



THE RELATIONSHIP BETWEEN KNOWLEDGE AND ATTITUDES OF PREGNANT WOMEN ABOUT MATERNAL AND CHILD HEALTH BOOKS (KIA)

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ABSTRACT	Keywords (3-5 kata kunci)
The Maternal and Child Health (KIA) book serves as a comprehensive record of routine pregnancy check-ups and an informational medium for pregnant women to manage their pregnancies effectively. Proper utilization of the KIA book enables early detection of abnormalities or complications during pregnancy and childbirth, potentially reducing maternal mortality rates. This study aimed to analyze the relationship between knowledge and attitudes of pregnant women regarding Maternal and Child Health (KIA) books in Waung Village, Boyolangu District, Tulungagung Regency. An analytical cross-sectional design was employed in this study. The population consisted of 30 pregnant women, with total sampling technique used to select all eligible participants. Data were collected using observation sheets and questionnaires from March 16-30, 2024. Statistical analysis was performed using the Chi-Square test with SPSS. The findings revealed that the majority of respondents (60%, n=18) had sufficient knowledge about KIA books, while most respondents (56%, n=17) demonstrated positive attitudes. There was a significant relationship between knowledge and attitudes of pregnant women about KIA books ($p=0.007$). Pregnant women with positive attitudes showed readiness to implement, pay attention to, and follow the guidelines contained in the KIA book to achieve optimal maternal and infant health. A significant relationship exists between knowledge and attitudes of pregnant women regarding KIA books in Waung Village, Boyolangu District, Tulungagung Regency ($p=0.007$). Healthcare providers, particularly midwives, should enhance health education about the importance of KIA books to improve maternal and child health outcomes.	Knowledge, Attitudes, Maternal and Child Health Book (KIA)

INTRODUCTION

Pregnancy, childbirth, the postpartum period, and newborn care are physiological conditions that typically progress normally; however, these processes carry potential risks that may threaten the lives of both mother and baby (Prawirohardjo, 2009). Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) serve as crucial indicators for assessing maternal health status in a region, particularly concerning the risks associated with maternal mortality and childbirth.

Currently, Maternal and Child Health (KIA) issues remain a significant public health concern. This is largely attributed to insufficient public knowledge regarding the importance of KIA books. The KIA book contains comprehensive records of routine pregnancy examinations, from initial visits to follow-up appointments. Additionally, it functions as an information medium that pregnant women can utilize for pregnancy care, enabling early detection of potential abnormalities or complications that may arise during pregnancy and childbirth, thereby reducing maternal mortality rates (Kementrian Kesehatan RI, 2015).

According to the 2022 Indonesian Health Survey (SKRT), several contributing factors to maternal deaths include delays in recognizing danger signs, delays in decision-making to seek help, delays in reaching health services, and delays in receiving appropriate care at healthcare facilities. Internal factors influencing maternal mortality include maternal age (too young or too old), frequency of pregnancy, and the childbirth process itself (Depkes RI, 2022).

Generally, maternal mortality rates can be reduced when pregnant women undergo proper antenatal care and utilize their KIA books effectively, allowing for early detection of risk factors and minimization of complications during pregnancy and childbirth. The KIA book provides comprehensive records of maternal health throughout pregnancy, childbirth, and the postpartum period, as well as child health from newborn through toddler stages. It also contains various information on maintaining and caring for maternal and child health. Consequently, every pregnant woman should possess a KIA book.

Midwives, as frontline healthcare providers in communities, play a vital role in improving maternal and child health. Their responsibilities include ensuring that every pregnant woman possesses a KIA book, understands its contents, and brings it to every healthcare visit. By understanding and applying the content of the KIA book, including regular check-ups, maternal and infant health can be properly monitored, facilitating safe and healthy deliveries (Sulistiyawati, 2009).

Based on this phenomenon, the researchers were motivated to conduct this study to analyze the relationship between knowledge and attitudes of pregnant women regarding Maternal and Child Health (KIA) books in Waung Village, Boyolangu District, Tulungagung Regency.

METHOD

This study employed an analytical survey method using a cross-sectional time approach. The cross-sectional design emphasizes that measurement or observation of both independent and dependent variables occurs only once at a specific point in time. Both variables are assessed simultaneously without follow-up, although not all research subjects are observed on the same day or time.

The research was conducted in Waung Village, Boyolangu District, Tulungagung Regency, from March 16 to 30, 2024. The study population comprised 30 pregnant women in Waung Village. Using total sampling technique, all 30 pregnant women were included as research participants.

Independent Variable: Knowledge of pregnant women about KIA books, Dependent Variable: Attitudes of pregnant women about KIA books.

Data were collected using observation sheets and structured questionnaires. The questionnaire assessed respondents' demographic characteristics, knowledge levels regarding KIA books, and attitudes toward KIA book utilization. Data were analyzed using descriptive statistics to characterize respondent demographics and knowledge/attitude distributions. The Chi-Square test with SPSS was employed to determine the relationship between knowledge and attitudes, with a significance level set at $\alpha = 0.05$.

RESULT

1. General Data

Table 1

Table 1 Characteristics of the respondents below:

KarakteristikResponden	Sum	Percentage (%)
Education		
College	4	13
SMA	12	40
SMP	10	33
No School	4	13
Age		
17-25 Years	16	53
26-30 Years	13	43
31-35 Years	1	3
36-40 Years	0	0
Work		
Not Working/IRT	14	47
Private	9	30
PNS	4	13
Farmer	3	10
Information		
Pernah	18	60
Never	12	40
Resources		
Immediately	13	43
Print	11	37
Media Electronics	6	20
Sum	30	100

Source: Primary Data, 2024

Based on Table 1, among 30 respondents, nearly half (40%, n=12) had senior high school education. Most respondents (53%, n=16) were aged 17-25 years. Nearly half of respondents (47%, n=14) were housewives or unemployed. Most respondents (60%, n=18) had received information about KIA books, with nearly half (43%, n=13) obtaining information through direct sources such as healthcare workers, friends, neighbors, and community members.

2. Knowledge of Pregnant Women About KIA Books

Table 2. Distribution of Respondents by Knowledge Level About KIA Books

No	Knowledge Level	Frequency (n)	Percentage (%)
1	Good	9	30
2	Sufficient	18	60
3	Poor	3	10
Sum		30	100

Source: primary Data, 2024

Table 2 shows that from 30 respondents, the majority (60%, n=18) had sufficient knowledge, while a minority (10%, n=3) had poor knowledge about KIA books.

Knowledge about KIA books can be influenced by various factors. According to theory, knowledge results from human sensory perception through hearing and sight. Knowledge is influenced by several factors including education, occupation, age, interests, experience, culture, and information accessibility (Mubarak et al., 2007).

The KIA book contains maternal records from pregnancy, childbirth, and child health records from newborns to toddlers, along with information on maintaining maternal and child health. It serves as an early detection tool for maternal and child health disorders. Therefore, higher education levels correspond to better knowledge about KIA books.

Based on the findings, most respondents (60%) had sufficient knowledge about KIA books. Factors influencing knowledge about pregnancy danger signs in the third trimester include education level, with nearly half of respondents (40%) having senior high school education, while a small percentage (13%, n=4) had only elementary education. Higher education correlates with better knowledge about KIA books. Other influential factors include information availability and sources. Most respondents (60%) had received information from various sources, predominantly direct sources such as health workers, friends, and community members. This aligns with the fact that ease of information access accelerates knowledge acquisition (Mubarak et al., 2007). Pregnant women receive information about pregnancy care from health workers during check-ups, as outlined in their KIA books.

3. Attitudes of Pregnant Women About KIA Books

Table 3. Distribution of Respondents by Attitude About KIA Books

No	Attitude	Frequency (n)	Percentage (%)
1	Positive	17	56
2	Negative	13	44
Sum		30	100

Source: Primary Data, 2024

Table 3 demonstrates that from 30 respondents, most (56%, n=17) demonstrated positive attitudes toward KIA books, while nearly half (44%, n=13) showed negative attitudes.

Attitudes are influenced by several factors, including knowledge. Attitude represents an individual's response to a problem or situation to achieve a goal. It is a reaction or response that remains unobservable until interpreted from behavior (Notoatmodjo, 2003). Attitudes are influenced by internal and external factors, with reactions to attitude objects being either positive or negative. The object of attitude is perceived by the individual, and the perception result is reflected in the attitude taken (Notoatmodjo, 2003).

The researcher posits that most respondents (56%) hold positive attitudes toward KIA books. Factors influencing attitude formation include knowledge, situation, norms, obstacles, and motivators. Better knowledge about KIA books corresponds to more positive attitudes. The data indicates that some respondents (60%) had sufficient knowledge, yet attitudes toward implementing KIA book recommendations vary. Respondents with adequate knowledge tend to respond positively to KIA book issues, while those with poor knowledge respond negatively.

4. Relationship Between Knowledge and Attitudes

Table 4. Cross-tabulation of Knowledge and Attitudes About KIA Books

Knowledge Level	Negative Attitude	Positive Attitude	Total
Poor	3	0	3 (10%)
Sufficient	8	10	18 (60%)
Good	2	7	9 (30%)
Sum	13 (43%)	17 (57%)	30 (100%)

Source: Primary Data, 2024

Chi-Square Test Results: $p = 0.007$

From Table 4, the Chi-Square test revealed a significant relationship between knowledge and attitudes of pregnant women about KIA books ($p=0.007$), below the significance level $\alpha=0.05$. Therefore, the alternative hypothesis (H_1) stating "There is a relationship between knowledge and attitudes of pregnant women about KIA books in Waung Village, Boyolangu District, Tulungagung Regency" is accepted, while the null hypothesis (H_0) is rejected.

Based on the Knowledge-Attitude-Practice (KAP) theory, knowledge and attitudes are precursors to behavior formation. Knowledge within the cognitive domain has six levels, including knowing (the lowest level), which involves remembering material previously studied (Mubarak et al., 2007). Attitude represents a response that remains unobservable until interpreted from behavior (Notoatmodjo, 2003).

Knowledge is also influenced by occupation and age. In this study, nearly half of respondents (47%, $n=14$) were housewives, and most (53%, $n=16$) were aged 17-25 years, with nearly half (43%) aged 26-30 years. This indicates that pregnant women have ample opportunity to obtain comprehensive KIA book information, as most do not work and are still productive age. With increasing age, psychological and mental maturity develops, improving thinking capacity.

DISCUSSION

1. Knowledge of Pregnant Women About KIA Books

The findings revealed that 60% of respondents had sufficient knowledge about KIA books. This result is consistent with the concept that knowledge acquisition is influenced by education, information sources, and experience (Mubarak et al., 2007). The majority of respondents (40%) had senior high school education, which likely contributed to their adequate knowledge levels.

The KIA book serves multiple purposes: recording maternal health during pregnancy, childbirth, and postpartum; documenting child health from newborn to toddler stages; providing health maintenance information; and serving as an early detection tool for health disorders. Pregnant women with higher education levels tend to have better understanding of KIA book content and importance.

Information sources significantly influenced knowledge levels, with 60% of respondents having received information about KIA books, predominantly from health workers. This finding supports the theory that information accessibility accelerates knowledge acquisition (Mubarak et al., 2007). Healthcare providers, particularly midwives, play a crucial role in disseminating KIA book information during antenatal visits.

2. Attitudes of Pregnant Women About KIA Books

The majority (56%) of respondents demonstrated positive attitudes toward KIA books. Attitude formation is influenced by knowledge, situation, norms, obstacles, and drivers (Notoatmodjo, 2003). The positive attitudes observed likely result from the sufficient knowledge levels among respondents, as knowledge shapes how individuals respond to health information.

However, 44% of respondents showed negative attitudes, indicating a need for improved health education. Negative attitudes may stem from limited understanding of KIA book benefits, cultural beliefs, or lack of support from family and community. Health workers should address these barriers through comprehensive counseling and culturally sensitive approaches.

3. Relationship Between Knowledge and Attitudes

The significant relationship between knowledge and attitudes ($p=0.007$) aligns with the KAP framework, where knowledge forms the foundation for attitude development (Notoatmodjo, 2003). Pregnant women with better knowledge about KIA books demonstrated more positive attitudes, while those with poor knowledge showed negative attitudes.

This relationship has practical implications for maternal health programs. Improving pregnant women's knowledge through health education can positively influence their attitudes toward KIA book utilization. Health workers should prioritize explaining KIA book content, benefits, and proper use during antenatal care visits.

The significant p -value (0.007) provides strong evidence supporting the hypothesis that knowledge and attitudes are interconnected. This finding is particularly relevant given the context of maternal mortality reduction strategies in Indonesia. When pregnant women understand and value the KIA book's role, they are more likely to use it consistently and follow its recommendations.

CONCLUSION

This study demonstrated a significant relationship between knowledge and attitudes of pregnant women about Maternal and Child Health (KIA) books in Waung Village, Boyolangu District, Tulungagung Regency ($p=0.007$). Most respondents had sufficient knowledge and positive attitudes about KIA books. The findings underscore the importance of health education in improving knowledge and attitudes toward KIA book utilization, ultimately contributing to better maternal and child health outcomes.

Suggestion

1. Midwives as health workers who are closest to the community and are an extension of the Puskesmas should better explain the importance of the KIA book to pregnant women
2. Pregnant women are more active in reading the information in the KIA book and can apply it in caring for their pregnancy until a safe and healthy delivery

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