

The Level of Knowledge of Pregnant Women About the MCH Book and ITS Relationship with Antenatal Visits at The Kopo Health Center, Bandung Regency in 2023

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ABSTRACT

Keywords:
knowledge, pregnant
women, KIA book,
antenatal visits

Improving public health, especially for pregnant women and infants, is a priority in reducing maternal and infant mortality rates. One of the efforts is the use of the Mother and Child Health Book (KIA) as a source of information. However, many pregnant women do not fully understand the content of the KIA book and are not compliant with antenatal visits. The aim of this research is to assess the level of pregnant women's knowledge about the KIA book and its relationship with antenatal visits at the Kopo Community Health Center. This research utilizes a descriptive analytical method with a cross-sectional design. The research sample includes all pregnant women at the Kopo Community Health Center who meet the inclusion criteria, totaling 76 pregnant women. The research findings indicate that pregnant women's knowledge about the Mother and Child Health Book (KIA) has a significant correlation with their compliance with antenatal visits at the Kopo Community Health Center. This suggests that pregnant women with good knowledge of the KIA book are more likely to have regular antenatal visits during their pregnancy, whereas those with lower knowledge levels tend to have fewer antenatal visits.



Introduction

Health development by improving the quality and ease of affordable services is directed to improve the degree of public health (Astari & Kirani, 2020). Indicators of the degree of public health and well-being are characterized by a decrease in maternal mortality, infant mortality and longevity. The high rate of maternal and child mortality in Indonesia is caused by several factors, namely direct and indirect causes of death (Nugroho, Milanti, & Fransiska, 2017). Indirect causes of death include late recognition of danger signs in deciding to be referred to a health facility, late reaching a health facility, and late getting health facility services. This delay usually goes undetected early due to irregular service, lack of knowledge of the mother about danger signs during pregnancy, during childbirth and puerperium (Sakti, 2017).

One of the health programs that is expected to help reduce morbidity and death rates due to pregnancy, childbirth and postpartum is the use of Maternal and Child Health (MCH) books (Hariyani, Murti, & Wijayanti, 2019). MCH books are books that contain information and counseling materials on nutrition and maternal and child health, pregnant women cards, toddler health cards (KMS) and records of maternal and child health services (Khuzaiyah, Khanifah, & Chabibah, 2018). MCH books are kept at home and brought every time mothers and children come to health care places anywhere to get MCH services (Anggraini, Hutabarat, & Sitorus, 2021).

The current Maternal Mortality Rate (MMR) is still far from the Sustainable Development Goals (SDGs) target of 70 per 100,000 live births by 2030. While the Sustainable Development Goals (SDGs) target to end preventable newborn and under-five deaths, with all countries trying to reduce Neonatal Mortality Rates to at least 12 per 1000 KH (Live Births) and Infant Mortality Rates to 25 per 1000 by 2030.6 According to WHO, MMR in the World reached 289,000 people in 2019 (Lubu, 2019). According to the Chairman of the Scientific Committee of the International Conference on Indonesia Family Planning and Reproductive Health (ICIFPRH), until 2019 Indonesia's MMR is still high, which is 305 per 100,000 live births. The total number of maternal deaths per Regency / City of West Java Province in 2020 was 660 cases, the number of death cases is higher than in 2019 of 417 cases.9 The causes of maternal mortality were still dominated by bleeding at 28% and hypertension at 29%, although other causes were also high at 24%.

The application of MCH books in all health facilities can increase the knowledge and understanding of pregnant women so that complications that may occur during pregnancy can be detected as early as possible by the purpose of antenatal services, namely to prevent obstetric complications and ensure that complications can be detected and treated adequately (Karim & Sari, 2021). In addition, the expected results of the procurement of MCH Books in the short term are increased maternal knowledge, increased knowledge of health worker skills and in the long term, there is a change in the behaviour of mothers, families and communities in maintaining maternal and child health and there is an increase in the health and nutritional status of mothers and children. But not all mothers use MCH books well; there are mothers who do not have time to read MCH books, are too lazy to read MCH books, and have difficulty understanding and understanding the contents of MCH books (Suarayasa, 2020).

The mother's knowledge of MCH books can affect the mother's condition during pregnancy (Rosmawati, Indrayani, & Putri, 2023). Factors affecting maternal monitoring include Age, Interest, Education, Occupation, Intelligence, Experience, Surrounding Environment and Information. As a result, if the mother's knowledge is lacking about the use of MCH books, most pregnant women do not know what are the danger signs during pregnancy, and prevention of late is not resolved (Damayanti & Nur A, 2010).

To prevent complications in pregnancy that can cause the risk of death to the mother, early detection and treatment of at-risk pregnant women need to be improved, especially in MCH service facilities.13 MCH books are given when the mother first

comes to check the pregnancy. After recording the results of the examination and informing the results, the midwife must also be able to educate and understand mothers about the contents and benefits of MCH books. So that mothers can find out the benefits of MCH books and prevent/detect early complications during pregnancy (Rofiqoch, 2023).

Based on the results of a preliminary study conducted in January 2023 in Cilame Village, of the five pregnant women interviewed, all of them already have MCH books, but three pregnant women do not know about the contents of MCH books because they have never been read, one pregnant woman knows what MCH is but only explains a little, and one other person knows and understands the contents of MCH books. So it can be said that many pregnant women do not want to read and learn about MCH books even though in the book there are many instructions on how to keep pregnancy healthy. Then, when the survey was conducted directly in Cilame RW.09 village by interviewing 5 pregnant women asked about their compliance with visits during pregnancy, 1 pregnant woman had not made a visit at all, 2 pregnant women had only visited midwives once, and 2 other people routinely made monthly visits to midwives. There are still many pregnant women who are not obedient to antenatal visits because they still do not understand what antenatal itself is, therefore this research is important because it is in line with the advantages possessed by the Faculty of Medicine, Pasundan University, namely Asah-Asih-Asuh (Education, Care, and Love).

Knowledge Level

Knowledge is the result of knowing and this happens after people have sensed a particular object. Sensing occurs through the five human senses, namely sight, hearing, smell, taste and touch.

Pregnant Women

Pregnant women are people who are in the process of fertilization to continue offspring. In the body of a pregnant woman there is a fetus growing in the uterus. Pregnancy is an important period of life. A pregnant woman must prepare herself as well as possible so as not to cause problems with the health of the mother, baby, and during the birth process. One of the factors that affect maternal health is the state of nutrition.

Maternal and Child Health Books

The Maternal and Child Health Book (MCH Book), known in the community as the pink book, is a collection of standard counseling materials, information, and notes on maternal and child health nutrition that serves as one of the instruments of maternal and child health services received directly by mothers and families.

Antenatal Care

Antenatal Care is a pregnancy supervision to determine the general health of the mother, establish early diseases that accompany pregnancy, establish early pregnancy complications, and determine the risk of pregnancy (high risk, doubtful risk and low risk).

Research Methods

This research method is descriptive analytics,37 with a cross sectional design, 38 namely the object of research is measured at the same time to determine the picture of the level of knowledge of pregnant women about MCH books and their relationship with antenatal visits at the Kopo Health Center. This study was observed based on primary data with the distribution of questionnaires directly to respondents.

Results and Discussion

Univariate Analysis

The sample in this study was pregnant women in 6 villages in Kopo, Bandung Regency, totaling 76 respondents. The instrument used in this study was in the form of a questionnaire given directly to respondents. Based on the data obtained, the results of univariate analysis of the level of knowledge of pregnant women on MCH books and also the description of antenatal visit compliance during pregnancy can be seen as follows:

Table 1.
Overview of the Level of Knowledge of Pregnant Women on MCH Books

Tingkat Pengetahuan	Frekuensi (n)	Persen (%)
Baik	42	55,3%
Cukup	19	25,0%
Kurang	15	19,7%
Total	76	100,0%

Based on Table 1 shows that most of the respondents, namely as many as 42 people (55.3%) pregnant women have a good level of knowledge, while the remaining 19 people (25.0%) pregnant women have a sufficient level of knowledge and as many as 15 people (19.7%) pregnant women have a lack of knowledge. Thus, it can be seen that pregnant women in Puskesmas Kopo Bandung Regency mostly have a good level of knowledge of MCH books.

Table 2
Overview of antenatal visit compliance during pregnancy

Kunjungan	Frekuensi (n)	Persen (%)
Sering	58	76,3%
Jarang	18	23,7%
Total	76	100,0%

Based on Table 2 shows that almost all respondents, namely as many as 58 people (76.3%) pregnant women have a level of adherence to frequent visits, while the remaining 18 people (23.7%) pregnant women have a level of adherence to infrequent visits. Thus, it can be seen that pregnant women in Puskesmas Kopo Bandung Regency almost all have a level of adherence to frequent antenatal visits during pregnancy.

Bivariate Analysis

Based on the results of univariate analysis that has been done before, then bivariate analysis is carried out using the chi-square test to determine the relationship that each variable has, here are the results of the analysis:

Table 3 The relationship between the level of knowledge of pregnant women on MCH books and antenatal visits during pregnancy

The Level of Knowledge of Pregnant Women About The Mch Book and Its Relationship With Antenatal Visits at The Kopo Health Center, Bandung Regency In 2023

		Kunjungan Antenatal				Total		P value
		Serang		Jarang		n	%	
		n	%	n	%			
Tingkat Pengetahuan	Baik	42	100,0	0	0,0	42	100,0	0,000
	Cukup	13	68,3	6	31,7	19	100,0	
	Kurang	3	20,0	12	80,0	15	100,0	
Total		58	76,3	18	23,7	76	100,0	

Based on Table 3 shows that of 42 pregnant women who have a good level of knowledge of MCH books, all (100.0%) often make antenatal visits during pregnancy, then of 19 pregnant women who have a sufficient level of knowledge of MCH books, almost some (68.3%) often make antenatal visits during pregnancy, while of 15 pregnant women who have a less level of knowledge of MCH books almost entirely (80.0%) rarely have antenatal visits during pregnancy. The results of statistical tests show a p value of $0.000 < 0.05$ which means that there is a significant relationship between the level of knowledge of pregnant women about MCH books and antenatal visits during pregnancy.

The health of pregnant women and fetal development are important priorities in prenatal care. One tool that plays an important role in monitoring and health care during pregnancy is the Mother and Child Card (MCH). MCH is not only a recording tool, but also a source of information that can provide guidance to pregnant women about the stages of pregnancy development, expected changes, and warning signs to watch out for.²¹

Pregnant women's knowledge of MCH can influence the extent to which they understand the benefits and needs of antenatal visits.²⁶ A good level of knowledge can help pregnant women understand that antenatal visits are not just routine, but an opportunity to monitor maternal and fetal health, and detect potential problems early. On the other hand, a lack of knowledge can hinder understanding of the importance of antenatal visits and can result in low adherence.

The results of this study showed that there was a significant relationship between the level of knowledge of pregnant women on MCH books with antenatal visits during pregnancy. The results of the analysis showed that pregnant women with a good level of knowledge about MCH books were all more likely to make antenatal visits during pregnancy. Meanwhile, pregnant women with a sufficient level of knowledge, most also often make antenatal visits. On the other hand, pregnant women with less knowledge of MCH books, mostly rarely make antenatal visits during pregnancy. Thus, researchers can assume that antenatal visits are more frequent by pregnant women who have good knowledge of MCH books, and less often by those with less knowledge. This means that the level of knowledge can influence the adherence of pregnant women to antenatal visits.

Knowledge is one of the predisposing factors or motivational factors that encourage pregnant women to attend antenatal visits regularly. A good knowledge of MCH books provides a deeper understanding of the benefits and importance of antenatal visits. Thus, the knowledge here acts as a motivator that increases the awareness of pregnant women about the need for consistent prenatal care. Therefore, increased knowledge can be targeted in an effort to increase antenatal visits. In addition, the effective delivery of

information to pregnant women about tools such as MCH books and their benefits is very important in increasing the level of adherence to antenatal visits of pregnant women.

Through MCH books, pregnant women can understand what should happen during their pregnancy. They learn about the stages of fetal development, common physical changes, and the biological processes that support a healthy pregnancy. Thus, they can identify normal and expected changes, such as weight gain, hormonal changes, and corresponding fetal growth. This creates a sense of closeness and involvement with the pregnancy process.

In addition to understanding normal changes, knowledge of MCH books also helps pregnant women recognize warning signs to look out for. They are taught to recognize symptoms that may indicate a health problem or potential complication, such as bleeding, high blood pressure, or lack of fetal movement. This is very important because it allows pregnant women to seek medical care immediately if these signs appear, which can reduce the risk of serious complications.

Through an understanding of normal changes and warning signs, pregnant women become more aware of the importance of regular antenatal visits. They knew that these visits were not only routine, but rather an opportunity to verify that normal changes were proceeding as they should and also to detect warning signs early. This understanding encourages them to actively participate in antenatal visits and assists in the decision-making process related to their care.

Expectant mothers who have a good knowledge of MCH books understand that antenatal visits are not just a routine ritual. They realized that the visit was designed to achieve a number of important goals, including monitoring maternal and fetal health, as well as detecting potential problems early.⁴¹ This makes them more open to regular visits. During the visit, the doctor or health care provider will perform a physical examination, measure blood pressure, monitor fetal growth, and perform necessary tests. Expectant mothers who have this understanding will appreciate the information provided during the visit even more, as they know that this information is an important tool in ensuring a healthy pregnancy.

Good knowledge about the benefits of pregnancy monitoring can also increase the confidence of pregnant women in facing pregnancy. They feel better equipped to cope with the physical and emotional changes that occur during pregnancy because they know that they are getting proper and supportive care.

This is in line with the theories of Notoatmodjo¹⁴ and the opinion of the study of Rahmad et al which states that pregnant women's knowledge of MCH books can have a significant impact on their adherence to antenatal visits. A good knowledge of MCH books can improve pregnant women's understanding of the importance of antenatal visits in pregnancy monitoring. This can help expectant mothers feel more connected to their medical care during pregnancy and raise awareness of its benefits. In addition, the results of this study also strengthen the findings of Rahmayati and Mugiati³³'s research that supports a positive relationship between pregnant women's knowledge of antenatal health services and their attendance rate to health facilities during pregnancy.

The results of this study are contrary to research from Ruri Yuni Astari and Tita Kirani 42 which showed that MCH books did not have a significant impact on the compliance of pregnant women. The findings showed that less than half of pregnant women had an adequate understanding of MCH books. In addition, it was conveyed that less than half of pregnant women did not utilize MCH books optimally.

Conclusion

It can be concluded that the level of knowledge of pregnant women about the Mother and Child Card (KIA) has a significant relationship with their compliance with antenatal visits at the Kopo Health Center. The results of the analysis showed that pregnant women who had good knowledge about MCH tended to make more frequent antenatal visits during pregnancy, while pregnant women with less knowledge levels had a lower tendency to visit. This knowledge is not only a motivational tool that raises awareness of the importance of consistent prenatal care, but also provides a deeper understanding of the developmental stages of pregnancy, expected changes, and warning signs to watch out for. Therefore, a better understanding of MCH can be targeted in an effort to improve pregnant women's adherence to antenatal visits, as well as make a positive contribution to maternal health care and fetal development at the Kopo Health Center.

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