

Maternal health literacy among pregnant women in Indonesia: A qualitative study

Anggie Pradana Putri¹, Lilik Hanifah², Ady Irawan. AM³, Yu Ying Lu⁴

National Taipei University of Nursing and Health Sciences, Taiwan; Program Studi D3 Keperawatan, Stikes Mamba'ul 'Ulum Surakarta, Indonesia¹

Program Studi D3 Kebidanan, Stikes Mamba'ul 'Ulum Surakarta, Indonesia²

Program Studi S1 Keperawatan, Universitas Duta Bangsa, Indonesia³

National Taipei University of Nursing and Health Sciences⁴

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Correspondence author:

Name: Yu Ying Lu

Address: 365 Mingde Road,
Beitou District, Taipei City,
112303, Taiwan (ROC)

E-mail: yuyin@ntunhs.edu.tw

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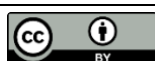
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Abstract

Introduction: Gaining insight into the maternal health literacy situation among pregnant women in Indonesia is crucial, as it forms the foundation for crafting precise interventions to enhance the well-being of mothers and infants on a national scale. **Objective:** This study aimed to explore the perspective of maternal health literacy among pregnant Indonesian women. **Method:** We employed a qualitative phenomenology method to explore maternal health literacy. Purposive sampling was used to collect participants' data. The data saturation was achieved at the thirteenth pregnant woman. The collected data were analyzed using Colaizzi's strategy to identify themes and subthemes within the phenomenon. **Results:** Four themes and seventeen subthemes emerged to explain maternal health literacy among pregnant women in this study. These themes include the ability to understand health-related information, search for information related to maternal health during pregnancy, assess and evaluate obtained information regarding pregnancy and maternal health, and decision-making, action, and maternal health behavior. **Recommendation:** The findings have the potential to benefit multiple sectors and contribute to efforts to improve maternal health in Indonesia. Culturally tailored health education programs, community engagement, empowerment, decision-making support, strengthening healthcare infrastructure, and integrating technology and telemedicine are all essential components.

Keywords: maternal health literacy, maternal health, literacy, pregnancy

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INTRODUCTION

Maternal health is a critical concern worldwide, and ensuring the well-being of pregnant women is a fundamental goal of public health initiatives (1,2). Maternal health literacy plays a pivotal role in ensuring the well-being of both the mother and the unborn child (3,4). Pregnant women's maternal health literacy levels help them take adequate care of themselves and adhere to the advice given to them by healthcare providers during antenatal contact, which brings them to experience healthy and safe pregnancies (4-6).

Maternal health literacy, which dates to the 2000s, is a more specific concept derived from the general idea of health literacy popularized in the 1970s (7). Maternal health literacy refers to skills that enable women to gain access to, comprehend, evaluate, and apply knowledge about pregnancy to enhance health quality and outcomes throughout pregnancy (8). This comprehensive definition must be broken down into its own.

As a diverse archipelago nation with a population exceeding 270 million, Indonesia faces unique challenges in addressing maternal health literacy (6,9). Despite notable progress in maternal healthcare infrastructure and services over the years, maternal mortality rates and disparities in maternal outcomes persist, especially in remote and underserved areas. Understanding the maternal health literacy landscape among pregnant women in Indonesia is essential for developing targeted interventions to improve nationwide maternal and infant health outcomes.

Previous studies quantitatively investigated maternal health literacy but still needed to be expanded in terms of qualitative strategy (5,7,10,11). This study explores maternal health literacy perceptions among pregnant women in Indonesia using a qualitative method. By employing qualitative research methods, we seek to delve deeper into the lived experiences, beliefs, and cultural influences that shape maternal health decision-making and practices. The findings of this study will contribute valuable insights to the existing body of knowledge on maternal health literacy, with a specific focus on the Indonesian context.

OBJECTIVE

The study aimed to explore the

perspectives of maternal health literacy among pregnant women in Indonesia.

METHODS

Design

This study employed a qualitative design with a phenomenology approach to capture the component of maternal health literacy among pregnant women in Indonesia.

Sample size and sampling technique

Purposive sampling was employed as the sampling strategy to recruit participants for this study. The inclusion criteria were established as pregnant women who were at least 18 years old (the legal age for self-consent) and could communicate in Indonesian. Pregnant women who experienced complications during pregnancy were excluded. The number of participants was determined once data saturation was reached (no additional information was extracted). Data saturation was achieved at the thirteenth participant.

Instrument

In a qualitative study, the researcher served as the instrument. To assist in capturing the phenomenon, we formulated a primary research question and four supporting questions to gather information related to the phenomenon.

We validated the formulated instrument construct to ensure its accuracy in measuring the phenomenon intended to be studied. We invited three experts in maternal health nursing, including researchers, educators, and practitioners, to assess its coverage of all aspects of the phenomenon. Each expert was asked to independently rate the relevance of each item on a scale ranging from 1 (not relevant) to 4 (appropriate). The Item Content Validity (I-CVI) was calculated by dividing the number of experts rated each item as 3 or 4 by the total number of experts. The I-CVI values were found to be 1. This indicates that the instrument demonstrates strong construct validity, and the experts reached a consensus that the questionnaire is well-suited for capturing the phenomenon under study.

This instrument had been piloted with three pregnant women in Kediri health centers, outside the study's setting, but still in the Java

area. The participants in the pilot study expressed no issues with the wording of the questions or prompts, and the questions captured the intended phenomenon, so no necessary revisions were needed. The piloting ensured that the final interview had clarity and sensitivity to cultural nuances about health and personal life issues.

Data collection

Before data collection, we meticulously conducted the informed consent process. This involved providing participants with comprehensive information about the study, its purpose, procedures, potential risks and benefits, confidentiality measures, and their rights as participants. Once all their concerns were addressed, participants were asked to read and sign the informed consent form, indicating their voluntary agreement to participate in this study. We proceeded with data collection through interviews only after obtaining their informed consent.

The data collection took place in December 2022. The researcher conducted In-depth interviews in Indonesian, although some participants occasionally mixed in the local language, Javanese. All the interviews were held in the corner of public health centers, typically used for individual patient consultations. All the participants agreed to use the room because it provided comfort and ensured their privacy. The interview lasted approximately 45 to 60 minutes for each participant. Refreshments and shopping vouchers at a baby shop were given to the participants as a reward for their active participation in this study.

Data analysis

Upon completion of the interviews, the recorded audio files and transcriptions were organized and labeled for systematic analysis. Identifying information of participants was replaced with pseudonyms to maintain confidentiality. In this case, we utilized flowers as the code.

We employed Colaizzi's phenomenological method as the framework for our data analysis (12,13). This approach involves the following steps:

1. Significant meaning identification: read and reread all interview transcripts to

comprehensively understand the data. We identified the critical statements and phrases with substantial meanings from the transcripts.

2. Formulation of meanings: analyzed the extracted statements to identify underlying purposes and themes.
3. Categorizing and clustering theme and themes: the music and subthemes were clustered based on commonalities and meaning.
4. An exhaustive description of the phenomenon offered a detailed and rich description of the participants' experiences, behavior, beliefs, and perceptions of maternal health literacy.
5. Proposing fundamental structure: established the theme and subtheme supporting maternal health literacy.
6. Validation of exhaustive description and its fundamental structure: a summary of the theme and subthemes was shared with a subset of participants to validate the accuracy and resonance of the identified articles with their experiences. This strategy is also known as member checking.

Throughout the analysis process, we practiced reflexivity, acknowledging our perspectives, biases, and potential influence on the data interpretation. We documented this step to enhance transparency and rigor. We employed techniques such as member checking and triangulation to ensure rigor and trustworthiness in the analysis.

Ethical consideration

This study involved pregnant women as the participants. Thus, we are concerned about human dignity, beneficence, and justice. Prior to the commencement of the study, ethical approval was obtained from the research ethics committee with numbers 119/037/XI/EC/KEP/Lemb.Candle/2022.

RESULTS

Participants of the study

Data saturation of this study was reached at the thirteenth participant. Most of the participants were multipara entering the second trimester. The pregnant women in this study had exemplary academic achievements, like college and senior high school. Only one pregnant woman graduated from junior high

school. The detailed demographic profile of the participants is presented in Table 1.

Table 1. Characteristics of the participants in this study (n=13)

No	Variables	N (%)	Mean (SD)
1	Age (years)		28.1 (4.79)
2	Parity		
	Nullipara	6 (46.2)	
	Multipara	7 (53.8)	
3	Gestational age (week)		15.8 (7.23)
4	Education level		
	College	7 (53.8)	
	Senior high school	4 (30.8)	
	Junior high school	2 (15.4)	
5	Number of antenatal care visits		3.15 (1.21)

The participants in this study ranged from 22 to 35 years old, with a mean age of 28.1 (SD = 4.79). More than half of them were multipara, with a mean gestational age of 15.8 weeks (SD = 7.23). The majority of them had graduated from college (53.8%). During the data collection period, the participants' mean number of antenatal care visits was three times.

Theme and subthemes of the perspective of maternal health literacy among pregnant women

In this study, we found four themes and seventeen subthemes supporting maternal health literacy perception among pregnant women. Table 2 presents more detail about the theme and subthemes.

Table 2. Theme and subtheme supported the perspective of maternal health literacy among pregnant women

Theme	Subtheme
Ability to understand the information related to pregnancy and maternal health	Understanding about the changes during pregnancy: physiologic and psychology.
	Ability to understand the proper diets and activities during pregnancy.
	Understanding about the recommended antenatal care and diagnostic tests during pregnancy.
	Ability to understand the risks of pregnancy.

	Ability to understand labor methods, postpartum care, and newborn care.
Ability to search information related to maternal health during pregnancy.	Pregnancy and maternal health information sources: peers, family, social media, professionals.
	Cultural and societal influences
	Accessibility of maternal health information
The ability to assess and evaluate information regarding pregnancy and maternal health	Critical thinking skills
	Communication with healthcare providers
	Informed decision-making and empowerment
Decision-making, action, and maternal health behavior	Antenatal care choices.
	Nutrition and diet management
	Proper exercise and activity during pregnancy
	Compliance with medical recommendations
	Self-care and well-being
	Healthcare-Seeking Behavior

Theme 1: Ability to understand the information related to pregnancy and maternal health

This theme discusses pregnant women's ability to understand the information related to pregnancy and maternal health. Five subthemes support the emerging theme, as follows:

Understanding about the changes during pregnancy: physiologic and psychology.

This subtheme narrated the ability of pregnant women to understand some changes during pregnancy. Participants depicted the physiology and psychological changes during their pregnancy, as we can see in this statement:

“I have read that there will be both physical and psychological changes, and I am experiencing that right now. From here, I understand that pregnancy will involve some changes, so I have to adapt.” -Sakura)

In addition, a participant mentioned in detail the changes in parts of her body:

“When I am pregnant, a lot of changes. My weight has increased, my breasts have become bigger, and I often need to urinate. I also feel moody; at the beginning of pregnancy, I was

quite irritable with my husband, hahaha..." - Rose.

Ability to understand the proper diets and activities during pregnancy

This subtheme narrates about pregnant women's capability to comprehend knowledge related to nutrition and physical activities that are appropriate and beneficial for a healthy pregnancy.

One of the participants understands that she loves exercising, like going to the gym. Since she was pregnant, she limited her workouts and did gentle movements, as she stated:

"To my knowledge, it's still permissible to exercise during pregnancy. Because I enjoy exercising, I couldn't completely give it up, so I continued exercising with a lighter intensity. I've stopped going to the gym. I mostly focus on taking more leisurely walks and engaging in light activities." -Rose.

Besides giving their opinions on appropriate activities during pregnancy, two participants also emphasized the importance of a healthy diet. They stated that vegetables, fruits, and cooked foods are essential, as follows:

"For food during pregnancy, you should eat plenty of vegetables, fruits, and meat. Avoid eating instant food and undercooked dishes like satay, and so on..." -Lavender

Moreover, one pregnant woman added that pregnancy supplements like iron and folic acid are also essential:

"In my understanding, during pregnancy, you need more nutrients. So, eating healthy and taking iron and folic acid tablets is essential.

Understanding about the recommended antenatal care and diagnostic tests during pregnancy

The third subtheme discusses an individual's comprehension and awareness of the necessary healthcare and medical evaluations that should be undertaken during pregnancy to ensure the well-being of both the expectant mother and the developing fetus. This subtheme also emphasizes the knowledge and ability to understand the importance, timing, and significance of antenatal care procedures and diagnostic tests. Some supported statements were delivered by the participants, as follows:

"Getting check-ups during pregnancy is important. My mother told me that when you're pregnant, you should go for check-ups.

I understand it's important to get checked at the community health center (Puskesmas) so that the midwife is aware of it." - Chrysanthemum.

"This is my second pregnancy, so I already understand how to get prenatal check-ups. I have the pregnancy book so that I can follow the instructions. I believe that getting prenatal check-ups is important and necessary. Additionally, when I reach the second trimester and the midwife suggests an ultrasound (USG), I think that's also important because ultrasounds provide valuable information." -Magnolia.

"...for the timing of prenatal check-ups, it's a minimum of six times during pregnancy. It was the same when I was pregnant with my first child. For example, I've had two prenatal check-ups right now, and as the months go by, I'll have more frequent check-ups, possibly three times each trimester. That's the schedule as far as I know." -Daisy.

Ability to understand the risks of pregnancy

This subtheme is the ability to comprehend and assess potential risks, complications, and health considerations associated with pregnancy. One of the pregnant women understands that she may have an abnormality due to high blood pressure or due to her maternal age. She is also not sure about her condition, but her doctor said it is tolerable, as statement below:

"Pregnancy is not always healthy, but I'm grateful that I've had two safe pregnancies without complications, mba. With the third one, my blood pressure tends to be high. I'm a bit worried because this pregnancy might not be normal, possibly due to my age. But the doctor said it's okay." -Lavender.

Another pregnant woman analyzed that some risk of pregnancy may happen when an individual experiences dizziness, bleeding, and tiredness:

"I understand, mba. Sometimes, even if you're told you understand, you can still feel confused. I occasionally experience dizziness, but the doctor says my blood pressure is normal. High-risk pregnancies can involve high blood sugar levels, fatigue, and long-lasting spotting or bleeding." -Lily.

Ability to understand labor method, postpartum care, and newborn care

This subtheme described the ability to grasp and prepare for the process involved in labor and childbirth, as well as the pregnant women's

understanding of the care required during the postpartum period and for newborns. The pregnant woman in this study said that section cesarean would be the chosen method due to the history of her previous labor, which means that she understands the labor method she needs:

"My previous childbirth was through a cesarean section, MBA. This one may also be a cesarean section because the age gap between them is less than four years. I believe that's safer, and the doctor mentioned that." - Sunflower.

In addition, the statement about what to do at the postpartum period was described by the participant:

"After giving birth, it's important to be able to take care of the baby, such as bathing, changing diapers, and providing enough breast milk. The mother should also eat healthily to ensure a good milk supply. Regular check-ups are important during pregnancy and after giving birth, mba." - Sakura.

Theme 2: Ability to search for information related to maternal health during pregnancy

The second theme that emerged about the perspective of maternal health literacy among pregnant women is the ability to search for information related to maternal health during pregnancy. This theme narrated about pregnant women's capacity and skills to effectively and efficiently seek out and access information about the health and well-being of pregnant women and their unborn babies. Moreover, this theme encompasses finding relevant and accurate information from various sources. The subthemes that support this theme are as follows:

Pregnancy and maternal health information sources: peers, family, social media, professionals

This subtheme discussed the different sources of maternal health information, including community networks, online resources, and healthcare providers. One of the pregnant women in this study stated that she got maternal health information from her social media, WhatsApp, as follows:

"I'm glad to hear there are some pregnancy groups, mba. It can be quite beneficial to join such groups on WhatsApp and Instagram, as they provide a platform for sharing and

learning about pregnancy-related information and experiences from other expectant mothers. It's a great way to stay informed and connected during this important time." -Tulip.

In addition, maternal health information is gotten from healthcare professionals, as narrated by a pregnant woman as follows:

"If I need more information about pregnancy and maternal health during pregnancy, I mostly obtain it from my obstetrician. I also had check-ups with a midwife and a nurse early in my pregnancy. I come to this community health center (Puskesmas) to get a referral to a specialist obstetrician." -Poppy.

Cultural and societal influences

The subtheme about cultural and societal influences discussed the impact of cultural beliefs and societal norms on choosing maternal health information sources. As stated by one of the pregnant women in this study, her family has a unique culture that influences the ability to search for information about maternal health, as follows:

"In my family, there's a unique tradition, mba. When someone is pregnant, they are encouraged to visit the eldest relatives. They are asked for blessings and advice. It's believed that this helps ensure the mother's and baby's health and well-being. So, they provide information about pregnancy, and some of their advice can indeed be valuable." -Magnolia.

In addition, one of the participants experienced that her family avoids her frequently using her smartphone, so she has limited access to maternal health information from the internet:

"My mother advised me, mba, that pregnant women should not frequently play with their mobile phones. This makes me rarely search for online information." -Lily.

Accessibility of maternal health information

The last subtheme of the second theme talks about the accessibility of information and barriers to accessing maternal health information. This definition can be extracted from these several statements of pregnant women in this study:

"I could say that I live in a rural area, MBA. Getting to this community health center (Puskesmas) might take a while. However, technological advancements should not be a reason to obtain information about maternal and child health." -Poppy.

"Nowadays, many obstetricians have evening practices. So, I can't take time off work for check-ups at the community health center like I'm doing now. In that case, I can relax knowing that I can visit an obstetrician to get a pregnancy check-up and directly ask healthcare professionals about my pregnancy condition. I can also seek their advice and important pregnancy-related information." - Lotus.

Theme 3: The ability to assess and evaluate information regarding pregnancy and maternal health that has been obtained.

The third theme of maternal health literacy perspectives among pregnant women is the ability to assess and evaluate information regarding pregnancy and maternal health that has been obtained. It defines pregnant women's capacity to critically examine the accuracy, reliability, and relevance of and judge the information they acquire about pregnancy and maternal health. There are three subthemes that support this idea, as follows:

Critical thinking skills

The critical thinking skills in this situation refer to the capability to think critically when assessing maternal health information and evaluating data validity. A participant said that they validated the information they got from the healthcare professionals:

"In my opinion, many sources provide information about pregnancy and women's health in general. However, I prefer asking directly during check-ups, whether with a midwife, Nurse, or obstetrician. That way, we get information from experts, MBA." -Rose

Moreover, another participant mentioned that online sources are also beneficial from trusted social media:

Valid information can be obtained from trusted platforms. On Instagram, for example, there are educational pregnancy accounts that, despite being on Instagram, include research findings. So, the information they provide can be substantiated." -Tulip

Communication with healthcare providers

This subtheme gives a picture of the strategies pregnant women use to engage with healthcare providers and seek clarification regarding their assessment of obtained information. One of the pregnant women was trying to discuss information she got when she had an antenatal visit, even though she also felt confused:

"I'm confused... It's my first pregnancy. Usually, I try to convey as much as I can about the information I've received to the Nurse, whether it's correct or not. If the number of patients is low, Nurse usually provides explanations." - Chrysanthemum.

Another strategy used by the participant was confirming with the midwives or nurses whenever she received information that differed from what was written in the maternal health book (*Buku Kesehatan Ibu dan Anak-KIA*):

"When I go for a check-up, I always bring my Maternal and Child Health (KIA) book. If there's any difference in the information in the KIA book, I try to ask the midwife or Nurse while showing them the points and what I have received from other sources." -Daisy.

Informed decision-making and empowerment

The last subtheme of the ability to assess and evaluate information related to maternal health is informed decision-making and empowerment. This subtheme focuses on pregnant women's competence in assessing maternal health information, leading to informed decision-making and empowerment in managing their pregnancy and maternal health.

The pregnant woman in this study needs healthcare professional validation before deciding the actions related to her maternal condition during pregnancy, as follows:

"If I must choose, I often listen to Nurses or midwives more than the doctor. However, I tend to listen to the doctor more when there are serious issues, such as whether it's permissible to maintain marital relations during pregnancy, and what the strategy should be.." -Orchid.

On the other hand, a multipara mother empowers herself to discuss with her partner the decision of antenatal care:

"I initially decided to adhere to regular prenatal check-ups after reading

information about pregnancy check-ups, their benefits, and the risks of not undergoing these examinations. My husband and I also discussed this matter. So, we decided to undergo regular check-ups starting from our first pregnancy." - Poppy.

Theme 4: Decision-making, action, and maternal health behavior

This is the last theme that emerged from the perspective of pregnant women related to maternal health literacy. This overarching theme encompasses the complex interplay of pregnant women and those involved in maternal health. They make informed decisions, take purposeful actions, and engage in various health-related behaviors to safeguard and enhance maternal health during pregnancy. Six subthemes formulated as the emerging phenomenon, such as:

Antenatal care choices

This theme includes the decision-making process for selecting healthcare providers and antenatal care plans. Pregnant women in this study took action to do routine antenatal care visits to maintain their health and their baby, as follows:

"I strive to undergo regular prenatal check-ups to monitor my health and the health of my fetus." -Sakura

In addition, a pregnant woman realized that routine antenatal care needs to be followed by other diagnostic tests, including ultrasound diagnostic tests (USG):

"We also undergo ultrasound examinations and possibly other health tests as advised by the doctor later." - Orchid

Nutrition and diet management

The second subtheme of decision-making and maternal health behavior is nutrition and diet management. This sub-theme focuses on the behaviors and decisions regarding dietary choices, nutrient intake, and meal planning during pregnancy.

One of the participants decided to change their diet habits, including consuming instant food during her pregnancy:

"I started to abandon the habit of eating instant food when I found out I was pregnant." -Tulip

In addition, a pregnant woman stated that nutrition is essential for her. She tried to fulfill her nutritional needs by consuming vegetables and meat. Moreover, she preferred to eat homemade food:

"Healthy food is important, ma'am. It includes vegetables, and we eat meat if there's more fortune. So, the baby is healthy too. I prefer homemade food more, seldom buy, only, when necessary, because there is a lot of MSG, which is not good." - *Chrysanthemum*.

Proper exercise and activity during pregnancy

This subtheme discussed the choices and actions concerning physical activity, including modifications and safety considerations during pregnancy. Some of the participants narrated their daily activities, including exercise. One pregnant woman decided not to continue her workout routine and preferred gentle exercises once she realized she was pregnant:

"I mentioned earlier that I enjoy sports. Well, because I'm pregnant, I stopped going to the gym. I still exercise, but not strenuously. If I get tired, I take a break." -Rose.

Another pregnant woman adjusted her daily work activities, such as the duration of sitting in front of the laptop. She needed to take breaks between her work routine and engage in simple walks:

"I continue to work as usual, ma'am. I don't think there's any difference from before I got pregnant. I've just made some modifications to my activities. For example, when I sit at the office in front of a laptop for a long time, I try to do a 15-minute stretching break. Then, I walk to the pantry, grab a drink, and return to work." -Poppy.

Compliance with medical recommendations

The next subtheme of decision-making, action, and maternal health behavior is compliance with medical recommendations. This subtheme discusses the extent to which pregnant women adhere to medical advice and guidance, including vitamins or pregnancy supplements and antenatal tests.

A pregnant woman declared that her midwives gave her an iron tablet, and she consumes it

regularly because she wants to maintain her condition during pregnancy:

"Nurse gave me an extra dose of blood, Ma'am. I drank it during pregnancy to stay healthy..." -Lily

One of the participants added that she needed to undergo some diagnostic tests, including a blood test and HIV screening:

"When I first arrived, I was asked to undergo a blood test and HIV screening, Ma'am. I just followed along. The staff also explained the examination's purpose, and I understood, so I was willing to do it." -Orchid.

Self-care and well-being

The next subtheme discusses actions for managing stress, getting adequate rest, and practicing relaxation during pregnancy. All of the participants expressed their efforts to address the stress during pregnancy. As one stated, it was very challenging during the beginning of the pregnancy. She experienced a swing mood, but she relaxed to manage it:

"I feel like I can control the changes in my pregnancy, especially psychologically, ma'am. I tend to get emotional easily if I can put it that way. It was a bit challenging initially, but now it's okay. I try to rest or have 'me time,' basically doing something that makes me happy..." -Lotus.

On the other hand, a multipara mother learned from her previous pregnancy how to manage her well-being as follows:

"In this second pregnancy, I feel more comfortable because I've learned from my previous experience not to stress too much. It's not good for the fetus. I also received motivation from the healthcare professionals here to take better care of my pregnancy." -Sunflower.

Healthcare-Seeking Behavior

The last theme is healthcare-seeking behavior. It is about action taken in response to complications during pregnancy. The complication is not merely about the actual difficulty but more about the risk during pregnancy. One of the participants found bleeding spots at the beginning of her pregnancy. This situation drove her to visit the

doctor and complain about her condition, as follows:

"I will get a check-up if I don't feel well. Like in the early stages of my pregnancy last time, I had spotting for two days, so I went to the midwife near my house for an examination." -Jasmine.

Another pregnant woman also will seek healthcare facilities whenever she complains of abnormality in her body:

"Yeah, that's right, ma'am. I go for a check-up if I don't feel well. At the midwife near my house, I regularly check my blood pressure during pregnancy. If I have to wait for the health center, it's a bit far." -Lily.

DISCUSSION

In this study, we explored the concept of maternal health literacy among pregnant women, uncovering four key themes and seventeen subthemes that shed light on the multifaceted nature of this phenomenon. The first theme, the ability to understand health-related information, highlights the pivotal role of comprehension in maternal health literacy. Pregnant women's capacity to grasp and comprehend complex health information is foundational to making informed decisions about their pregnancy and maternal health. This finding aligns with the results of previous research conducted by Azugbene in 2017, emphasizing the significance of understanding health-related information among pregnant women (3,5,10). Together, these studies underscore the consistent importance of comprehension as a fundamental component of maternal health literacy.

The second theme, the ability to search for information related to maternal health during pregnancy, emphasizes the proactive approach pregnant women take to seek out relevant information. This subtheme underscores their agency in acquiring knowledge to enhance their understanding of maternal health issues. These findings are based on the work of Putri et al. and Bello et al., who similarly reported the active information-seeking behaviors of pregnant women (1,6). The consistency of these findings across studies highlights the recurrent pattern of pregnant women's eagerness to access information related to their health.

The third theme, the ability to assess and evaluate obtained information regarding pregnancy and maternal health, underscores pregnant women's critical thinking and discernment skills. It is not enough to acquire knowledge; individuals must also critically assess the information's quality, reliability, and relevance to make informed decisions. Comparably, McKinn et al. and Khorasani et al. conducted a study emphasizing the importance of evaluating obtained health information among pregnant women (5,10). Our findings echo this emphasis on the significance of discernment and evaluation as integral components of maternal health literacy.

The final theme, decision-making, action, and maternal health behavior, encapsulates the culmination of maternal health literacy. It highlights the transition from knowledge acquisition to practical application. Pregnant women with high maternal health literacy levels are more likely to make informed decisions and engage in positive maternal health behaviors. This outcome aligns with the research conducted by Azugbene, Kharazi, and Lee, who also emphasized the association between maternal health literacy and positive health behaviors during pregnancy (3,11,14). Together, these studies highlight the critical role that maternal health literacy plays in promoting informed decision-making and positive health behaviors.

This qualitative research provided a deep and comprehensive exploration of maternal health literacy among pregnant women. It allowed for collecting rich, detailed, and contextually relevant data. Moreover, the study prioritized the voices and perspectives of pregnant women, offering valuable insights into their experiences and perceptions regarding maternal health literacy. This approach adds depth to the understanding of the topic. This study can serve as a foundation for future research in maternal health literacy. Researchers can build upon these findings to explore related topics or conduct larger-scale quantitative studies to confirm and expand the qualitative results.

On the other hand, this study's relatively small sample size becomes a limitation. Although the participants provided rich and valuable insights, the findings may not fully represent the diversity of experiences and perspectives among pregnant women in different settings or

demographics. In addition, qualitative research often focuses on in-depth exploration, so the findings may need to be more readily generalizable to larger populations. The context-specific nature of the study limits the broader applicability of the results. While the findings may not be broadly generalizable, they offer practical implications for healthcare providers, policymakers, and maternal health programs in the study's specific context. The insights gained can inform targeted interventions and support efforts to enhance maternal health literacy.

CONCLUSION

This study uncovered the unique perspectives of maternal health literacy from the viewpoint of pregnant women in Indonesia. We identified four overarching themes and seventeen subthemes that shed light on maternal health literacy's multifaceted nature. These four themes encompass the ability of pregnant women to understand health-related information, their capacity to seek out information pertinent to maternal health during pregnancy, their skill in assessing and evaluating the information they obtained, and the pivotal role of decision-making, actions, and maternal health behaviors in shaping their overall health literacy.

In our qualitative study, we delved into the intricate realm of maternal health literacy among pregnant women in Indonesia. Understanding the maternal health literacy landscape in this context cannot be overstated. It is a crucial foundation upon which precise and effective interventions can be crafted to safeguard the well-being of both mothers and infants. Moreover, the study's findings not only contribute to the existing body of knowledge on maternal health literacy but also hold the potential to guide policymakers, healthcare practitioners, and researchers in formulating targeted interventions.

As we conclude in this study, it is clear that maternal literacy is a multifaceted construct, and understanding it comprehensively is vital for creating a healthier future for both mother and their newborns in Indonesia. Further research and evidence-based interventions informed by our findings are necessary to

continue the journey towards improved maternal and infant health in this region.

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