



(REVIEW ARTICLE)



Overview of the level of knowledge of pregnant women with the utilization of MCH Books in Indonesia: A literature Review

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Abstract

The Maternal and Child Health Handbook (MCH), as stipulated in the Decree of the Minister of Health of the Republic of Indonesia No. 284 of 2004, serves as a tool for the early detection of maternal and child health issues. It is also a communication and educational tool that provides essential information for mothers, families, and communities about maternal and child health services, including referrals, and the standard package of MCH services, nutrition, immunization, and child development [1]. The general benefit of the MCH Handbook is that it provides mothers and children with a comprehensive health record [2]. The research aimed to describe the knowledge levels of pregnant women in utilizing the MCH Handbook in Indonesia. The method employed in this study was a comprehensive literature review. The findings were based on 10 articles published within the last 10 years. The results indicated that seven studies reported pregnant women effectively utilizing the MCH Handbook, while three studies indicated the contrary. A recommendation for pregnant women is to enhance their awareness and habit of reading to fully understand the benefits contained in the MCH Handbook.

Keywords: Level of knowledge; MCH book; Pregnant Women; Maternal; Child Health

1. Introduction

The Maternal and Child Health (MCH) Handbook (Buku Kesehatan Ibu dan Anak, MCH), as stipulated in the Decree of the Minister of Health of the Republic of Indonesia No. 284 of 2004, serves as a tool for the early detection of maternal and child health issues. It is also a communication and educational tool that provides essential information for mothers, families, and communities about maternal and child health services, including referrals and the standard package of MCH services, nutrition, immunization, and child development. This handbook is used to monitor the health and development of mothers and children from pregnancy through the child's growth up to six years old. The MCH Handbook functions as the sole health record for mothers and children and also serves as a health education and communication tool [1].

The MCH Handbook (Buku MCH) is designed to improve the quality of maternal and child health services, thereby reducing maternal mortality (AKI) and infant mortality (AKB) rates in Indonesia. Additionally, the handbook aims to help families easily access health information about mothers and children as outlined in the book, assist mothers in independently monitoring their own health and that of their babies, and promote better family and community practices in maintaining maternal and child health [2]. According to 2017 WHO data, the global maternal mortality rate was 810 deaths per 100,000 live births per day, with 462 maternal deaths occurring in developing countries and 40 in developed countries. Maternal mortality data from ASEAN countries places Indonesia as the second-highest. The maternal mortality rate in Indonesia is nine times higher than in Malaysia, five times higher than in Vietnam, and twice as high as in Cambodia [3].

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In general, the benefits of the MCH book can be divided into two, namely general and specific benefits. The general benefits of the MCH book are that mothers and children have complete health records. While the specific benefits are first to record and monitor the health of mothers and children, the second is a communication and counseling tool equipped with important information for mothers, families and the community about MCH service packages (standards). Third is a tool for early detection of disorders or health problems of mothers and children. Fourth is as a record of maternal and child nutrition and health services including references [2].

Information obtained from both formal and non-formal education can have a short-term impact (immediate impact) resulting in changes or increased knowledge. The existence of new information obtained from the Maternal and Child Health (MCH) book regarding maternal and child health provides a new cognitive foundation for the formation of knowledge about maternal and child health. Good knowledge will make mothers utilize the Maternal and Child Health (MCH) book [4].

based on the results of a study conducted by Apriyanti (2020) regarding the relationship between the role of health workers and pregnant women's knowledge about the MCH book, that midwives are one of the people who play an important role in pregnant women's knowledge about the MCH book. So that the knowledge of pregnant women is good only 2% (1 respondent) is smaller than the percentage of poor knowledge of pregnant women about the MCH book with the role of health workers of 96% (50 respondents). Meanwhile, there are no pregnant women who have good knowledge about the MCH book without the role of health workers, namely 2% (1 respondent). It can be concluded that without the role of health workers, especially midwives, pregnant women's knowledge about the MCH book is lacking [5]

2. Material and methods

This research is classified as qualitative research using a literature review method and a descriptive analysis approach. The data for this study were sourced from national scientific journal articles obtained from the Google Scholar database using keywords such as "Level of knowledge", "MCH book", "pregnant women", "Maternal" and "Child health". The inclusion criteria for this research are scientific articles published within the last 10 years (2014-2024). The collected data will be analyzed, and conclusions will be drawn based on the analysis.

3. Results and discussion

This study was conducted to determine the level of knowledge of pregnant women about the benefits of the MCH book. Data analysis was carried out by conducting a literature review on 10 journals published in the last 10 years related to this study. Based on the research method, all journals are studies with a crosssectional approach. The details of the results obtained are 9 journals on the descriptive research method, 3 journals, 7 journals of correlation, 10 journals of research using a crosssectional approach. The results of good knowledge are the most, there are 6 journals, sufficient knowledge 3 journals, and less knowledge 1 journal. Pregnant women who make good use of the MCH Book are 7 journals and pregnant women who do not make good use of the MCH Book are 3 journals. Based on the collected and analyzed articles, the findings are presented as follows:

Table 1 List of Articles

No.	Author	Method	Result
1	C. Sistiari, et al (2014) [6].	Cross Sectional	From the results of the study, it was found that there was a relationship between knowledge about the MCH book and the quality of use of the MCH book with a p value of 0.027.
2	A., Erlina (2017) [7].	Cross Sectional	The results of the study showed that there was a relationship between knowledge and the attitude of pregnant women about the use of the MCH book at the Andowia Health Center, North Konawe Regency (p = 0.001X 2 table 4.58).
3	R., Hanum (2018) [8].	Cross Sectional	The statistical test results obtained a p value = 0.001 on the knowledge variable, a p value = 0.017 on the attitude variable where $p < \alpha$ (0.05), which indicates that there is a relationship between knowledge and attitudes of pregnant women about the use of MCH books at the Namu Ukur Health Center.

4	P. T., Kurniati, et al (2022) [9].	Cross Sectional	The results obtained were that most of the respondents had insufficient knowledge about the MCH Book as many as 18 (58%), most of the respondents had sufficient knowledge about understanding the use of the MCH book as many as 20 (65%), and some of the respondents had insufficient knowledge in applying the MCH book as many as 13 (42%).
5	C. Sistiarini, et al (2014). [10]	Cross Sectional	MCH book recording function less well in the amount of 44%, a good educational functions MCH book of 57.1%, good communication function MCH book by 61.5%, and maternal knowledge about the MCH that is equal to 56 % better. There are relationship between the function of recording MCH books with knowledge, there is no relationship between education and communication functions with knowledge MCH.
6	Veronika et al. (2022) [12].	Cross Sectional	Knowledge of pregnant women, postpartum mothers and mothers with babies <1 year in the Jatijajar Health Center area is good. P value = 1, which indicates that there is no relationship between the behavior of using MCH books and mother's knowledge of MCH books. The behavior of pregnant women, postpartum mothers and mothers with babies <1 year old in using the MCH handbook is still lacking with 21 mothers out of 20 mothers (70%). Mother's knowledge of the MCH book is in the good category with a total of 28 mothers from 30 mothers (93.3%).
7	S. Wahyuni, et al (2022) [13].	Cross Sectional	the results of an analysis of the description of the knowledge of pregnant women in using the MCH handbook, of 21 (60.0%) had sufficient knowledge, and good and less, respectively, 8 people (22.8%) had good knowledge, and 6 people (17.2%) have less knowledge. Utilization of the MCH Handbook at TPMB Sri Wachyuni was 30 people (85.7%) did not benefit, and 5 people (14.33%) benefited. there is no relationship between the knowledge of pregnant women and the use of the MCH Handbook at TPMB Sri Wachyuni with a p value = 0.995 at a significance level of 0.05.
8	A., Ariantika (2024) [14].	Cross Sectional	The results of the chi square test showed a p value of 0.000 or p value (<0.05), so it can be concluded that there is a relationship between the knowledge of pregnant women and the utilization of the MCH book.
9	A., Ayuaningsih, et al (2023) [11].	Cross Sectional	The results of the study showed that there was a significant relationship between knowledge and the use of maternal and child health (MCH) books in pregnant women (p= 0.00 < 0.05). The conclusion is that there is a relationship between knowledge and the use of maternal and child health (MCH) books for pregnant women at the Pampang Health Center, Makassar City.
10	A., Munna, et al (2020) [15].	Cross Sectional	There is a significant relationship between the level of knowledge with the behavior (p = 0,007) of third trimester pregnant women in the use of the MCH Handbook.

Based on the results of the study, it was found that most respondents got a good knowledge score of the MCH book as many as 39 respondents (78%), while respondents with a poor knowledge score of the MCH book were 11 respondents (22%). In addition, based on the results of the quality of use of the MCH book, it was found that 26 respondents (52%) utilized the MCH book well, and 24 respondents (48%) utilized the MCH book poorly [6]. This is in line with the results of the study obtained that out of 21 pregnant women who had a positive attitude, there were 10 people (27.8%) who had good knowledge, 9 people (25.0%) had sufficient knowledge and 2 people (5.6%) had insufficient knowledge. Of the 15 mothers who had a negative attitude, there were 10 people (27.8%) who had insufficient knowledge, 4 people (11.1%) had sufficient knowledge and 1 person (2.8%) had good knowledge. Based on the p value and Chi Square, the results showed that there was a relationship between knowledge and attitudes of pregnant women regarding the use of the MCH book [7].

In further research, the results obtained pregnant women who have good knowledge and utilize the MCH book are 5 respondents (6%), pregnant women who have sufficient knowledge and utilize the MCH book are 18 respondents (21.4%), and pregnant women who have less knowledge but utilize the MCH book are 16 respondents (19%) [8]. This is in line with other studies, where the results obtained were that some of the respondents had less knowledge, namely

18 people (58%), a small number of respondents had sufficient knowledge, namely 11 people (35%), and very few respondents had good knowledge, namely 2 people (6%) about the application of the MCH Book [9].

Further research found that mothers who have good MCH knowledge, have incomplete MCH book recording functions of around 70%, compared to mothers who have complete MCH book recording functions of around 45.1%, the difference is statistically significant with a value of $p = 0.031$ ($p \text{ value} \leq 0.05$), meaning there is a relationship between the function of MCH book recording and MCH knowledge [10]. This is in line with other studies, where the results of the behavior of pregnant women, postpartum mothers and mothers with babies <1 year in utilizing MCH books are still lacking with a total of 21 mothers out of 30 mothers (70%). Mothers' knowledge of MCH books is included in the good category with a total of 28 mothers out of 30 mothers (93.3%). The utilization of MCH Books at the Jatijajar Health Center is considered good with a percentage of 90.9% [12].

In another study showed the number of respondents with good knowledge in the use of MCH Books with a percentage of 80.6% and respondents with good knowledge who lack in the use of MCH books, namely 19.4%, while respondents with poor knowledge who are good in the use of MCH Books with a percentage of 31.8% and respondents with poor knowledge who lack the use of MCH books, namely 68.2%. then it is known the relationship between maternal knowledge and the use of MCH books with the chi square test obtained a p-value of 0.000 or a p value (<0.05) then it can be concluded that there is a relationship between maternal knowledge and the use of MCH books [14]. This is in line with other studies, where from a total of 74 respondents the results were obtained, that mothers who have sufficient knowledge by utilizing MCH books are 69 mothers (93.2%) and no pregnant women have sufficient knowledge by not utilizing MCH books. While pregnant women who have insufficient knowledge by utilizing MCH books are 1 mother (1.4%) and pregnant women who have insufficient knowledge by not utilizing MCH books are 4 mothers (5.4%). The results of the chi-square test show that $\rho = 0.00$, which is smaller than the α value of 0.05 ($\rho < 0.05$), namely that there is a relationship between the level of knowledge and the use of maternal and child health books (MCH) in pregnant women [11].

In further research, it was found that the characteristics of respondents with the level of knowledge obtained p-value on the characteristics of age, and work > 0.05 which means that there is no significant relationship between the characteristics of pregnant women with the level of knowledge of pregnant women in the third trimester in the use of MCH Books. While the characteristics of education obtained a p-value of (0.001 <0.05) which means that there is a significant relationship between education and the level of knowledge of pregnant women in the third trimester [15]. In contrast to other studies, where the results of the analysis of the Relationship between Pregnant Women's Knowledge and the Use of MCH Books at TPMB Sri Wachyuni were obtained, namely 21 out of 35 people who had moderate knowledge, where almost all of them, namely 19 people (63.3%) had a level of benefit, and only a small part, namely 2 people (20%) were useful. From the results of the Chi-Square test, a p-value of $0.995 > \alpha$ (0.05) was obtained, so H_0 was accepted, with the conclusion that there was no significant relationship between Pregnant Women's Knowledge and the Use of MCH Books at TPMB Sri Wachyuni [12].

4. Conclusion

Based on the analysis of 7 journal articles that have been discussed and described, most of them reveal that there is a significant relationship between the level of knowledge and the use of maternal and child health books (MCH) in pregnant women. Reading MCH books is an important thing that must be done by mothers, especially pregnant women to mothers who have toddlers, because MCH books are information media that provide complete knowledge about maternal and child health starting from how to maintain the health of pregnant women, mothers in labor, postpartum mothers and child health up to children aged six years. MCH books have an important role in increasing maternal knowledge if read regularly

Compliance with ethical standards

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Disclosure of conflict of interest

No conflict of interest to be disclosed.

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