

Perceptions and Experiences of Spiritual Well-Being among Women with High-risk Pregnancy

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ABSTRACT

Background & aim: Spirituality is among prominent strategies to minimize negative emotions in different circumstances. Clarifying the concept of spiritual well-being in high-risk pregnancies enables healthcare providers to address and support their patients' spiritual needs. This study aimed to explore the perceptions and experiences of spiritual well-being among women with high-risk pregnancy.

Methods: This qualitative content analysis was conducted from December 2017 to March 2019 in public and private hospitals and health centers in Mashhad, Iran. The participants included 26 women with high-risk pregnancy, who selected using a purposive sampling. Data was collected through semi-structured and face-to-face individual interviews using the interview guide. The data analysis was carried out concurrently with the data collection, using the conventional content analysis based on the Graneheim and Lundman's method.

Results: Following data analysis, "Spiritual well-being in high-risk pregnancies" was characterized by two main categories including "Meaning-seeking and belief in purposeful pregnancy" and "Relying on spirituality in achieving health."

Conclusion: Searching for meaning and purposefulness in pregnancy and relying on spirituality to achieve health are among the components of spiritual well-being in high-risk pregnancy; hence, understanding women's spiritual well-being could help tailoring strategies to reduce their tensions and discomforts caused by high-risk pregnancy. Thus, it is highly recommended that women with high-risk pregnancy receive spiritual care as part of their comprehensive care.

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Introduction

Pregnancy is one of the most critical times in a woman's life because she undergoes physical, mental, and social changes. And her inability to address these issues leads to serious harm (1). Although pregnancy is a physiological and natural phenomenon in women's lives, certain conditions can affect maternal-fetal health, making this unique period quite stressful. As a result, the

pregnant woman may experience a high-risk pregnancy (2).

The prevalence of high-risk pregnancy varies by country, community, and region in Iran, owing to the various conditions and factors that cause high-risk pregnancy or the definition of high-risk pregnancy in those societies. So that the prevalence of high-risk pregnancies has been reported to range between 6 and 33% (3), and it

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is estimated that approximately 22% of all pregnant women are exposed to high-risk pregnancies every year (4). The prevalence of high-risk pregnancy is also reported differently in different regions of Iran. So, in the study of Bajlan et al. (2018) in Qazvin, the prevalence of high-risk pregnancy was 75.6% (5), in study by Azizi et al. (2014) in Sanghar was 39.8% (6), in study conducted by Safari et al. (2018) in Yasouj was 52.4% (7), and in study by Soleimani-Zadeh et al. (2013) in Bam was estimated at 52% (8).

In addition to physical complications, mood and psychological changes in women with high-risk pregnancies have been reported. As He et al (2020) writes, high-risk pregnancy causes women to experience strong negative emotions, including disappointment, guilt, worry, fear, anger, or jealousy, but less positive emotions such as self-confidence, hope, enthusiasm, vitality, or pleasure (9). When a pregnant woman perceives and experiences a higher level of pregnancy risk for herself and her child, she may also experience increased levels of uncertainty, increased psychological pressures, and degrees of malaise or depression, as well as anxiety. According to Effati et al (2016), the prevalence of depression during pregnancy in Tabriz women referred to healthcare centers was 22.7% in the first trimester, 30.6% in the second trimester, and 36.6% in the third trimester; the prevalence of anxiety in pregnancy is 17.3% in the first trimester, 12% in the second trimester, and 27.3% in the third trimester. And the prevalence of stress in pregnancy has been reported as 19.8% in the first trimester, 24.7% in the second trimester, and 31.7% in the third trimester (10). These symptoms are associated with a significant increase in high-risk pregnancies (4), influencing health-related behaviors and decisions, as well as their overall sense of health and well-being (11). As a result, negative emotions during pregnancy can lead to incorrect and sometimes dangerous decisions. In a systematic review and meta-analysis, Orri et al (2019) found an increase in the likelihood of suicide in women with high-risk pregnancies (12).

Several studies have suggested methods to reduce negative emotions during pregnancy (13-16). One of these strategies is to use spirituality and religion as coping mechanisms for the problems encountered at this stage of life (17).

Studies have shown that spirituality and religion are beneficial to people under stress, particularly in high-risk and high-stress situations (18). In a qualitative study using the phenomenological research method, Philip et al (2019) revealed how religion and spirituality play a significant role in improving people's psychological, cognitive, and social performance. It also affects international students' performance and reduces the acculturative Stress in the academic environment (19). In an integrated review study, Badanta et al (2022) demonstrated the positive effect of spirituality in stressful conditions such as hospitalization in intensive care units (ICU) and stated that respecting patients' spiritual beliefs is essential in intensive care. They also stated that professionals should be aware of and trained regarding their patients' spiritual needs (20). Spiritual well-being has been shown in studies to improve physical health, mental health, and quality of life and reduce mortality. In general, studies have shown that spiritual well-being improves physical health, mental health, and quality of life while reducing mortality (21). Negative spiritual well-being, on the other hand, despite its rarity, is associated with negative outcomes such as depression, anxiety, stress, dissatisfaction with health status, and poor quality of life. Spiritual well-being can limit the effect of stress and inspire feelings of hope, optimism, and optimism (18). In a systematic review, McCann et al (2020) demonstrated the positive impact of religion on the spirituality of LGBT youth (22).

In high-risk pregnancies, spiritual well-being is deemed to be a significant aspect of the women's health, so there is an inverse relationship between spiritual well-being and negative emotional status. (23-24). However, there have been few studies on the dimensions, components, and explanation of the concept of well-being in high-risk pregnancy. In this regard, Dunn et al (2007) in examining spiritual well-being in high-risk pregnant women on bed rest, refer to the definition of spiritual well-being taken from Paloutzian and Ellison's (1982) analysis of the concept of spiritual well-being in the general population and writes: "spiritual well-being comprised of two components: existential and religious. The existential dimension of spiritual well-being refers to having a sense of purpose and

meaning in life, whereas the religious aspect means connection with God or a higher power ". Religion is the source of a person's spiritual well-being. Spiritual well-being is a significant aspect of women's well-being in high-risk pregnancies; thus, there is an inverse relationship between spiritual well-being and negative emotional states. Similarly, other studies have found that Spiritual well-being is associated with various psychosocial factors; although an abstract concept, it is deemed to be one of the significant dimensions of well-being in women with high-risk pregnancies (23, 24). The meaning of well-being and spiritual well-being in breast cancer patients has been expressed in three components by Phenwan et al (2019): "feeling life worthwhile, sense of belonging in the community, and feeling connected to the nature" (25).

Explaining and clarifying the concept of spiritual well-being in high-risk pregnancies enables healthcare providers to address and support patients' spiritual needs. Women's care should be adapted to the conditions of a high-risk pregnancy. Although providing spiritual care is a well-known component of comprehensive health care, the World Health Organization emphasizes the importance of spirituality as a component of a person's health and quality of life (26). However, due to a lack of research in this area, its dimensions and meaning in special conditions such as high-risk pregnancy for healthcare providers are uncertain. Further exploration into the spiritual well-being experiences of women with high-risk pregnancies is required to improve overall care for these women. According to some studies, the search for meaning and the desire to feel connected to a sacred agent can reduce negative emotions such as guilt, stress, and anxiety (27,28). Although even though numerous studies have been conducted on biological, psychological, and social changes in high-risk pregnancy (29) and the explanation of the concept of well-being (24,26) , few studies, however, have described the components of the spiritual well-being dimension in high-risk pregnancy. Considering that cultural and social contexts are not taken into account in quantitative studies, the phenomenon of spiritual well-being in high-risk pregnancy is a complex phenomenon that is related to

experiences, human interactions, feelings, perceptions, and thoughts mixed with people who cannot be quantified (30-31). Therefore, this qualitative study was conducted to identify the perceptions and experiences of spiritual well-being in the group of women with high-risk pregnancies.

Materials and Methods

The current study was a qualitative study with a conventional content analysis approach conducted from December 2017 to March 2019. The research setting included high-risk perinatal clinics at three governmental hospitals and one health center in Mashhad, Iran. The mentioned settings were selected for their ease of accessibility and diversity of participants. The study population included all women with high-risk pregnancies according to NICE guidelines (32) who registered in the National Medical Care Monitoring Center (MCMC). Selection criteria were women who willingly participated in the study and could communicate with the researcher to convey their experiences. A purposeful sampling method was used to ensure maximum diversity in terms of age, gestational age, socioeconomic status, and type of pregnancy complications.

A semi-structured individual interview was used to collect data. The interview was held in a quiet room with enough facilities for the comfort of the high-risk pregnant women, taking into account the conditions of the high-risk pregnant mothers in the hospital, health centers, home, and any other places that mother desired. Sampling continued until data saturation, There was a total of 26 participants.

A semi-structured interview was conducted focusing on the participants' perceptions and experiences of spirituality, spiritual well-being and the effects of spirituality on their pregnancy. The following are some examples of questions:

- Describe your perceptions of and experience with spirituality during pregnancy.
- Discuss how pregnancy affects your spiritual and religious beliefs.
- Discuss the influence of spiritual and religious beliefs on your pregnancy.
- Describe the spiritual aspects of your pregnancy.
- Describe the pregnancy moments that you believe they were spiritual in nature.

- How does spirituality affect your emotions during pregnancy?

Probing questions such as can you explain more? Could you provide an example? To ensure the correctness of the researcher's understanding of the participants' statements, summarizing and briefing of the interview and obtaining feedback were used to clarify the explanations. Finally, the participants were asked a final question: do you believe there is a topic that has not been addressed and you would like to discuss? The interview lasted 20–70 minutes (on average 40 minutes) depending on the depth of data and the participants' conditions. After obtaining permission from the participants, the entire interviews were recorded using an MP3 player.

The data analysis was conducted concurrently with data collection using the qualitative content analysis method developed by Granheim and Lundman (2004). Five steps are involved in the conventional method of analysis according to Granheim and Lundman's (2004) approach: 1) Implementation the entire interview immediately after each interview, 2) Reading the entire text for a general understanding of its content, 3) Identifying meaning units, condensed meaning unit, and primary codes 4) Classifying similar primary codes in more comprehensive categories and 5) Determining the main categories (33).

Therefore, the interviews were used as the unit of analysis in the present study. Following each interview, the researcher (the first author) listened to the audio file several times to gain a general understanding of it, and then the text of all the interviews was converted word by word into typed text (the first step). The second stage of the interview involved reading the text several times and identifying the sentences or paragraphs which were related to the central concept as meaning unit (the second step). Afterward, the meaning units were summarized, and appropriate codes were assigned (the third stage) (Table1). Following the reduction and compression process, similar codes were merged, and subcategories appeared (the fourth step). In this manner, the data reduction process continued until the final categories with a more general and abstract concept were extracted

(the 5th stage) (Table2). MAXQDA10 data management software was used for the analysis.

The Lincoln and Guba (1985) criteria was used for achieving trustworthiness and strength of the data, which included credibility, confirmability, dependability, and transferability (34).

To ensure the credibility, the researcher thought about the concept under study constantly, even while involving her daily activities (researcher's continuous engagement with the data). The rest of the research team members (second, third, and fourth authors) were given access to the coded texts to discuss and confirm the extracted codes, subcategories, and categories (Peer debriefing). Furthermore, the extracted textual codes were provided for three participants to confirm or correct the researchers' understanding of their experiences (member check). To ensure the dependability, the text of the audio files and copies of the interviews were presented to three qualitative analysts. Data were then coded and analyzed separately, yielding consistent results to the researchers, analysis and coding. To achieve confirmability, all stages of the research, from beginning to end, were meticulously recorded (audio files and copies of the interviews) and made available to experts for research auditing. To express the transferability, more details about the participants are presented in the current study, including demographic information such as age, education, number of pregnancies, type of pregnancy complications, and gestational age. In addition, the principle of maximum variation was observed in the participant selection.

Results

The participants included 26 women with high-risk pregnancies with maximum variation in age, gestational age, number of pregnancies, number of children, pregnancy complications, education, and occupation. The participants' average age was $32/5 \pm 6/65$ years, with a minimum age of 20 years and a maximum age of 46 years. The average gestational age was $28/7 \pm 9$ weeks, with the gestational age ranging from 7 to 40 weeks. Participants' number of children ranged from none children to five. So that 42.3% of participants had no children, 42.3% had one or two children, and 15.4% had

three or more children. 53.8% were housewives, 38.5% were employed, and 7.7% were students. Education-wise, 34.6% of participants had elementary school guidance, 30.8% had high school diplomas, and 34.6% had university degree. After analyzing and data reduction, the following explanation of spiritual well-being in high-risk pregnancy was obtained: Women with high spiritual well-being regard pregnancy as a gift from God; consequently, they regard everything they have encountered as a gift from

God and are content with it. During pregnancy, they feel precious and accept all of the difficulties and hardships of pregnancy; therefore, they are confident and rely on God. Healthcare providers also feel peaceful when they trust their superior force. Pregnant women’s sense of health is determined by their ability to perform religious duties, from which two main categories were extracted: "Meaning-seeking and belief in purposeful pregnancy" and " Relying on spirituality in achieving health".

Table 1. The process of coding from raw data, in subcategory of "Purpose and meaning in enduring difficulties of pregnancy

Meaning unit	Condensed meaning unit	Code
"I feel that with each passing day of my pregnancy, I am getting closer to the most beautiful part of my pregnancy. All these hardships will finally pass. I feel that night was not just a night, everyone thought it was very dark, but I thought the stars in the sky were spectacular. I'm talking about the night of my pregnancy. If I liken my entire pregnancy to one night, I'm so excited that I'm finally getting closer to the dawn. It's beautiful and sweet to hold my child safe and sound" (Participant No.7).	The beautiful days are approaching. All of the difficulties of pregnancy will eventually pass with the passage of the difficult days. My pregnancy is compared to a night for everyone, but for me, it is a night filled with spectacular stars that finally dawn. This is sweet and pleasing. Because, in the end, the baby's birth is healthy.	The end of all pregnancy difficulties Reaching the dawn after the night of pregnancy Likening a high-risk pregnancy to a dark night with spectacular stars The beauty of enduring the difficult days of pregnancy The birth of a healthy baby after a difficult pregnancy

1- Meaning-seeking and belief in purposeful pregnancy

The two subcategories of this main category were Pregnancy is a divine and valuable gift and Purpose and meaning in enduring difficulties of pregnancy (Table 2).

1-1. Pregnancy is a divine and valuable gift

Pregnancy was regarded as a divine gift by women with high-risk pregnancy. As a result, many of them felt valuable during their pregnancy. They acknowledged that God thought them worthy of bearing another creature in their womb. Other women described pregnancy as a divine miracle, so accepting its hardships and problems was bearable to them because it was a divine destiny. Therefore, many women did not complain to God about pregnancy problems and were satisfied with what God had blessed them. In cases where they expressed their dissatisfaction and complaint to

God due to poor pregnancy conditions, they later regretted doing so. They felt guilty or had a

pang of conscience and were concerned that their ungratefulness to God may have negative consequences for their fetus or pregnancy.

"Pregnancy is a God-given miracle; many women may never have this experience. But now God has given me this chance to experience it and become a more valuable being than before. I know I have to go through a lot, but if it's from higher, then I'm happy with everything, and that's why I never complain to God "(Participant No. 3).

1-2. Purpose and meaning in enduring difficulties of pregnancy

Many women admitted that because their goal at that stage of life and pregnancy is the birth of a healthy baby, they focused on the birth of a healthy baby more than anything else. Thus, they endured the sufferings, hardships, and problems related to high-risk pregnancy while hoping for a good pregnancy outcome during the difficult days of pregnancy. They relied on God, and trusted him confidently in this manner

while acknowledging that whatever comes from God is good (Table2).

Table 2. Codes, subcategories, categories emerged from the data analysis

Codes	Subcategory	Category
pregnancy is the granting of divine merit to a woman Feeling valuable in pregnancy Pregnancy is a divine miracle	Pregnancy is a divine and valuable gift	Meaning-seeking and belief in purposeful pregnancy
Accepting the difficulties of bed rest for the sake of the child Ignoring the troubles of being pregnant with twins because of gratitude to God Enduring the hardships of pregnancy due to having children	Purpose and meaning in enduring difficulties of pregnancy	
The ability to pray denotes a return to normalcy Being able to pray means feeling good about one's health Reading the Quran means feeling good about one's health	Feeling good about being able to perform religious duties	Relying on spirituality in achieving health
Belief in the normal results of tests by appealing to Imams Ensuring the health of the child by trusting in God	Feeling healthy in through trusting in God	
Lesoning that God works through doctors put women at peace The doctor's belief in God's help will make women feel calm The doctor's strong spiritual beliefs will put the women at ease Stating that saving the baby is a divine miracle by the doctor will helpwomen to find peace of mind	Relying on spiritual beliefs of the doctor	

A 35-year-old woman, 36 weeks pregnant, with heart disease, diabetes, and chronic hypertension, describes her feelings during pregnancy as follows:

"I feel that with each passing day of my pregnancy, I am getting closer to the most beautiful part of my pregnancy. All these hardships will finally pass. I feel that that night was not just a night, everyone thought it was very dark, but I thought the stars in the sky were spectacular. I'm talking about the night of my pregnancy. If I liken my entire pregnancy to one night, I'm so excited that I'm finally getting closer to the dawn. It's beautiful and sweet to hold my child safe and sound" (Participant No.7).

2-Relying on spirituality in achieving health

This category indicates that the mother's spiritual beliefs, trust, and connection to a higher power gave her confidence in

maintaining her health and that of the fetus. Health service providers' confidence and trust in their superior force also created a sense of peace within them, whereas the ability to perform religious and devotional duties led to good emotional health in the mother. This main category was derived from three sub-categories: Feeling good about being able to perform religious duties , Feeling healthy in through trusting in God, , Relying on spiritual beliefs of in the doctor (Table 2).

2-1- Feeling good about being able to perform religious duties

Women with high-risk pregnancies felt relieved when they communicated with God or imams through prayers and supplications. Because they considered the ability to communicate with God and perform religious duties a sign of their health.

"I couldn't pray standing up at all before, but now I can communicate with God and feel much better. I mean I felt much better, like a healthy person, because my relationship with God helps

my mood get better, and the peace that I have feels so good" (participant No.3).

2-2- Feeling healthy in through trusting in God

Women with high-risk pregnancies believed that praying and talking to God would ensure their well-being, the well-being of the fetus, and the whole pregnancy. Through vows, needs, and charity, the mother asked God to preserve her health and that of the fetus, reducing the tension of the dangerous pregnancy and replacing it with a sense of peace. The dominant feeling of these people was confidence in health in the shadow of faith in God. In this situation, the mother understood the feeling of well-being in a high-risk pregnancy. Participant No.4 states:

"I was feeling hopeless and sad after you told me your blood pressure was high. My husband was crying. My family was disappointed and upset. I appealed to Imam Hossein, made a vow, and my tests came out good. If God wants, anything is possible, I am sure that God takes care of me and my child" (Participant No. 4).

2-3- Relying on spiritual beliefs of the doctor

Understanding the spiritual beliefs of doctors also enabled women in high-risk pregnancies to develop a sense of spiritual well-being. The doctor's statements like "a doctor is a tool," "God is the one who protects," and "saving the fetus is a divine miracle" would relieve the mother feel help her understand her well-being. In this regard, a 37-year-old pregnant woman who is 29 weeks along and has been having water bag rupture since 25 weeks of pregnancy gives the following account of her experience:

"My doctor's expressions showed that she is just a tool and that someone else should do this for me. It's a miracle that the child is still alive now. Ask the one who has cared for you so far; he will keep you safe. I heard this from the doctor a lot because you know how strongly she believes in it, and it made me feel better. This talk was enjoyable for me in general (participant No. 10).

Discussion

According to the findings of this qualitative study which was conducted to explore the perception and experience of spiritual well-being in women with high-risk pregnancies, "spiritual

well-being in high-risk pregnancy" is explained in two main categories: "Meaning-seeking and belief in purposeful pregnancy " and

"Relying on spirituality in achieving health". The definition of spiritual well-being proposed by Paloutzian and Ellison (1982) includes two existential and religious components. "existence" refers to a horizontal aspect of spiritual well-being that includes meaning and purpose in life and it corresponds with the component of " Meaning-seeking and belief in purposeful pregnancy " in the current study, whereas "religion" refers to a connection with God or a higher power, which is similar to the component of " Relying on spirituality in achieving health". Nevertheless, Paloutzian and Ellison's definition of spiritual well-being (1982) is linked to general conditions and explains the relationship between a higher power and general conditions; however, in the current study, "reliance on spirituality to achieve health" emerged in the unique conditions of women with high-risk pregnancies (24, 35). Due to the unique circumstances surrounding high-risk pregnancies, women are most concerned about maintaining their health and that of their fetuses. Health anxiety is one of the components of well-being in women with high-risk pregnancies (36). In this regard, the correlation between spiritual well-being and physical and mental health has been shown in numerous studies (35, 37).

In the definition of Gomez and Fisher (2003), spirituality is a meaningful relationship with oneself, others, the world and a higher power. According to this model, spiritual well-being has four dimensions: personal, transcendental, environmental, and social. In a high-risk pregnancy, a sense of worth for the pregnancy despite the problems can explain the individual's relationship with oneself (38). According to the description of Samaram and Mahbobi (2017), the conceptual model of mental and social well-being, one aspect of well-being is the satisfaction of spiritual and psychological needs, with self-worth and self-esteem serving as its explanatory components (39). While in both the present study and the study of Gomez and Fisher (2003), self-worth appeared in explaining the concept of spiritual well-being.

According to Phenwan et al (2019), well-being and spiritual well-being in breast cancer

patients include three components: a Feeling life worthwhile, Sense of belonging in the community, and Feeling connected to the nature (25). The present study and Phenwan et al (2019) have discussed spiritual well-being in the context of high-risk pregnancy and cancer , respectively. However, spiritual well-being has not been demonstrated in these comparable conditions. In the current study, women with high-risk pregnancies regard their pregnancy as a gift from God. However, people who had cancer considered giving life more valuable and sought to preserve it. The sense of belonging to society and the relationship with spirituality were two distinct dimensions of spiritual well-being among cancer and high-risk pregnancy patients. This could be attributed to the unique circumstances of these two populations and their differing definitions, understandings, and experiences. Meaning-seeking and belief in purposeful pregnancy is the main category in explaining the concept of spiritual well-being in high-risk pregnancy, which emerged following the findings of the qualitative content analysis of the present study. Frankl (1985), a theorist and adherent of the originality of existence and existentialist, defines well-being as finding meaning and purpose in life. In his view, emotional disorders stem from people being unable to find meaning in their lives. Even in the most miserable circumstances, life has meaning. No matter what situation a person finds himself in, he is free to find meaning in those conditions, or he can find meaning in any painful and unchanging circumstance. Finding the meaning of those conditions allows a person to comprehend the feeling of well-being. If a person cannot give meaning to her life, she will feel empty, hopeless, bored, and tired. According to Frankl 's well-being theory, man is responsible for his own existence and life. His life defines values; and every adversity he encounters in life has a purpose. With the power of meaning, the human spirit can fight and overcome life's difficulties (40). Following the presentation of Frankl's theory of giving meaning to trials and tribulations, spiritual well-being was conceptualized as having two existential and religious components, where "existence" includes meaning and purpose in life, which is consistent with the dimension of

"Purpose and meaning in enduring difficulties of pregnancy " of the present study (24, 35).

On the other hand, the study's findings suggested that high-risk pregnant women are willing to tolerate the challenges of pregnancy for the sole reason of having children and becoming mothers. In this regard, Ryff's well-being theory (1989) introduced the characteristics of a well-being person, which include having a specific goal in life, having faith in one's goal, and believing that life has meaning (41). The mother's goal in high-risk pregnancy is to have a healthy baby. Therefore, such a mother finds it easy to accept the pregnancy with all its problems and difficulties as she relies and hopes on God in this manner. In this regard, Frankl (1985) explains in his theory that when a person is inevitably placed in a position of suffering and difficulty and is unable to change his situation, he can change his perspective and attitude and accept it bravely (40). Therefore, studies have shown that religious communities perceive a higher level of well-being than non-religious communities (42).

In the current research, one of the components of spiritual well-being in high-risk pregnancy emerged as a Pregnancy is a divine and valuable gift . In a consolidated study, Kaufman (2018) introduced self-worth and self-transcendence as other components of well-being. The findings of Kaufman's study (2018) indicated that well-being people have a lower sense of superiority and a higher sense of selflessness, belonging, and connection with themselves and their creator (43).

Furthermore, researchers have defined spirituality as having a meaningful connection with oneself, others, the world, and a higher power. Based on this, in high-risk pregnancy, a sense of worth for the pregnancy can explain the person's relationship with himself despite the problems (38). In contrast, a sense of worth in pregnancy expresses the purpose and significance of a high-risk pregnancy. In his definition of well-being, Ryff (1989) also includes the dimension of purposefulness and meaning in life. However, communication with God is not included in Ryff's definition of well-being (41).

In the present study, one of the main classes of the concept of spiritual well-being in high-

risk pregnancies is " Relying on spirituality in achieving health " In this regard, Tanhan (2019) demonstrated in his study that Acceptance and Commitment Therapy (ACT) is effective in neurotic disorders treatment and that using it promotes a sense of well-being in a person. One of the measures in this method is to assist the client in practicing prayer and worship consciously and insightfully. The therapist helps the client accept the current conditions by using examples from the Quran, Sunnah, and Hadiths. As a result, her stress is reduced, and she is able to understand the feeling of well-being. On the other hand, many spiritual and religious traditions lead to compassion, which enables people to live meaningful lives. Muslim religious rituals, such as praying and following the rules, necessitate focus and attendance. As a result, prayer using the method of conscious presence in truth, similar to "Meditation" techniques in Eastern traditions, is beneficial to the formation and promotion of well-being. So that the body movements of raising both hands at the start of each prayer up to the level of the ears, which means putting things aside, allow Muslims to experience being in the moment in that position, which is similar to mindfulness training techniques. Standing, bowing, and prostrating during prayer teach a person to be calm at the moment and communicate only with God. Furthermore, it is believed in Islam that all troubles and calamities are sent by God to test men. When Muslims lose a loved one, they say that we are all God's creation and will return to Him. With this belief, a mother with a high-risk pregnancy regards her life and the fetus as a gift from God, allowing them to understand the sense of well-being and peace. Therefore, becoming aware of one's spiritual resources can lead to acceptance and a sense of well-being. Accepting and paying attention to spirituality in the family and society can be used by mental health providers to improve people's health and well-being (44).

In general, the study's findings revealed that in a high-risk pregnancy, the mother's well-being is overshadowed by spirituality. While Ryff's definition of well-being has been

excluded and ignored this dimension of well-being (45), studies have shown that religious beliefs play a significant role in experiencing the feeling of well-being. Gallup, for example, discovered in his study that 86% of Americans considered religious and spiritual beliefs significant in their sense of well-being (46).

Spiritual well-being assists the mother in adapting to the stress of a high-risk pregnancy (47). And she feels good when taking a spiritual approach and performing religious rituals. Therefore, in the current study, religious beliefs, practices, and performing religious rituals were extracted as components for spiritual well-being in high-risk pregnancies. Thus, for women with high-risk pregnancies, one aspect of caring for them is to pay attention to their spiritual health. Following a review study on high-risk pregnancy, Holness (2018) explains that by creating an empathetic environment, the mother's spiritual well-being can be strengthened through prayer, meditation, and other valuable activities (3).

Chen et al (2021) in his study discovered a significant relationship between spiritual well-being and quality of life, anxiety, and depression in women with gynecological cancer. Thus, spiritual well-being is associated with less anxiety and depression and a higher quality of life. Higher levels of spiritual well-being are associated with formal religious affiliation. Non-religious patients should receive more spiritual care from healthcare providers to help them cope with the stressors associated with their illness. To help patients cope with the distress of their illness, healthcare providers should combine spiritual care with psychological counseling, particularly for those with poor quality of life or severe symptoms who experience anxiety and depression (48).

The strength of the research was conducting in-depth interviews to identify the dimensions and aspects of spiritual well-being in high-risk pregnancies. Despite Iran's cultural, social, and religious background, this concept is often overlooked in healthcare. The current study, however, had some limitations, one of which was caution in the generalizability of the results, which is a limitation of all

qualitative research. It is suggested to compare spiritual well-being in high-risk and low-risk pregnancies in the future research.

Conclusion

In high-risk pregnancies, seeking for meaning and purposefulness in pregnancy and relying on spirituality to achieve health are the main components of spiritual well-being. Since, understanding spiritual well-being decreases the tensions and discomforts caused by high-risk pregnancy. Thus, women with high-risk pregnancies should receive spiritual care as part of their comprehensive care.

Declarations

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Conflicts of interest

The authors declared no conflicts of interest.

Ethical Considerations

The first author conducted the sampling and data collection process while introducing herself to the participants and explaining the purpose of the study. Additionally, she assured them that their information would remain confidential and that they could withdraw from the study at any time. Also she obtained their written informed consent.

Code of Ethics

Code of IR.MUMS.NURSE.REC.1397.039

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Authors' contributions

TK and AE supervised the study. KM participated in data collection, data analysis,

FFH assisted with data interpretation. All authors have read and approved the manuscript.

References

1. Rezaee N, Salar A, Ghaljaei F, Seyedfatem N, Rezaei N. Understanding the Contextual Factors Affecting Women's Health in Sistan and Baluchestan Province in Iran: A Qualitative Study. *International Journal of Community based Nursing and Midwifery*. 2017; 5(4): 317.
2. Medeiros ALd, Santos SRd, Cabral RWdL, Silva JPG, Nascimento NdM. Assessing nursing diagnoses and interventions in labour and high-risk pregnancies. *Revista Gaucha de Enfermagem*. 2016; 37(3): e55316.
3. Holness N. High-risk pregnancy. *Nursing Clinics*. 2018; 53(2): 241-251.
4. Rodrigues PB, Zambaldi CF, Cantilino A, Sougey EB. Special features of high-risk pregnancies as factors in development of mental distress: a review. *Trends in Psychiatry and Psychotherapy*. 2016; 38(3): 136-140.
5. Bajalan Z, Sabzevari Z, Qolizadeh A, Abdollahi F. Prevalence of high-risk pregnancies and the correlation between the method of delivery and the maternal and neonatal outcomes. *Iranian Journal of Pediatric Nursing*. 2019; 5(3): 52-58.
6. Azizi A. The prevalence of the causes of high-risk pregnancies in pregnant women of Sonqor city. *Iranian Journal of Obstetrics, Gynecology and Infertility*. 2015; 22(18): 1-24.
7. M. Safari MS, B. Yazdanpanah PD, Sh. Yazdanpanah GP. High Risk Pregnancy and Some of Related Factors in Women who Referred to Vasouj Health and Medical Centers. *Scientific Journal of Hamadan Nursing & Midwifery Faculty*. 2008; 16(2): 18-28.
8. SoleimaniZadeh I, Danesh A, Basari N, Abaszadeh A, Arab M. Assessment of high pregnancy in Bam Mahdieh maternity hospital, Journal of Shahrekord university of medical Scienes. *Journal of Shahrekord University of Medical Scienes*. 2004; 6(2): 67-73.
9. He J, Wang Y, Liu Y, Chen X, Bai J. Experiences of pregnant women with gestational diabetes mellitus: a systematic review of qualitative evidence protocol. *BMJ Open*. 2020; 10(2): e034126.
10. Effati-Daryani F, Mohammad-Alizadeh-Charandabi S, Zarei S, Mohammadi A, Mirghafourvand M. Depression, anxiety and stress in the various trimesters of pregnancy in women referring to Tabriz health centres, 2016. *International Journal of Culture and Mental Health*. 2018; 11(4): 513-521.
11. Gupton A, Heaman M, Cheung LW-K. Complicated and uncomplicated pregnancies:

- women's perception of risk. *Journal of Obstetric, Gynecologic & Neonatal Nursing*. 2001; 30(2): 192-201.
12. Orri M, Gunnell D, Richard-Devantoy S, Bolanis D, Boruff J, Turecki G, et al. In-utero and perinatal influences on suicide risk: a systematic review and meta-analysis. *The Lancet Psychiatry*. 2019; 6(6): 477-492.
 13. Mirzakhani K, Hejazinia Z, Golmakani N, Mirteimouri M, Ali Sardar M, Tghi Shakeri M. The effect of exercise with special ball during pregnancy on duration of active phase of first stage of birth in nulliparous women. *The Iranian Journal of Obstetrics, Gynecology and Infertility*. 2015; 18(174): 12-21.
 14. Mirzakhani K, Hejazinia Z, Golmakani N, Sardar MA, Shakeri MT. The effect of birth ball exercises during pregnancy on mode of delivery in primiparous women. *Journal of Midwifery and Reproductive Health*. 2015; 3(1): 269-275.
 15. Nosrati A, Mirzakhani K, Golmakani N, Asghari Nekah M, Esmaeili H. Effect of paternal-fetal attachment on maternal-mental health: A randomized clinical trial. *Journal of Mazandaran University of Medical Sciences*. 2017; 27(152): 50-62.
 16. Mirzakhani K, Hejazinia Z, Golmakani N, Mirteimouri M, Sardar MA, Shakeri MT. The effect of execution of exercise program with birth ball during pregnancy on anxiety rate in nulliparous women. *The Iranian Journal of Obstetrics, Gynecology and Infertility*. 2014; 17(117): 8-16.
 17. Polat F, Karasu F, Yıldız M. The effect of religious attitudes on anxiety and psychological well-being in risky pregnancies: a cross-sectional study from turkey. *Journal of Religion and Health*. 2022; 61(4): 2992-3010.
 18. Maier K, Konaszewski K, Skalski SB, Büssing A, Surzykiewicz J. Spiritual Needs, Religious Coping and Mental Wellbeing: A Cross-Sectional Study among Migrants and Refugees in Germany. *International Journal of Environmental Research and Public Health*. 2022; 19(6): 3415.
 19. Philip S, Neuer Colburn AA, Underwood L, Bayne H. The impact of religion/spirituality on acculturative stress among international students. *Journal of College Counseling*. 2019; 22(1): 27-40.
 20. Badanta B, Rivilla-García E, Lucchetti G, de Diego-Cordero R. The influence of spirituality and religion on critical care nursing: An integrative review. *Nursing in Critical Care*. 2022; 27(3): 348-366.
 21. Damen A, Raijmakers NJ, Van Roij J, Visser A, Van den Beuken-Everdingen M, Kuip E, et al. Spiritual well-being and associated factors in Dutch patients with advanced cancer. *Journal of Pain and Symptom Management*. 2022; 63(3): 404-414.
 22. McCann E, Donohue G, Timmins F. An exploration of the relationship between spirituality, religion and mental health among youth who identify as LGBT+: A systematic literature review. *Journal of Religion and Health*. 2020; 59(2): 828-844.
 23. Dunn LL, Shelton MM. Spiritual well-being, anxiety, and depression in antepartal women on bedrest. *Issues in Mental Health Nursing*. 2007; 28(11): 1235-1246.
 24. Ellison CW. Spiritual well-being: Conceptualization and measurement. *Journal of Psychology and Theology*. 1983; 11(4): 330-338.
 25. Phenwan T, Peerawong T, Tulathamkij K. The meaning of spirituality and spiritual well-being among thai breast cancer patients: a qualitative study. *Indian Journal of Palliative Care*. 2019; 25(1): 119.
 26. Chehrizi M, Faramarzi M, Abdollahi S, Esfandiari M, Shafie rizi S. Health promotion behaviours of pregnant women and spiritual well-being: Mediatory role of pregnancy stress, anxiety and coping ways. *Nursing Open*. 2021; 8(6): 3558-3565.
 27. Chen J, Lin Y, Yan J, Wu Y, Hu R. The effects of spiritual care on quality of life and spiritual well-being among patients with terminal illness: a systematic review. *Palliative Medicine*. 2018; 32(7): 1167-1179.
 28. Mirzakhani K, Ebadi A, Faridhosseini F, Khadivzadeh T. Well-being in high-risk pregnancy: an integrative review. *BMC Pregnancy and Childbirth*. 2020; 20(1): 1-14.
 29. Mirzakhani K. Pregnant women's experiences of the conditions affecting marital well-being in high-risk pregnancy: A qualitative study. *International Journal of Community Based Nursing and Midwifery*. 2020; 8(4): 345.
 30. Kronborg H, Harder I, Hall EO. First time mothers' experiences of breastfeeding their newborn. *Sexual & Reproductive Healthcare*. 2015; 6(2): 82-87.
 31. Holloway I, Galvin K. *Qualitative research in nursing and healthcare*. 5th ed. Wiley & Blackwell; 2023.
 32. Guideline scope Intrapartum care for high-risk women - NICE. National Institute for Health And Care Excellence Guideline scope. Available at: <https://www.nice.org.uk/guidance>.(accessed 13 August 2015).

33. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, trustworthiness. *Nurse Education Today*. 2004; 24(2): 105-112.
34. Lincoln YS, Guba EG. *Naturalistic inquiry*: Sage; 1985; **30(0)**: 73-84.
35. Paloutzian RF, Ellison CW. Loneliness, spiritual well-being and the quality of life. *Loneliness: A sourcebook of current theory, research and therapy*. 1th ed. New York: John Wiley & Sons;1982.
36. Mirzakhani K, Khadivzadeh T, Faridhosseini F, Ebadi A. Development and psychometric evaluation of the High-Risk Pregnancy Well-Being Index in Mashhad: a methodological study. *Reproductive Health*. 2022; 19(1): 1-11.
37. Cheng Q, Liu X, Li X, Wang Y, Mao T, Chen Y. Improving spiritual well-being among cancer patients: implications for clinical care. *Supportive Care in Cancer*. 2019; 27(9):3403-3409.
38. Gomez R, Fisher JW. Domains of spiritual well-being and development and validation of the Spiritual Well-Being Questionnaire. *Personality and Individual Differences*. 2003; 35(8): 1975-1991.
39. Samaram E, Mahbobi R. Construction Of A Scale For Measuring Social Welfare With Its Emphasis on Subjective Well-Being (Feeling Welfare). *Social Development and Welfare Planning*. 2017; 5(18): 1-35.
40. Frankl VE. *Man's search for meaning*: 1th ed New York: Simon and Schuster;1985.
41. Ryff CD. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*. 1989; 57(6): 1069.
42. Diener E, Heintzelman SJ, Kushlev K, Tay L, Wirtz D, Lutes LD, et al. Findings all psychologists should know from the new science on subjective well-being. *Canadian Psychology/Psychologie Canadienne*. 2017; 58(2): 87.
43. Kaufman SB. Self-actualizing people in the 21st century: Integration with contemporary theory and research on personality and well-being. *Journal of Humanistic Psychology*. 2018; 63(1): 51-83.
44. Tanhan A. Acceptance and commitment therapy with ecological systems theory: Addressing Muslim mental health issues and wellbeing. *Journal of Positive School Psychology*. 2019; 3(2): 197-219.
45. Ryff CD, Keyes CLM. The structure of psychological well-being revisited. *Journal of personality and Social Psychology*. 1995; 69(4): 719.
46. Gallup-Healthways. Gallup-Healthways Well-Being Index: Methodology Report for Indexes. 2009. <http://wbi.meyouhealth.com/files/GallupHealthwaysWBI-Methodology.pdf> (accessed July1, 2015).
47. Amorim TV, Souza ÍEdO, Moura M, Vasconcelos A, Queiroz ABA, Salimena AMO. Nursing care 514 perspectives in high-risk pregnancy: integrative review. *Enfermería Global*. 2017; 16(2): 500-.
48. Chen J, You H, Liu Y, Kong Q, Lei A, Guo X. Association between spiritual well-being, quality of life, anxiety and depression in patients with gynaecological cancer in China. *Medicine*. 2021; 100(1): e24264.