



The Relationship Between Interest in Reading Maternal and Child Health Books and ANC Visits in Pregnant Women at Remote Areas of the Panaan Community Health Center

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Abstract: Regular Antenatal Care (ANC) visits are crucial for maintaining maternal and fetal health, but in remote areas, access to health information is often limited. The Maternal and Child Health Handbook is an alternative educational medium, though its effectiveness depends on pregnant women's interest in reading the book. This study aimed to identify the relationship between interest in reading the Maternal and Child Health Handbook and the regularity of ANC visits among pregnant women in remote areas of the Panaan Community Health Center (UPT). The study used an analytical observational design with a cross-sectional approach. A purposive sampling technique selected 30 pregnant women as respondents. Data were collected using a structured questionnaire covering respondent characteristics, knowledge of pregnancy health, interest in reading the handbook, and ANC visit data. Univariate and bivariate analyses were performed, with the Chi-Square test used for the latter. The results showed that 53.3% of respondents had a positive interest in reading the handbook, and 60% made regular ANC visits. Bivariate analysis revealed a significant relationship between reading interest and ANC visit regularity ($\chi^2=10.24$; $p=0.001$). Of the 16 women interested in reading, 87.5% made regular ANC visits, compared to only 28.6% of those without interest. In conclusion, pregnant women with higher interest in reading the Maternal and Child Health Handbook are more likely to make regular ANC visits, highlighting the need for efforts to increase reading interest through education and support.

Keywords: Antenatal Care; Health Education; Pregnant Women; Reading Interest; Remote Areas.

1. INTRODUCTION

Pregnant women's interest in maternal and child health counseling literature plays a vital role in broadening their understanding of reproductive health and care during pregnancy. Particularly in remote areas of Indonesia, such as the Panaan Community Health Center (UPT Puskesmas), limited access to adequate health information is a serious problem. Data from the Indonesian Ministry of Health shows that only around 60% of pregnant women receive antenatal care (ANC) as recommended (Kemenkes RI, 2022). Yet, regular ANC checkups are crucial for monitoring the health of both mother and fetus and identifying potential complications as early as possible.

Complex geographic challenges and limited healthcare facilities in remote areas often hinder pregnant women from accessing adequate healthcare. In such situations, maternal health counseling literature can serve as an alternative source of information, helping pregnant women understand the urgency of ANC check-ups. Previous studies have indicated that improving reading habits among pregnant women can lead to increased ANC visits (Sari et al., 2021).

A 2023 survey by the Central Statistics Agency (BPS) revealed that only around 40% of pregnant women in remote areas had access to books or counseling materials related to maternal and child health. This figure indicates that the majority of pregnant women have not yet utilized existing information sources to enrich their knowledge. This condition results in low rates of ANC visits, which should ideally occur at least four times throughout pregnancy according to WHO guidelines (World Health Organization, 2021). Pregnant women who enjoy reading tend to be more proactive in seeking information about health and prenatal care. Conversely, those who rarely read counseling literature often lack an understanding of the importance of ANC examinations and, consequently, are more likely to skip necessary visits. Therefore, it is important to examine the correlation between reading habits and the frequency of ANC visits among pregnant women in remote areas.

Low reading interest among pregnant women can be triggered by various factors, including educational level, availability of books, and lack of encouragement to seek health information. A study by Rahmawati and colleagues (2022) showed that pregnant women with higher levels of education tend to have a greater interest in reading and are more active in attending ANC visits. This indicates a positive relationship between educational level and reading habits. On the other hand, a lack of reading habits can lead to a lack of understanding of the importance of ANC, which can seriously impact maternal and infant health. Pregnant women who do not understand the risks and benefits of ANC visits may not feel the need for these examinations, increasing the risk of complications during pregnancy and childbirth. For the sake of Maternal and Child Health, there is a clear causal relationship between reading habits of counseling literature and ANC visit rates.

To encourage increased reading interest among pregnant women, various approaches can be implemented. One approach is providing easier access to counseling literature in health facilities such as community health centers (Puskesmas) and at the community level. Educational programs involving medical personnel and community volunteers can also be effective in raising awareness about the importance of reading and attending ANC visits. For example, focus group activities held at Puskesmas can provide a forum for discussing health topics and motivating pregnant women to be more active in their healthcare. Furthermore, the use of digital platforms can be optimized to reach pregnant women who have difficulty accessing physical books. Health apps that present information and counseling materials in easily accessible formats can be an attractive alternative. Research by Nugroho (2023) shows that pregnant women who use health apps tend to be more informed and attend ANC visits more frequently.

This research is worthwhile because it offers a new perspective on the importance of reading habits in the context of maternal and child health, particularly in remote areas. Understanding the relationship between interest in reading counseling literature and ANC visits is expected to lead to more effective policy recommendations for improving maternal health. Furthermore, this research has the potential to contribute to the existing literature on health education and the development of more targeted intervention programs.

2. RESEARCH METHOD

This study used an analytical observational research design with a cross-sectional approach to identify the relationship between interest in reading Maternal and Child Health Books and Antenatal Care (ANC) visits among pregnant women in remote areas of the Panaan Community Health Center (UPT Puskesmas). The cross-sectional design was chosen because the measurement of the independent variable, namely interest in reading Maternal and Child Health Books, and the dependent variable, namely ANC visits, were carried out simultaneously, so that it can describe the prevalence and relationship between variables at a certain point in time. This design was chosen due to considerations of time efficiency, cost, and ease of conducting research in remote areas with limited accessibility.

The population in this study was all pregnant women registered and undergoing pregnancy check-ups at the Panaan Community Health Center (UPT) during the study period. The characteristics of remote areas were a special consideration in this study, considering that access to health services and health information is often limited in these areas. The study sample consisted of 30 respondents selected based on predetermined inclusion and exclusion criteria. Inclusion criteria included pregnant women registered at the Panaan Community Health Center (UPT), willing to be respondents by signing an informed consent, able to communicate well, and possessing a Maternal and Child Health Handbook. Meanwhile, exclusion criteria were pregnant women with severe complications requiring referral, pregnant women undergoing hospital treatment, and pregnant women who were uncooperative or withdrew from the study.

The sampling technique used was purposive sampling, which is a sampling technique based on specific considerations or criteria established by the researcher. This technique was chosen based on the specific and limited characteristics of the population in remote areas, so the sample was selected deliberately, considering the suitability of the respondents' characteristics to the research objectives. A sample size of 30 respondents was considered the minimum requirement

for chi-square statistical analysis, although further research is recommended to use a larger sample size to increase the generalizability of the research results.

The research instrument used was a structured questionnaire that had been tested for validity and reliability. The questionnaire consisted of several sections, namely respondent identity including age, education, occupation, and parity; a questionnaire on maternal knowledge about pregnancy health and the Maternal and Child Health Book consisting of questions with true or false answer choices; a questionnaire on reading interest in the Maternal and Child Health Book that measured the frequency, duration, and motivation of reading using a Likert scale; and an ANC visit observation sheet obtained from medical records and the cohort register of pregnant women at the Community Health Center. Data collection was carried out through structured interviews using questionnaires, direct observation of respondents' Maternal and Child Health Books, and secondary data searches from medical records to verify the regularity of ANC visits.

Data analysis was conducted in stages using a statistical application program. The first stage was a univariate analysis aimed at describing the characteristics of each research variable including age, education, occupation, parity, maternal knowledge, interest in reading the Maternal and Child Health Book, and ANC visits. Data were presented in the form of frequency distributions and percentages for categorical variables, and means and standard deviations for numeric variables. The second stage was a bivariate analysis using the chi-square test to examine the relationship between interest in reading the Maternal and Child Health Book and ANC visits. The chi-square test was chosen because both variables are categorical. The statistical significance level used was 5% alpha or p-value <0.05 , which means if the p-value is less than 0.05 then there is a significant relationship between the independent and dependent variables.

3. RESULTS AND DISCUSSION

Results

General Data

Table 1. General Data Distribution

Characteristics	Frequency	%
Mother's Age:		
• < 20 years	5	10,016.7
• 20–35 years	19	63.3
• > 35 years	6	20.0
Education		
• Elementary School	7	23.3
• JUNIOR HIGH SCHOOL	9	30.0
• SENIOR HIGH SCHOOL	8	26.7
• Diploma	4	13.3
• Bachelor	2	6.7
Work		
• Housewife	18	60.0
• State Civil Apparatus	4	13.3
• Teacher	3	10.0
• Farmer	5	16.7
Parity		
• Primipara	11	23.3
• Multipara	15	60.0
• Grand multipara	4	16.7

This study shows that the majority of pregnant women respondents are in the 20–35 age group, with a proportion of 19 people (63.3%). This age range is the optimal reproductive period, where the likelihood of pregnancy complications tends to be minimal compared to those under 20 or over 35, as stated by the Indonesian Ministry of Health (2021). The findings of Sari et al. (2022) reinforce this finding by showing that pregnant women in this age range are more likely to undergo regular prenatal checkups, possibly related to mental maturity and greater physical readiness in this age group.

Education also plays a crucial role in shaping mothers' understanding and behaviors regarding health. Data shows that 30% of respondents had attained junior high school education, 23.3% were elementary school graduates, and only 6.7% had attained college. In their study, Pratiwi and Setiawan (2021) revealed that mothers with higher education generally had more comprehensive insights into reproductive health and demonstrated greater initiative in accessing prenatal care. These findings indicate that educational attainment significantly contributes to increased maternal awareness of the importance of care during pregnancy.

Respondents' employment status also showed interesting variations, with the majority (60%) being housewives, while the remainder worked as civil servants (13.3%), teachers (10%), and farmers (16.7%). These employment conditions have implications for time availability and access to healthcare services. Astuti et al. (2023) found that mothers working in the formal sector, such as civil servants and educators, were more likely to utilize healthcare facilities than housewives, a factor explained by social support from the work environment and ease of access to healthcare information and services.

In terms of parity, respondents were categorized as primiparas (36.7%), multiparas (50%), and grand multiparas (13.3%). Wulandari et al. (2022) identified a pattern where mothers experiencing their first pregnancy reported a higher frequency of antenatal care visits than those with previous childbirth experience. This phenomenon can be understood as a response to the greater levels of anxiety and uncertainty experienced during their first pregnancy, which then motivates them to actively seek information and medical support through routine antenatal care.

Special Data

Table 2. Distribution of Mother's Knowledge

Knowledge	Frequency	(%)
• Good	17	56.7
• Not enough	13	43.3

Mothers' knowledge of reproductive health is crucial in determining their health behaviors. Data obtained showed that 56.7% of respondents had good knowledge, while 43.3% had poor knowledge. Research by Nuraini et al. (2021) showed that mothers with good knowledge were more likely to attend regular ANC visits. This suggests that efforts to increase knowledge through education and health counseling are essential to raise awareness among pregnant women.

Table 3. Distribution of Interest in Reading Maternal and Child Health Books

Reading Interest	Frequency	(%)
• There is	16	53.3
• There isn't any	14	46.7

Interest in reading the book KESEHATAN IBU DAN ANAK (Mother and Child Health) is an important indicator in understanding mothers' involvement in their and their children's health. Of the 30 respondents, 53.3% showed a positive interest in reading the book KESEHATAN IBU DAN ANAK, while 46.7% showed no interest. Research by Sari et al.

(2023) shows that mothers with a high interest in reading tend to better understand health information and are more active in attending ANC visits. This suggests that promoting reading interest can be an important strategy in improving maternal and child health.

Table 4. Distribution of ANC Visits

Knowledge	Frequency	(%)
• Good	17	56.7
• Not enough	13	43.3

The analysis showed that 60% of respondents attended ANC visits regularly, while 40% were irregular. Regular ANC visits are crucial for monitoring maternal and fetal health during pregnancy. According to research by Hidayati and Rahman (2022), mothers who attend ANC regularly have a lower risk of complications and better pregnancy outcomes. This highlights the importance of interventions to encourage pregnant women to attend ANC more regularly.

Bivariate Analysis

The results of the bivariate analysis showed a significant relationship between interest in reading books on MATERNAL AND CHILD HEALTH and the regularity of ANC visits. Of the 16 mothers who had an interest in reading, 14 (87.5%) made regular ANC visits, while of the 14 mothers who did not have an interest in reading, only 4 (28.6%) made regular ANC visits. The Chi-Square test showed a χ^2 value of 10.24 with a p-value of 0.001, which indicates that there is a statistically significant relationship between the two variables.

The statistical test results provide a clear picture of the importance of reading interest in increasing the regularity of ANC visits. The very low p-value (0.001) indicates that interventions aimed at increasing maternal reading interest can be an effective strategy in improving maternal and child health.

Discussion

The results of this study show that there is a significant relationship between interest in reading books Maternal and Child Health is associated with regular ANC visits ($p=0.001$). This finding aligns with research by Sulistyawati et al. (2019), which found that pregnant women with good knowledge of the Maternal and Child Health Handbook had ANC compliance 3.2 times higher than those with less knowledge. This study confirms that understanding the information in the Maternal and Child Health Handbook plays a crucial role in increasing maternal awareness of the need for regular prenatal checkups.

In line with this, Kartikasari and Oktaviana (2020) in their research in remote areas of East Java found that 78.5% of pregnant women actively read books. Maternal and Child Health (MCH) participants made at least four ANC visits during pregnancy, while only 32.1% of those who did not read the book complied. This demonstrates the effectiveness of the MCH Handbook as a self-educational tool, especially in areas with limited access to healthcare professionals. Meanwhile, research by Wulandari and Fitriani (2021) further indicates that interest in reading the MCH Handbook is influenced by maternal education level. Mothers with secondary education or higher have a 2.8 times higher reading interest, consistent with the study's data, which shows that 56.7% of mothers have good knowledge.

Furthermore, the study by Rahmawati et al. (2022) found that socialization and assistance of health workers in the use of the Health Book Maternal and Child Health increased mothers' reading interest by 65%, which resulted in an increase in regular ANC visits to 82.3%. Research by Novitasari and Sugiharti (2023) reinforces this finding by showing that in remote areas, the Maternal and Child Health Handbook was the primary source of information for 69.4% of pregnant women, particularly primiparous women who needed guidance during their first pregnancy. These research findings confirm the importance of optimizing the use of the Maternal and Child Health Handbook as an effort to improve the coverage and quality of ANC services, particularly in remote areas with limited access to healthcare.

4. CONCLUSION

From the analysis above, it can be concluded that there is a significant relationship between interest in reading books Maternal and Child Health. The regularity of ANC visits for pregnant women in remote areas of the Panaan Community Health Center (UPT Puskesmas) is crucial. Therefore, efforts to increase reading interest through educational programs and health education are crucial. These programs will not only increase mothers' knowledge but also encourage them to be more active in maintaining their health during pregnancy.

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