



Identifying and Explaining Experiences of Fear of Childbirth and Coping Strategies: A Qualitative Study

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Abstract

Introduction: Fear of childbirth is a natural response that helps women prepare for childbirth. However, if fear is increased, it can lead to physical and emotional disabilities. This study aims to explain the experiences of fear of childbirth and, consequently, present a model for reducing such fears.

Methods: A phenomenological approach was used in this study. The participants were selected from among primigravida (women who were pregnant for the first time) through purposeful sampling, and the data were collected through open and unstructured interviews. Besides, the collected data were analyzed using Colaizzi's nine-stage method.

Results: Different types of fear of childbirth identified in this study were harmful to maternal and neonatal health, normal childbirth, the feeling of inability, and cesarean section. Besides, the reasons behind fear of childbirth were inadequate awareness, lack of trust in medical staff, negative experiences from information sources, and the environment of the maternity center. Finally, the most important strategies to deal with the fear of childbirth were faith in God, feeling confident, receiving support, raising awareness, and positive thinking which were used to design the model.

Conclusion: The findings of the study showed that women's self-confidence plays a key role in decreasing fear of childbirth. Therefore, effective measures should be taken to increase women's sense of self-confidence to reduce their fear of childbirth.

Keywords: Fear of Childbirth, Pregnant Women's Experiences, Phenomenology

Introduction

Fear of childbirth is a unique, multi-faceted, and multi-dimensional feeling experienced by a pregnant woman that is strongly influenced by her social context (1). Fear is a natural response that induces the protection and safety against childbirth and is a concern that helps women prepare for childbirth. However, if the fear is widespread, it can lead to physical and emotional disability (2). The severity of the fear of childbirth varies across countries (1). Studies in western countries show that more than 80% of women experience widespread anxiety, 20% of them have severe worries, and 6–10% of them have severe fear of childbirth (2-5).

Severe childbirth fears have many negative effects on both health and delivery outcomes for pregnant women (6), leading to serious consequences such as loss of peace (4, 7) and physical and emotional disability in women (2, 5).

Severe fear of childbirth due to increased uterine artery resistance leads to low neonatal Apgar scores, abnormal fetal heart rate patterns, and low birth weight of infants. Increased serum catecholamines and cortisol also lead to decreased pelvic blood flow and increased pain during labor (8-11) while disrupting normal labor and delivery, prolonged deliveries, emergency cesarean section, medical and surgical

interventions, and increased dissatisfaction with childbirth experiences (12-17).

Severe fear experienced by the mother due to psychological disorders such as postpartum depression and post-traumatic stress disorder lead to the mother's inability to play a maternal role and to have a loving relationship with the infant, problems in family relationships, fear of sexual intercourse, avoidance of pregnancy and childbirth, and delaying subsequent pregnancies (2,7,15,18).

Research has also shown that the rate of elective cesarean delivery is higher in women who have severe fears of childbirth (19, 20). According to research conducted in Iran, over 70% of pregnant women demand cesarean without medical necessity, 92% of which are due to fear of labor pain and normal delivery complications (21).

Cesarean delivery has many side effects and complications, including anesthesia such as headache, low back pain, aspiration (22), maternal death (23), increased bleeding and need for transfusions (24), and lung, pelvis, and urinary tract infections (25).

According to the previous studies, the causes of fear of childbirth include fear of labor pain (12, 26, 27), injury to the baby (28- 30) (28, 30), midwifery injuries and lack of adequate support (5), loss of control (12, 27), and the death of the mother and the baby (31). Saisto and Halmesmäki showed that the most common cause of fear of childbirth is a lack of confidence in midwifery staff (26), and Melender found that women were concerned about unfriendly behavior of medical staff (32).

Concerning maternity compatibility solutions, a study by Najafi et al. showed that participation in childbirth preparation classes reduces fear of childbirth (33). According to Melender's study, although childbirth education does create some fears, it is a good way to alleviate or eliminate the fears of pregnancy and childbirth and has many positive effects and results (15).

Given the sweeping effects of fear of childbirth on maternal and family health, this qualitative study seeks to identify and explain women's experiences of fear of childbirth and ways to cope with it.

Methods

The choice of a research approach depends on the research questions and research paradigm (34). As the present study focuses on fear of delivery, Husserl's phenomenological method (descriptive phenomenology) was employed. Besides, Colaizzi's method was used for data analysis as this method is able to provide a comprehensive account of the phenomenon under study (35). Colaizzi's method consists of nine steps:

Step 1: Describing the phenomenon of interest: To gain a thorough understanding of the research problem, the literature and researches related to the phenomenon under study were reviewed in order to enhance the theoretical sensitivity of the study and focus on the issue and its importance. Accordingly, the main question addressed in this study is How do pregnant women describe their perceptions, feelings, and experiences about fear of childbirth?

Step 2: Collecting data on the participants' descriptions of the phenomenon: The inclusion criteria were having first pregnancy, single pregnancy with cephalic presentation and low-risk pregnancy (no pregnancy complications, no internal and mental illness, no medication and absence of abnormalities in the fetus), gestational age over 36 weeks, having the age of 18 years and older, and willingness to participate in the study. The women who met the inclusion criteria were selected through purposive sampling. In this study, the sampling procedure began on Apr. 6, 2017, and continued until data saturation by interviewing 27 participants (Nov. 1, 2017). To conduct the interviews, the researcher herself and provided some explanations about the objectives and significance of the study. She also ensured the participants' confidence in the confidentiality of the interview and their data and obtained the participants' permission to record the interviews. The participants were also told that they were free to withdraw from the study at any time they wished. The interviews were conducted in a quiet and private environment by observing ethical issues at Imam Hossein Hospital's training classes. Each interview lasted 45-60

minutes, and the participants answered open-ended questions. In-depth and unstructured interviews were used to collect data. First, two preliminary interviews were conducted with the general question: *"Please talk about your fear of childbirth and your thoughts and feelings"*. The main interviews were then conducted with the general questions, and gradually more detailed questions were asked: *"What are your fears about childbirth?"*, *"What are the causes of your fears?"*, and *"What do you do to reduce your fears?"* In order to gain more information and to clarify the phenomenon under study, the researcher used various methods including providing feedback to the participants, requesting more explanation, repeating questions, asking for clarification, speculating, and using non-verbal language. During the interviews, the participants' nonverbal behaviors were recorded by taking notes. The researcher also tried to use a reminder to clarify the ideas extracted. For this purpose, during or after the completion of each interview, she recorded the reminders and used them to gather richer data and develop the analytical procedure.

Step 3: The participants' descriptions of the phenomenon were transcribed on paper. The descriptions of each participant were repeatedly reviewed by the researcher in order to explore and understand them more profoundly.

Step 4: The transcripts were reviewed, the main sentences and phrases were underlined and the main ideas expressed by the participants were extracted.

Step 5: At this step, the meanings of important expressions and statements were formulated and the related codes were extracted.

Step 6: The extracted themes were organized into clusters of concepts: To this end, similar concepts and themes were placed in the same clusters. Besides, the extracted codes were also categorized and the primary/secondary concepts were determined. The basic concepts were then categorized. All the codes and concepts extracted from the interviews were reviewed by experts in the field and a qualitative research expert to verify that the consistency of the concepts with the participants' statements and to ensure the

quality of the categories and the relationships of the concepts. The transcripts and the codes extracted from them were reviewed by the participants and their comments were used to complete the process. In general, the statements and ideas expressed in each interview were organized separately from the other interviews and they were classified into main and secondary concepts with respect to commonalties in the points referred to in the interviews.

Step 7: By combining all the extracted ideas, a complete and comprehensive description of the details of the phenomenon under study was obtained.

Steps 8 and 9: The participants were asked to confirm the descriptions, and new data were added to the comprehensive description.

In qualitative research, the concept of trustworthiness is used instead of two criteria of validity and reliability to evaluate the scientific accuracy of research (36). The concept consists of four indices: credibility, transferability, conformability, and dependability (37). Therefore, the four indices were used in this study to assess the credibility of the data.

To ensure the credibility of the research findings, the researcher was long engaged with the topic, the data, and the participants, and after analyzing the data, the extracted codes were referred to the participants to verify the contents of the codes.

To ensure the transferability of the findings, the research process and all its steps were described in detail to allow other researchers to understand how the findings were obtained.

To ensure conformability, the researcher tried not to interfere with her assumptions in the data collection process and to provide the participant's statements related to the identified concepts.

To ensure the dependability of the findings, a number of experts were asked to review the interview transcripts and the extracted codes and verify their consistency with the participants' statements as well as to ensure the quality of the classifications.

Moreover, in this study, all ethical considerations were observed, including the

approval of the research proposal by the Research Council and the Ethics Committee of the university, obtaining the necessary permits, obtaining consent from the participants and ensuring the confidentiality of their information, and allowing them to withdraw from the study if they wished so.

Results

The mean age of the participants was 25 years (20-30 years). Concerning the level of education, 9 participants held master's degrees, 12 held bachelor's degrees, 3 had associate's degrees, and 3 had secondary school diplomas. Of the 27 participants in the study, 16 were employed and the rest were housewives. All participants experienced their first pregnancy.

The participants' statements and views about

fear of childbirth were categorized into 13 main concepts, 28 secondary concepts, and 77 codes (Table 1).

The main concepts related to fear of childbirth identified in this study were harm to maternal and neonatal health, normal childbirth, the feeling of inability, and cesarean section. Besides, the reasons behind fear of childbirth were categorized into inadequate awareness, lack of trust in medical staff, negative experiences from information sources, and the environment of the maternity center. Furthermore, the most important strategies taken by the participants to cope with the fear of delivery were classified into faith in God, feeling confident, receiving support, raising awareness, and positive thinking.

Table 1. The main, secondary and codes concepts extracted from the data

Main concepts	Secondary concepts	codes
The natural delivery process Feeling powerless Harm to health Cesarean delivery	Labor pain, medical checkups, and examinations, interventions Inability and loss of control Harm to the mother and the baby The surgical process and surgical complications	Severe labor pain, scary and horrible labor pain, difficulty enduring labor pain. Disturbing and scary examinations, examinations by different people, many examinations. Feeling of inability to cope with pain, feeling unable to bear the pain, feeling unable to give birth. Feelings of loss of patience, feelings of loss of control over behavior, feelings of loss of self-control. Maternal physical injury, mental injury, maternal death. infant physical injury, mental injury, infant death. The process of anesthesia, injury during surgery. Complications of anesthesia, surgical site infection, postoperative pain.
Insufficient awareness Lack of trust in medical staff Maternity ward environment Negative experiences	Low awareness and experience Professional and ethical incompetence Lack of familiarity with the ward, crowdedness of the ward People & media	Incomplete information, incorrect information First pregnancy, lack of recognition Lack of skill, many mistakes, misdiagnosis Improper behavior and treatment, not paying attention, not strengthening the heart Other women's experiences and memories, other women's comments Content in books, sites, movies Unknown people, strange devices The high number of deliveries, the noise of other women
Faith in God Increasing awareness Receiving support	Trust in God, Prayer Education, studying, talking about fears Professional and social support	Entrusting everything to God, trusting God Secret and need with God, seek help from God

Positive thinking Feeling confident	Positive attitudes and positive visualization A sense of peace and security	Calmness, confidence, heartfelt belief, self-confidence Convenience, comfort, reassurance Receive professional support and care from a specialist physician and midwife, receive psychological, physical and information support from midwives Receiving physical and mental support from the spouse, receiving information and spiritual support from the mother Participate in training and preparation for childbirth classes, mental preparation, increase cognition, receive correct information Study site content, read books, increase information Talk to a specialist, talk to a midwife, talk to your spouse, talk to experienced people Being a mother, having a positive mindset, positive experiences of others, having a valuable goal Imagine pleasant results, beautiful ideas about the moment of meeting the child
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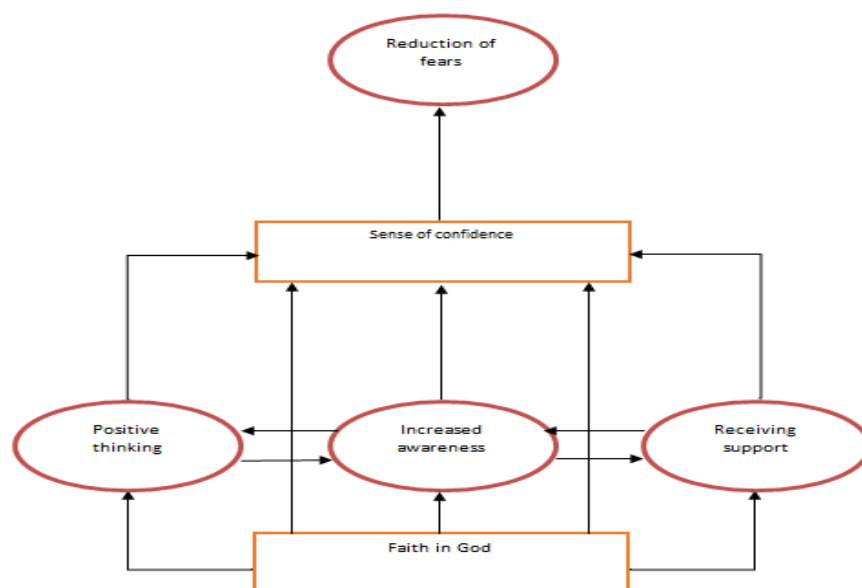


Figure 1. A model for reducing fear of childbirth

Discussion

The present study addressed women's experiences and perspectives on fear of childbirth and coping strategies and subsequently developed a model to reduce fear of childbirth (Figure 1).

The categories of fear of childbirth

1. Fear of harm to the health of mother and baby

The results of the study suggested the most common fears of childbirth experienced by the women were fear of injury to or death of the baby or the mother.

The women were concerned about neonatal injury including physical injury (scapular, pelvic and head injury), mental injury (oxygen deficiency injury), neonatal death, physical

injury (rupture, hemorrhage, and body injury), mental injury (demoralization, suffering, and discomfort), and maternal death. According to the participants, incompetency of medical staff and their poor performance can cause harm to women and infants. In addition, the misdemeanor of the delivery staff and their inattention to human dignity would result in unnecessary distress and suffering for women.

The results of studies conducted by Eriksson et al. Melender, and Arfaie et al. indicated that the fear of harm to health was common in women and they were concerned about the health of themselves and their infants (5,15,31). Khorsandi et al. (2014) and Deklava et al. (2015) found that the most common fear of childbirth was fear of infant injury (29,30). However, Serçekuş and Okumuş showed that fears of the harm to their health and that of their baby were less common among women (12).

2. Fear of the delivery process

This study showed that one of the most common fears of childbirth was fear of the childbirth process including labor pain and fear of undergoing medical examinations and interventions. Besides, fear of labor pain was the most common fear of childbirth.

Studies by Saisto and Halmesmäki and Marshall and Raynor also showed that the most common fear of the labor process is fear of labor pain (26, 27). According to the previous studies, fear of pain increases the amount of pain and stress during labor (2, 12, 15).

Excessive fear and worry increase the release of catecholamines such as adrenaline and potentiate painkiller stimuli, increase the perception of pain in the cerebral cortex and decrease pain tolerance, as well as causing the individual to fall into a fear-anxiety-pain dysfunctional cycle and thus this cycle continues due to the inhibition of endorphin function (38). Another fear related to the delivery process identified in this study was the fear of medical interventions. The participants in this study were concerned about interventions such as prescribing medications for pain, delivery with tools, and emergency cesarean section. A study by Serçekuş and Okumuş showed that mothers

are afraid of interventions such as episiotomy and delivery with tools (vacuum and forceps) (12). The results of another study by Marshall and Raynor showed that fear of interventions during labor and delivery was one of the most common fears among mothers (27). Similarly, Nystedt et al. found that performing midwifery and surgery interventions increased mothers' fear and anxiety (39).

Another fear related to the delivery process in this study was the fear of medical examinations. The participants in the present study were concerned that the examinations would be conducted extensively by different individuals, and also feared that the examinations would be painful and uncomfortable. Serçekuş and Okumuş also made similar observations in their study (12).

3. Fear of feeling powerless

Another fear of childbirth experienced by the participants in this study was the fear of feeling powerless. The participants were concerned about their ability to cope with pain, pain tolerance, and exposure to pain, and feared that they would lose patience, the ability to control their behavior, and self-control during labor and delivery. The results of a study by Slade et al. showed that one of the most important fears of childbirth was fear of an inability to adapt to pain (28). Similarly, Fisher et al. found that most women were afraid of feeling powerless and afraid to lose control (2). According to Eriksson et al. and Marshall and Raynor, women also had a fear of inability and loss of self-control (5, 27). Today, due to the medicalization of childbirth, women's ability and power to perform their labor freely and consciously have been undermined, and this, in turn, has increased their sense of helplessness, fear, and anxiety. In fact, the medicalization of childbirth involves limiting women in the labor bed and using a variety of medical methods and equipment (such as serum and monitoring devices, etc.) that reduce women's sense of control and increase their fear and anxiety and dependence on the medical staff. As a result, women are unable to participate actively in their labor and delivery and are deprived of the potential experience of

empowerment and competence (2, 39). The medicalization of childbirth has turned it into an unpredictable and uncontrollable process (12). Therefore, the feeling of losing personal control increases women's fear (2, 12).

4. Fear of cesarean section

One of the fears of women's delivery identified in this study was fear of cesarean section, a finding not reported in other studies. The participants in this study stated that they feared the process of anesthesia, intraoperative injury, complications of anesthesia, postoperative infection, and postoperative pain. The main reason for fear of cesarean section in this study was lack of confidence in the performance of the hospital surgical staff. Cesarean section by newly-employed and inexperienced specialists or female residents without the supervision of experienced professors seems to increase the complications and fear of the cesarean section.

Causes of fear of childbirth

1. Lack of trust in the hospital's medical staff

The most common cause of fear of childbirth in the present study was a lack of trust in hospital staff (specialists working in the maternity center and operating room). The participants stated that they were concerned about the incompetence of the medical staff, significant medical errors, wrong diagnosis, and unfriendly behavior and mistreatment on the part of the medical staff. According to the participants, incompetency of medical staff and their poor performance can cause harm to women and infants. In addition, the misdemeanor of the delivery staff and their inattention to human dignity would result in unnecessary distress and suffering for women. According to Arfaie et al., fear caused by mistrust in medical staff was also prevalent in pregnant women (31).

2. Insufficient awareness

Inadequate awareness was another cause of the fear of childbirth in this study. In the present study, primiparous women felt that their fears were due to low awareness and lack of prior experience. This finding is consistent with the results of other studies. A study by Soltani et al. showed that insufficient awareness of childbirth causes fear (40).

Melender's study showed that pregnant women have fears caused by unawareness (15), and Toohill et al. showed that primiparous women are more afraid of childbirth due to lack of previous experience compared to multiparous women (41).

3. The maternity ward environment

The present study showed that one of the causes of fear of childbirth was the environment of maternity ward. The participants were concerned that they would be more afraid to see other women and hear their cries. They were also afraid of being in the unfamiliar atmosphere of the maternity ward.

A study by Serçekuş and Okumuş showed that seeing others' fears triggers fear, so fear will be transmitted to women who see each other and hear each other's cries (12).

Studies by Lowe and Pascali suggested that entering an unfamiliar hospital environment and being surrounded by unfamiliar people and being subjected to multiple cares and treatment procedures are frightening (42, 43).

4. Negative experiences from information sources

The findings of this study indicated that one of the causes of fear of childbirth is negative experiences from information sources. In the present study, the participants reported about their fears induced by hearing about other women's negative experiences and memories and reading some of the content in books and websites and watching some videos because they think the same negative conditions would happen to them. Studies by Eriksson et al. (2006) and Melender show that hearing about other women's negative experiences creates fear (5, 15).

Important strategies for coping with fear of childbirth

1. Feeling confident

According to the findings of this study, one of the most important strategies for coping with fear of childbirth was the feeling of confidence. The key to eliminating or reducing fear of childbirth is a women's confidence. Women's confidence includes confidence in their ability to cope with challenges, efficacy, self-reliance, boldness, and courage, which is a key psychological component

of physiological natural childbirth (38). The sense of confidence in women increases their ability to adapt to labor, thereby reducing their fears and pain during labor (15).

The findings of the present study indicated that maternal confidence derives from four important factors, including faith in God, receiving support, raising awareness, and positive thinking.

2. Faith in God

The findings of this study indicated that stronger beliefs and faiths in mothers are an important factor in creating confidence and reducing fear of childbirth. This finding is consistent with the results of other studies (44-46).

A study by Shirvani et al. showed that religious beliefs lead to a sense of peacefulness in women during childbirth (44). In fact, women with high religious beliefs are more relaxed and confident due to the support of God and reliance on Him and the effort to gain support, awareness, and preparation for the important issue of childbirth, and can better use their cognitive and behavioral skills to cope with pain and problems (45).

One of the most important effects of faith in God is the comfort and reassurance of the heart and the reduction of fears and anxieties. The Holy Qur'an states: "Whoever puts his trust in God, he is sufficient for him" (47).

The main point is that religion gives meaning and a sense of self-control to people and the more people think of God as dominant over their affairs, the more their fear is reduced (48).

3. Receiving support

The results of this study indicated that another important way of coping with fear of childbirth is to receive professional and social support.

The participants in this study stated that they seek to receive professional support and care from a specialist physician and midwife and to receive physical, psychological, and informational support from midwives, especially private or accompanying midwives, to reduce fear of childbirth. All women also tended to have their mother or spouse next to them during delivery.

A study by Nilsson et al. found that receiving professional support (from midwives and specialists) and social support (from the spouse,

family members, close friends) would reduce fear of childbirth (49).

Providing social support and professional support to women will eliminate or reduce their fear (15). Providing ongoing emotional and psychological support to the mother creates comfort and reassurance for the mother and reduces fear (27,50) and pain (51).

Research shows that midwifery support by building confidence in women (52) increases peace, self-esteem, the opportunity for participation, cooperation, and the sense of self-control (27,53,54) and reduces fear of childbirth (7,15).

Midwifery support breaks the fear-stress-pain cycle (55), and providing midwifery support to mothers during labor and delivery, while alleviating fear and anxiety, reduces the release of catecholamines, thereby reducing the severity of pain. Furthermore, by improving the contractile power of the uterus, it reduces the duration of labor and delivery and facilitates and speeds up physiological delivery (56).

Gibbins and Thomson's study showed that in stressful and critical labor situations, continued encouragement, support, and care can reduce maternal fear and anxiety (50).

According to the participants' statements, midwifery behaviors such as friendliness and compassion, empathy, patience, attentiveness and listening, continuous presence, humane behavior and conduct, and honest and respectful communication induce relaxation and reassurance, reduce fear, anxiety, and suffering, increase the sense of control and empowerment (7,27,57,58) and enhance their satisfaction and promotion of their physical and mental health (59).

4. Raising awareness

According to the findings of the present study, another important strategy for coping with fear of childbirth was to increase awareness and preparation for childbirth. The present study showed that attending birth preparation classes and receiving appropriate information significantly enhances women's confidence in their ability to adapt to labor, reducing fear and stress associated with pregnancy and childbirth.

A study by Najafi et al. showed that participation in childbirth preparation classes reduces the fear of childbirth (33). Similarly, Khorsandi et al. showed that relaxation training as part of the training of childbirth preparation classes is effective in reducing fear of childbirth (29).

Aksoy et al. and Lally et al. found that women who are well-prepared for pregnancy during pregnancy by receiving correct information have greater expectations of actual pain levels and are less likely to experience inability. Such women have higher confidence, and this, in turn, reduces fear of childbirth (60,61).

5. Positive thinking

The present study suggested that another approach to coping with fear of childbirth was to have positive thinking that is consistent with the results of other studies (5, 15). It was shown that having positive attitudes such as paying attention to positive aspects like becoming the mother and others' positive experiences, as well as using positive visualization such as imagining the pleasant results of childbirth and having beautiful perceptions about the moment of mother and child visit creates positive thinking and reduces fear of childbirth.

The more positive attitudes toward pregnancy and childbirth, the less will be fear of childbirth. In fact, having a positive attitude and paying attention to the positive aspects of things, while removing mental limitations and negative beliefs, reduces fear of childbirth.

Limitations

The limitations of qualitative studies were also observed in the present study. The dependency of the research results to the conditions is one of the limitations while it can itself be a strength per se in terms of considering environmental, cultural, and social variables in qualitative research.

Conclusion

The results of this study showed that the most common fear experienced by the women was fear of harm to their health and that of their newborn. This fear is associated with both natural delivery and cesarean delivery methods and the main reason for this is the lack of trust in health care

providers including medical experts and practitioners. It was also shown that the most important factor in reducing fear of childbirth was confidence. The following steps need to be taken to build confidence in women and increase confidence in the health care system:

- Making fundamental changes and reforms to the human resources structure of healthcare and medical centers, such as promoting knowledge and skills, improving the behavior and performance of health professionals, focusing on increasing the sense of responsibility, and paying attention to meeting the needs of women while maintaining their human dignity through holding training courses on medical ethics, scientific re-training and skill-building for the medical staff (including specialists and experts) and basic training of all medical students, with full supervision of experienced professors on student performance in the operating room and delivery room, continuous monitoring and evaluation and providing feedback for the performance of the medical staff by a team of inspectors of the Ministry of Health and Treatment are deemed necessary.
- For all women to benefit from professional and social support and to raise their awareness and confidence, it is recommended that childbirth preparation classes for all pregnant women be appropriately and practically implemented as an integral part of prenatal care programs.
- Finally, physiological childbirth, care, and services can be provided by private midwives covered by insurance, and the possibility of the attendance of the spouse or mother in the delivery room can be facilitated by creating a private environment for childbirth in all hospitals.

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Conflicts of Interest

There was no conflict of interest in conducting the present study.

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