

Determinants influencing the knowledge levels of pregnant women regarding the contents of the MCH Book

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Abstract

Introduction: Each day, nearly 800 women die due to pregnancy and childbirth complications. The MCH book is a strategy designed to empower communities, particularly families, to maintain health quality and access optimal healthcare services for mothers and children. To use the MCH book effectively, mothers need to understand its contents. This research aims to find out more about the factors that influence the level of knowledge of pregnant women about MCH books.

Method: This study is a literature review. The articles sourced from Google Scholar and selected articles based on certain inclusion criteria. The chosen articles highlight original research findings regarding the factors that influence the knowledge level of pregnant women about the contents of the MCH book. The articles were published between 2020-2024.

Result and Discussion: From the literature research, 9 articles met the inclusion criteria. A review of 9 articles indicates that several factors can influence the knowledge of pregnant women regarding the MCH book. The varying characteristics of each individual naturally lead to different levels of understanding.

Conclusion: Healthcare professionals play a crucial role in enhancing the knowledge of pregnant women about the contents of the MCH book. The characteristics of the pregnant women also influence their level of understanding.

Keywords: Determinants; Knowledge; Pregnant; MCH Book; Health Education

1. Introduction

Maternal mortality has decreased from 451,000 in the year 2000 to 287,000 in 2020. However, nearly 800 women still die every day from pregnancy and childbirth complications. This means that every two minutes, there is one maternal death due to obstetric issues (1).

The MCH book serves as a key strategy to empower communities, particularly families, to maintain health quality and access optimal healthcare services for mothers and children. It functions as a guide for maternal and child health information and records, a tool for documenting health data, an educational medium, and a means of providing health information and communication (2).

Every mother and child has the right to receive an MCH book, and every healthcare facility is obligated to provide it. The MCH book contains a wide range of important health information for mothers and children. When used effectively, it

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can lead to better health behaviors and outcomes for both. To use the MCH book optimally, mothers need to understand its contents (3).

This research aims to find out more about the factors that influence the level of knowledge of pregnant women about MCH books. This study aims to increase the knowledge of health workers, especially midwives, to optimize the services provided and increase the knowledge and empowerment of pregnant women. Anticipation is useful in reducing morbidity and mortality rates in mothers and babies.

2. Material and methods

This article is a literature review that examines 9 selected articles based on specific inclusion criteria. The chosen articles present original research findings regarding the factors that influence the knowledge levels of pregnant women about the contents of the MCH book. The articles were published between 2020 and 2024 (in the last four years) and consist of 9 articles in Indonesian. The exclusion criteria for this review included any articles that discussed factors influencing the knowledge level of pregnant women about the MCH book using methods other than original research. The articles used are sourced from Google Scholar. Articles were analyzed descriptively including author and year of publication, research location, research methods, research subjects, and research findings.

3. Results

Ten articles have been reviewed and analyzed as follows.

Table 1 Literatur Review

No	Author	Research Title	Location	Method	Subject	Result
1	Simotupang D, Silalahi EL (2022)	Pengaruh Sosialisasi Buku KIA terhadap Pengetahuan Ibu Hamil tentang Buku KIA	Community Health Center	Quantitative analysis with quasi-experimental design	30 pregnant womens	The mean level of knowledge before the MCH Book socialization was carried out was 62.97. The mean level of knowledge after socialization of the MCH Handbook was 74.31. The statistical results of the paired sample test (pre-post) of knowledge obtained p value of 0.000 indicating that there was a significant difference between knowledge before the MCH Handbook Socialization was carried out and after the MCH Handbook socialization was carried out (4).
2	Amalia R, Putri NR, Mutika WT, Megasari AL (2023)	Hubungan Lama Membaca Buku KIA (Kesehatan Ibu dan Anak) dengan Pengetahuan dan Sikap Ibu Hamil terhadap Kehamilan	Java Island	Survey method with cross sectional approach	268 pregnant women	The statistical test results obtained a p value of 0.037 or less than 0.05 and an OR value of 1.6. These results indicate that there is a relationship between the duration of reading the MCH handbook and the respondent's knowledge of the MCH handbook (5).

3	Suhartini, Rosmiyati (2021)	Pengaruh KIE tentang Pemanfaatan Buku KIA terhadap Pengetahuan Ibu Hamil	Tanjung Sari Health Center in Natar Dsitrict, South Lampung Regency	Quantitative research with a quasi-experimental research design	30 pregnant womens	The results of the study showed that there was influence after being given CIE has an increase in the level of knowledge by a difference of 10.13 points with p-value 0,000 (6).
4	Putra MIT, Tanjung ICD, Hutagalung SV, Lubis AP (2024)	Pengaruh Frekuensi Membaca Buku Kesehatan Ibu dan Anak terhadap Pengetahuan Ibu	Medan Johor	Case control study with a retrospective observational approach	144 parents of children aged 0-59 months	The results showed that 60.4% the utilization of MCH book was in good category and 43.8% the mother's knowledge regarding child health was in sufficient category. There is a significant relationship between the utilization of MCH book and mother's knowledge of child health (p=0.001) (7).
5	Hikmah N (2023)	Pengaruh Pendidikan dan Usia terhadap Pengetahuan Ibu Hamil tentang Buku KIA	Banyu Besi, Tragah District	Descriptive analytical with a cross-sectional approach	24 pregnant womens	The results showed that ρ value (0.026) < α (0.05) showed that there was a relationship between education and mother's knowledge of the MCH handbook. ρ value (0.880) > α (0.05) there was no relationship between age and mother's knowledge of the MCH handbook (8).
6	Suciati R, Hardjanti TS, Fajrin R (2024)	Pengaruh kelas Ibu terhadap Pengetahuan Isi Buku KIA pada Ibu Hamil di Wilayah Kerja UPTD Puskesmas Geyer 2	UOTD work area of Geyer 2 Health Center	Quantitative research with a quasi-experimental research design	44 respondents	The results of this study were the knowledge of pregnant women before (pretest) respondents with a good category as many as 21 people (47.7%) and knowledge of pregnant women after (posttest) increased to 42 respondents (95.4%) with a good category. In the shapiro wilk test, it was obtained $\alpha > 0.05$ so that the data was normally distributed and from the simple paired T test showed p values of 0.000 < 0.05, it can be concluded that there is an influence of maternal class on knowledge of MCH book content (9).
7	Arinta I (2021)	Faktor-Faktor yang Mempengaruhi	Sawah Besar Public Health	Quantitative using cross	214 samples of pregnant women	The results of the analysis showed that there is a significant relation of

		Pengetahuan tentang Buku KIA pada Ibu Hamil	Center and Cempaka Putih Health Center	sectional approach		mother job (p = 0,048), OR = 4,596, with knowledge of books on pregnant women at Cempaka Putih Public Health Center and Sawah Besar Public Health Center (10).
8	Siahaan N, Sinaga ES, Rosmega (2022)	Hubungan Pendidikan Kesehatan dengan Pengetahuan Ibu Hamil tentang Buku KIA di Desa Suka Makmur Kecamatan Deli Tua Kabupaten Deli Serdang Tahun 2021	Suka Makmur Village, Deli Tua District, Deli Serdang Regency	Quasi-experimental with one group pretest and posttest design	20 people	The results of the analysis showed that there is a relationship between health education and knowledge of pregnant women about MCH books with a p value of 0.000 (11).
9	Rahmi A (2022)	Pengetahuan dan Sikap Ibu Hamil tentang Isi Buku Kesehatan Ibu dan Anak yang diberikan melalui Media Grup <i>Whatsapp</i> di Praktik Mandiri Bidan Sungai Lutut	Sungai Lutut Midwife's Independent Practice	Descriptive with onw group pre-posttest design	36 respondents	Before receiving the material from the MCH book through the WhatsApp group, most respondents had a moderate level of knowledge (61.11%). After receiving the material, the majority became well-informed (75%) (12).

4. Discussion

The research findings indicate that there are several factors influencing the knowledge levels of pregnant women regarding the contents of the MCH book.

In Simatupang's (4) study, it was found that pregnant women's knowledge about the MCH book increased after socialization. Before the socialization, the mean knowledge score of mothers was 62.97, which rose to 74.31 after the socialization. Socialization is a learning process aimed at acquiring knowledge, information, understanding, and practicing the contents of the MCH book, which includes explanations and healthcare services for mothers and children from pregnancy, childbirth, postpartum, until the child reaches five years old, as well as counseling and contraceptive provision, immunization, nutritional status, and optimal child growth and development. The paired sample test statistics (before the socialization of the MCH book) showed a p-value of 0.000, indicating that there is a significant impact of MCH book socialization on knowledge improvement.

Aligned with Suhartini's (6) research findings, there is an impact of providing Information, Education, and Communication (IEC) about the utilization of the MCH book on pregnant women's knowledge. Health IEC through the MCH book can serve as a means of communication between healthcare providers and mothers. Although mothers can read the messages/information in the MCH book themselves, not all have the time or opportunity to do so. The ease of understanding health information/education becomes a crucial determinant. The MCH book can be used as an effort to raise awareness among mothers and healthcare providers about the importance of maternal and child health.

Health education via social media platforms like WhatsApp can also be utilized. Rahmi's (12) research indicates an increase in respondents' knowledge after they were provided with materials related to the contents of the MCH book. Educational media play a significant role in enhancing knowledge and serving as a source of information. By modifying

the educational media, knowledge levels can be further improved, potentially reducing morbidity and the still-high maternal and child mortality rates.

Similar results were found in Suciati's (9) study, which involved 44 respondents. The paired sample T test showed a significance value (2-tailed) with a p-value of $0.000 < 0.05$, indicating a significant difference between the knowledge levels about the MCH book before and after the intervention. This suggests that the maternal classes positively impacted the knowledge of the MCH book's contents after the implementation of learning in these classes. Health education is associated with pregnant women's knowledge about the MCH book, which is linked to the convenience of carrying the MCH book during pregnancy check-ups at healthcare facilities, and the book's valuable and important information for mothers and babies.

The study by Amalia et al. (5) found a p-value of less than 0.05 and an odds ratio (OR) of 1.6 in the analysis of the relationship between the duration of reading the MCH book and respondents' knowledge about it. This indicates that if pregnant women read the MCH book for 29 minutes per week, their knowledge increases by 1.6 times compared to those who read for less time. The duration spent reading the MCH book provides valuable information through narratives or illustrations, which serves as an initial step in enhancing knowledge during pregnancy.

The education level of pregnant women does not always correlate with their knowledge. Hikmah's (8) research shows a relationship between education and mothers' knowledge of the MCH book. A mother's education is associated with the breadth and depth of her knowledge, which she gains from formal education. A mother with secondary education is considered capable of absorbing a variety of information presented to her. Similarly, Arinta's (10) research found a significant relationship between a mother's occupation and her knowledge about the MCH book. The occupation of pregnant women is linked to the time they have available to read the MCH book and their communication interactions with their environment.

5. Conclusion

A review of 9 articles indicates that several factors influence pregnant women's knowledge about the contents of the MCH book, including socialization, health IEC (Information, Education, and Communication), health education, and maternal classes. This demonstrates the significant role healthcare professionals play in educating pregnant women about the MCH book to enhance their knowledge. The characteristics of pregnant women, such as their education and occupation, also affect their understanding of the MCH book's contents.

Compliance with ethical standards

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Disclosure of Conflict of interest

The author declared no potential conflicts of interest.

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