Original Article

High Risk-pregnant Women's Experiences of Risk Management: A Qualitative Study

Talat Khadivzadeh[1,2], PhD; Zahra Shojaeian[3], PhD; Ali Sahebi[4], PhD

[1]Nursing and Midwifery Care Research Center, Mashhad University of Medical Sciences, Mashhad, Iran;
[2]Department of Midwifery, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran;
[3]Department of Midwifery, Quchan Branch, Islamic Azad University, Quchan, Iran;
[4]Senior Faculty of the William Glaser institute, Sydney, Australia

Corresponding Author:
Zahra Shojaeian, PhD; Department of Midwifery, Quchan Branch, Islamic Azad University, Kilometer 4 Quechan, Mashed Road, Postal code: 051, Quchan, Iran
Tel/Fax: +98 51 47011001; **Email:** zshogaeian@yahoo.com

Received: 18 September 2022 **Revised:** 06 December 2022 **Accepted:** 10 December 2022

Abstract

Background: Maternal and fetal morbidity and mortality depend on identifying of pregnancy risks and risk management. There is a dearth of information about the experiences of high-risk pregnant mothers in self-mitigation of the risk in the socio-cultural setting of Iran. This research was conducted to explore the risk management experiences of high-risk pregnant mothers.

Methods: This Qualitative study was conducted in educational hospitals in Mashhad, Iran, from July 2018 to December 2020. The purposive sampling method was used to recruit the participants based on medical or obstetric high-risk conditions in pregnancy. Qualitative data were obtained from in-depth and semi-structured 29 interviews. Mothers' experiences of pregnancy in a risky condition were asked, and the interview continued until data saturation. Data were analyzed using the MAXQDA 10 software and the Elo and Kyngäs method.

Results: Maternal experiences for risk management in pregnancy were formed by nine sub-categories and three categories: the excitement of emotion including: "feeling worry and despair", "gladness in the shadow of hope and optimism", "momentary shocking and excitement", and "inactivity and helplessness"; self-contemplation including: "active analysis of the ways of moderating the risk", "cognitive denial", and "ignoring the risk"; and witnessed action including: "problem-focused and rational actions", and "avoidance and inefficient engagements".

Conclusion: Risk management experiences of pregnant women with high-risk pregnancies include a wide range of positive and negative feelings, effective and ineffective thoughts, and behaviors. Mutual collaboration between mothers and midwives/obstetricians by providing high-quality risk management counseling can lead to choosing effective risk management strategies.

Keywords: Pregnancy, Risk management, High-risk

Please cite this article as: Khadivzadeh T, Shojaeian Z, Sahebi A. High Risk-pregnant Women's Experiences of Risk Management: A Qualitative Study. IJCBNM. 2023;11(1):57-66. doi: 10.30476/IJCBNM.2022.96781.2148.

Introduction

A high-risk pregnancy (HRP) refers to pregnancies in which the mother or the fetus has an increased risk of complications compared to uncomplicated pregnancies.[1] Besides maternal death, fetal complications (e.g., fetal death, premature delivery, low birth weight) and other poor outcomes more likely increase due to HRP.[2] The prevalence of HRPs in Iran and other countries ranges from 25.6% to 75.6%.[3, 4] In the past, it was not recommended for childbearing in high-risk conditions due to the mother and baby with more complications. Recent advances in medical treatments have enabled many women with chronic illnesses to get pregnant and experience motherhood.[5]

Women's risk perception affects decision-making and behavior in pregnancy.[6, 7] This means that mothers must control their environment, diet, activity, and any risk for raising their chances of fulfilling the goal of childbearing.[7] A qualitative study of pregnant women in Iran found that challenges of family, anticipation for motherhood, future pregnancies, and challenge of adaptation in pregnancy were experiences of high-risk pregnant women.[8] Many pregnant women with hypertensive disorders felt that they weren't well informed of management decisions and had a desire to be involved in decision-making.[9] A study found that thoughts and feelings about safety, the physical environment and the perceived psychological influence of the location of birth are the factors that women consider when deciding on place of birth process.[10] Barriers to management of diabetes during pregnancy were financial barriers to maintaining a healthy diet and exercising, communication difficulties, lack of social support, and barriers related to diabetes care.[11] A grounded theory study has found becoming the best mom that I can be is a complex process. Women need to rebuild the self and regain control of their lives. This process needs reorganization of the problem, dealing with their shame and embarrassment, identifying an understanding healthcare provider, and considering the consequences of the depression and its management.[12] A systematic research finding recommended that the maternal health experiences should be highlighted, particularly when it comes to decision making about care.[13]

Despite the fact that pregnancy outcome will be safer with risk management, no qualitative study to investigate management of risk in high risk pregnant Iranian women has been conducted in Iran. One study evaluated Risk Management Model of Iran's Health System.[14] According to the Ministry of Health and Medical Education statistics in Iran, HRPs were cared with standard practice set by the reference books as a single policy across Iran.[15] HRP management includes medical interventions and supportive cares. Experiences during HRP have a unique meaning for the person.[16] The researcher's experience indicates that prenatal care is carried out based on standards and without considering the views and opinions of mothers in Iran. Therefore, mothers may not act correctly when the recommendations and the mother's point of view conflict, which is dangerous for the mother's health. Mother's desire is to preserve the health of the fetus and herself. The experiences and behaviors of Iranian pregnant women with regard to the management of HRP remain mainly unexplored. Understanding this matter and aligning the prenatal care according to the mother's discretion can be beneficial in advancing or improving the health of the mother and the fetus in HRPs. The choice for a qualitative study is its effectiveness in obtaining the perceptions and experiences and understanding concerns and feelings of people with health issues.[17] The present qualitative study was conducted to better understand the experiences of women with HRP regarding the management of risk during pregnancy.

Materials and Methods

The current qualitative study which used the content analysis approach was conducted on 25

women with HRPs from July 2018 to December 2020 in Mashhad, Iran. The participants were selected using a purposeful sampling method of the women referred to educational hospitals (18 participant) and health centers (7 participant) in Mashhad, and the sampling continued until data saturation. The inclusion criteria were Iranian women with HRP based on the obstetrician's diagnosis and standard definition of HRP,[1] outpatient condition, willingness to contribute to their experience, and ability to speak Persian and communicate verbally to provide the researcher with complete information. The exclusion criteria were congenital fetal abnormalities during the pregnancy or unwillingness to continue the study.

The data were gathered through 29 in-depth semi-structured face-to-face interviews with 25 participants until data saturation. The interviews took place in a private and quiet room in a hospital or healthcare center, each lasting from 25 to 50 minutes. The interviews were conducted by corresponding author after obtaining informed written consent. Sampling continued until data saturation, i.e., no new data or new category was acquired. The interview started with general questions such as:

"What was your experience of pregnancy?", "How do you feel during this pregnancy?", "What have you done during this pregnancy?", "Do you think these actions are enough?", "What else have you done differently than other pregnant women?", "What else have you done to maintain this pregnancy?". The interview continued then with open questions: "Can you explain more about the ways you have tried so far to save this pregnancy?", and "Which medical recommendations are acceptable to you?". All interviews were recorded after the permission of the participants and obtaining their written informed consent.

The data were analyzed concurrently with data collection using the conventional content analysis method, as described by Elo and Kyngäs (2008).[18] The analysis consists of three phases: preparing, organizing, and reporting. In the preparation phase, the researcher (corresponding and first author) listened to all of the interviews, transcribed them verbatim, and studied the text to gain an in-depth understanding (immersion) of the data repeatedly. The organization stage included the selection of meaning units and codes, reduction and compression process of similar codes, appearance of subcategories, and finally, the abstraction process to form the main categories. The final list of categories was formulated with a joint effort by all the research team members after multiple joint meetings and agreed upon by all group members. The final stage consisted of reporting the extracted categories.

For data trustworthiness, the Lincoln and Guba method (1985) was assessed, which included the four criteria of credibility, dependability, transferability, and confirmability.[19] To ensure the credibility of the data, the researcher thought about it continuously (engagement with the data). The coded texts were made available to other members of the research team for validation, were also given to participants and were asked to revise the researcher's correct understanding of their experiences (member check re-interview). Data were evaluated to ensure dependability constantly. To express the transferability, information such as demographic characteristics, interview techniques, data collection methods, researcher's observations, and the data analysis process were fully provided in the present study. To achieve confirmability, all stages of the study, data collection and data analysis, were continuously meticulously documented from beginning to the end. For data management, the MaxQDA software (version 10.0) was used. The present research was approved by the Ethics Committee of Mashhad University of Medical Sciences, Mashhad, Iran (code: IR.MUMS.REC.1396.276). The participants were informed about the purpose and methodology and confidentiality of the information. Participants were permitted to

withdraw from the study for any reason at any time without any change in their pregnancy care process.

Results

A total of 25 mothers with HRP, aged 17 to 40 years, participated in the study. The demographic characteristics of the participants are listed in Table 1. Analysis of the 29 interviews resulted in 118 extracted codes, and after exclusion of the duplicate codes, a total of 20 main codes remained. These codes were classified into nine sub-categories and three main categories, as shown in Table 2.

1. The Excitement of Emotion

1.a. Feeling Worry and Despair

Worry was the first emotion of most mothers when facing the risks that they were going to experience in their pregnancies. Expressing worry and despair depended on the type of risk factor in mothers as chronic diseases and the presence of several risk factors concurrently. The possibility of infertility was a vague concern about the family consequences added to the worries about pregnancy.

"I kept telling myself that it's my problem; we can't have children, so I have to bear it... Then, I said that the people around me (my mother-in-law) might say after a few years why you don't have children." (P5)

For some of the participants, the problems encountered in previous pregnancies were repeated and resulted in poor pregnancy outcomes; the feeling of despair prevailed over other emotions.

"Every time I tell myself this time my pregnancy will be successful, but as soon as my bleeding starts again, I tell myself that I won't get pregnant again. I can't do it anymore; how many more times will I have to get pregnant and will it be futile?" (P18)

Table 1: Characteristics of the participants enrolled in the study

Participant No.	Age (year)	Education level	Occupation	Gravidity (number)	Cause of High-Risk Pregnancy
1	34	BSc[a]	Midwife	4	Age >35 years
2	39	Msc[b]	Midwife	3	Diabetes
3	35	BSc[a]	Self-employed	3	Age >35 years
4	28	BSc[a]	Self-employed	3	Diabetes
5	24	BSc[a]	Self-employed	1	Heart disease
6	40	PhD[c]	Teacher	1	Multiple sclerosis
7	32	MSc[b]	Teacher	2	Heart disease
8	25	High school diploma	Housewife	4	Kidney disease
9	16	High school	Housewife	1	Heart disease
10	32	Diploma	Housewife	1	Heart disease
11	35	Diploma	Housewife	2	Asthma
12	17	High school diploma	Housewife	1	Age <18 years
13	17	Primary school certificate	Housewife	1	Age <18 years
14	39	Primary school certificate	Housewife	5	Age >35 years,
15	40	High school diploma	Housewife	4	Recurrent Stillbirth
16	24	Primary school certificate	Housewife	5	Recurrent abortion
17	40	Primary school certificate	Housewife	1	Depression
18	36	BSc[a]	Housewife	5	Recurrent abortion
19	28	Diploma	Self-employed	3	Recurrent abortion
20	38	Primary school certificate	Housewife	5	Recurrent abortion
21	21	Diploma	Housewife	3	Stillbirth
22	17	High school diploma	Housewife	1	Age <18 years
23	38	BSc[a]	Housewife	1	Age >35 years
24	36	Diploma	Self-employed	4	Cesarean section>3
25	26	Diploma	Self-employed	4	Recurrent abortion

[a]Bachelor of Science; [b]Master of Science; [c]Doctor of Philosophy

Table 2: The subcategories and categories generated

Codes	Subcategories	Main categories
Worrying about the ahead problem's pregnancy Worrying and despair about the poor outcome	Feeling worry and despair	The excitement of emotion
Peace of mind through a healthy pregnancy Inner peace through trust in God Happiness through a positive view of pregnancy	Gladness in the shadow of hope and optimism	
Screaming to hear about illness Being shocked by the Possibility of infertility Being shocked by fear of fetus abnormality	Momentary shocking and excitement	
Helplessness due to illness in pregnancy and not doing anything Helplessness due to treatment costs	Inactivity and helplessness	
Possibility of doing preconception Possibility of examining other assisted Reproductive Technology	Active analysis of the ways of moderating the risk	Self-contemplation
Unbelieving in risk of pregnancy Risk controllability with available medical facilities	Cognitive denial	
Childbearing, only way to save life in any condition Conscious risk justification	Ignoring the risk	
Tiredness about the risk ahead Examining all possible and effective ways to encounter risk	Problem-focused and rational actions	Witnessed action
Childbearing based on discretion in marital life Resistance to risk acceptance	Avoidance and inefficient engagements	

1.b. Gladness in the Shadow of Hope and Optimism

If controlling the risk was possible from the doctor's point of view, physicians permitted the mothers to get pregnant despite the risk. These mothers tried to regain peace with hope in God, joy with positivity in pregnancy, and peace of mind with a healthy pregnancy.

"As soon as the doctor allowed me to get pregnant, it was enough for me, I left the gladness behind ... I believe that in this pregnancy, God got me that so far no problem has happened, so God will care for me afterwards as well; this gives me peace." (P11)

1.c. Momentary Shocking and Excitement

If mothers hear stressful news, they are shocked. Hearing about the possibility of not getting pregnant or the threat to the health of the fetus, such as the possibility of abnormality, abortion, or death of the fetus, without any background, they immediately had a quick shock reaction.

"When the doctor said that I can't get pregnant with myoma and uterine surgery and they might remove the uterus, I just cried. It wasn't my fault; I just cried out loud." (P20)

1.d. Inactivity and Helplessness

Mothers with chronic diseases and frequent history of poor outcomes in previous pregnancies needed more treatments, costs and were exposed to more drug side effects. These repeatable and boring measurements caused the feeling of fatigue and helplessness with pregnancy, so they did not do anything else due to the feeling of helplessness in some stages of treatment.

"I have to take an injection every day; my body gets hives. No matter what I do, the itching doesn't go away; it bothers me. I couldn't find the drug sometimes. It's very expensive, and now it's still five months, I'm really wearied ...Sometimes I don't do anything anymore". (P18)

2. Self-contemplation

2.a. Active Analysis of the Ways of Moderating the Risk

Some participants thought about the risk adjustment methods for themselves. Each mother evaluated the solutions according to the ability in her personal and family life.

"My biggest worry is during childbirth. I thought to myself if I can take someone with me as a companion, if I have a caesarean

section, if I give birth to my baby painlessly, or whether I can go to the city where I work, where they will know me more". (P6)

Some mothers used to bear the problems more easily hoping for the future of pregnancy and imagining the joys of the child in the future as one strategy.

"When my asthma bothers me, I think, I will start planning for happiness and a new life right now, and not to be boring for myself and my husband." (P11)

Some mothers were investigating possible alternative solutions to reach the desired number of children.

"Until now, no one told me that I could use a surrogate. I said to myself, when I can get pregnant myself, why a surrogate, ..., I will definitely look for other methods." (P15)

2.b. Cognitive Denial

Some mothers did not believe in the importance of the risk. In their opinion, there was no difference between them, and the other mothers compared themselves with other low-risk mothers. They did not need to take more care.

"I do the same things as other mothers who get pregnant; I go to the doctor, I do the tests, I don't need to do anything else." (P1)

2.c. Ignoring the Risk

Some mothers desired to continue childbearing despite the risk, they comforted themselves and tried to reduce the risk in their minds to help themselves and then take action.

"When I'm very worried, I say to myself that there are many pregnant women whose conditions are much worse than me. For example, one of them had had six cesarean sections so far, and nothing happened, so there will be no problem for me either; I know everything myself and should be careful." (P24)

Some mothers believed that childbearing was the only way to achieve what they wanted, and there was no other way for them; they felt compelled to get pregnant despite the risk. Therefore, the risk does not matter against the desire.

"If I hadn't been get pregnant, I wouldn't have been able to do anything else with my life instead of having a baby. My husband wanted a child and... being bothered during pregnancy is not very important for saving my life." (P16).

3. Witnessed Action

3.a. "Problem-focused and Rational Actions

Mothers showed various actions in encountering to HRPs. The practical solution for many mothers was to try all possible solutions as using peer experiences, relevant support, and alternative solutions. Every mother chose the method that was possible and effective for her and tried to make it easier for herself to bear the risk and problems.

"Before I got pregnant, I read a lot about the pregnancies of other mothers with my conditions. I traveled to another city to be cared by good specialist doctors. This way, I see other mothers in my conditions who got pregnant, and I can ask what they did." (P9)

Some mothers tolerated the problems, obeyed medical advice, and tried to reduce the risk with methods: spiritual solutions, patience, family involvement, and flexibility. According to their discretion, they moderated the risk and ultimately trusted in God and were not dissatisfied.

"I did everything I could for this pregnancy; I went to the doctor, I did all the screening tests they said, I put my trust in God, I prayed, I read the Qur'an for her health, and thanked God that it has progressed this far. God is great". (P19)

Getting pregnant for some mothers, such as heart patients or chronic diseases, was associated with more problems than other mothers. It was to preserve the health of the fetus and mother. In this way, they accept all kinds of hardships and difficulties with all their soul. The health of the fetus was a priority for these mothers.

"I didn't have a child; no matter what the doctor recommended, I still refused and became pregnant. It is important for me to keep the child; I try to use everything I can

to reduce my stress. I cope with illness and conditions every way, ……., I take medicine, I follow a diet, just to give birth to a healthy child." (P6)

3.b. Avoidance and Inefficient Engagements

In addition to the thought of ignorance of the risk, some mothers showed avoidance behavior and inefficient engagements in their actions. They consciously knew that they should not get pregnant. They did not take any measures to assess the risk before pregnancy. They justified the risk of pregnancy to factors other than medical issues or avoided going to the doctor out of fear they did not take preventive measures.

"If I wanted to wait for the doctors to give me permission to get pregnant, I didn't know how long it would take, and then they might say: no, you shouldn't get pregnant; that's why I didn't go to the doctor before I got pregnant. Even now that I'm pregnant, when I go to the doctor, I don't ask anything." (P24)

Some mothers consciously resisted medical advice (advice not to get pregnant). They put the doctor against the fait accompli and got pregnant. They justified that the appropriate time to have a child with their living conditions was now, or decided to continue childbearing, regardless of the risk until they have desired number of children.

"I didn't ask the doctor before; I got pregnant. Then, I told my doctor, my baby is already big; it was time to have another child and I am pregnant now... ." (p4)

Discussion

The main aim of this study was to explain high-risk pregnant mothers' experiences from risk management. The results showed that the mother's feeling was more prominent as the most significant element of measuring behavior after being informed about the risks of pregnancy. Mothers, who had a poor history of a previous pregnancy or chronic diseases, such as heart disease or pregnancy with several risk factors, felt more worried and disappointed because they felt more at risk. On the other hand, in mothers whose risk factor was less severe, such as age or the risk of pregnancy was controllable from the mother's point of view, at the same time as worry, feelings of happiness and optimism were more expressed in the mother. The results of another study showed that pregnancy, along with having an unhealthy and high-risk body in diabetic women, brought a sense of lack of control, which led to the feeling of worry and guilt about high blood glucose levels, constant pressure, and difficult interactions with health care professionals.[20] In a systematic review, high-risk mothers experienced a wide range of emotions. Their behavior influenced expectations, social norms, pregnancy complications, fetal abnormalities, and pregnancy-related diseases. Therefore, shock, fear, despair, sadness, isolation and loneliness, anger, sadness, guilt, and mental health disorders were commonly seen in these mothers.[21] In another study, mothers experienced emotions such as fear, anxiety, and sadness with happiness in a HRP.[22] Another systematic review found that the increase or decrease in maternal happiness during pregnancy was influenced by factors such as age, life with a sexual partner, social support, previous pregnancy experience, desired pregnancy, and health status.[23]

In the present study, mothers started self-evaluation after the initial stages of facing the problem and subsiding the physiological reactions. According to the mothers' perception of personal capabilities and risk control, the thoughts were in the direction of strengthening positive feelings or denying the risk and avoiding responsibility. Thoughts of mothers who had a feeling of peace and hope were in the direction of reducing the effects of the risk. Mothers who felt worried and helpless blamed themselves and focused on the obstacles by denying the responsibility of managing the risk. In one study, high-risk mothers who had a sense of self-efficacy positively searched for information and in stressful situations used individual approaches such as control, avoidance, and distraction to stressful information.[24]

Our results showed that the next step after the targeted imagination to overcome the risk was managing and practical determination of effective and ineffective behaviors. Therefore, the mothers' behaviors (problem-oriented strategies versus avoidance strategies) were included. Actions were being patient, seeking support from relevant, trusting in God and imams, controlling stressors versus shirking responsibility refusing to take preventive measures, and trying to get pregnant without paying attention to the risk factor. The methods or strategies a person uses to overcome stressful situations play an important role in his/her mental health. In a study, difference in behavior during pregnancy was caused by differences in cultures.[25] In another study, literacy, income, and education were efficient on health behavior.[26] Strategies used by women with phenylketonuria in one study included seeking knowledge and support, learning skills, coping strategies with evaluation, and reassuring to minimize harm to the fetus.[27] In one study, the mothers' choices depended on perceived risk severity, judgment and beliefs about risks of pregnancy and childbirth, mother's weighting of various influencing factors, and prioritizing and balancing the risk factors. The interpretation of safety and risk was different in mothers who chose home birth or hospital birth, but the goal of both groups was the health and well-being of the fetus.[24] In a review study[7], researchers found that the behavior of mothers during pregnancy was influenced by values, beliefs, perceived risk, priorities, and different capabilities, the way to collect information and examine them. The main theme of all mothers' behaviors during pregnancy was maternal and fetal health. All mothers were trying to fulfill the pregnancy in a way that would ensure maternal and fetal health and that care and problems during pregnancy would not prevent them from satisfying other personal and family needs.[13]

As a limitation of this study, the purposeful sample method and enrolment of volunteered participants might have been a selection bias. Another limitation was that the care providers did not participate in the study. The strengths of this study are the use of a qualitative approach and that the study is the first to explore Iranian pregnant women's experiences of risk management during a HRP. We recruited the participants with maximum variation sampling, e.g., mothers with different risk factors throughout pregnancy.

Conclusion

Risk management experiences of pregnant women within HRPs include a wide range of positive and negative feelings, effective and ineffective thoughts, and behaviors of the mother. Mothers who faced several risk factors or chronic diseases during pregnancy felt helpless, focused on the obstacles to having a healthy child, and avoided responsibility and effective behaviors. On the other hand, tirelessness and efforts to use all possible solutions and risk management to achieve the goals were the characteristics of the mothers who, with positive thinking and belief in the ability to manage risk and using available resources, tried to bring their pregnancy to fruition despite the risk. The pregnant mothers' desire to choose the best approach for both the child's health and their well-being is based on their assessment of the pregnancy risks. Mutual collaboration between mothers and midwives/obstetricians can lead to choosing effective risk management strategies. Further studies on midwives and obstetricians about risk management in pregnancy are recommended.

Acknowledgement

The study was financially supported by the Vice-Chancellor for Research Affairs of Mashhad University of Medical Sciences, Mashhad, Iran (960009). We would like to thank the participants and all the personnel of pregnancy clinics at various education centers for their time, effort, and contribution to the study.

Conflict of Interest: None declared.

References

1 James D, Steer PJ, Weiner CP, Et Al. High-Risk Pregnancy: Management Options. 5th Ed. Cambridge (UK): Cambridge University Press; 2018.

2 Berek JS. Berk And Novak's Gynecology. 16th Ed. Philadelphia: Lippincott Williams And Wilkins; 2020.

3 Bajalan Z, Sabzevariha Z, Abdollahi F, Qolizadeh A. Prevalence Of High-Risk Pregnancies And The Correlation Between The Method Of Delivery And The Maternal And Neonatal Outcomes. Journal Of Pediatric Nursing. 2019;5:52-8. [In Persian]

4 Michel KN, Ilunga BC, Astrid KM, Et Al. Epidemiological Profile Of High-Risk Pregnancies In Lubumbashi: Case Of The Provincial Hospital Janson Sendwe. Open Access Library Journal. 2016;3(12).

5 Lawler D, Begley C, Lalor J. (Re) Constructing Myself: The Process Of Transition To Motherhood For Women With A Disability. Journal Of Advanced Nursing. 2015;71:1672-83.

6 Lennon SL. Risk Perception In Pregnancy: A Concept Analysis. Journal Of Advanced Nursing. 2016;72:2016-29.

7 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.

8 Badakhsh M, Hastings-Tolsma M, Firouzkohi MR, Et Al. The Lived Experience Of Women With A High-Risk Pregnancy: A Phenomenology Investigation. Midwifery. 2020. [Online]. Doi: 10.1016/J.Midw.2019.102625

9 Helou A, Stewart K, Ryan K, George J. Pregnant Women's Experiences With The Management Of Hypertensive Disorders Of Pregnancy: A Qualitative Study. BMC Health Services Research. 2021;21:1292.

10 Lee S, Ayers S, Holden D. Decision-Making Regarding Place Of Birth In High-Risk Pregnancy: A Qualitative Study. Journal Of Psychosomatic Obstetrics And Gynecology. 2016;37:44-50.

11 Collier SA, Mulholland C, Williams J, Et Al. A Qualitative Study Of Perceived Barriers To Management Of Diabetes Among Women With A History Of Diabetes During Pregnancy. Journal Of Women's Health. 2011;20:1333-9.

12 Bennett HA, Boon HS, Romans SE, Grootendorst P. Becoming The Best Mom That I Can: Women's Experiences Of Managing Depression During Pregnancy – A Qualitative Study. BMC Women's Health. 2007;7:13.

13 Yuill C, Mccourt C, Cheyne H, Leister N. Women's Experiences Of Decision-Making And Informed Choice About Pregnancy And Birth Care: A Systematic Review And Meta-Synthesis Of Qualitative Research. BMC Pregnancy And Childbirth. 2020;20:343.

14 Jahangir M, Khorakian A, Mortazavi SS, Elahi SE. Risk Management Model Of Iran's Health System Transformation Plan: A Qualitative Study. Payesh. 2019;18:333-45. [In Persian].

15 Cunningham FG, Leveno K, Bloom S, Et Al. Williams Obstetrics. 25th Ed. US: Mcgraw Hill; 2018.

16 Oliveira DC, Mandú ENT. Women With High-Risk Pregnancy: Experiences And Perceptions Of Needs And Care. Esc Anna Nery. 2015;19:93-101.

17 Polit DF, Beck CT. Nursing Research: Generating And Assessing Evidence For Nursing Practice. 10th Ed. Philadelphia: Lippincott Williams And Wilkins; 2017.

18 Elo S, Kyngäs H. The Qualitative Content Analysis Process. Journal Of Advanced Nursing. 2008;62:107-15.

19 Guba EG, Lincoln YS. Competing Paradigms In Qualitative Research. In: Denzin NK, Lincoln YS, Editors. Handbook Of Qualitative Research. US: Sage Publications; 1994. P.105-17.

20 Singh H, Ingersoll K, Gonder-Frederick L, Ritterband L. Diabetes Just Tends To Take Over Everything: Experiences

Of Support And Barriers To Diabetes Management For Pregnancy In Women With Type 1 Diabetes. Diabetes Spectr. 2019; 32:118-24.
21 Isaacs NZ, Andipatin MG. A Systematic Review Regarding Women's Emotional And Psychological Experiences Of High-Risk Pregnancies. BMC Psychology. 2020;8:45.
22 Wilhelm LA, Alves CN, Demori CC, Et Al. Feelings Of Women Who Experienced A High-Risk Pregnancy: A Descriptive Study. Online Brazilian Journal Of Nursing. 2015;14:284-93.
23 Tyrlik M, Konecny S, Kukla L. Predictors Of Pregnancy-Related Emotions. Journal Of Clinical Medicine Research. 2013;5:112-20.
24 Lee S, Holden D, Ayers S. Risk Perception And Decision Making In Women With High Risk Pregnancies. In: SRIP 35th Annual Conference; 2015 August 14-15; Nottingham, UK. UK: City Research Online; 2015. Available From: Https://Openaccess.City.Ac.Uk/Id/Eprint/12763/
25 Edvardsson K, Ivarsson A, Eurenius E, Et Al. Giving Offspring A Healthy Start: Parents' Experiences Of Health Promotion And Lifestyle Change During Pregnancy And Early Parenthood. BMC Public Health. 2011;11:936.
26 Loke AY, Poon CF. The Health Concerns And Behaviours Of Primigravida: Comparing Advanced Age Pregnant Women With Their Younger Counterparts. Journal Of Clinical Nursing. 2011;20:1141-50.
27 Roberts RM, Muller T, Sweeney A, Et Al. Promoting Psychological Well-Being In Women With Phenylketonuria: Pregnancy-Related Stresses, Coping Strategies And Supports. Molecular Genetics And Metabolism Reports. 2014;1:148-57.