCH books is good, 61 respondents (83.6%)
2. The majority of respondents read MCH books with a frequent frequency (53.4%)
3. The majority of respondents read MCH books with sufficient duration (54.8%)
4. There is a relationship between the frequency of reading with the level of knowledge of pregnant women (p-value <0.05)
5. There is a relationship between reading duration and knowledge level of pregnant women (p-value <0.05).

In conclusion, there is a relationship between the use of MCH books and the level of knowledge of pregnant women. Pregnant women who are willing to read MCH books with frequent frequency and sufficient duration will increase the knowledge of pregnant women.

Suggestion

1. For further researchers; It is necessary to re-examine the variables of mother's attitude and interest in reading MCH books so that they get a clearer picture of mother's behavior in reading MCH books
2. For midwives; to be more active in inviting mothers to read MCH books and conduct evaluations for each class meeting for pregnant women

3. For Mother; to increase interest in reading MCH books so that knowledge and readiness for further processes such as childbirth, postpartum, baby care can be maximized.

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