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Pregnant women's experiences of well-being in high-risk pregnancy: A qualitative study

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Abstract:

BACKGROUND: Physical changes in high-risk pregnancy (HRP) can lead to changes in mood and social relationships and negative effects on women's well-being. Individuals in different sociocultural contexts have different perceptions of well-being. Yet, there is limited information about perceptions of well-being in HRP. This study aimed to explore the Iranian women's experiences of well-being in HRP.

MATERIALS AND METHODS: This qualitative study was conducted in 2019–2020 through directed content analysis based on the conceptual framework of well-being in HRP. Participants were 26 women with HRP purposively recruited from public and private healthcare settings in Mashhad, Iran. Face-to-face semistructured interviews were held for data collection until data saturation. Data were analyzed through directed content analysis proposed by Elo and kyngäs (2008) and were managed using the MAXQDA (v. 10) program.

RESULTS: Well-being in HRP had seven attributes in the five main dimensions of physical, mental-emotional, social, marital, and spiritual well-being. The seven attributes of well-being in HRP were controlled physical conditions, controlled mood, emotions, and affections, perceived threat, self-efficacy, and competence for multiple role performance, maintained social relationships, meaning seeking and relationship with the Creator, and positive marital relationships.

CONCLUSION: The present study provide an in-depth understanding about well-being in the Iranian women with HRP. It is a complex and multidimensional concept with physical, mental-emotional, social, marital, and spiritual dimensions. Comprehensive multicomponent interventions are needed to promote well-being among women with HRP and designed the guidelines to provide woman-centered care.

Keywords:

Complicated, experiences, high-risk, mental health, pregnancy, pregnant women, qualitative study, understanding, welfare, well-being, wellness

Introduction

High-risk pregnancy (HRP) is a major health problem around the world. Any unpredictable problem during pregnancy with potential or actual risk for woman or fetus can turn a normal pregnancy into an HRP.[1] Twenty million women experience HRP and more than 800 women experience HRP-related death each day around the world.[2] Prevalence of HRP in different countries widely varies due to its major causes and its definitions in each country. The global prevalence of HRP is reported to be 5–7%[1,3] with an estimated mean of 22%.[4]

HRP is associated with many different outcomes for pregnant women, their fetuses, and their families. For example, pregnant women with HRP may experience extreme negative feelings such as despair, guilt, concern, fear, anger, jealousy, and limited self-confidence, eagerness, happiness, and pleasure. A qualitative study reported that HRP was associated with sociocultural

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and economic problems, increased financial needs, and negative feelings such as doubt, fear, concern, insecurity, and anxiety.[5] Negative feelings during pregnancy can in turn lead to depression and anxiety. The prevalence rates of anxiety and depression in HRP were reported to be 16.9–54% and 12.5–44.2%, respectively.[6] These problems negatively affect pregnant women's well-being,[7] and hence, care programs for women with HRP should include physical, emotional, and mental care services in order to promote their well-being.[5,8] A concept analysis and review of the literature of the perinatal well-being defined well-being as the level of adaptation to pregnancy-induced emotional and physical changes which has psychological, physical, spiritual, social, ecological, and economical aspects[9] but compared with low-risk pregnancy. Negative well-being is experienced more in HRP.[10]

A very basic step to effective HRP management and well-being promotion among women with HRP is to clarify the concept of well-being in HRP and determine its different dimensions. Generally, well-being is defined as having senses of pleasure, happiness, and satisfaction and includes physical, functional, emotional, intellectual, psychological, mental, familial, and social dimensions.[11] However, controversies exist over the aspects of well-being in HRP. A study considered a mental–emotional dimension for well-being and defined well-being as mental health and the opposite of depression. Based on this definition, a pregnant woman experiences well-being when she has low or no depression and has good mental health.[12] Another study into the sickle cell disease in pregnancy considered only a physical dimension for well-being and defined well-being as the successful management of sickle cell disease during pregnancy.[13] Moreover, a study considered physical, psychological, and self-efficacy dimensions for well-being in HRP,[14] while another study defined well-being in HRP based on mental health and the absence of stress, anxiety, and behavioral limitations.[12] Two studies also addressed the spiritual dimension of well-being and defined spiritual well-being as having purpose and meaning in life and relationship with God or a supreme power.[15,16] A qualitative study has been conducted on the conditions affecting marital well-being in HRP, but other dimensions are not explained.[17]

In an integrative review, Mirzakhani *et al*.[11] found that well-being in HRP was a complex and multidimensional concept with four main dimensions, namely, physical, mental–emotional, social, and spiritual well-being. They reported that HRP-afflicted women experience well-being when they have limited concern, fear, anxiety, stress, and depression regarding the negative outcomes of HRP for self and fetus and have controlled physical conditions, controlled mood, emotions, and affections, low perceived threat, high self-efficacy and competence for multiple role performance, healthy social relationships, meaning seeking, and relationship with the Creator.

Although well-being is a context-based concept and may vary in different sociocultural contexts, previous studies into the concept of well-being in HRP either dealt only with some aspects of the concept or were not context based. Consequently, there is limited context-based information about the concept of well-being in HRP in different contexts.[11] such as Iran, and further studies are needed to narrow this knowledge gap. The aim of the study was to explore the concept of well-being in HRP based on the experiences of Iranian women with HRP.

Materials and Methods

Study design and setting

This qualitative study was conducted from September 2019 to January 2020 using directed content analysis.

Participants and setting

Study population consisted of all women with HRP with medical records in the Medical Care Monitoring Center in Mashhad, Iran. Participants were 26 women with HRP recruited from HRP clinics, the Primary Healthcare Center number 3, as well as the midwifery care centers of three referral public hospitals (i.e., Qaem, Imam Reza, and Ommolbanin hospitals) and two private hospitals (i.e., Mehr and Pasteur hospitals) in Mashhad, Iran. The mentioned setting was considered for easy access and maximum variation of participants. Sampling was done purposively with maximum variation in age, gestational age, gravida, socioeconomic status, and pregnancy disorder. Selection criteria were HRP, agreement for participation, and ability to establish verbal communication. HRP was determined based on the criteria of the National Institute for Health and Care Science.[18]

Data collection

The first author collected the data through face-to-face semistructured interviews. Examples of the main interview questions were "How do you feel about your HRP?" "May you please explain about your good feelings in your pregnancy?" and "May you please explain about your bad feelings in your pregnancy?" Probing questions such as "Can you explain more?" and "Can you provide an example?" were also used to receive feedback from participants, further clarify their experiences, and ensure our accurate understanding of their experiences. Interviews were held using an interview guide developed based on the dimensions and the attributes of the concept of well-being in HRP determined in Mirzakhani and colleagues' study.[11] At the end of each interview, the interviewee was asked

whether she wanted to add any other point regarding well-being in HRP. The length of the interviews varied according to participants' conditions and ranged 40–85 min (with a mean of 50 min). Data collection was continued up to data saturation which was achieved after interviewing 23 women. Nonetheless, three more interviews were conducted to ensure data saturation. These three interviews produced no new data. The first, third, and fifth participants were interviewed twice and other participants were interviewed once. Accordingly, the total number of interviews was 29. The place of the interviews was determined according to participants' preferences and conditions and included hospital settings, primary healthcare centers, or their own homes. All interviews were held in a private and safe place and audio recorded using an MP3 player.

Ethical considerations

The Ethics Committee of Mashhad University of Medical Sciences, Mashhad, Iran, approved this study (code: IR.MUMS.NURSE.REC.1397.039). The first author who performed sampling and data collection introduced herself to participants, informed them of the study aim, ensured them of the confidentiality of their data and their freedom to unilaterally withdraw from the study, and obtained their written consent for participation.

Data analysis

Data analysis was conducted concurrently with data collection through directed content analysis proposed by Elo and kyngäs.[19] The three steps of this method are preparation, organization, and reporting. In the preparation step, each interview was transcribed verbatim, the transcript was considered as the unit of analysis, and it was perused several times to make sense of the data and immerse in the data. In the organization step, an unconstrained matrix was created based on the six main attributes of the concept of well-being in HRP. These six main attributes were controlled physical conditions, controlled mood, emotions, and affections, perceived threat, self-efficacy and competence for multiple role performance, maintained social relationships, and meaning seeking and relationship with the Creator.[11] Then, excerpts from the data which were relevant to the study aim were identified, coded, and allocated to the six predetermined categories. Codes which could not be allocated to the predetermined categories were grouped into new subcategories and categories according to their attributes. Data were managed via the MAXQDA 10 software.

Rigor

The criteria of Lincoln and Guba were used to ensure trustworthiness. These criteria are credibility, confirmability, dependability, and transferability.[20] Credibility was ensured through prolonged engagement with the data, peer checking, and member checking. Confirmability was ensured through documenting all steps of the study. Dependability was also ensured through external debriefing. Moreover, detailed descriptions of participants' age, educational level, number of pregnancies, type of pregnancy disorder, and gestational age were provided to ensure transferability.[21]

Results

Participants were 26 women with HRP with an age mean of 32.5 ± 6.65 years (in the range of 20–46) and a gestational age mean of 28.76 ± 9 weeks (in the range of 7–40). The number of participants' pregnancies ranged from 1 to 6 and 50% of them had their first or second pregnancy, 26.9% of them had their third pregnancy, and 23.1% of them had their fourth to sixth pregnancy. Moreover, 76.9% of them reported the history of at least one successful pregnancy and 23.1% of them reported the history of 1–5 unsuccessful pregnancies. Respecting the number of children, 42.3% of them had no child, 42.3% of them had 1–2 children, and 15.4% of them had 3–5 children. In addition, 53.8% of participants were housewife, 38.5% were employed, and 7.7% of them were student. Respecting educational level, 34.6% of them had elementary or junior secondary education, 30.8% of them had senior secondary education or diploma, and 34.6% of them had university degree.

The attributes of the concept of well-being in HRP fell into the same six categories introduced by Mirzakhani *et al*.[11] as well as the new category of positive marital relationships. Consequently, the seven main categories of the attributes of well-being in HRP were controlled physical conditions, controlled mood, emotions, and affections, perceived threat, self-efficacy and competence for multiple role performance, maintained social relationships, meaning seeking and relationship with the Creator, and positive marital relationships. These findings indicated the complexity and multidimensionality of the concept of well-being in HRP [Table 1].

Controlled physical conditions

The controlled physical condition category refers to the physical dimension of well-being in HRP and highlights that women with HRP experience well-being when their physiological parameters are under control, the results of their laboratory tests and ultrasound assessments are normal, and they feel that their physical conditions are under the control of themselves and their healthcare providers. Some participants noted that they sometimes experienced confusion, unawareness, and disorientation to time and place due to physical problems.

> *My physical condition was very bad. I had fever and shivering and couldn't breathe and eat. It was very awful. They said that I had lung infection but they had not*

Table 1: Subcategories and categories emerged related to concept of well-being in HRP

Subcategories	Categories
Successful control of physiologic parameters; Successful control of physical health conditions	Controlled physical conditions
Anxiety; Depression; Stress; Satisfaction with the present conditions; Satisfaction with laboratory tests; No feeling of loneliness; Feeling guilty at adverse pregnancy outcomes; Feeling of vitality; Feeling of hope	Controlled mood, emotions, and affections
Ambiguities; uncertainties	Perceived threat
Feeling dependent on independence in high-risk pregnancies; Self-efficacy in playing multiple roles	Self-efficacy and competence for multiple role performance
Socio-family relationships from limitations to opportunities; Positive interpersonal relationships, energy exchange in high-risk pregnancies	Maintained social relationships
Maintaining marital emotional intimacy in the midst of danger; Perception of committed management in difficult pregnancy situations; Sex in high-risk pregnancies from stress to moderation	Positive marital relationships
Existence of spiritual and purposeful aspects in pregnancy; Spiritual well-being and health as intertwined concepts	Meaning seeking and relationship with the Creator

accurately diagnosed it. My fever didn't reduce with any medication. It was very dangerous. It seemed I was not in this world. I told myself I was dying (P. 13).

Controlled mood, emotions, and affections

This category shows that woman with HRP experience well-being when their mood, emotions, and affections are under control and they feel positive affections more than negative affections. Some participants reported that they felt positive affections such as satisfaction, vitality, and hope and highlighted that they felt well-being when they had satisfaction with their conditions and healthcare services. These participants described their HRP as a pleasant experience associated with good feelings, vitality, and happiness and hoped for a successful pregnancy and delivery of a healthy child. Contrarily, some participants had negative affections such as anxiety, depression, stress, fear, loneliness, and guilt due to HRP-associated maternal and fetal problems. They had fear over medical interventions in HRP and over witnessing critically ill patients. Moreover, they were concerned with HRP-associated threats for themselves and their fetus, pregnancy outcomes, inability to manage their families, and pregnancy-related costs. Their feeling of guilt was also due to HRP-related complications and their desire to terminate pregnancy.

Ultrasound assessment in the second month of pregnancy revealed that my pregnancy was twin. I became so happy about having a twin pregnancy that I wanted to fly. I had very good feelings. However, concerns, fears, and stress started when my blood sugar increased in the sixth month. I'm now worried about the potential negative effects of high blood sugar on my baby and also about my husband and my other child who are alone without me (P. 5).

Perceived threat

Some participants perceived threat to themselves and their fetuses due to having HRP and its associated problems and complications, a complicated pregnancy, and limited access to the necessary equipment for successful HRP management. Perceived threat negatively affected their well-being. Some participants also felt ambiguities and uncertainties due to their inability to consider a good end for their pregnancies. On the other hand, some participants were certain about maintaining the health of themselves and their fetuses and trusted in their physicians, healthcare providers, and treatments and, hence, felt peace and well-being.

I'm confused and uncertain in these conditions. I don't know what will happen to me and my baby. I don't still trust in my physician and her prescribed medications and hence, resist taking the medications because I can't accept that the medications are safe for me and my fetus (P. 3).

Self-efficacy and competence for multiple role performance

Our participants reported that their sense of well-being during their HRP largely depended on their self-efficacy and competence for performing their multiple roles such as maternal and social roles. Some of them were limited to complete bed rest due to premature rupture of membranes or severe bleeding and, hence, were dependent on others for doing their daily activities and fulfilling their basic needs such as the need for elimination. These participants needed to use bedpan for elimination. Such dependence and the use of bedpan in rooms with several other patients were very difficult for them, disturbed their privacy, and caused them feelings such as shame, weakness, and disability.

In those conditions, I couldn't move and couldn't go to toilet. They put bedpan for me which was very difficult for me. One time I cried a lot when they put bedpan for me. You know, I had always been an independent person with no need for others' help. It was very difficult for me and I thought that I was very disabled (P. 10).

Maintained social relationships

Participants also reported that HRP limited their social relationships and felt that they unintentionally

transferred their negative feelings such as discomfort and sufferings to others and made them feel discomfort and upset. This annoyed them and negatively affected their well-being. While some participants reported social stigmatization of an unsuccessful HRP, those with successful delivery at the end of an HRP reported public acceptance and admiration and subsequent sense of competence. Most participants reported that as HRP was associated with the possibility of mandatory pregnancy termination, others continuously asked them questions about their pregnancy and its success. Such information seeking behaviors of others made them feel that others intended to judge about their childbearing ability. Moreover, some participants reported that their HRP-induced limitations, bed rest, and hospitalization reduced their ability to perform some sociocultural rituals, such as New Year ceremonies or buying things for the new baby, and hence, gave them bad feelings. On the other hand, some participants reported that HRP provided them with the opportunity to have more time for their families, strengthened their familial and social relationships, and thereby, improved others' understanding of their conditions and gave them pleasant feelings. Some of them also noted that HRP made their significant others pay more attention to their needs, show them more kindness, and establish emotional and empathetic relationships with them.

> *Now, I have to stay home and hence, my relationship with my family members has improved. Before pregnancy, I was very busy due to my heavy workload and couldn't have close relationship with my family members and did not see my children a lot. However, staying home has made life sweeter. It seems that my family members pay more attention to me. Therefore, I didn't have bad feelings during pregnancy (P. 7).*

Positive marital relationships

Study participants noted that HRP improved their husbands' understanding of their conditions, strengthened their husbands' intimate relationship with them, and required their husbands to avoid actions which could aggravate their conditions in HRP and to perform activities to facilitate their coping with HRP. Intimate and committed marital relationships during HRP gave participants good feelings such as satisfaction, calmness, and hope and reduced their stress, anxiety, and grief.

> *I felt disappointed when my blood pressure increased and they said that maternal and fetal health was at risk. However, my husband supported me and did whatever he could to protect my health and pregnancy. These behaviors gave me good feelings and made me hopeful (P. 4).*

Participants also noted that as their main goal in HRP was to protect pregnancy and fetal health, they and their husbands had decided to limit or discontinue their sexual relationships due to their fear over causing damage to fetus and pregnancy. However, limitation or discontinuation of sexual relationships was associated with feelings such as worry, distress, and guilt for some participants.

Meaning seeking and relationship with the Creator

According to the participants, spiritual beliefs and attention to spiritual issues in HRP gave them senses of worthiness, acceptance, calmness, confidence, and well-being. Moreover, reliance on a Supreme power and connectedness to Him made them confident about maternal and fetal health. Performing religious rituals also created a sense of well-being in them. Most participants considered pregnancy as God's favor and, hence, felt worthy of it. Some of them considered pregnancy as a miracle and God's will and, hence, accepted pregnancy-related difficulties and problems, did not complain of them, and were satisfied with them. Those who complained of their difficult conditions felt regretful, guilty, and pangs of conscience after a while and were concerned over the negative effects of their complaints on their fetus or their pregnancy. Most of them considered a healthy child as a gift of God, relied on Him, were satisfied with His favors, and hence, accepted pregnancy-related difficulties in hope of having a healthy child. They attempted to establish the relationship with God through praying and considered the ability to establish such relationship as an indicator of acceptable health status. On the other hand, they considered relationship with God as a guarantee for their maternal and fetal health. The calmness associated with spiritual beliefs helped them felt well-being.

> *I feel worthy in pregnancy. I always review in my mind that God has considered me capable of nurturing a baby in my body and hence, I think that I have to consider myself worthy and accept pregnancy-associated problems (P. 3).*

Discussion

This study explored the concept of well-being in HRP based on the experiences of Iranian women with HRP. Findings revealed that well-being in HRP is a complex and multidimensional concept with the seven main attributes of controlled physical conditions, controlled mood, emotions, and affections, perceived threat, self-efficacy and competence for multiple role performance, maintained social relationships, meaning seeking and relationship with the Creator, and positive marital relationships.

The first category of well-being in HRP in the present study was controlled physical conditions. Mirzakhani

et al.[11] considered this category as the physical dimension of well-being in HRP. Previous studies also reported physical well-being as a main attribute of well-being.[22] Physical well-being is also provided by exercise, which in addition to feeling well-being in pregnancy, also has a positive effect on childbirth.[23,24] A concept analysis through Walker and Avant's approach defined prenatal physical well-being as the lack of disorder and disease.[9] An integrative review of the concept of well-being among nonpregnant individuals also defined physical well-being as functional ability.[22] Other studies also considered physical aspect for well-being and noted that well-being is achieved through achieving health.[25] Nonetheless, most well-being theorists believe that the concept of well-being has no physical dimension and considered well-being as a subjective concept with inner happiness and energy.[26]

The second main category of well-being in HRP in the present study was controlled mood, emotions, and affections. Mirzakhani *et al*.,[11] considered controlled mood, emotions, and affections as one of the categories of the mental–emotional dimension of well-being in HRP. Our findings showed that women with HRP feel well-being when their mood, emotions, and affections are under control and they have positive affections more than negative affections. In line with these findings, previous studies reported that well-being is affected by negative and positive affections such as anxiety, depression, stress,[27-31] feelings of guilt and loneliness, satisfaction,[32] vitality,[33] and hope.[34] Nonetheless, a study reported that HRP turns the positive feeling of mother-becoming to negative feelings of insecurity, fear, and anxiety and, hence, is associated with significant affective, emotional, behavioral, and familial problems which negatively affect well-being, while healthcare providers pay limited attention, if any, to these problems and mainly focus on HRP-associated physical problems.[5] A difference between the findings of the present study and the findings reported by Mirzakhani *et al*.[11] is that women's fears and concerns in that study were mainly related to HRP and its associated problems.[11], while our participants reported fear over encountering with other HRP-afflicted pregnant women in addition to HRP and its associated problems. This finding denotes that women's privacy in HRP units is not well protected and highlights the necessity of serious interventions to protect pregnant women's privacy in healthcare settings.[27] Moreover, our findings revealed that women with HRP had concerns due to their limited control over their family and household. Based on the Well-being Theory of Ryff, individuals with well-being are concerned with the happiness of others and feel responsibility toward it.[28] Accordingly, such concerns over self, fetus, family, and society can be considered as aspects of well-being when they are under control and can negatively affect well-being when they are out of control.[29]

Self-efficacy and competence for multiple role performance was another attribute of well-being in HRP. Mirzakhani *et al*.[11] allocated this attribute to the mental–emotional dimension of well-being in HRP. This attribute refers to independence in doing daily and personal activities. The need for independence is a main attribute of self-actualization and well-being.[30] According to Ryff, mastery and competence in controlling the surrounding environment and effectively using the available opportunities significantly contribute to well-being so that individuals who are unable to manage their daily activities and modify their environment feel limited well-being.[28] HRP is associated with disturbances in personal and familial life, inability to perform roles, and sense of incompetence in doing roles.[5] A concept analysis study into the concept of wellness in older adults found competence as a main attribute of the concept.[31]

Another main attribute of well-being in HRP in the present study was maintained social relationships. Women with HRP considered maintaining warm and close social relationships with others as a main aspect of their well-being. Mirzakhani *et al*.[11] reported maintained social relationships as the social dimension of well-being in HRP. Studies showed that personal, familial, and social problems in HRP negatively affect well-being, while normal social interactions and relationships have positive effects on well-being.[5] Humans are social beings and continuously face social challenges, and hence, their feelings, emotions, and well-being have social aspects.[35]

Study findings revealed that HRP and the possibility of unsuccessful pregnancy were associated with the risk of social stigmatization, which in turn negatively affected participants' well-being. Ryff noted that individuals with well-being are resistant to social pressures, are able to think and act based on their personal styles, and evaluate themselves using personal standards.[28] Therefore, context-based educational interventions are needed to improve social relationships among women with HRP, improve public attitudes toward HRP, and thereby improve well-being among these women.

The sixth main category of the attributes of well-being in HRP was positive marital relationships. This category refers to another social aspect of well-being and was not addressed in the study performed by Mirzakhani *et al*.[11] This is due to the fact that fulfilling the needs of families in the Iranian context is mostly with men.[36] Marital well-being includes marital satisfaction, marital stability, martial commitment, and marital closeness.[37] A study reported that respect and commitment in marital relationships improved marital satisfaction and

well-being.[38] Close and empathetic marital relationships provide couples with the opportunity to share their positive experiences, help them more effectively manage and cope with negative emotions such as stress, anxiety, anger, grief, and distress, and improve marital satisfaction.[39] Moreover, our findings showed that women with HRP and their husbands had accepted limitations in their sexual relationships and modified these relationships according to their conditions. A study reported that sexual satisfaction and marital well-being in pregnancy are independent from sexual relationships.[38] As HRP is associated with senses of threat and stress[40] and affections can affect well-being;[9] positive marital relationships are considered as an indicator of well-being in HRP.[17]

The final category of the attributes of well-being in HRP was meaning seeking and relationship with the Creator. This category referred to the spiritual dimension of well-being.[11] A previous study also confirmed the significant relationship of health and spiritual well-being.[16] Frankl, an existentialist philosopher, believed that life is meaningful even in its most catastrophic moments and attributed emotional problems to the inability to find meaning in life. Accordingly, he defined well-being based on finding meaning in life.[41] Ryff also considered clear goals in life, belief in goals, and belief in life meaningfulness as the characteristics of individuals with well-being.[28] In HRP, the main goal of most women is to give birth to a healthy baby, and hence, they accept all HRP-related problems and difficulties to achieve this goal. Frankl also noted that when individuals inevitably encounter difficult situations and cannot change them, they can change their attitudes and perspectives and bravely accept their conditions.[41] Our findings also revealed the sense of self-worth as an aspect of meaning seeking and relationship with the Creator. Similarly, a study found self-worth and self-transcendence as the components of well-being.[42] Therefore, spiritual care services should be integrated in care plans for women with HRP in order to promote their health and well-being.[1,43,44] An important strategy for this purpose is acceptance and commitment therapy which focuses on spiritualities.[45]

Limitations and recommendation

The most important strength of the present study was the comprehensive exploration of the concept of well-being in HRP. Among the limitations of the study were data collection through a single method and exploration of only women who voluntarily participated in the study. Women who refused participation might have different experiences of well-being in HRP. Further studies are also needed to assess and compare well-being in HRP, low-risk pregnancy, and postpartum period. It is necessary to study with purpose development and psychometric evaluation of the High-Risk Pregnancy Well-being Index.

Conclusion

This study concludes that well-being in HRP is a complex and multidimensional concept with seven main attributes in four main dimensions, namely, physical, psychological, social, and spiritual well-being. The seven attributes of the concept are controlled physical conditions, controlled mood, emotions, and affections, perceived threat, self-efficacy and competence for multiple role performance, maintained social relationships, meaning seeking and relationship with the Creator, and positive marital relationships. This study shows that although most aspects of well-being in HRP in Iran are similar to those in other countries, positive marital relationships are the unique aspect of well-being in HRP in Iran. Moreover, fears and concerns of Iranian women with HRP are beyond maternal and fetal health and include attention to the immediate environment and family. Interventions to improve well-being among women with HRP should be comprehensive and address all different aspects of it.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their quotations and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity.

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Conflicts of interest

There are no conflicts of interest.

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