

BARRIERS TO HEALTH INFORMATION-SEEKING BEHAVIORS WITHIN PREGNANT WOMEN IN HANOI OBSTETRICS AND GYNECOLOGY HOSPITAL IN 2023

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Abstract: Health information-seeking behaviors are critical for enabling pregnant women to make informed decisions that safeguard both their health and that of their babies. However, these behaviors are often hindered by various obstacles. Investigating these barriers is essential for developing interventions that enhance women's ability to protect, prevent, and manage their health. Such efforts can ultimately improve the overall well-being of women and their infants. Notably, there is limited information in Vietnam. Aims to describe the barriers to health information-seeking behavior among pregnant women in Hanoi Obstetrics and Gynecology Hospital in 2023. **Methods:** A cross-sectional study was conducted in 2023 with 191 women visiting Hanoi Obstetrics and Gynecology Hospital. Various personal and external environmental barriers hinder information-seeking behavior among women. The most significant barrier reported was worrying about the overwhelming amount of information (33%), following the barriers related to affordability and availability of counseling healthcare (30,9% and 17.3%). Furthermore, women with lower educational attainment encountered exacerbated difficulties related to geographical distance, communication barriers with healthcare professionals, insufficient support for transportation to medical appointments, and the lack of available counseling centers. These findings highlight the need to enhance social support and healthcare services to mitigate these barriers and particularly emphasize the need for targeted support for women with lower education levels. Enhancing support in the area can significantly improve their capacity for self-care, prevention, and overall health, benefitting both themselves and their families.

Keywords: *information-seeking, barriers, pregnant women*

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1. Introduction

Health information-seeking behaviors help pregnant women make informed decisions about protecting and caring for their own and their baby's health. Information related to childbirth is crucial for implementing beneficial interventions and recommendations for pregnant women (PW). The behavior of seeking information during pregnancy positively impacts pregnant women by providing them with motherhood knowledge, improving their healthcare abilities, and reducing maternal mortality rates [1, 2]. Conversely, a lack of understanding among women is observed as increasing the risk of maternal mortality and pregnancy complications, exacerbating symptoms of gestational diabetes, and increasing postpartum depression [3]. The behavior of seeking information is hindered by various obstacles, such as psychological and environmental factors. These barriers may include lack of time, limited finances, or negative healthcare experience and the availability of counseling centers nearly in the living area of women [4-6].

Researching barriers to information-seeking behavior will provide evidence for promoting this behavior among women, enhancing the capacity of pregnant women to care for and improve their own and their baby's health. However, in Vietnam, such information is still limited. Hanoi Obstetrics and Gynecology Hospital is a major

provincial hospital specializing in maternity care in Hanoi. Pregnant women who come for check-ups here have diverse personal characteristics and health conditions. Therefore, this study aims to describe the barriers to health information-seeking behavior among pregnant women in Hanoi Obstetrics and Gynecology Hospital in 2023.

2. Methods and sample

2.1. Research design: a descriptive cross-sectional study was conducted

2.2. Study time frame: Data collection period: January 2023 - March 2023.

2.3. Study subjects: Women who visited Hanoi Maternity Hospital for prenatal check-ups and currently live in Hanoi were invited to the research, except for those who had difficulty in communication or showed signs of fatigue.

2.4. Sample size: 191 participants.

2.5. Variables: Demographic characteristics of the research subjects: (age, educational level, occupation, monthly income). The main outcome was barriers to information-seeking behaviors, including personal barriers and environmental barriers. There are five questions to explore the psychological and economic barriers, while six items are used to explore questions about environmental barriers.

2.6. Sampling method: Pregnant women who met the inclusions were conveniently invited into the research.

2.7. Ethical consideration

The Ethics Committee of Hanoi Maternity Hospital approved the research proposal, No 206 CN/PS dated February

17, 2023. The implementation of the research must also be reported to and approved by the relevant departments.

3. Results

3.1. General information of participants

Table1. General information of participants (N=191)

Personal characteristic of participants		n	Percentage (%)
Age	< 35 years old	181	94.8
	≥ 35 years old	10	5.2
Education level	High school and below	52	27.2
	Above high school	139	72.8
Occupation	Self-employed	81	42.4
	Official Job	110	57.6
Monthly Income	Ten million VND and below	61	31.9
	Above ten million VND	130	68.1

According to the results in Table 1, the average age of the study participants is 27.9 ± 4.2 years, with the youngest being 18 and the oldest being 40. The majority of the women interviewed are under 35 years old (94.8%). Women with higher education

beyond high school and stable occupations make up a larger proportion compared to the other group (72.7% vs. 57.6%). Among the respondents, about one-third of the women reported a monthly family income of ten million VND or below.

3.2 Barriers to Information Seeking

Table 2. Distribution of perceived personal barriers by education level and monthly income characteristic of participants

Barriers	n	%	Education level			Monthly income		
			High school and below (n=52)	Above high school (n=139)	p	Low (n=61)	High (n=130)	p

Psychological

Barriers:

I feel anxious when receiving too much information.	63	33	30.8	33.8	0.69	39.3	30.3	0.2
I feel afraid/embarrassed to ask for sensitive information	29	15.2	23.8	12.2	0.06	19.7	13.1	0.24

Economic Barriers:

The cost of internet access is high.	5	2.6	3.9	2.2	0.6 ^a	3.3	2.3	0.66 ^a
The cost of medical consultations is high.	59	30.9	36.5	28.8	0.3	31.8	30.0	0.7
The cost of purchasing books is high.	21	11	7.7	12.2	0.46 ^a	13.1	10.0	0.5
The distance between home and clinic is very far.	24	12.6	21.2	9.4	0.04 ^a	14.8	11.5	0.5

(^a Fisher exact test)

Table 2 describes the distribution of personal barriers to information-seeking behavior among pregnant women based on education level and income. The results show that among 191 participants, there are 33% of women feel anxious when faced with too much information, followed by high consultation costs (30.9%). The least mentioned barriers are high internet costs (2.6%) and high book costs (11%). There is

no significant difference in the perception of barriers across different income groups. However, the perception of distance as a barrier varies between groups with different education levels, with those having lower education perceiving the distance as a greater barrier compared to those with higher education (21.2% vs. 9.4%, $p=0.04$ of Fisher exact test).

Table 3. Distribution of perceived environmental barriers by education level and monthly income characteristic of participants

Barriers	n	%	Education level			Monthly income		
			High school and below (n=52)	Above high school (n=139)	p	Low (n=61)	High (n=130)	p
I do not have anyone to accompany me to the clinic.	15	7.9	15.4	5.1	0.02	8.2	7.7	0.9
Healthcare Services:								
Lack of counseling centers.	33	17.3	28.9	13	0.01	23	14.6	0.16
Healthcare professionals do not have enough time for advice and information.	34	17	21.2	16.6	0.46	24.6	14.6	0.09
Healthcare professionals do not suggest appropriate reference materials.	27	14.1	15.4	13.7	0.76	13.1	14.6	0.78
Healthcare professionals do not encourage me to actively seek information.	26	15.6	13.5	13.6	0.97	14.8	13.1	0.75
Healthcare professionals behave inappropriately.	5	2.6	7.69	0.7	0.02^a	1.6	3.1	0.48 ^a

(^a Fisher exact test)

Table 3 illustrates the distribution of environmental barriers to information-seeking behavior among pregnant women based on education level and income. The results reveal that the lack of counseling centers is the most common barrier with 17.3% of women reporting, followed by healthcare professionals not having enough time (17%). The least mentioned barriers are the inappropriate behavior of healthcare professionals (2.6%) and the lack of a family member to support transportation to appointments (7.9%). There is no significant difference in barriers reported among monthly income groups. However, barriers related to a lack of support, counseling centers, and inappropriate behavior of healthcare professionals were reported to vary between groups with different education levels. Those with lower education levels perceive these barriers as more significant compared to those with higher education levels.

4. Discussion

The results show that there are several factors from both personal and environmental aspects that act as barriers to information-seeking behavior. Among these, personal factors are perceived as more significant barriers compared to environmental factors. The most frequently reported barriers are feeling anxious when receiving too much information, high

consultation costs, and the lack of counseling centers (33%, 30.9%, and 17.3%, respectively). The least mentioned barriers are high internet costs and inappropriate behavior of healthcare professionals (2.6%).

In terms of personal characteristics, different educational levels affect the perception of barriers differently. The study provides new information about the potential barriers to information-seeking behavior among pregnant women, which is seen as a behavior that helps women enhance their knowledge and contributes to their health and the health of their fetus.

33% of Participants feel anxious when receiving too much information, with no significant difference between education and income groups. This may reflect a common societal issue with information overload, regardless of education or income level. This result is consistent with the study by Chae et al. (2014), where participants also showed high levels of anxiety when faced with too much information, irrespective of education and income [7]. 30.9% of Participants encounter barriers due to high consultation costs, with no significant differences based on education and income. This suggests that cost is a common barrier to information-seeking among pregnant women and is considered one of the major barriers [5]. There 17.3%

of women reported significant obstacles due to the lack of counseling centers, similar to findings by Noncungu et al [8]. Availability of healthcare services also reported as a related factor to using healthcare service in women [9]. Participants facing barriers due to high internet costs were 2.8%, with no significant differences based on education and income. This result aligns with the Pew Research Center (2021) which indicates that internet access is becoming more widespread and cost is no longer a major barrier for many people [10]. There 15.8% of participants reported significant psychological obstacles, such as anxiety or embarrassment when asking sensitive questions to healthcare professionals. This is consistent with the qualitative study by Das et al. (2014), which found that psychological factors such as feeling embarrassed or afraid to ask questions affect women's ability to gather necessary health information. Factors such as poor quality of care, including overload, lack of confidentiality, lack of empathy, poor staff attitudes, long waiting times, distance from home, and lack of appropriate support are important reasons why women and their families may lose trust in the public health service system [4].

In terms of personal characteristics, pregnant women with high school or above reported fewer barriers relating to the distance between home and clinic, someone

accompanied to the clinic, availability of counseling centers, and behaviors of healthcare professionals. This suggests that women with higher education levels might be more proactive in health information-seeking compared to those with lower education. This finding aligns with a previous study, which found lower education levels are associated with a lower proportion of health information-seeking behavior [11].

5. Conclusion and recommendation

This study identifies barriers to seeking medical information among pregnant women. The most significant barrier reported was worrying about the overwhelming amount of information (33%), followed by barriers related to affordability (30.9%) and availability of counseling healthcare (17.3%). Women with lower educational attainment encountered exacerbated difficulties related to geographical distance, communication barriers with healthcare professionals, insufficient support for transportation to medical appointments, and the lack of accessible counseling centers.

These findings highlight the need to enhance social support and healthcare services to mitigate these barriers and particularly emphasize the need for targeted support for women with lower education levels. Enhancing support in the area can significantly improve their capacity for self-

care, prevention, and overall health, benefitting both themselves and their families.

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