Original Article

What Do Mothers Want during a High-risk Pregnancy? A Qualitative Study

Talat Khadivzadeh[1], PhD; Zahra Shojaeian[2], PhD; Ali Sahebi[3], PhD

[1]Nursing and Midwifery Care Research Center, Mashhad University of Medical Sciences, Mashhad, Iran;
[2]Department of Nursing and Midwifery, Qu.C., Islamic Azad University, Quchan, Iran;
[3]Department of Clinical Psychology, Senior Faculty of the William Glaser institute, Sydney, Australia

Corresponding Author:
Zahra Shojaeian, PhD; Department of Nursing and Midwifery, Qu.C., Islamic Azad University, Kilometer 4 Quechan – Mashed Road, Postal code: 051, Quchan, Iran
Tel: +98 51 47110001; **Fax:** +98 51 47011010; **Email:** zshojaeian@iau.ac.ir

Received: 06 January 2025 **Revised:** 13 September 2025 **Accepted:** 15 September 2025
Online Published: 18 October 2025

Abstract

Background: Mothers with High-risk pregnancies (HRPs) face a combination of health risks, individual factors, and contextual diseases that limit their abilities to address favorable situations and their desires. This study aimed to explore the desires of these mothers.

Methods: This qualitative content analysis was conducted from July 2018 to December 2020 in the teaching hospitals of Mashhad and health centers. Data were collected via semi-structured, face-to-face interviews with 25 outpatient mothers with HRPs until saturation was reached. Data analysis was performed using Elo and Kingas approach through MAXQDA software version 10.

Results: The analysis identified four main categories and nine subcategories. (I) fulfillment of the desire to have children: Childbearing to propagate religion, Childbearing until achieving the desired family composition, Strengthening the marital bond through childbearing, (II) Maintaining routine life despite the risk of pregnancy: Maintaining daily activities during a high-risk pregnancy, Maintaining normal marital relations despite risk factors, (III) More support and interaction of the healthcare provider: More support for peace of mind, Responsive and friendly healthcare provider, and (IV) Comprehensive and confidential medical care: Comprehensive medical care without wandering, confidential medical care.

Conclusion: Childbearing while maintaining marital and daily life was the desire of mothers with HRPs in Iran. Healthcare providers should offer friendly, holistic support that respects the mothers' goals to fulfill their desires. Investigating the views of women with HRPs can aid in developing prenatal interventions that address their holistic care needs.

Keywords: High-Risk Pregnancy; Mothers; Pregnancy; Qualitative Research

Please cite this article as: Khadivzadeh T, Shojaeian Z, Sahebi A. What Do Mothers Want during a High-risk Pregnancy? A Qualitative Study. IJCBNM. 2026;14(1):67-77. doi: 10.30476/ijcbnm.2025.103652.2571.

Introduction

High-risk pregnancies (HRPs) elevate the likelihood of maternal and fetal complications and mortality, depending on the specific risk factors involved.[1] According to the international literature, approximately 10–20% of pregnancies are high-risk.[2] Different nations reported varied rates of maternal and fetal complications in HRPs.[3, 4] Prenatal care aimed to reduce adverse health risks for pregnant women and their fetuses. HRPs necessitate comprehensive management of co-occurring illnesses and complications; hence, mothers with HRPs often encounter challenges and require extra care to realize their goal of having healthy children.[5]

Mothers with HRPs face a combination of health risks, individual factors, and contextual diseases; this limits their ability to address favorable situations and their desires. Despite the risks and difficulties of HRPs, some women decide to become mothers and use a variety of techniques to improve the likelihood of a healthy child.[6] Therefore, mothers with HRPs usually have a variety of health desires throughout pregnancy, such as physical, emotional, social, and educational needs. Situational and contextual factors shape people's understanding of the risks and high-risk mother choices.[7] In this regard, various studies have been conducted in different countries, and the desires of mothers with HRPs in pregnancy have been reported to be very different; some of their desires are common during all pregnancies. Some of these desires in qualitative studies include the need for patient-centered care during pregnancy that is informative, personalized, and accommodates their daily lives, spiritual care by providing respectful maternal care, and the need for psychosocial professionals within the perinatal interdisciplinary healthcare team.[8-10] In addition, one research found that women preferred providers who were proficient in early detection of problems and fetal and maternal health management.[11] In the Northern Netherlands, mothers in vulnerable situations desired control over their situation as well as particular, individualized information regarding treatments.[12] Some women experiencing pregnancy complications to fulfill their needs during pregnancy actively seek pregnancy health information from various sources, including healthcare providers and informal networks.[13] Some women diagnosed with autoimmune rheumatic diseases used 'self-guides' to prioritize their needs in a dynamic process, and their experiences of illness and motherhood identities were intertwined.[14]

Various studies showed pregnant women have diverse desires and preferences influenced by their circumstances and cultural backgrounds.[9, 10, 14] On the other hand, obstetric professionals often prioritize the physical aspects of pregnancy care, focusing on the prevention and treatment of medical conditions.[15] However, studies show that women with HRPs face major non-medical problems, such as uncertainty that is influenced by various personal, pregnancy-related, demographic, and healthcare-related factors.[16] Another research found that pregnant women at risk had unmet care requirements.[17] The diversity of desires, preferences, and decisional needs in various studies emphasizes the importance of an individualized approach to treatment recommendations during HRP.[18] Culturally sensitive, patient-centered care improves pregnant women's well-being, satisfaction, treatment outcomes, and reduces stress.[10, 19] Holistic prenatal care, encompassing non-medical factors, improves the quality of maternal and child healthcare in pregnant women with chronic disease.[20]

Most published studies reflected the desires of mothers with HRPs in specific situations and challenges. However, the mother's desires regarding various types of HRPs, the study that includes all types of HRPs, including maternal age, types of diseases, etc., and examines the mother's desires, has not been conducted. Also, previous research in different cultural and socioeconomic contexts showed diversity in the desires of mothers who experienced HRPs.

This suggests that culturally sensitive, individualized approaches are necessary to evaluate diverse maternal needs and desires in each specific context during HRP. Existing antenatal care guidelines do not specifically address the desires of high-risk pregnant women. On the other hand, the World Health Organization (WHO) advised that every pregnant woman and newborn should receive quality care.[21] Also, the mother's compliance with pregnancy care guidelines is contingent upon her cooperation, and the mother's behavior is significantly influenced by her desires rather than by her perception of risk.[22] Therefore, this qualitative study aimed to explore Iranian mothers' desires in HRPs.

Materials and Methods

This is a qualitative study conducted using the conventional content analysis method at Mashhad University of Medical Sciences. Data collection continued from July 2018 to December 2020. A total of 25 participants who had met the entry criteria were selected using a purposive sampling technique. Written informed consent was obtained from all participants. Iranian women, HRPs or those with decisions to repeat a HRP, in accordance with the definition of a HRP (HRP means having at least one of the conditions, including Gravidity>4 or being under 18 or over 35, or having a disease), and the absence of fetal abnormalities were among the inclusion criteria of the study. Additionally, the participants had to be able to communicate in Persian and understand it and be able to articulate their experiences. Exclusion criteria were unwillingness to continue with interviews, fetal abnormality diagnosis, and hospitalization. First, the researcher briefed the objectives to mothers with HRPs, and if consent for participation was obtained, the interview began with the corresponding author, a Ph.D. in Reproductive Health. The interviews were conducted in a secluded chamber at the hospital outpatient clinic or health center. Participants were interviewed in a semi-structured format for 30–60 minutes. After data saturation and the absence of new information in the interview, sampling was terminated. The interview started with an open question (What did you know about pregnancy before you got pregnant; What did you think), and then the interview with targeted questions (such as How would you demand your pregnancy to proceed? What were any unmet desires in your prenatal care? What do you want from the care provider? What do you want from your pregnancy?). Probing questions were used to extract detailed information.

Data analysis was concurrently conducted with data collection using the conventional content analysis method outlined by Elo and Kyngäs, using MAXQDA software version 10.[23] The analysis involved three phases: preparation, organization, and reporting. In the preparation phase, the authors, under the supervision of a clinical psychology PhD (third author), transcribed all interviews verbatim and repeatedly studied the text for an in-depth understanding of data. In the case of need to further exploration of the participants' experiences, follow-up interviews were conducted to clarify ambiguities.

The organization stage involved selecting meaning units and codes, compressing similar codes, creating subcategories, and abstracting to form the main categories. The final list of categories was collaboratively developed by the research team. The last stage entailed reporting the extracted final categories.

Lincoln and Guba's strategy was evaluated for data trustworthiness, based on the four criteria of credibility, dependability, transferability, and confirmability.[24] The researcher maintained a consistent and continuous engagement with the data to guarantee its credibility. Also, to validate the findings, we shared the coded texts with participants for member checking. Dependability was ensured by evaluating accurate data coding and documenting all methodological decisions; also, to express transferability, the study fully provided comprehensive information on demographic

characteristics, interview techniques, data collection methods, researcher observations, and the data analysis process. To ensure confirmability, two independent observers experienced in qualitative studies and reproductive health evaluated and approved all the study phases, including data collection and analysis.

This research was approved by the Ethics Committee of Mashhad University of Medical Sciences in Iran (code: IR.MUMS.REC.1396.276.) Patient participation in this study was entirely voluntary. The purpose of the investigation was clearly explained to patients before their participation. All participants provided written informed consent for the recording of interviews and their participation. The participants were guaranteed complete confidentiality, anonymity, and the right to withdraw from the study at any time without any repercussions for their care.

Results

A total of 25 mothers with HRP, aged 17 to 41 years, participated in the study. The demographic characteristics of the participants are listed in Table 1. Through data analysis, 97 initial codes were identified. These codes were classified into 9 sub-categories and four categories, as shown in Table 2.

1. Fulfillment of the Desire to Have Children

One of the desires of mothers with HRPs was having children due to various reasons, and they got pregnant to fulfill it.

1.a. Childbearing to Propagate Religion

Some mothers, who believed the risk assessed was low, became pregnant in terms of their religious beliefs and a desire to propagate their religion**.** One participant said:

"When I, as a Muslim, can still have a child and raise it and spread my religion.....

Table 1: Demographic characteristics of the participants (N=25)

Participant No.	Age (year)	Education level	Occupation	Gravidity (number)	Cause of High-Risk Pregnancy
1	17	High school diploma	Housewife	1	Age<18 years
2	32	High school diploma	Housewife	1	Heart disease
3	35	BSc[a]	Midwife	4	Age≥35 years
4	35	High school diploma	Housewife	2	Asthma
5	39	MSc[b]	Midwife	3	Diabetes
6	38	Primary school certificate	Housewife	5	Recurrent abortion
7	35	BSc	Self-employed	3	Age≥35 years
8	26	High school diploma	Self-employed	4	Recurrent abortion
9	28	BSc	Self-employed	3	Diabetes
10	24	BSc	Self-employed	1	Heart disease
11	40	PhD[c]	Teacher	1	Multiple sclerosis
12	32	MSc	Teacher	2	Heart disease
13	40	High school diploma	Housewife	4	Recurrent Stillbirth
14	25	High school diploma	Housewife	4	Kidney disease
15	16	High school diploma	Housewife	1	Heart disease
16	38	BSc	Housewife	1	Age≥35 years
17	36	BSc	Housewife	5	Recurrent abortion
18	17	High school diploma	Housewife	1	Age<18 years
19	17	Primary school certificate	Housewife	1	Age<18 years
20	40	Primary school certificate	Housewife	1	Depression
21	39	Primary school certificate	Housewife	5	Age≥35 years,
22	24	Primary school certificate	Housewife	5	Recurrent abortion
23	28	High school diploma	Self-employed	3	Recurrent abortion
24	21	High school diploma	Housewife	3	Stillbirth
25	36	High school diploma	Self-employed	4	Cesarean section>3

[a]BSc: Bachelor of Science; [b]MSc: Master of Science; [c]PhD: Doctor of Philosophy

Table 2: The subcategories and categories generated from the data

Subcategories	Categories
Childbearing to propagate religion Childbearing until achieving the desired family composition Strengthen the marital bond through childbearing	Fulfillment of the desire to have children
Maintaining daily activities during a high-risk pregnancy Maintaining normal marital relations despite risk factors	Maintaining routine life despite the risk of pregnancy
More support for peace of mind Responsive and friendly healthcare provider	More support and interaction of the healthcare provider
Comprehensive medical care without wandering Confidential medical care	Comprehensive and confidential medical care

fulfill my faith duty ..... so why not?" (P1).

1.b. Childbearing Until Achieving the Desired Family Composition

Many mothers with chronic illnesses, and the risk assessed as high, desired a more children or a specific sex. One participant with heart disease said:

"I must have a healthy child, and now, due to my husband's desire for a boy, I'm pregnant, hoping for a healthy baby, preferably a boy." (*P2*).

1.c. Strengthening the Marital Bond through Childbearing

Some mothers with chronic diseases felt that the additional costs and limitations of their illness affected marital life, and so, having a child would enhance the continuity of their marital lives.

This is supported by the following quotes:

"If I were an infertile woman, my mother-in-law might say something unpleasant, my husband might behave badly, or divorce me; having children is necessary to sustain a life." (P13).

According to certain mothers, pregnancy is feasible regardless of the circumstances, as it is considered essential for the continuation of life.

"My husband and I wanted a child, and we decided to have a child, understanding its importance in our lives. Now, for saving my marital life and my husband's wishes, I can undergo screening, rest, and be hospitalized." (P5).

2. Maintaining Routine Life Despite the Risk of Pregnancy

The other desire of mothers with HRPs was maintaining their routine life despite the risks.

2.a. Maintaining Daily Activities during a High-risk Pregnancy

Because high-risk pregnancies necessitate frequent prenatal visits, most mothers desired a care plan that accommodated their other maternal and spousal responsibilities. A participant said:

"*I used to do some daily chores for myself, my child, and my wife. I want to continue providing care in a way that doesn't change my daily routine, just as I did before."(P14).*

2.b. Maintaining Normal Marital Relations Despite Risk Factors

Most women preferred that prenatal care be scheduled in a way that does not disrupt their marital relationship. One participant told:

"I want everything to be the same as before I became pregnant; the normal routine of my marital life should not change, at home and with my husband, . Medications or care should not affect my marital relationship." (P11).

3. More Support and Interaction from the Healthcare Provider

Most mothers wanted more interaction with their healthcare team to address pregnancy complications and expected the team to be

more proactive and supportive throughout their pregnancy.

3.a. More Support for Peace of Mind

Many mothers desired their healthcare provider to be available and support them when facing problems. One participant said:

"I don't want things to get worse. Treatment personnel should support and understand me. I need them ..... I just need his presence when I'm short of breath." (P4).

Another participant said:

"During this pregnancy, I am very anxious. I would like the doctors to follow all recommendations and all necessary tests during each visit, listen carefully to my concerns to ensure everything is alright, so that I can rest assured." (P11).

3.b. Responsive and Friendly Healthcare Provider

The majority of mothers with HRPs are in specialized centers, which necessitates extensive care at each prenatal visit, and these centers are overcrowded. Consequently, all mothers expected the healthcare providers to show responsive and pleasant behaviors to provide more effective care. This is supported by the following quotes:

"I want my caregiver to answer my questions, such as where to get tested and what to do if something goes wrong. They should answer my questions clearly and in a friendly manner, patiently taking the time to answer all my pregnancy questions." *(P6).*

4. Comprehensive and Confidential Medical Care

The majority of mothers required frequent appointments, additional tests, and referrals for specialized treatments. They demanded comprehensive care at every visit, and confidentiality of test results and pregnancy decisions was a desire of all mothers.

4.a. Comprehensive Medical Care without Wandering

Most mothers desired comprehensive examinations and the requisite guidance at each appointment to reduce the number of unnecessary appointments and meandering. One participant said:

"Every time I come for care, I like to get all tests and care done in one place, at once, each visit, so I don't have to go back and forth. Sometimes, I had blood tests once, and again I had an ultrasound once. Sometimes, I'm not sure where to go or what to do." (P22).

4.b. Confidential Medical Care

Some mothers sought confidential prenatal care. They hid their illnesses from relatives to avoid the stigma of illness. This is supported by the following quotes:

"No one knows that I have a disease and take medicine.... I want, every time I come in for care, my care to be done in such a way that no one sees me in the hospital and does not know about my disease." (P2).

Discussion

This study aimed to investigate the desires of pregnant women with HRPs. The results showed that these mothers wanted to achieve their goal of having children. Therefore, while maintaining their daily and marital routines, they sought increased support and interaction from healthcare providers, as well as comprehensive and confidential care.

The first category, mothers with HRPs, desired childbearing despite inherent risks for personal or marital reasons. Research on the presence of disease and pregnancy in various countries is consistent with the findings of current studies. A narrative study found that women with heart disease were eager to have children, actively sought information about childbearing options, and acted selectively.[25] Another study showed that young women with early-stage breast cancer prioritized having children and remained steadfast in their desire to do so, even in the face of significant risks.[26] A study in Iran showed that childbearing tendencies were similar in the women with low-risk and high-risk

pregnancy histories.[27] Korean women with systemic lupus erythematosus chose not to have children due to concerns related to the disease, significantly influencing their family size and childbearing decisions.[28] Although the health community has stressed safety, the social construction of parenting has developed to reflect women's changing lifestyles. The process of having children is dynamic and is linked to the societal perception of women and the decision to become a mother.[29] In Iran and some other similar cultures, having children is an important family function, and mothers are often strongly committed to this role. Therefore, despite the risk, the mothers accepted the risk and were determined to have children.

The second category is related to mothers' desire to maintain their routine life with their usual responsibilities, similar to a normal pregnancy. Mothers perform many roles, including motherhood, wives, and housework, and want prenatal care that doesn't interfere with their responsibilities. The findings of one study indicate that women with high-risk pregnancies face challenges in fulfilling maternal roles and maintaining family functioning.[30] Another research found that home care for high-risk women improved family life by preserving regular routines and avoiding hospital visits and their consequences because hospitalized mothers reported greater worry, boredom, and a loss of privacy as a result of restricted family interaction.[31] Previous studies showed that restrictions on mothers' activities and responsibilities, social interactions, and confusion in marital relations caused feelings of weakness in their well-being, and health during a high-risk pregnancy.[32] Thus, they need help to maintain their responsibilities.

The third category of mothers' desires in HRPs includes more support and interaction with the treatment staff. High-risk mothers have unique needs compared to other pregnant individuals. Improving caregiver interactions and tailoring them to the needs of mothers were important desires for mothers. In the same line with our findings, many mothers in one study reported insufficient support from healthcare personnel.[33] Other studies revealed gaps in their perception and ability to apply information, according to their needs and personal health status, about oral health during prenatal care.[34] One research highlights that many women find it uncomfortable to discuss their illness in terms of feelings of shame, may not even know how to talk about such issues, and may require more professional interaction.[35] Antenatal visits for women should facilitate communication, address concerns, and discuss mental and physical health.[36] Factors affecting the relationship between healthcare workers and mothers are varied. One study found that pregnant women with HRPs had positive views on high levels of patient participation in their prenatal care. They appreciated receiving clear, realistic, and informative advice from doctors while also having their choices respected.[37] In Iran, maternal healthcare follows national guidelines. Women with HRPs need more frequent visits to medical centers and a longer time commitment. Due to the high number of clients in specialized centers, healthcare providers face time constraints and staff shortages. Additionally, insurance coverage in the nation is often lacking, and official support services for mothers are minimal.[38]

The findings in the fourth category showed that high-risk mothers aimed to navigate their pregnancies without wandering. Confidential and comprehensive care was their desire. They wanted to complete all treatment procedures at each visit to reduce the number of visits and receive necessary advice and guidance so that they do not wander. Women with HRPs need many types of treatment, including lab tests, imaging, prescriptions, and more frequent referrals. The care of these women requires a multidisciplinary approach. One study found that pregnant women defined comprehensive prenatal care as a combination of attention, dialogue, trust, and technical procedures.[39] One study suggested that healthcare professionals treating pregnant women

should listen attentively and therapeutically, offering support and building confidence throughout this life stage.[40] This finding aligns with our results. Healthcare professionals should provide individualized and holistic care for women with HRPs.[41] Mothers desired access to comprehensive centers although a limited number of centralized and comprehensive healthcare facilities exist in Iran. Also, most women desired their personal information and illness to remain confidential during pregnancy even though healthcare professionals are ethically obliged to protect patient confidentiality. Every woman with HRP should be considered a singular and multidimensional being with comprehensive and continuous care, considering the complexity of local, regional, and global reality.[42] In Iranian society, women may be concerned about illness and social stigma that could obstruct their fertility desires. Therefore, it is important to maintain the mother's privacy when providing care related to pregnancy.

In this study, there were some limitations; we did not conduct interviews with healthcare providers and obstetricians engaged with pregnant women with HRPs and their families, which may restrict a deeper understanding of their perspectives and experiences. Another limitation is interviewing outpatient mothers in the category of high-risk pregnancy; inpatient mothers' needs may differ from those of other mothers with HRPs, which may hinder a deeper understanding of their perspectives. Future studies should include both hospitalized and outpatient pregnant women to better understand the differences in their needs and desires. The strengths of this study are that it examines the desires of Iranian pregnant women with HRPs, a topic previously under-researched.

Conclusion

Iranian mothers with HRPs desired to balance childbearing with their marital and daily lives. They requested a greater amount of interaction with medical professionals for comprehensive, hassle-free medical care. They want responsive and friendly support from a healthcare provider who attempt to fulfill the mothers' desires. Consequently, further studies are recommended to explore how women's views on HRPs can be understood and incorporated into holistic prenatal care through individual and collective actions.

Acknowledgement

I would like to thank the team at the high-risk pregnancy center of Imam Reza and Qaem Hospital in Mashhad for their assistance with this study, as well as Mashhad University of Medical Sciences for their support.

Authors' Contribution

T. KH and Z.SH. made substantial contributions to the conception and design of the study. Data collection was conducted by Z SH. Data analysis and interpretation were carried out by T.KH., A.S., and Z.SH. All authors participated in drafting, critically reviewing, and revising the manuscript. The corresponding author attests that all listed authors meet the authorship criteria.

Funding Source

This study was supported financially by Mashhad University of Medical Sciences (Grant number: 960009).

Conflict of Interest

None declared.

Declaration on the use of AI

The authors did not employ artificial intelligence (AI)-assisted technologies in the production of submitted work.

References

1 Spong CY, Lockwood CJ, editors. Queenan's Management of High-risk Pregnancy: An Evidence-based Approach.

7th ed. US: John Wiley & Sons; 2023
2 Sokou R, Lianou A, Lampridou M, et al. Neonates at Risk: Understanding the Impact of High-Risk Pregnancies on Neonatal Health. Medicina (Kaunas). 2025;61(6):1077.
3 Heberlein EC, Smith JC, LaBoy A, et al. Birth outcomes for medically high-risk pregnancies: comparing Group to Individual Prenatal Care. American Journal of Perinatology. 2024;41:414-21.
4 Robijn AL, Harvey SM, Jensen ME, et al. International Journal of Gynecology & Obstetrics. 2024;166:596-606.
5 Zhu J, Mohd Said F, Chun Hoe Tan. Progress in Research on the Management of High-Risk Pregnancies in China. International Journal of Biotechnology and Biomedicine (IJBB). 2024;1:44-56.
6 Flocco SF, Caruso R, Barello S, et al. Exploring the lived experiences of pregnancy and early motherhood in Italian women with congenital heart disease: an interpretative phenomenological analysis. BMJ Open. 2020;10:e034588.
7 Mendes Á, Sequeiros J, Clarke AJ. Between responsibility and desire: Accounts of reproductive decisions from those at risk for or affected by late-onset neurological diseases. Journal of Genetic Counseling. 2021;30:1480-90.
8 Fryer K, Reid CN, Cabral N, et al. Exploring Patients' Needs and Desires for Quality Prenatal Care in Florida, United States. International journal of MCH and AIDS. 2023;12:e622.
9 Yüksekol ÖD, Ulucan M, Baltacı N, et al. Evaluation of the spiritual care needs of risky pregnants from the perspective of the patient and the clinician: Qualitative Research. Journal of Psychiatric Nursing.2023;14:378-86.
10 Munch S, McCoyd JL, Curran L, et al. Medically high-risk pregnancy: Women's perceptions of their relationships with health care providers. Social Work in Health Care. 2020;59:20-45.
11 Hajifoghaha M, Nahidi F, Simbar M, et al. The view point of iranian gynecologists and midwives on the expectations of pregnant women: A content analysis study. Iranian Journal of Nursing and Midwifery Research. 2020;25:419-25.
12 Feijen-de Jong EI, Dalmaijer M, van der Stouwe R.A, et al. Experiences and needs of women in vulnerable situations receiving additional interventions in maternity care: a qualitative study. BMC Pregnancy Childbirth. 2022;22:536.
13 Ray AE, Jeffrey KN, Nair PH, et al. You're a 'high-risk' customer": A qualitative study of women's experiences of receiving information from health professionals regarding health problems or complications in pregnancy. Women and Birth.2022; 35:e477-e486.
14 Williams D, Pell B, Grant A, et al. Identities of women who have an autoimmune rheumatic disease [ARD] during pregnancy planning, pregnancy and early parenting: A qualitative study. PLoS One. 2022;17:e0263910.
15 Hwang JY. Reclassification of high-risk pregnancy for maternal-fetal healthcare providers. Journal of the Korean Society of Maternal and Child Health. 2020;24:65-74.
16 Schmuke AD. Factors affecting uncertainty in women with high-risk pregnancies. MCN: The American Journal of Maternal Child Nursing. 2019;44:317-24.
17 Keten Edis E, Kurtgöz, A. Care experiences and care expectations of hospitalized high-risk pregnant women: a qualitative study. Women & Health. 2023;63:704-12.
18 Metcalfe RK, Harrison M, Hutfield A, et al. Patient preferences and decisional needs when choosing a treatment approach for pregnancy hypertension: a stated preference study. The Canadian Journal of Cardiology. 2020;36:775-9.
19 Williamson SP, Moffitt RL, Broadbent J, et al. Coping, wellbeing, and psychopathology during high-risk pregnancy: A systematic review.

Midwifery. 2023;116:103556.
20 Jesudason Sh, Tong A. The patient experience of kidney disease and pregnancy. Best Practice & Research Clinical Obstetrics & Gynaecology. 2019;57:77-88.
21 Cresswell JA, Alexander M, Chong MY, et al. Global and regional causes of maternal deaths 2009–20: a WHO systematic analysis. The Lancet Global Health. 2025;13:e626-34.
22 Shojaeian Z, Khadivzadeh T, Sahebi A, et al. Perceived risk in women with high-risk pregnancy: A qualitative study. Iranian Journal of Nursing and Midwifery Research. 2021;26:168-74.
23 Elo S, Kyngäs H, The qualitative content analysis process. Journal of Advanced Nursing, 2008;6:107-15.
24 Forero R, Nahidi Sh, De Costa J, et al. Application of four-dimension criteria to assess rigour of qualitative research in emergency medicine. BMC Health Services Research. 2018;18:120.
25 Osteen K, Tucker CA, Rebecca M. We Have to Really Decide: The Childbearing Decisions of Women with Congenital Heart Disease. The Journal of Cardiovascular Nursing. 2024;39:325-34.
26 Umashankar S, Li M, Blevins K, et al. Characterizing attitudes related to future child-bearing in young women diagnosed with early-stage breast cancer. Breast Cancer Res Treat. 2024;204:509-20.
27 Mirzaei F, Kheirkhah M, Hagani, H. The role of high-risk pregnancy in childbearing tendency in Tehran. Journal of Family Medicine and Primary Care. 2021;10:625-30.
28 Kim IJ, Kim HA, Suh CH, et al. Impact of childbearing decisions on family size of Korean women with systemic lupus erythematosus. Journal of Korean Medical Science. 2016;31:729-34.
29 Temmesen CG, Nielsen HS, Birch Petersen K, et al. Reflections on timing of motherhood-a qualitative online study with women of reproductive age. BMC Women's Health. 2024;24:589.
30 Badakhsh M, Hastings-Tolsma M, Firouzkohi M, et al. The lived experience of women with a high-risk pregnancy: A phenomenology investigation. Midwifery. 2020;82:102625.
31 Van Den Heuvel JF, Teunis CJ, Franx A, Crombag NM, Bekker MN. Home-based telemonitoring versus hospital admission in high risk pregnancies: a qualitative study on women's experiences. BMC Pregnancy and Childbirth. 2020;20:77
32 Mirzakhani K, Ebadi A, Faridhosseini F, et al. Well-being in high-risk pregnancy: an integrative review. BMC Pregnancy and Childbirth. 2020;20:526.
33 Dönmez A, Karaçam Z. The Experiences of Adolescents with Their First Pregnancy: A Qualitative Research. Journal of Education & Research in Nursing. 2024;21:85-91.
34 Vamos CA, Merrell L, Livingston TA, et al. "I didn't know": Pregnant women's oral health literacy experiences and future intervention preferences. Women's Health Issues. 2019;29:522-8.
35 Alderdice F, Kelly L. Stigma and maternity care. Journal of Reproductive and Infant Psychology. 2019;37:105-7.
36 Thi LM, Manzano A, Ha BTT, et al. Mental health stigma and health-seeking behaviors amongst pregnant women in Vietnam: a mixed-method realist study. International Journal for Equity in Health. 2024;23:163.
37 Hilder J, Stubbe M, Macdonald L, et al. Communication in high-risk ante-natal consultations: a direct observational study of interactions between patients and obstetricians. BMC Pregnancy and Childbirth. 2020;20:493.
38 Asadi H, Khakian M, Palangi HS, et al. Challenges of implementation of insurance coverage program for infertility services in Iran. Iranian Red Crescent Medical Journal. 2023;25:e2624.
39 Sátiro LS, Santos AM, Smith AC, et al. The expectations and satisfaction of

pregnant women with prenatal care at a basic health unit in Natal, Brazil: a cross-sectional study. Escola Anna Nery. 2024;28:e20240037.

40 Andrade UV, Santos JB, Duarte C. Pregnant Women Perception of the Quality of Prenatal Care at UBS, Campo Grande, MS. Journal of Psychology and Health. 2019;11;53-61. [In Portuguese]

41 Keten Edis E, Kurtgöz A. Care experiences and care expectations of hospitalized high-risk pregnant women: a qualitative study. Women & Health. 2023;63:704-12.

42 Rodrigues DB, Backes MTS, Delziovo CR, et al. Complexity of high-risk pregnancy care in the health care network. Revista Gaucha de Enfermagem. 2022;43:e20210155.