

ORIGINAL ARTICLE

Exploring Health-Seeking Behaviors in Iranian Women with High-Risk Pregnancy: A Qualitative Study

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ABSTRACT

Background: Health-seeking behaviors are essential for preventing pregnancy complications and improving maternal and fetal health outcomes. In high-risk pregnancies, these behaviors constitute a complex process influenced by various individual, cultural, and socioeconomic factors. This study aimed to explore the health-seeking behaviors of Iranian women experiencing high-risk pregnancy.

Methods: This qualitative study was conducted from August 2024 to March 2025 in Ahvaz, Iran. Using purposive sampling with maximum variation, 24 participants (18 women with high-risk pregnancies and 6 healthcare providers) were interviewed. Data were collected using in-depth, semi-structured interviews and continued until data saturation was achieved. The data were analyzed using conventional qualitative content analysis based on the Elo and Kyngäs framework. MAXQDA software version 20 was used for data organization and management.

Results: The data analysis identified three main categories and seven subcategories. The categories included proactive health-seeking behaviors (health monitoring and care, and lifestyle-related behaviors), reactive health-seeking behaviors (therapeutic and care reactions, information-seeking reactions, and psychological reactions for stress management), and avoidant behaviors (avoidance of seeking help and medical services and avoidance of social interaction).

Conclusion: Women with high-risk pregnancies exhibit diverse health-seeking behaviors. A comprehensive understanding of these patterns enables healthcare providers and intervention program designers to deliver targeted education and support, thereby reducing avoidant behaviors, promoting proactive actions, and ultimately improving maternal and fetal health outcomes.

Keywords: Health behavior; High-risk Pregnancy; Qualitative research; Women

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INTRODUCTION

High-risk pregnancy is recognized as a significant challenge for public health systems. Addressing healthcare needs during pregnancy is one of the World Health Organization's Sustainable Development Goals and objectives.¹ A high-risk pregnancy is defined as one in which there are medical, obstetric, or demographic factors that pose risks to the health or life of the mother or fetus.² This increased risk may result from pre-existing medical conditions, complications arising during gestation, or specific characteristics of the mother or fetus.^{2, 3} It is estimated that approximately 15% to 20% of pregnancies are classified as high-risk.⁴ Depending on the country, the reported prevalence of high-risk pregnancies ranges from 12% to 60%.⁵

Pregnancies classified as high-risk have a greater likelihood of adverse outcomes for the mother and/or fetus, necessitating close monitoring and management.⁶ Therefore, identifying the needs, challenges, and barriers these women face and designing appropriate interventions to improve maternal and fetal health outcomes are essential. Some studies have shown that high-risk pregnancies are influenced by a combination of medical, social, and psychological factors that affect women's health-seeking behaviors and decision-making during pregnancy.⁷⁻⁹

Health-seeking behaviors encompass the range of actions individuals undertake to preserve, protect, or improve their health, regardless of their current or perceived health status.¹⁰ Understanding these behaviors is crucial for the effective allocation and management of health resources, particularly in the fields of public health and policy development.¹¹ Maternal health-seeking behavior refers to the actions and decisions women make to obtain healthcare services during pregnancy, childbirth, and the postnatal period.¹² These behaviors include the timely use of antenatal care services, adherence to medical advice and prescriptions, and preparedness to handle potential

emergencies.¹³ Specific examples of health-seeking behaviors in high-risk pregnancies include seeking reliable health information, obtaining professional medical assistance for illnesses or related complications, attending regular antenatal visits, and utilizing support systems.¹⁴ Research conducted across various countries indicates that pregnant women's health-seeking behaviors are influenced by a combination of cultural beliefs, family and social support, financial and geographic accessibility, and access to reliable health information.^{15, 16} Studies from Nigeria, Pakistan, Nepal, Cameroon, and Iran consistently demonstrate that barriers such as poverty, low awareness, cultural preferences for home births, and concerns about service quality impede timely and appropriate care-seeking.¹⁷⁻²¹ Maternal health literacy and proactive health information-seeking behavior, particularly through online resources, are associated with healthier pregnancy practices and improved outcomes.²² Emotional support from social networks also plays a critical role in encouraging adherence to prenatal care.²³ Overall, improving maternal and perinatal outcomes requires addressing these multifaceted factors to promote timely and informed health-seeking behaviors among women with high-risk pregnancies.²⁴

In Iran, most quantitative studies on high-risk pregnancies have focused on prevalence, maternal and neonatal outcomes, risk factors, and psychological aspects,²⁵⁻²⁷ while only a limited number of qualitative studies have explored issues such as risk perception, quality of prenatal care, and lived experiences.^{28, 29} However, none has specifically investigated health-seeking behaviors. Given the limited understanding of how women seek, access, and utilize healthcare services during high-risk pregnancies, particularly within the Iranian socio-cultural context, a qualitative study is warranted. Such an approach can capture the individual, social, and structural conditions influencing these behaviors and provide evidence to inform culturally sensitive interventions. Therefore, this study

aimed to explore the health-seeking behaviors in women with high-risk pregnancies as described by both the women themselves and healthcare providers.

MATERIALS AND METHODS

This qualitative study, employing the conventional content analysis method, was conducted from August 2024 to March 2025. The study included 24 participants: 18 women with high-risk pregnancies and 6 health providers (Tables 1 and 2). Sampling was carried out at the high-risk pregnancy specialty clinic and the perinatology ward of Imam Khomeini Hospital and health centers in Ahvaz. The study population comprised women with high-risk pregnancy attending these healthcare facilities, as well as healthcare professionals, including midwives, obstetricians, and other relevant practitioners functioning within both clinical and community health environments. Purposive sampling with maximum variation was employed to ensure the inclusion of participants with diverse conditions, experiences, and viewpoints. The women were selected to maximize diversity across variables such as age, occupation, education level, number of pregnancies, births, abortions, gestational age, and type of risk. Similarly, the healthcare providers represented a range of education levels, work experience, academic specializations, job ranks, and workplaces.

Inclusion criteria for women were a diagnosis of high-risk pregnancy at any gestational age, basic literacy, the ability to articulate their experiences, and residence in Ahvaz. Eligibility criteria for healthcare practitioners included holding at least a bachelor's degree in midwifery, having a minimum of five years of relevant experience in high-risk prenatal care or at health centers, and being able to effectively express their opinions on the topic. The exclusion criterion for both groups was unwillingness to participate in the study.

Interview questions were developed based on a review of the literature and health behavior frameworks. After content validation

by experts and refinement through a pilot interview, the questions were used in the main study. Probing questions were also employed to elicit richer data. In-depth, semi-structured interviews were conducted to collect the necessary data. The interviews began with general questions and progressed to more specific inquiries based on the participants' responses and the study objectives. Before the interviews, all participants completed a demographic questionnaire, and the interviews were recorded with their permission. In cases where participants declined consent for audio recording, the interviewer employed thorough and meticulous note-taking method. Efforts were made to document the participants' responses as accurately and verbatim as possible. Following each interview, the notes were promptly reviewed and supplemented to minimize the likelihood of omitting pertinent information. Additionally, the participants' contact information was collected to facilitate follow-up telephone communications, if needed, to clarify or augment the data.

All interviews were performed by the first author, who has experience interacting with patients in perinatology wards as a clinical instructor and is a Ph.D. candidate in midwifery. Appointments were scheduled individually with each participant, and the interviews were conducted at a time and location convenient for them within the study setting.

An interview guide was specifically developed for the study purpose. The interview began with an open-ended question for women: "Can you describe your experiences and thoughts about seeking healthcare during your high-risk pregnancy?" and for health providers: "According to your clinical experience, what healthseeking behaviors are commonly observed among women with high-risk pregnancy, and what is your professional viewpoint on managing these behaviors?" Although only one or two main open-ended questions were posed, they were intentionally designed to be broad, allowing the participants to elaborate in detail on their experiences and health-seeking behaviors.

The interviewer then followed up with additional probing questions, for example, “Can you provide an example?” This approach ensured richer and more nuanced data, enabling the participants to elaborate more deeply. Each interview lasted between 45 and 60 minutes. Data collection continued until saturation was reached. All interviews were conducted in Persian, and each participant was interviewed once. Data reduction was conducted in accordance with the conventional qualitative content analysis methodology, utilizing the framework proposed by Elo and Kyngäs.³⁰ First, all interviews were transcribed verbatim, and the texts were read repeatedly to gain a comprehensive understanding. Meaning units relevant to the study aim were then identified, condensed, and coded. Similar codes were grouped into sub-categories, which were further organized into broader categories. Finally, through the process of abstraction, the main categories were derived to capture the overarching themes of the data. The data were organized and managed using MAXQDA version 20.

The initial coding was done by the first author, SJ. Throughout the coding process, she

held regular meetings with the research team to discuss and review the coding scheme and the synthesis of the codes at a higher level. To ensure the accuracy and trustworthiness of the data, we adhered to the four criteria proposed by Lincoln and Guba:³¹ credibility, transferability, dependability, and confirmability. To enhance credibility, we allocated sufficient time to data collection and used a purposive sampling strategy that emphasized maximum variation in terms of age, educational level, types of maternal-fetal risk, and ethnicity, continuing the process until data saturation was achieved. For confirmability, the coded data were reviewed by external experts proficient in qualitative research and familiar with the subject matter, helping to minimize researcher bias. To support transferability, we provided detailed descriptions of the participants’ characteristics, sampling procedures, and the data collection process, enabling readers to assess the applicability of the findings to other contexts. Efforts to ensure dependability included maintaining a clear audit trail of all research steps and methodological decisions.

This study is part of the first author’s PhD dissertation in Midwifery, financially

Table 1: Characteristics of women with high-risk pregnancies

Participant Code	Age (year)	Education	Occupation	Pregnancy Status	Gestational Age (Weeks)	Risk Type
W ^a 1	38	Bachelor	Housewife	G ^b 2, P ^c 1	28	Diabetes
W2	21	Primary School	Housewife	G2, Ab ^d 1	28	Bleeding & Placenta Previa
W3	34	Master	University Lecturer	G2, Ab1	34	Placenta Previa
W4	33	Master	Psychologist	G2, P1	33	Placenta Previa
W5	41	High School	Housewife	G4, P2, Ab1	12	Severe Nausea & Vomiting
W6	34	Primary School	Housewife	G3, P2	15	Bleeding, Placenta Previa
W7	33	Bachelor	Housewife	G12, AB11	14	Recurrent pregnancy loss
W8	32	Bachelor	Housewife	G1, P0	27	Thrombocytopenia
W9	30	Primary School	Housewife	G2, P1	8	Esophageal varices
W10	33	High School	Housewife	G4, P2, D ^e 1	33	Previous Cesarean
W11	33	High School	Housewife	G3, P3	28	Bleeding
W12	31	High School	Housewife	G4, P3	28	Placental Adhesion
W13	33	High School	Housewife	G3, P2	32	Anemia & Diabetes
W14	32	Primary School	Housewife	G4, P3	10	Cardiac disease & Asthma
W15	42	Primary School	Housewife	G4, P3	27	Hypertension & Anemia
W16	38	High School	Housewife	G1, P0	32	Bleeding & Diabetes
W17	32	High School	Housewife	G3, P2	28	Diabetes
W18	36	Primary School	Housewife	G3, P2	30	Diabetes & Anemia

^aW: Woman; ^bG: Gravidity; ^cP: Parity; ^dAb: Abortion; ^eD: Dead

supported by Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran (Approval ID: IR.AJUMS.REC.1403.173). After explaining the study objectives to the participants, we obtained informed written consent from each individual before the interview. Participants were informed that their participation was

voluntary and that they could withdraw from the study at any time. To ensure the confidentiality of the participants' identities, each individual was assigned a unique code. The code "W" was used for women with high-risk pregnancy, and the code "HP" for healthcare providers, each followed by a sequential number.

Table 2: Demographic Information of Health Providers

Participant Code	Age (year)	Job Position	Academic Field	Educational Level	Work Experience (Years)	Workplace
HP ^a 1	58	Director of Maternal Health	Midwifery	Master	20	Health Center
HP2	46	Head of Perinatology	Perinatologist	Subspecialty Fellowship	18	Perinatology ward (Hospital)
HP3	48	Midwife	Midwifery	Bachelor	16	Health Center
HP4	56	Head of the High-Risk Pregnancy Clinic	Midwifery	Bachelor	14	High-Risk Pregnancy Clinic
HP5	44	University Lecturer	Reproductive Health	Doctor of Philosophy	16	University
HP6	45	University Lecturer	Reproductive Health	Doctor of Philosophy	17	University

^aHP: Health providers

Table 3: Sub-subcategories, sub-categories, and categories extracted from data

Sub-subcategory	Sub Categories	Main Categories
Engaging in preconception care Engaging in prenatal care Choosing the best medical services	Health monitoring and care behaviors	Proactive Health-Seeking Behavior
Behaviors related to lifestyle and physical and mental health Engagement in Mental Health Support Activities	Lifestyle-related behaviors	
Apply for Receiving specialized counseling and actively managing the condition Adhering to medical and pharmacological instructions during high-risk pregnancy	Therapeutic and Care Reactions	Reactive Health-Seeking Behavior
Obtaining information from official sources Obtaining information from unofficial sources	Information-Seeking Reactions	
Religious coping strategies Psychological self-care strategies Seeking Social and family support	Psychological Reactions for Stress Management	
Avoidance of psychological counseling and support Resistance to accepting and following medical care Distrust and dissatisfaction with the healthcare system Limited health information-seeking behavior due to lack of awareness Avoiding or delaying follow-up due to inadequate support Avoidance due to structural and systemic barriers	Avoidance of seeking help and medical services	Avoidant Behaviors
Social withdrawal and pregnancy concealment Limitation of social and occupational roles	Avoidance of social interactions	

RESULTS

The findings of this study were obtained from 24 in-depth interviews conducted with women with high-risk pregnancies and healthcare providers. Tables 1 and 2 present the demographic characteristics of the participants. Data analysis generated 119 codes, which were organized into 20 sub-subcategories, 7 subcategories, and, ultimately, three main categories: (1) proactive health-seeking behavior, (2) reactive health-seeking behavior, and (3) avoidant behavior. The details of each main category, along with their respective subcategories, are presented in Table 3 and are comprehensively described in the following sections.

1. Proactive Health-Seeking Behavior

Proactive health-seeking behavior refers to the actions individuals take to actively manage their health. This behavior is essential for improving health outcomes, as it facilitates early diagnosis and effective management of health issues. These behaviors can be categorized into two sub-categories: health monitoring and care, and lifestyle-related behaviors.

1.a. Health Monitoring and Care Behaviors

According to the participants, continuous assessment of the mother's physical condition, both before and during pregnancy, is especially important in high-risk pregnancies. They emphasized the necessity of receiving preconception counseling, particularly to optimize health in women with chronic conditions and to manage their medications effectively. Additionally, psychological counseling and emotional support for informed decision-making regarding future pregnancies were identified as critical needs. Regular follow-up through routine and specialized medical visits, as well as actively seeking access to the best available medical facilities and equipment during pregnancy, were also highlighted as essential components of health monitoring and care in high-risk pregnancies. Two participants said:

"Due to the health issues I experienced

before pregnancy, I was under medical supervision and consulted subspecialist doctors before attempting to conceive again. I was always concerned about my health during pregnancy. Now, I attend my check-ups every two weeks, and I understand that I must give birth in a well-equipped hospital."(W9)

"Preconception care is critically important for women with high-risk pregnancies. Many complications can be prevented or managed effectively if the mothers' health is assessed before pregnancy. Unfortunately, many of these women delay seeking assistance until it is too late". (HP4)

1.b. Lifestyle-Related Behaviors

Changing one's lifestyle is an unavoidable consequence of a high-risk pregnancy, significantly impacting various aspects of an individual's life. Participants reported that, due to the conditions associated with high-risk pregnancy, certain lifestyle modifications are necessary. These include receiving nutritional counseling to optimize dietary status and reducing or limiting daily physical activities. Additionally, participants emphasized the importance of engaging in activities that promote mental well-being, such as listening to music and reading materials related to pregnancy, childbirth, and infant care. Two women stated:

"Because of my diabetes, I inject insulin every morning and night as prescribed by my doctor, and I walk for half an hour each day. I also follow a specific diet that I must strictly adhere to."(W13)

"Because I have placenta previa during my pregnancy, I often experience spotting and bleeding, which requires me to have complete bed rest at home. Staying at home causes stress and depression; therefore, I spend time on social media and sometimes listen to music."(W3)

2. Reactive Health-Seeking Behavior

Reactive behaviors in women with high-risk pregnancy typically arise in response to concerns and challenges related to their

pregnancy, reflecting their efforts to adapt to difficult conditions and safeguard both their own health and that of the fetus. This category comprises three subcategories: “therapeutic and care reactions,” “information-seeking reactions,” and “psychological reactions for stress management.”

2.a. Therapeutic and Care Reactions

Based on the statements of most participants, women with high-risk pregnancies actively manage their health. They seek specialized care, maintain continuous and effective communication with physicians, undergo hospitalization when necessary, regularly attend follow-up appointments, and complete advanced tests and evaluations. These behaviors demonstrate a high level of awareness within this group regarding the importance of treatment and specialized care in ensuring favorable pregnancy outcomes. Two participants said:

“Due to low platelet levels, I consulted a hematology specialist. Additional tests were conducted, and I was prescribed medication that I need to take. I attend my medical appointments regularly and punctually, fully adhering to my doctor’s instructions because I understand that these care measures are crucial for my baby’s health.” (W8)

“I suddenly experienced heavy bleeding, which was very concerning. I immediately went to the nearest well-equipped hospital to receive urgent and specialized care.” (W16)

2.b. Information-Seeking Reactions

One important aspect concerning women with high-risk pregnancy is their strong need to seek information about their condition and its effects on both their own health and that of their fetus. These women utilize both formal and informal sources to gather information. Formal sources include consultations with physicians, midwives, and healthcare centers, reflecting their preference for accurate and reliable medical information. Conversely, informal sources such as advice from other women, online platforms, and conversations

with friends and family also play a significant role in meeting their informational needs. In this regard, two participants stated:

“Whenever I have a question about my illness or its effects on myself or my baby, I first consult my doctor and trust his advice. However, I also sometimes benefit from the experiences of other mothers in online groups, which I find helpful.” (W7)

“For peace of mind and reliable information, I talk to friends and family, use Google and Instagram, and consult my friend who is a midwife. However, I always make the final decision in consultation with my doctor.” (W1)

2.c. Psychological Reactions for Stress Management

Women with high-risk pregnancies reported using three primary strategies to manage stress and maintain psychological well-being: religious practices such as prayer and trust in God; psychological techniques like meditation and deep breathing; and emotional and social support, particularly from their spouses. These strategies helped reduce anxiety and foster a sense of security and resilience. Two women said:

“My husband always accompanied me in my medical appointments. When he was by my side, I felt I wasn’t alone, and it was as if half of my worries faded away. Whenever I felt very anxious or stressed, he was the first person I would talk to. He always tried to calm me with his words and reassure me that everything would be fine.” (W6)

“Whenever I felt anxious or stressed, I would pray. Prayer and making supplications gave me a sense of calm and helped reduce my anxiety during my high-risk pregnancy.” (W9)

3. Avoidant Behaviors

These behaviors included avoiding seeking help and medical services and social withdrawal. The underlying causes of such behaviors were diverse and included distrust of the healthcare system, dissatisfaction with the quality of care, stigma or secrecy

surrounding pregnancy, and socio-cultural pressures. These avoidant tendencies often resulted in delays in receiving necessary care, emotional and social isolation, psychological distress, and increased risks to both maternal and fetal health.

3.a. Avoidance of Seeking Help and Medical Services

The findings of this study reveal that health-seeking behaviors among women with high-risk pregnancies are influenced by a complex interplay of individual, psychosocial, and structural factors. At the individual level, barriers such as low health literacy, limited awareness regarding the critical need for specialized care, and entrenched medical misconceptions significantly deter patients. Furthermore, emotional barriers, including fear, shame, and the anticipation of judgment, frequently lead to the non-disclosure of health issues, thereby causing critical delays in accessing care. Interpersonally, the degree of social support and the quality of patient-provider interactions act as pivotal determinants in either facilitating or inhibiting care-seeking behaviors. Two participants said:

“I didn’t go for prenatal care until the fourth month because the staff at the health center were cold, disrespectful, and demeaning. Since I’ve had three C-sections, they kept blaming me. I felt judged and that no one took my concerns seriously, so I preferred to delay seeking care.” (W10)

“The literacy level of pregnant women is very low. When knowledge is limited, they don’t know what to do when they face a problem. For this reason, they feel discouraged and stop going to healthcare and medical centers.” (HP3)

From a systemic perspective, structural deficiencies within the healthcare system substantially diminish women’s motivation to seek medical attention. Participants highlighted systemic challenges such as staff shortages, inadequate service coordination, the absence of confidential and supportive environments, and extended waiting times.

These institutional shortcomings are further exacerbated by logistic and socioeconomic constraints, including long distance to the healthcare facilities, prohibitive out-of-pocket costs, lack of insurance coverage, and inflexible clinic schedules such as the unavailability of evening hours. Collectively, these findings underscore the urgent need for comprehensive, multifaceted interventions that concurrently address individual vulnerabilities, interpersonal dynamics, and systemic constraints to optimize healthcare access and outcomes for women with high-risk pregnancy. Some participants stated:

“Our health center facilities are insufficient, and there is no safe physical space where pregnant women feel comfortable discussing their mental health. Additionally, the number of clients per shift is very high, and there is not enough time to provide all necessary healthcare services”. (HP4)

“Evening shifts at the health center should be available because many clients are employed and cannot come for services in the morning.” (HPI)

“My husband couldn’t afford to complete my treatment course and stay hospitalized longer. I discharged myself from the hospital with my own consent because we were facing financial problems.” (W11)

3.b. Avoidance of Social Interaction

Pregnant women reported that a high-risk pregnancy significantly impacts their social lives, leading to behaviors such as withdrawal, isolation, anxiety, and restriction of social and occupational roles. These behaviors often arise from fear of being judged (e.g., labeled or stigmatized), concerns about others’ reactions, and efforts to maintain family harmony by concealing their condition. Such social avoidance can result in reduced emotional support, increased psychological burden, and poor adherence to treatment. Two women said:

“I want to be discharged from the hospital as soon as possible. No one knows I am hospitalized, and I don’t want our relatives to

find out because they will mock you, saying you can't deliver a healthy baby and are always in the hospital. " (W16)

"When they told me my pregnancy was high-risk, I had to take a leave of absence from work. I no longer participated in gatherings and events like I used to, and I set aside many of my responsibilities, because I felt that the less involved I am, the more peace of mind I will have about the baby." (W4)

DISCUSSION

The findings provide a comprehensive understanding of the health-seeking behaviors exhibited by women with high-risk pregnancy, which were classified into three distinct categories: proactive, reactive, and avoidant.

The findings highlighted that women with high-risk pregnancy were engaged in proactive health behaviors, such as attending preconception and prenatal care, seeking psychological counseling and emotional support, and actively utilizing advanced medical facilities and equipment. These proactive measures were essential for safeguarding the health of both the mother and the fetus. Additionally, mothers demonstrated early initiation and continuity of care. These findings align with previous research indicating that timely and regular prenatal care is significantly associated with improved pregnancy outcomes.^{32, 33} It was found that higher levels of awareness and self-efficacy were associated with increased engagement in preventive behaviors among women with high-risk pregnancy.³⁴ Their deliberate selection of advanced healthcare facilities reflected informed decision-making and self-efficacy, which previous studies have also identified as influential factors in maternal health.³⁵ Preventive health-oriented behaviors included dietary modifications, consistent use of insulin and medications, and stress management techniques. Evidence indicates that such lifestyle changes can substantially reduce the risks associated with high-risk pregnancies.³⁶ Proactive health behaviors

among women with high-risk pregnancy reflect a high level of awareness, self-care, and active engagement in the healthcare process. These behaviors are consistent with the findings from previous studies and highlight the importance of improving access to information, counseling, high-quality healthcare services, and psychological support to strengthen such behaviors and improve pregnancy outcomes.^{37, 38} Therefore, educational and supportive programs within the healthcare system should be designed and implemented focusing on enhancing these key proactive behaviors.

Findings showed that women with high-risk pregnancies were actively engaged in reactive behaviors when faced with health threats to protect their own well-being and that of their fetus. These behaviors include consulting specialists and visiting well-equipped medical centers, undergoing additional tests, seeking accurate and reliable information from various formal and informal sources, and employing strategies to manage stress. Furthermore, the results indicate that these behaviors align with the Health Belief Model, which emphasizes that perceived risk, belief in the effectiveness of medical interventions, and the reduction of barriers are key factors in promoting health-related behavior.³⁹ Enhancing perceived susceptibility and benefits, while simultaneously reducing structural and psychological barriers, has been shown to significantly improve care-seeking in vulnerable populations.⁶ Participants adhered to medication use and follow-ups. These findings are consistent with previous research highlighting the importance of treatment adherence in improving pregnancy outcomes.¹³

Participants were engaged in information-seeking behaviors from a variety of formal and informal sources, including doctors, midwives, the Internet, support groups, and the experiences of other mothers. These actions aim to increase awareness, reduce uncertainty, and support decision-making in high-risk pregnancies. Previous

research confirms that women with high-risk pregnancies frequently employ such strategies, relying on healthcare professionals, family, friends, and online platforms to obtain reliable information.⁴⁰ High-risk pregnancies, which are associated with increased health risks for both the mother and fetus, motivate women to better understand their condition and make informed decisions.⁴¹ The reactive behaviors of women with high-risk pregnancies are not merely passive responses but rather conscious and purposeful actions aiming at maintaining health and managing their conditions. Strengthening these behaviors requires targeted educational and psychosocial interventions. The healthcare system should focus on reducing structural and psychological barriers, enhancing access to reliable information, and creating a supportive environment to empower women with high-risk pregnancies to make timely and informed decisions.

In this study, avoidance behaviors were observed, including reluctance to pursue psychological and prenatal care, social withdrawal, and postponement of medical appointments, all attributable to structural and systemic obstacles. These behaviors were motivated by distrust in counseling services, apprehension about judgment, negative experiences within healthcare settings, and financial limitations. This pattern of avoidance represents a maladaptive coping mechanism, consistent with prior research indicating that negative interactions with healthcare providers and unfavorable attitudes impede access to prenatal care among populations with high-risk pregnancies. One study found that pregnant women, particularly in conservative cultures, often concealed their psychological concerns due to fear of stigma and misunderstanding.⁴² Another study highlighted that negative experiences with healthcare personnel hindered timely utilization of care.⁴³

This study reveals that high-risk pregnancies significantly impact women's social lives, often leading to social withdrawal,

isolation, and anxiety. Some women avoided social interactions and concealed their pregnancy status as a strategy to prevent judgment and maintain family harmony. Such isolation reduced emotional support and adherence to treatment. Research also showed that women's avoidance of social engagement, driven by anxiety and shame related to medical complications, disrupted their daily functioning.⁴⁴ Therefore, it is crucial to develop support programs that strengthen social networks, provide psychological services, and reduce stigma surrounding high-risk pregnancies. The study found that structural and systemic barriers significantly influenced avoidant behaviors among women with high-risk pregnancies. Key obstacles include low health literacy, misconceptions about medical services, and a lack of supportive environments. Logistical challenges such as long distances to healthcare centers, high costs, inadequate insurance coverage, and limited clinic hours further deter access to essential care. These findings align with previous research highlighting systemic factors as primary causes of delays in seeking prenatal care.^{45, 46}

In practice, midwifery can apply these findings by promoting culturally sensitive communication, strengthening community partnerships, and providing targeted education that encourages timely health-seeking behaviors among women with high-risk pregnancies. However, interventions should not focus solely on individual behaviors; systemic, cultural, and social barriers must also be addressed. Therefore, healthcare policies and practices should adopt community-engaged and culturally appropriate approaches to improve access to care and support better maternal and fetal health outcomes.

This study has several notable strengths, including the exploration of health-seeking behaviors among women with high-risk pregnancies from both their perspectives and those of key informants, such as healthcare providers, enhancing the credibility of

the findings. The qualitative methodology offered a rich understanding of women's experiences, motivations, and challenges, while the inclusion of participants from diverse backgrounds contributed to the study's comprehensiveness. However, certain limitations should be acknowledged. Since the study was conducted in Ahvaz, Iran, local factors may have influenced the participants' responses, and the sensitive nature of some topics might have led to withholding information.

CONCLUSION

This study indicates that while some women with high-risk pregnancies possess adequate awareness and self-efficacy to seek preventive care, others exhibit avoidant behaviors influenced by cultural, social, and structural factors. Nurses and midwives, through a community-based approach, can play a crucial role in identifying these barriers and providing appropriate psychological, educational, and social support to bridge the gap between knowledge and action, thereby ensuring equitable access to healthcare services. Therefore, future research should prioritize the development and evaluation of multilevel, culturally tailored interventions aiming at overcoming structural obstacles and improving health-seeking behaviors among women with high-risk pregnancies.

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Authors' Contribution

The conception and design of the study were

jointly developed by MJ, SJ, SM, and NJ. SJ collected the data. MJ and SJ conducted the data analysis and interpretation, while SJ, SM, and SGH wrote the first draft of the paper. The final draft was approved for publication after thorough review and editing by all authors. The authors bear full responsibility for the accuracy of the analysis and the integrity of the data. The corresponding author certifies that all listed authors meet the authorship criteria and that no one has been omitted.

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Conflict of Interest

None declared.

Declaration on the use of AI

The authors of this article state that they did not use any artificial intelligence to write the article.

REFERENCES

- 1 Shrestha A. High risk pregnancy detection and management: need of present day obstetric care. Kathmandu University Medical Journal. 2022;20:122-3.
- 2 Gary Cunningham F, Leveno KJ, Dashe JS, et al. Williams Obstetrics. 26th ed. New York: McGraw Hill; 2022.
- 3 Holness N. High-Risk Pregnancy. Nurs Clin North Am. 2018;53:241-51.
- 4 Wilkins PA, Wong D. The High-Risk Pregnancy. In: Wong D, Wilkins PA. Equine Neonatal Medicine. New York: John Wiley & Sons; 2024.
- 5 Zhang Y, Ding W, Wu T, et al. Pregnancy with multiple high-risk factors: a systematic review and meta-analysis. J Glob Health. 2025;15:04027.
- 6 Andrade AFM, Casotte MDB, Valenzuela LX, et al. High-Risk Pregnancy:

- Associated Factors, Impacts, and the Importance of Prenatal Care. *Brazilian Journal of Implantology and Health Sciences*. 2024;6:2392-406.
- 7 Murugesu L, Damman OC, Derksen ME, et al. Women's Participation in Decision-Making in Maternity Care: A Qualitative Exploration of Clients' Health Literacy Skills and Needs for Support. *Int J Environ Res Public Health*. 2021;18:1130.
 - 8 Ahmed S, Islam TT, Huda FA, Alam A, Akter R, Rahman QS. Decision-making process in seeking antenatal care: A cohort study in a poor urban and a typical rural area in Bangladesh. *J Glob Health*. 2024;14:04097.
 - 9 Alemu DA, Zegeye AM, Zeleke LB, et al. Pregnancy Risk Perception and Associated Factors among Pregnant Women Attending Antenatal Care at Health Centers in Jabi Tehnan District, Amhara, Northwestern Ethiopia, 2021. *Int J Reprod Med*. 2022;2022:6847867.
 - 10 Munezero E, Manoukian S. The social determinants of health and health seeking behaviour in populations affected by armed conflict: a qualitative systematic review. *Med Confl Surviv*. 2021;37:293-318.
 - 11 Abuduxike G, Aşut Ö, Vaizoğlu SA, et al. Health-seeking behaviors and its determinants: a facility-based cross-sectional study in the Turkish Republic of Northern Cyprus. *Int J Health Policy Manag*. 2020;9:240-9.
 - 12 Guo F, Xiong H, Qi X, et al. Maternal health-seeking behavior and associated factors in the Democratic Republic of the Congo. *Health Educ Behav*. 2021;48:700-9.
 - 13 Markos Z, Kassegn A, Tesfaye D, et al. Delayed initiation of antenatal care and its determinants in Ethiopia: A systematic review and meta-analysis. *Midwifery*. 2026;156:104734.
 - 14 Rezaee R, Ravangard R, Amani F, et al. Healthy lifestyle during pregnancy: Uncovering the role of online health information seeking experience. *PLoS One*. 2022;17:e0271989.
 - 15 Dahab R, Sakellariou D. Barriers to accessing maternal care in low-income countries in Africa: a systematic review. *Int J Environ Res Public Health*. 2020;17:4292.
 - 16 Salem EES, Gaheen MAA, Bela GAES. Factors Affecting Health Seeking Behavior among Pregnant Women in rural Areas. *Tanta Scientific Nursing Journal*. 2022;26:12-32.
 - 17 Zhang Z, Cunningham K, Adhikari RP, et al. Maternal decision-making input and health-seeking behaviors between pregnancy and the child's second birthday: a cross-sectional study in Nepal. *Matern Child Health J*. 2020;24:1121-9.
 - 18 Agha N, Ansar F, Rind RD, et al. A quantitative study of antenatal care, access barriers and maternal health vulnerability in rural Sindh, Pakistan. *Health Education*. 2026. [Online]
 - 19 Cooper LB, Harsono AA, Enah C, et al. Barriers to Maternal and Neonatal Healthcare in Cameroon: A Qualitative Study of Key Stakeholder for mMIST Intervention Adaptation. *Int J Women's Health*. 2026;18:557348.
 - 20 Abdulraheem AF, Ononokpono DN, Raimi MO. Breaking barriers to safe motherhood: how social, cultural, and geographic inequalities shape skilled birth attendance in Nigeria. *Sociol Int J*. 2025;9:188–200.
 - 21 Javanmardi M, Noroozi M, Mostafavi F, et al. Challenges to access health information during pregnancy in Iran: a qualitative study from the perspective of pregnant women, midwives and obstetricians. *Reprod Health*. 2019;16:128.
 - 22 Sabetghadam S, Keramat A, Goli S, et al. Maternal health literacy, health information-seeking behavior and pregnancy outcomes among Iranian pregnant women: A cross-sectional study. *Community Health Equity Res Policy*. 2023;44:77-87.
 - 23 Sharifi M, Amiri-Farahani L, Kariman N, et al. Sources of get information and

- related factors during pregnancy among Afghan migrant women in Iran. *Nurs Open*. 2021;8:975-81.
- 24 Shrestha J, Gurung SD, Subedi A, et al. Identifying high risk pregnancy and its effectiveness in determining maternal and perinatal outcome. *Birat Journal of Health Sciences*. 2021;6:1565-72.
- 25 Aliabadi S, Jafari M, Kazemi F, et al. Perceived Stress and Related Factors in Iranian High-Risk Pregnant Mothers: A Cross-Sectional Study. *Current Women's Health Reviews*. 2025;21(2).
- 26 Daemi A, Ravaghi H, Jafari M. Risk factors of neonatal mortality in Iran: a systematic review. *Med J Islam Repub Iran*. 2019;33:87.
- 27 Bajalan Z, Sabzevari Z, Qolizadeh A, et al. Prevalence of high-risk pregnancies and the correlation between the method of delivery and the maternal and neonatal outcomes. *J Pediatr Nurs*. 2019;5:52-8. [In Persian]
- 28 Mohammadi S, Shojaei K, Maraghi E, et al. Explaining the psychological distress of women with high-risk pregnancies in Iran: A qualitative study. *Iran J Nurs Midwifery Res*. 2022;27:560-6.
- 29 Mirzakhani K, Ebadi A, Faridhosseini F, et al. Pregnant women's experiences of well-being in high-risk pregnancy: A qualitative study. *J Educ Health Promot*. 2023;12:6.
- 30 Elo S, Kyngäs H. The qualitative content analysis process. *J Adv Nurs*. 2008;62:107-15.
- 31 Lincoln YS, Guba EG. *Naturalistic Inquiry*. Beverly Hills (CA): Sage Publications; 1985.
- 32 Albarqi MN. The impact of prenatal care on the prevention of neonatal outcomes: a systematic review and meta-analysis of global health interventions. *Healthcare*. 2025;13:1076.
- 33 Hailu E, Bekele D, Megersa G. Timely initiation of new antenatal care contact model and its associated factors among pregnant women at Munessa health facilities, Ethiopia: a facility-based cross-sectional study. *Front Med (Lausanne)*. 2025;12:1532041.
- 34 Al Hashmi I, Al Omari O. Self-efficacy in relation to adherence to healthy behaviours among pregnant women: a concept analysis. *Cent Eur J Nurs Midw*. 2022;13:664-74.
- 35 Gebeyehu NA, Gelaw KA, Lake EA, et al. Women decision-making autonomy on maternal health service and associated factors in low-and middle-income countries: Systematic review and meta-analysis. *Women's Health*. 2022;18:17455057221122618.
- 36 Tsironikos GI, Potamianos P, Zakyntinos GE, et al. Effectiveness of Lifestyle Interventions during Pregnancy on Preventing Gestational Diabetes Mellitus in High-Risk Women: A Systematic Review and Meta-Analyses of Published RCTs. *J Clin Med*. 2023;12:7038.
- 37 Webb R, Ayers S, Shakespeare J. Improving accessing to perinatal mental health care. *J Reprod Infant Psychol*. 2022;40:435-8.
- 38 Khosravi A, Ebrahimidavvasi S, BasirianJahromi R, et al. Health Information Seeking Behavior of Pregnant Women Referring To Health Centers and its Relationship with Their Health Literacy Level. *International Journal of Information Science and Management*. 2023;21:197-207.
- 39 Daniati N, Widjaja G, Olalla Gracia M, et al. The health belief model's application in the development of health behaviors. *Health Education and Health Promotion*. 2021;9:521-7.
- 40 ShojaeiBaghin M. Online Health Information Seeking Behavior of Pregnant Women: A social cognitive perspective. 2024;11:171-8.
- 41 Xu H, Zhou Y, Wang X. Research on the influencing factors of maternal online health information-seeking behavior. *Front Public Health*. 2025;13:1592093.
- 42 Vora V, Kanyal S, Chauhan A, et

- al. Cultural perceptions and social determinants of health in perinatal mental health: An obstetric-psychiatric perspective. *Int J Gynecol Obstet.* 2025;172:137-48.
- 43 Jones A, Duong CC. Exploring predictors of help-seeking behaviors among women with postpartum depression: A social media recruited sample. *Public Health Nurs.* 2024;41:894-900.
- 44 Place JMS, Renbarger K, Van De Griend K, et al. Barriers to help-seeking for postpartum depression mapped onto the socio-ecological model and recommendations to address barriers. *Front Glob Women's Health.* 2024;5:1335437.
- 45 Sheikh J, Allotey J, Kew T, et al. Vulnerabilities and reparative strategies during pregnancy, childbirth, and the postpartum period: moving from rhetoric to action. *EClinicalMedicine.* 2023;67:102264.
- 46 Jeon S, Noh W. Psychosocial factors associated with health behaviors in pregnant women of advanced maternal age in Korea. *Front Public Health.* 2023;11:1179416.