# **Exploring the Motivations of Pregnant Women to Seek Health Information: A Qualitative Study**

#### **Abstract**

Background: Health information-seeking behavior is directed by various factors. Understanding the motivations of pregnant women to obtain health information can facilitate evidence-based policy-making to enhance their health literacy. Therefore, this study was conducted to explore the motivations of pregnant women to seek health information. Materials and Methods: In this qualitative study with a content analysis approach, 39 participants, including pregnant women, midwives, and gynecologists in Isfahan city, Iran, were selected via purposive sampling with maximum variation strategy. Individual interviews, field notes, and daily notes were used to collect data, which was then analyzed using conventional qualitative content analysis. Results: Analysis of data resulted in one main category of "strive to protect the health of mother and fetus." This main category consisted of four subcategories, including "increasing information related to maternal and fetal health," "preventing recurring problems or causing complications in pregnancy," "reducing worry about pregnancy problem," and "receiving encouragement from the spouse, relatives, and healthcare providers." Conclusions: According to the findings, pregnant women seek health information for a variety of reasons, including learning more about their own health and that of their fetus, preventing recurring problems or complications, alleviating concerns about pregnancy problems, and receiving encouragement from husbands, relatives, and healthcare providers. Thus, health professionals, midwives, and antenatal care providers should be aware of these issues and provide more evidence-based information to pregnant women at the time they require it.

Keywords: Information seeking behavior, Iran, motivation, pregnant women, qualitative research

### Introduction

Health Information-Seeking Behavior (HISB) indicates how an individual search, finds, and uses information related to diseases, health threats. and health-promoting activities.[1] Pregnant women's health information can enhance their ability to perform preventive health behaviors, increase self-care ability, interact better with healthcare providers, and reduce anxiety while confronting new health issues or stressful situations.[2] Most social psychological theories applied to the change in health behavior tend to assume a degree of motivation for change and have focused on attempts to promote action by converting motivation into action.[3-5] Thus, the awareness of motivations for seeking health information among pregnant women is critical for developing health interventions and providing high-quality prenatal care for them.<sup>[2]</sup> In Tsehay's study, the lack of knowledge, experience of pregnancy complications in the family, risk of pregnancy complications, and

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search for a healthy life were introduced as the most important reasons for pregnant women to seek health information. [6] Merrell showed that the need to know the unknown experiences, preventing poor pregnancy outcomes, and attempts to understand whether the problems posed to pregnant women are normal, or they need a consultation with healthcare providers were among motivating factors to get health information during pregnancy. [7] Moreover, the most common reasons to seek health information among women during pregnancy were obtaining information about the unborn child, nutrition, and labor/delivery. [2]

Iran is one of the countries that was successful to achieve the Millennium Development Goals by reducing maternal and infant mortality rate, [8] but these amounts are still higher than those of developed countries, [9] and the necessary measures and activities should be taken to promote maternal and child health in the country. In Iran, there is little information on

How to cite this article: Javanmardi M, Noroozi M, Mostafavi F, Ashrafi-Riz H. Exploring the motivations of pregnant women to seek health information: A qualitative study. Iran J Nurs Midwifery Res 2022;27:446-51.

**Submitted:** 06-Oct-2021. **Revised:** 20-Dec-2021. **Accepted:** 19-Apr-2022. **Published:** 14-Sep-2022.

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HISB in pregnant women, and despite its great importance, few and scattered studies were conducted in this field.[10,11] Regarding HISB directly affects the quality of life and can be effective in making decisions about individual and social health,[1] it seems necessary to study the motivations of pregnant women to seek health information and to discover the impact of sociocultural context on it. Considering various dimensions of HISB, identifying the motivations of pregnant women in seeking health information can provide a suitable context for comprehensive interventions based on cultural values, ultimately, promoting maternal and fetal health. Since, qualitative research is an approach used for discovering and describing people's experiences and giving meaning to them,[12] the present qualitative study was conducted to explore the motivations of pregnant women to seek health information.

### **Materials and Methods**

This qualitative research is part of a mixed methods study conducted in Isfahan city, Iran, from June to November 2016, in which a conventional qualitative content analysis approach was used. Purposive sampling was used to identify 30 pregnant women, 5 midwives, and 4 gynecologists as participants. Pregnant women were selected using a maximum variation strategy that took into account their age, level of education, employment, gestational age, and number of previous pregnancies. Healthcare providers were selected with the maximum variation strategy based on length of working experience. The inclusion criteria were participants' willingness to participate in the study, the ability to express experiences, and Iranian citizenship. Participants were accessed via four public maternity clinics as well as midwives and gynecologists' offices and were recruited through face-to-face meetings or telephone calls. Exclusion criterion was unwillingness to continue cooperation and participation in research.

In this study, in-depth semi-structured interviews, field notes, and daily notes were used for data collection. Prior to data collection, the first author wrote down initial preconceptions and beliefs about the research topic based on their previous working experiences with pregnant women and from a review of the literature. These preliminary thoughts and ideas led to the providing an interview guide. The first author conducted the interviews, who had 12 years of midwifery experience, and performed a qualitative study. Interviews with pregnant women began with open questions such as, "Why do you seek health information during pregnancy? Please explain this?" Interviews with healthcare providers began with open questions such as, "Based on your experiences, what makes pregnant women seek health information? Please explain this?" Besides, as the interviews went on, more detailed questions (based on the interview guide) were asked. Course of the interviews was guided by the participants' open and interpretative answers. The time and location of the interviews were chosen based on the preferences of the

participants. Interviews took place in parks, public maternity clinics, and the offices of healthcare practitioners. Interview sessions lasted between 30 and 65 minutes. Interviews were continued until data saturation occurred, that is, no new data code emerged in the interviews. The first author recorded notes about nonverbal behaviors of the participants during the interviews (field notes). Furthermore, pregnant women were asked to record daily issues related to their motivations to seek health information (daily notes).

The data were analyzed manually using a conventional qualitative content analysis with Graneheim and Lundman approach.[12] All the interviews were recorded using a digital audio recorder and were transcribed verbatim. Coding was done by the first author. A codebook was created and shared with the research team based on the purpose of the research and the interview guide. Coding discrepancies were resolved through discussion and consensus. After forming codes inductively, similar codes were merged, and those with a similar meaning were grouped together to form subcategories, and finally the main category. Four criteria of credibility, dependability, confirmability, and transferability suggested by Lincoln and Guba<sup>[13]</sup> were considered to ensure rigor of the research findings. To assure the credibility of the data, transcripts were reviewed for comments or corrections by 5 participants in other sessions and their final comments were summarized (member checking). Moreover, different methods including in-depth interviews at different times and places, field notes, and daily notes were used to validate the data. For increasing transferability of the obtained data, findings of the study were presented to 5 pregnant women with similar characteristics to the participants, but were not involved in the study, to judge similarity of the study results with regard to their experiences. To assure dependability, 3 other authors who were knowledgeable in qualitative data analysis assisted the first author in confirming the data. Moreover, to assure confirmability, opinions of 4 experts were used to ensure consistency of the findings with those of the participants (external checking).

### **Ethical considerations**

The present study was approved by Research Ethics Committee of Isfahan University of Medical Sciences (Ethics Code: IR.MUI.REC.1395.3.955), and ethical considerations including obtaining informed written consent, the confidentiality of information, anonymity, and the right to resignation at any time were observed.

### Results

The results showed that participating pregnant women aged between 16 and 35 years old, most of them were housewives, and were in the third trimester of pregnancy. Also, participating healthcare providers aged between 35 and 51 years old and had working experience between 5 and 24 years [Tables 1 and 2]. Data analysis led to extraction

of 88 codes, 4 sub-categories, and 1 main category. Main category of "strive to protect the health of mother and fetus" consisted of subcategories, including "increasing information related to maternal and fetal health," "preventing recurring problems or causing complications in pregnancy," "reducing worry about pregnancy problems," and "receiving encouragement from spouse, relatives, and healthcare providers" [Table 3].

### Strive to protect the health of mother and fetus

Based on the results, during pregnancy, it is important for women to maintain the health of themselves and their fetuses. In this regard, they were motivated to seek health information and try to increase their knowledge about the health of the mother and fetus. They seek information to prevent recurrence of problems or complications in pregnancy and to reduce concerns about problems. Encouragement from spouses, relatives, and healthcare providers is another motivating factor in looking for health information during pregnancy to protect maternal and fetal health. This main category consisted of four subcategories.

### Increasing information related to maternal and fetal

Participating pregnant women directly considered themselves responsible for the health of the fetus. They narrated that given the importance of maintaining their fetal health, they search for health information until access to answers to their questions. Participant No. 3 said: "To protect the health of my fetus, I tried to increase my information" (Pregnant woman).

Moreover, all healthcare providers narrated that as it is very important for pregnant women to maintain their health and the health of their fetus, this factor is an important motivation to seek the health information during pregnancy. Participant No. 32 said: *Pregnant women are eager to search about anything related to their health and the health of their fetus*" (Midwife).

A large number of pregnant women (especially women experiencing their first pregnancy) needed information about physical and psychological changes in their body during pregnancy, fetal growth and development, and

Participant's no.	Age (years)	Educational level	Occupation	Gestational age (week)	Gravidity
1	31	PhD*	Lecturer	30	1
2	31	BS**	Housewife	25	1
3	23	Diploma	Housewife	37	1
4	29	High school	Service provider	34	1
5	32	BS	Housewife	27	2
6	35	BS	Teacher	37	1
7	25	BS	Housewife	37	1
8	32	Diploma	Housewife	10	3
9	16	BS	Housewife	26	1
10	24	BS	Accountant	34	2
11	29	MS***	Computer engineer	27	1
12	27	BS	Teacher	23	1
13	31	BS	Employee	35	1
14	31	BS	Housewife	26	2
15	32	Diploma	Housewife	28	3
16	28	BS	Housewife	34	2
17	25	BS	Housewife	31	1
18	31	BS	Housewife	31	1
19	30	Diploma	Housewife	18	1
20	20	High school	Housewife	12	1
21	26	High school	Housewife	19	2
22	33	Diploma	Housewife	37	3
23	29	Diploma	Housewife	30	2
24	24	High school	Housewife	15	1
25	33	BS	Saleswoman	26	2
26	23	BS	Housewife	26	1
27	34	Diploma	Housewife	28	1
28	31	BS	Housewife	34	2
29	28	BS	Housewife	11	2
30	19	BS	Housewife	27	1

<sup>\*</sup>Doctor of Philosophy, \*\*Bachelor of Science, \*\*\*Master of Science

childbirth. They narrated that they did not know what was happening in their body because they had no pregnancy or childbirth, and the need for knowledge and desire to raise awareness prompted them to seek health information. Participant No. 20 said: "It was my first experience. I didn't know what was going on in my body. For example, do I get angry because I am pregnant or stressed? So, I searched for this" (Pregnant woman).

Furthermore, all healthcare providers believed that because pregnant women experiencing their first pregnancy are very interested in learning about their body changes during pregnancy and how the fetus grows, they try to get the answer to their questions by searching for information. Participant No. 39 said: "Pregnant women are very motivated to find out about the condition of their fetus, for example, they want to know if their fetus is growing normally or not" (Gynecologist).

### Preventing recurring problems or causing complications in pregnancy

Some pregnant women who had a history of problems in their previous pregnancies (such as abortion) found themselves at risk as soon as they became pregnant. They

Table 2: Demographic characteristics of healthcare providers

Participant's No.	Age (Years)	Work experience (Years)	Occupation
31	47	24	Midwife
32	35	5	Midwife
33	42	8	Midwife
34	44	22	Midwife
35	40	7	Midwife
36	40	9	Gynecologist
37	45	13	Gynecologist
38	38	5	Gynecologist
39	51	15	Gynecologist

understood the need for self-care and sought to prevent the problem from recurring during pregnancy by looking for health information. Participant No. 22 said: "I wanted my fetus to be healthy and not to experience abortion, because I had a history of abortion. This motivated me to find the answers to my questions so that my baby would be born healthy" (Pregnant woman).

Another number of pregnant women cited prevention of complications (such as gestational diabetes, hypertension, etc) during pregnancy and maintenance of maternal and fetal health as a motivation to seek health information. Participant No. 16 said: "Every time I had a problem, I became more motivated to find out if it was normal or not" (Pregnant woman).

Moreover, most healthcare providers narrated that pregnant women are looking to avoid any problems or complications during pregnancy. They considered the need to know about preventing recurring problems or causing complications during pregnancy as a motivation to seek information by pregnant women. Participant No. 36 said: "Many pregnant women are looking for information to find out that whether their conditions are normal. For example, what type of nausea, heartburn, or headache is abnormal? Each of these increases their motivation to obtain information" (Gynecologist).

### Reducing worry about pregnancy problems

Some pregnant women considered pregnancy to be a stressful event and a cause of concern and anxiety. They introduced concerns about pregnancy issues and fetal health as factors in psychological distress. In this regard, pregnant women cited fear, anxiety, and anxiety as motives for seeking information, and sought to relieve these feelings by seeking information. Participant No. 7 said: "I was always afraid of having a problem for myself or my fetus. So, I tried to get information in order to reduce my stress" (Pregnant woman).

Table 3: The examples of codes, sub-categories and main category						
Code	Subcategory	Main category				
Having a normal, uncomplicated pregnancy						
Prevention of repetition of abortion						
Prevention of repetition of preterm labor	Preventing recurring problems or causing complications in pregnancy	Strive to protect the health of mother and				
Ensure that symptoms such as morning sickness or headache are normal						
Elimination of concern and ensuring maternal health		fetus				
Elimination of concern and ensuring fetal health	Reducing worry about pregnancy					
Elimination of fear from damage to the fetus	problems					
Elimination of concern about fetal abnormalities						
Need to increase information on ways to maintain maternal and fetal health	Increasing information related to					
Need information on how the fetus grows and develops	maternal and fetal health					
Need to get information about body changes during						
Encouraging from spouse to seek health information	Receiving encouragement from spouse,					
Encouraging from midwife to seek health information	relatives, and healthcare providers					
Encouraging from family members (sisters, etc.) to seek health information	<u>,                                      </u>					

Moreover, some pregnant women considered a lack of information or misinformation about pregnancy and its changes as a factor in psychological distress, and cited it as an incentive to seek information. Participant No. 20 said: "Because I didn't know about pregnancy, I was stressed when I had a question. I was less stressed and excited when I asked" (Pregnant woman).

Most healthcare providers narrated that facing pregnant women with questions about pregnancy and childbirth issues makes them stressed; therefore, they seek to answers for their questions. They cited psychological needs such as safety and comfort as motivations for pregnant women to seek health information, and thought that pregnant women were trying to alleviate anxiety and anxiety by seeking information. Participant No. 35 said: "In usual, pregnant women ask their questions to lessen their stress, fear, and excitement" (Midwife).

## Receiving encouragement from spouse, relatives, and healthcare providers

Based on the participants' narrations, receiving psychological support and encouragement from spouse and relatives (such as sister, mother, mother-in-law, etc), midwives, and gynecologists play an effective role to motivate the pregnant women (especially women experiencing their first pregnancy) to seek health information. Participant No. 27 said: "As soon as I tell my husband that I have a problem, he encourages me to search" (Pregnant woman).

Some pregnant women reported that their spouses and relatives acted as "a searcher" and sought health information in various areas of the pregnant woman. Participant No. 3 said: "Sometimes my husband searches for me on the Internet. Now we are both increasing our knowledge about pregnancy" (Pregnant woman).

Most healthcare providers identified pregnant women's spouses and relatives as supportive and encouraging them to seek health information. Furthermore, all participating midwives narrated that they encouraged pregnant women to read books and health pamphlets related to pregnancy and childbirth to receive accurate and comprehensive information. Participant No. 33 said: "I often advise pregnant women to read books published by reputable authors in order to find answer to their questions" (Midwife).

### **Discussion**

This study was conducted to explore the motivations of pregnant women to seek health information. The results showed that pregnant women strive to protect the health of themselves and their fetuses. In this regard, their motivations to seek health information are as follows: increasing information related to maternal and fetal health, preventing recurring problems or causing complications in pregnancy, reducing worry about pregnancy problems, and receiving encouragement from spouse, relatives, and healthcare providers. Based on the results of present

study, increasing information related to maternal and fetal health (such as physical and psychological changes during pregnancy, fetal growth and development, fetal health, and childbirth) motivated pregnant women to seek health information. In a study, Nasrollahzadeh showed that pregnant women are motivated to seek health information by learning about any health-related topic.[11] Another study showed that information about the health of embryo was the most important information need among pregnant women.<sup>[14]</sup> Moreover, Sayakhot and Carolan-Olah demonstrated that fetal development, nutrition in pregnancy, and stages of childbirth were the most topics of interest for pregnant women to search on the Internet.[15] The motivation of pregnant women to seek information related to maternal and fetal health may suggest that health professionals, midwives, and antenatal care providers should be aware of these issues and provide more evidence-based information (such as reputable websites, brochures, and books (to pregnant women at the time they require it.

Based on the results, preventing recurring problems or causing complications during pregnancy motivated pregnant women to seek health information. Tsehay in a study showed that lack of knowledge, perceived personal risk of health complications, and seeking a healthy life were the major factors that motivated pregnant women to seek for health information.<sup>[6]</sup> As many studies have pointed out, it can be concluded that HISB plays an important role in promoting a healthy lifestyle and preventive behaviors. Information alone cannot guarantee healthy behavior, but looking for health information can be an important motivation for changing healthy behavior.[16] Thus, by being aware of women's motivations to seek information about recurring problems or causing complications during pregnancy and providing the required health information via reputable sources, effective steps can be taken to improve their level of awareness and health.

The results of present study indicated that reducing worry about pregnancy problems and fetal health motivated pregnant women to seek health information. Spielberg *et al.*,<sup>[17]</sup> showed that anxiety and fear can induce cognitive, emotional, and behavioral responses to threat or fear reduction. Nasrabadi *et al.*,<sup>[10]</sup> identified fear, anxiety, and uncertainty as the main motivations for information seeking. It seems that regarding the important psychological changes during pregnancy, paying attention to motivations of women in seeking health information can reduce their concerns and also improve their psychological health.

The results of present study showed that encouragement from spouses, relatives, and healthcare providers motivated pregnant women to seek health information. It is believed that social support, encouragement, and persuasion of people, especially family members and healthcare providers are very important in increasing the level of health literacy, health care behavior, and health promotion.<sup>[18]</sup> Deng and Liu showed that social support can indirectly affect HISB.<sup>[19]</sup> One recent study by Surinprateep *et al.*,<sup>[20]</sup> reported that social support can

significantly predict the pregnant women's need for seeking health information. Kim et al., [21] showed that family members can play a significant role in the health behaviors of other family members by providing emotional and informational support as well as encouraging for seeking health information. This finding highlights social support by emphasizing the importance of family and healthcare providers can play an effective role to provide the health information by pregnant women and preventing pregnancy complications in them. In this study, we tried to access pregnant women with different number of pregnancies and deliveries, but most participants were experiencing their first pregnancy. This is due to the decrease in the total fertility rate in Iran, in recent years.[22] Therefore, it seems that the motivations of pregnant women to seek health information are limited to these pregnant women and this could be a limitation for the present study.

#### Conclusion

Based on the results, pregnant women seek health information for a variety of reasons, including learning more about their own health and that of their fetus, preventing recurring problems or complications, alleviating concerns about pregnancy problems, and receiving encouragement from husbands, relatives, and healthcare providers. Thus, health professionals, midwives, and antenatal care providers should be aware of these issues and provide more evidence-based information to pregnant women at the time they require it. Furthermore, these findings can be used to design the interventions to raise awareness of pregnant women about maternal and fetal health, provide social support with a focus on family members and healthcare providers, help prevent complications, and ultimately improve their health during pregnancy.

### Acknowledgements

This article was based on the doctoral dissertation on reproductive health (395955) approved by the Research Council of Isfahan University of Medical Sciences and conducted from June to November 2016. We should thank the pregnant women and healthcare providers (midwives and gynecologists) in Isfahan for their sincere participation in the interviews.

### Financial support and sponsorship

Isfahan University of Medical Sciences

### **Conflicts of interest**

Nothing to declare.

### References

- Kalankesh LR, Mohammadian E, Ghalandari M, Delpasand A, Aghayari H. Health information seeking behavior (HISB) among the university students. Frontiers Health Informatics 2019;8:e13.
- Kamali S, Ahmadian L, Khajouei R, Bahaadinbeigi K. Health information needs of pregnant women: Information sources, motives and barriers. Health Info Libr J 2018;35:24-37.
- Schwarzer R. Life and death of health behaviour theories. Health Psychol Rev 2014;8:53-6.

- Michie S, West R, Sheals K, Cristina A, Godinho CA. Evaluating the effectiveness of behavior change techniques in health-related behavior: A scoping review of methods used. Transl Behav Med 2018;8:212-24.
- Hardcastle SJ. Commentary: Interpersonal style should be included in taxonomies of behavior change techniques. Front Psychol 2016;7:894.
- Tsehay AB. Seeking health information in rural context: Exploring sources of maternal health information in rural Ethiopia. Master's Thesis. Bergen, Norway: University of Bergen; 2014.
- Merrell LK. Exploration of the pregnancy-related health information seeking behavior of women who gave birth in the past year. PhD Dissertation. Tampa, FL: University of South Florida: 2016.
- World Health Organization (WHO). Trends in maternal mortality 2000 to 2017: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. 2019. Available from: https://apps.who.int/iris/handle/10665/327596. [Last accessed on 2021 August 05].
- United Nations Children's Fund) UNICEF(. The state of the world's children 2019 statistical tables. 2019.
   Available from: https://data.unicef.org/resources/dataset/sowc-2019-statistical-tables/. [Last accessed on 2021 Aug 10].
- Nasrabadi A Sabzevari S, Bonabi TN. Iranian women's experiences of health information seeking barriers: A qualitative study in Kerman. Iran Red Crescent Med J 2015;17:e25156.
- Nasrollahzadeh S. Health information-seeking behavior of pregnant women: A grounded theory study. Human Info Interact 2015;1:270-81. [In Persian]
- Creswell JW, Creswell JD. Research Design: Qualitative, Quantitative and Mixed Methods Approach. 5th ed. Los Angeles: Sage; 2017.
- Holloway I, Galvin K. Qualitative Research in Nursing and Healthcare. 4<sup>th</sup> ed. New York: Wiley-Blackwell; 2016.
- Chalak AM, Riahi A. Information needs of pregnant women referred to health centers in Behshahr city within 2016-2017.
   J Community Health Res 2017;6:165-74.
- Sayakhot P, Carolan-Olah M. Internet use by pregnant women seeking pregnancy-related information: A systematic review. BMC Pregnancy Childbirth 2016;16:65.
- Serçekuş P, Değirmenciler B, Özkan S. Internet use by pregnant women seeking childbirth information. J Gynecol Obstet Hum Reprod 2021;50:102144.
- 17. Spielberg JM, Leon AA, Bredemeier K, Heller W, Engels AS, Warren SL, *et al.* Anxiety type modulates immediate versus delayed engagement of attention-related brain regions. Brain Behav 2013;3:532-51.
- Jo A, Seo EJ, Son YJ. The roles of health literacy and social support in improving adherence to self-care behaviours among older adults with heart failure. Nurs Open 2020;7:2039-46.
- Deng Z, Liu S. Understanding consumer health information-seeking behavior from the perspective of the risk perception attitude framework and social support in mobile social media websites. Int J Med Inform 2017;105:98-109.
- 20. Surinprateep P, Ratinthorn A, Limruangrong P. Factors influencing pregnant women's seeking of health information. TJNC 2019;34:95-107.
- Kim W, Kreps GL, Shin CN. The role of social support and social networks in health information–seeking behavior among Korean Americans: A qualitative study. Int J Equity Health 2015;14:40.
- Enayat H, Parnian L. The study of cultural globalization and tendency to fertility. J Woman Society 2013;4: 109-36. [In Persian].