

Access this article online
Quick Response Code:

Website: www.jehp.net
DOI: 10.4103/jehp.jehp_896_23

Investigate mothers' perceptions and experiences of natural childbirth and quality of care in childbirth management based on Safe Childbirth Checklist: A qualitative study

Atefeh Kamrani, Mina Iravani¹, Parvin Abedi², Mahin Najafian³, Shahla Khosravi⁴, Narges Alianmoghaddam⁵, Bahman Cheraghian⁶

Department of Midwifery, Nursing and Midwifery School, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, ¹Reproductive Health Promotion Research Center, Midwifery Department, Nursing and Midwifery School, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, ²Department of Midwifery, Reproductive Health Promotion Research Center, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, ³Department of Obstetrics and Gynecology, School of Medicine, Fertility Infertility and Perinatology Research Center, Imam Khomeini Hospital, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, ⁴Department of Community Medicine, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, ⁵School of Public Health, Massey University, Palmerston North, New Zealand, ⁶Department of Biostatistics and Epidemiology, School of Health, Alimentary Tract Research Center, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

Address for correspondence:

Dr. Mina Iravani, Reproductive Health Promotion Research Center, Midwifery Department, Nursing and Midwifery School, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran. E-mail: minairavani2004@yahoo.com

Received: 24-06-2023
Accepted: 27-08-2023
Published: 28-09-2024

Abstract:

BACKGROUND: The Safe Childbirth Checklist (SCC) was designed in an effort to support health workers to perform essential tasks and improve the quality of care (QoC) for mothers and babies during childbirth. Given the fact that human experiences in any society can be influenced by cultural, economic, and social differences. Therefore, the present qualitative study aimed to investigate mothers' perceptions and experiences of natural childbirth and QoC in childbirth management based on SCC.

MATERIALS AND METHODS: The current study is a qualitative study that was conducted in 2022–2023 by targeted sampling on women who gave birth based on SCC in two hospitals in Ahvaz. Eighteen women participated in the interview sessions 1 month after giving birth. The conventional content analysis method was used to analyze the data.

RESULTS: Overall, 870 codes were extracted from the interviews. The interviewed mothers' satisfaction with the use of SCC was organized into seven main themes, namely "Satisfaction with the comprehensive support of the companion," "Satisfaction with the comprehensive support of the midwife," "Satisfaction with the emotional support of the husband," "Satisfaction with the mutual interaction between the midwife and the parturient mother," "Preparation for the challenges of different stages of childbirth and postpartum through training," "Satisfaction with the pain management strategies adopted by the companion," "Satisfaction with skin-to-skin contact and early breastfeeding" and "Satisfaction with the strengthened relationship between the couples and acceptance of the father's role after the husband's meeting with the parturient mother."

CONCLUSION: Implementation of SCC by providing evidence-based practice and midwifery standards to mothers and neonates can help improve women's experiences of the birth process. By reminding midwives to encourage women to have a companion during childbirth and by giving the necessary training to them about danger signs in every stage of childbirth from admission to discharge, this checklist can not only lead to positive birth experiences but also improve the interaction of mothers with midwives. Therefore, it is recommended that this checklist be used in maternity wards.

Keywords:

Childbirth, natural childbirth, qualitative study, quality of care, safe childbirth checklist

Introduction

Childbirth is an important milestone in a woman's life. In fact, a woman's

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

emotional and cognitive experience of childbirth is known as an important factor contributing to her physical and mental

How to cite this article: Kamrani A, Iravani M, Abedi P, Najafian M, Khosravi S, Alianmoghaddam N, *et al.* Investigate mothers' perceptions and experiences of natural childbirth and quality of care in childbirth management based on Safe Childbirth Checklist: A qualitative study. J Edu Health Promot 2024;13:332.

condition after childbirth.^[1] A positive birth experience can improve the mother's well-being and facilitate mother-baby bonding, while a negative experience can lead to a state of psychological distress and severe types of postpartum depression.^[2] Mothers will never forget their childbirth experiences. They tend to remember the incidents during labor and delivery along with the words and actions of the medical team. Accordingly, either they may feel grateful for their help and care, or their memories will be replete with anger and resentment for their neglect and cruel behavior. Proper health care creates in the mother a positive birth experience and a favorable attitude towards her next childbirth.^[3] The importance of the birth experience is so immeasurable that the World Health Organization (WHO), in addition to emphasizing the health of the mother and the baby, has placed the provision of integrated services for the mothers' mental health at the top agenda of the development goals for the years after 2015.^[4] Therefore, according to specialized standards, maternity units are required to set the stage for a satisfactory and safe delivery experience for mothers and babies.^[5] Although the experience of childbirth is an unpredictable phenomenon, it should bring about positive memories with minimal risk for the mother.^[6] Unfortunately, some of the very commonly used techniques in the birthing process not only have no benefit to maternal and newborn outcomes but can potentially cause risks for both the mother and the baby. When carrying out a treatment protocol, the midwife must be aware of how routine care can instill a negative attitude in the mother. For example, if the parturient mother is not allowed to take a suitable position for herself outside the bed, she will feel powerless and will not have the power to help herself during childbirth.^[7] By improving the psychological and emotional aspects of childbirth, however, modern childbirth methods such as non-pharmacological and supportive treatments can turn childbirth into a pleasant and enjoyable event for the mother, and by reducing the intensity of pain and fear, they can minimize the desire for elective cesarean section.^[8] Studies have shown that the parturient women's opinions and views about the care they receive during the various stages of childbirth substantially affect how this care is delivered and thus the acceptance and satisfaction of these women. A critical understanding of maternal care can increase the ability of midwifery personnel to properly perform their duties.^[9]

In western countries, next to the reduction of maternal mortality and perinatal mortality, the birth experience has received enormous attention, and many quantitative and qualitative studies have been conducted on the birth experience. The knowledge acquired about maternal childbirth experience has

helped care providers to improve the quality of their care.^[10]

Developed countries^[11-13] have shown that women's experiences of childbirth are influenced by the following factors: (a) women's expectations of childbirth, (b) their participation in the decision-making process, (c) the quality of support they receive; and (d) their relationship with caregivers.^[14,15]

The use of checklists in healthcare is becoming increasingly common to manage the complexities of clinical care and improve communication during clinical practice. Studies on using health checklists show how they can reduce risk through standardization and improve information transfer between providers, ensuring a consistent standard of care and reducing human error in stressful situations.^[16,17]

The WHO developed the Safe Childbirth Checklist (SCC) in an effort to support health workers to perform essential tasks and improve the quality of care (QoC) for mothers and babies during childbirth. This 29-item checklist (Additional file 1) targets 4 phases, which include: On admission, Just before childbirth, Soon after birth (1 h), and Before discharge.^[18-20] SCC provides an organized list of evidence-based essential birth practices that target the leading causes of maternal mortality worldwide. This checklist has standards for improving the quality of maternal and newborn care in health centers. To help translate this checklist into practice, this framework has eight domains of QoC and is accompanied by statements to assist clinicians in measurable delivery outcomes.^[21] Incorporating elements of the QoC framework into SCC can play an important role in improving mothers' childbirth experiences and promoting supportive and effective communication during childbirth.^[22-24]

In a study conducted on mothers' experiences of the QoC and the potential benefits of implementing WHO's SCC, it was shown that implementation of SCC can potentially improve the safety and QoC. In addition, adopting a qualitative approach in this study made it possible to identify additional aspects, such as the need for transparency in the admission phase and, maintaining dignity and protecting the rights of mothers in the decision-making process, which are necessary for better care quality.^[25]

Given the fact that human experiences in any society can be influenced by cultural, economic, and social differences,^[20] no study has thus far been conducted to investigate the impact of SCC on childbirth experience in Iran. Therefore, the present qualitative study aimed to investigate mothers' perceptions and experiences of

natural childbirth and QoC in childbirth management based on SCC.

Materials and Method

Study design and setting

After written permission was obtained from the WHO to translate the SCC (Additional file 2), the study protocol was approved by the Ethics Committee of Ahvaz Jundishapur University of Medical Sciences (IRAJUMS.REC1401.049), Ahvaz, Iran. Informed written consent was obtained from all participants, and they were assured that their identity and information would remain confidential during all stages of the research implementation and publication. This study is part of a mixed-methods doctoral dissertation with the aim of implementing the program of labor and delivery management based on WHO's SCC and evaluating its effect on maternal and newborn outcomes. Sampled started on May 6, 2022 and ended on June 12, 2022. After the first phase of the study was implemented, the second phase started, which involved a qualitative investigation of midwives' perceptions and experiences of managing labor and delivery based on SCC.

The study site included two hospitals in Ahvaz city in which management of labor and delivery, from admission to discharge, was done based on SCC. Ahvaz is a metropolis in southwest of Iran and the capital of Khuzestan province. It is the seventh most populous city in Iran, with 44.8% of its residents being of Persian descent and speaking various Farsi dialects and 35.7% and 15.8% being Arabs and Bakhtiari, respectively.

Study participants and sampling

The participants were selected by purposive sampling method from among the women who had given vaginal childbirth in the hospitals where labor and delivery were conducted based on SCC. The present study was conducted 1 month after their delivery. The reason for choosing this interval was to avoid any false positive or false negative experiences due to the excitement of having a baby.^[26] Eligible participants were primiparous women aged 19 years and above who had no history of mental disorders, were at a gestational age of 37 weeks and above, and had given birth to healthy babies through vaginal delivery. Women with a history of depression or any major medical conditions were excluded from the study. Primiparous women without previous childbirth experience were selected in this study because, based on evidence, previous labor experience in multiparous women can affect perception, emotions, and choice of delivery type.^[27]

Data collection tool and technique

After informed consent was obtained from the participants, qualitative data were collected by

conducting in-depth semi-structured interviews to delve into the mothers' childbirth experiences. The interviews were conducted by the first author (Ph.D. student of midwifery) using open-ended questions such as "Can you please tell me about your experience of labor and delivery?"

Then, using probing questions such as: "Please elaborate on that?" or "Can you please give an example?" and "What do you mean by this?" more detailed answers were elicited from the participants. The interviews were conducted at a time and place convenient to the participants (e.g., a health center, the women's own house, the physician's office at the hospital, and the office of the faculty member). The interview time varied between 20 and 60 min. Although data saturation was achieved after 13 interviews, we examined a total of 18 women. The interviews were conducted 1 month after the women had given birth and took place in a period of 5 months between December 2022 and March 2023.

Data accuracy and trustworthiness

To increase the trustworthiness of the data, Lincoln and Guba's four criteria of credibility, confirmability, dependability, and transferability were evaluated.^[28] In this research, the transcript of the interviews was read several times by the first author, who was immersed in the data, and the process of selecting semantic units and coding was done accordingly. Initial coding was done by re-reading each interview transcript and continuously reviewing the data. Then, the interview transcripts, the primary codes extracted from the transcripts, and the categories emerging out of the codes were provided to the second and third authors to ensure the accuracy and trustworthiness of the data and their analysis. Corrective comments from the other research team members were used. Also, the extracted primary codes, along with the emerging categories and themes, were provided to the third author, and her additional comments were used in the coding process. To ensure the accuracy of data interpretation, the participants were provided with the codes as well as the extracted sub-themes and themes.

Data analysis

The interviews were recorded and then transcribed verbatim. Conventional content analysis was used to analyze the data.^[29] Data analysis was done in the following steps: (a) repeated reading of the interview transcripts; (b) extracting the codes; (c) categorizing codes based on their differences or similarities; (d) identifying connections and relationships between subcategories to organize the main categories (themes).

These steps were taken by the first author under the supervision of the third author. No software was used to collect data.

Ethical consideration

After written permission was obtained from the WHO to translate the SCC (Additional file 2), the study protocol was approved by the Ethics Committee of Ahvaz Jundishapur University of Medical Sciences (IRAJUMS. REC1401.049), Ahvaz, Iran. Informed written consent was obtained from all participants, and they were assured that their identity and information would remain confidential during all stages of the research implementation and publication.

Results

In-depth individual interviews were conducted with 18 participants and lasted over 5 months in 2022–2023. Of all the women participating in this study, 10 were of Arab race were Bakhtiari, and one was Persian. The majority of the participants were housewives and had a university degree [Table 1]. Overall, 870 codes were extracted from the interviews.

After duplicate codes were removed, the number of codes was reduced to 560. Similar codes were merged into primary categories, which were then abstracted into eight main categories. The interviewed mothers' satisfaction with the use of SCC was organized into seven main themes, namely "Satisfaction with the comprehensive support of the companion," "Satisfaction with the comprehensive support of the midwife," "Satisfaction with the emotional support of the husband," "Satisfaction with the mutual interaction between the midwife and the parturient mother," "Preparation for the challenges of different stages of childbirth and postpartum through training," "Satisfaction with the pain management strategies adopted by the companion," "Satisfaction with skin-to-skin contact and early breastfeeding" and "Satisfaction with the strengthened relationship between

the couples and acceptance of the father's role after the husband's meeting with the parturient mother." [Table 2].

Satisfaction with comprehensive support of the companion

This is the most important theme based on the answers of the participants. It includes two sub-themes: "the companion's spiritual support" and "the companion's support through participation in the parturient mother's care processes."

The companion's spiritual support

One of the most common childbirth experiences of the primiparous women interviewed in this study was related to the spiritual support provided by the companion.

Some participants believed that they should ask God to bestow them the ability to give childbirth naturally, to keep the baby healthy, and to give them peace. They also considered the prayers of others to be as effective in seeking peace. A participant stated: "They allowed my companion to be by my side. She talked to me and told me that she was praying, so that I would give childbirth very well, and this made me feel calm. I was also praying a lot. My mother was with me and would keep telling me: 'Don't be afraid, I'm here with you and I'm praying for you to give childbirth soon.' Thank God, my fears were completely removed with my mother's prayers." (Participant No. 2).

Another participant described the positive effect of the companion's praying as follows: "My companion helped me a lot; she kept massaging me; she prayed for me, and thanks to her prayers, it was as if all my stress had been relieved." (Participant No. 4).

Some participants believed that the presence of a companion could play an encouraging role in helping the mother endure the pain and make natural childbirth easier. A participant said: "I was about to give childbirth and my pains were coming, I could not bear it anymore. My companion was encouraging me that it will end soon and with these pains, my delivery will be closer and I'll be able to see my baby. These words helped me a lot to be able to bear the pain." (Participant No. 3).

Companion's support through active participation in the care processes of the parturient mother

The presence of a companion had an important role in performing non-pharmacological pain relief methods and having the mother walk during labor. Not imposing restrictions on the presence of a companion and the companion's involvement in decisions related to the mother's care had a large contribution to the mother's satisfaction with childbirth. Most of the participants

Table 1: Demographic characteristics of the participants

Variable	Number
Age (years)	
18–25	10
26–30	5
31 and above	3
Education	
No high school diploma	4
High school diploma	4
University degree	10
Occupation	
Housewife	14
Employee	4
Ethnicity	
Arab	11
Lor	7
Fars	1

Table 2: Coding and identification of categories

Themes	Categories	Codes	Meaning units
Satisfaction with the comprehensive support of the companion	Spiritual support of the companion	The parturient mother's peace of mind and reduced anxiety due to her companion's praying	My companion used to say that I would pray for you, and this calmed me down and reduced my anxiety.
		The companion's encouragement of the parturient mother by telling her hopeful words	My companion encouraged me that it is about to end and with these pains, your delivery is getting closer.
	The companion's support through participation in the parturient mother's care processes	The companion as a bridge connection the mother and the midwife	When I was close to giving birth, I started to have nausea and vomiting and I felt pressure on my back. My companion quickly informed the midwife and after the internal examination, the midwife quickly transferred me to the delivery bed. If it weren't for my companion, I might've given birth on the same ordinary bed.
Satisfaction with the comprehensive support of the midwife	The midwife's spiritual support	Shortened labor	But when my mom stayed with me for an hour, my cervix was 4 centimeters dilated.
		Provision of care accompanied with empathy and attention	When the midwife introduced herself to me, she smiled at me and asked about my baby's name, and whenever she wanted to listen to the baby's heart, she called the baby by her name. She was very kind.
	The midwife's professional support	Satisfaction with the midwife's skillfulness in performing care practices correctly and quickly	When I was in pain and screamed, the midwife would come to my side and hold my hands, and she was not rude or yelling at all, and she was very patient, and when I asked her a question, she answered me very well, and treated me and my companion with respect.
Satisfaction with the emotional support of the husband	Creating a sense of tranquility	Husband's measures to create peace in the parturient mother	When I was admitted, I told the midwife who wanted to insert the angiocath that I have very bad veins (my veins are difficult to detect). She looked at the veins in my hand and said: "if anything, your veins are very good". When she quickly connected the angiocath with a single try, I realized that she knew the ropes, so I trusted her and was sure that she knows what she was doing.
	Creating a sense of security	Mother's understanding of husband support	When the midwife was sewing my stitches, she did it so quickly, and when she said it was done, I was surprised, because it was done so quickly.
The mutual interaction between the midwife and the parturient mother	Mutual cooperation	The positive effect of the mother's cooperation with the midwife in obtaining satisfactory results	When my husband saw me in pain, he got very upset all of a sudden and started to console me and hugged me, and I felt that my husband understood my condition and that made it easier for me to bear the pain. A feeling of peace took over my whole soul.
	Mutual respect	The positive effect of the mother's cooperation with midwives on their appropriate behavior	I thought that my husband was at home, but when I talked to him on the phone, I realized that he was waiting behind the door of the labor room, and I took heart and felt a sense of security.
Preparation for the challenges of different stages of childbirth and postpartum through training	Training tailored to the parturient mothers' needs and understanding	Providing sufficient information according to the needs and understanding of the baby in different stages of childbirth and after it	The midwife told me what to do at every stage of my delivery and I followed all of them. I listened to all the words of the midwife and followed every instruction she gave me. During childbirth, if the midwife told me to breathe, I breathed, and if she told me to push, I did the exact same thing. Because I cooperated with the midwife, I didn't get stitches.
			when the midwife saw that I was following her instructions, she encouraged me, and whenever she came over me, she smiled at me and even would brought me fruit juice herself and pour it into a glass so that I can drink, even though I had a companion. Of course, I kept thanking her.
			The midwife gave me the instructions in simple language, she spoke to me in my own language, so that I could understand, and this was very good, and she gave me a series of other instructions at each stage of my delivery, and she taught me like this, which was very good. I knew what to do and I would not forget.

Contd...

Table 2: Contd...

Themes	Categories	Codes	Meaning units
Satisfaction with pain coping strategies with the help of the companion	Elimination of the parturient mothers' worries by raising their awareness	The positive effect of the midwife's training on the elimination of the mother's anxiety in different stages of childbirth and after it	When I was close to giving birth, I felt like passing stool, I was very stressed and I was afraid lest I would make the bed dirty, but the midwife told me that this is a good sign and it means that my delivery is close, and she told me to push whenever I felt like this and not to worry at all. After the birth of the baby, I was very worried because I had no experience in childbirth, and I didn't know what I should if there was a problem with the baby. I asked many of these questions while the midwife was sewing the episiotomy, but before discharge, all mothers who had given birth were gathered in a room, and they explained to us the breastfeeding training and the danger signs for the baby and for ourselves. With these trainings, my stress decreased a lot.
	Change of attitude towards vaginal delivery and breastfeeding style after training	Loss of the feeling of fear of vaginal delivery after being trained by midwives	When I was admitted, I didn't want to have a natural birth at all and I wanted to have a cesarean section, but when the midwife told me about the complications of cesarean delivery for the mother and the baby, I changed my mind.
		Deciding to breastfeed after being trained by the midwife	I even brought baby bottles and formula. I was not going to breastfeed my baby because I thought that breastfeeding would distort my body, but when the midwife told me about the benefits of breast milk for the baby, I completely changed my mind.
	Massage by a companion for pain relief	Reduced knee pain after receiving massage on the abdomen and lower back by the companion	When my sister didn't massage my stomach and back for a moment, all my pains would return. It was very fortunate that I had a companion who could massage my back.
	Using mindfulness techniques and creative visualization to relieve pain	Reduced labor pain after the companion's (patient's mother) talking about the baby and recalling her own fetal memories	My mother used to talk about the baby and told me that when she is born, I will forget all my pains. My mother used to talk about her own childbirth when she was carrying me, and this way I was distracted from the pains.
Satisfaction with skin-to-skin contact and early breastfeeding	Using stretching techniques for pain relief with the help of a companion	Reduced pain by doing stretching exercises with the help of the companion	With the help of my companion, I was able to perform these stretching movements when I was in pain during labor. I used the companion as a support. Sometimes she would hold my hand and sometimes she held my back still so that I could do the movements more easily, which was very good.
	Hydrotherapy technique for pain relief with the help of a companion	Reduced pain by taking a warm shower with the help of the companion	If she wasn't with me, I wouldn't have been able to get out of bed and get back under the shower all by myself, because my midwife had three other mothers besides me to take care of, and she couldn't be with me all the time.
	Mother's feeling of belonging and love for the baby after skin-to-skin contact	The mother's feeling of dependence on the baby	When they placed the baby on my abdomen, I felt a strange feeling of love, as if the baby was a part of me that I can't live without.
		The mother's feeling of ownership and attachment to the baby	When the baby was placed on my abdomen after giving birth, it was as if I was given, for the first time, something that was completely mine, and a strange feeling of love took over my entire being.
	Feeling of motherhood after skin-to-skin contact	Awakening of maternal instinct with skin-to-skin contact	When the baby was placed on my abdomen, I realized what it feels like to be a mother, I had no such feeling before that, but after the skin-to-skin contact, I unconsciously loved the baby very much.
	Positive attitude towards breastfeeding after skin-to-skin contact	Changing the mother's decision to breastfeed following the infant's searching effort to feed from her breast during skin-to-skin contact	When the baby was placed on my abdomen and I saw that the baby was looking for my breast to feed, I felt very sorry for him and I saw how eagerly he was trying to latch on his food source. Then I changed my mind and put my breast in his mouth and breastfed him milk.

Contd...

Table 2: Contd...

Themes	Categories	Codes	Meaning units
	The positive effect of skin-to-skin contact on the successful initiation of breastfeeding	Milk flowing from the mother's breast immediately after skin-to-skin contact	My sister didn't want to give her own milk to her baby, because she didn't have milk. I thought that like my sister, I can't give my own milk to the baby, and I don't have milk, but when they put the baby on my abdomen, I felt a shooting pain in my chest, and when I pressed my hand on my breast and saw that the my milk was coming, I got very happy. Of course, they didn't put my sister's baby on her abdomen, and they had given her the baby to breastfeed two hours later, but they gave me my baby right away without cutting the umbilical cord.
Satisfaction with the strengthened relationship between the couples and acceptance of the father's role after the husband's meeting with the parturient mother	Preparation to accept the paternal role	The first communication between the father and the fetus is when he sees his wife in pain	My husband put his hand on my abdomen and left it there and started talking to the baby, telling her that daddy loves you very much! Don't bother mommy and come quickly. It was the first time that he put his hand on my abdomen and talked to the baby and called himself daddy.
	Improved relationship with the husband	The mother's love to husband becoming deeper after receiving emotional support during childbirth	When the midwife let me see my husband, he noticed that I had been through a lot of pain, and he started pampering me. When I was crying because of the pain, he was also crying and kept telling me that he loves me and cheered me up. It was then that I realized I love him too.

admitted that having a companion by their side made them feel more confident during labor and after delivery because, in case of a need for a health care provider, the companion would immediately inform the caregivers. In fact, the participants regarded their companions as a bridge facilitating their communication with the midwife.

According to one of the participants: "The presence of a companion encouraged me. Whenever I needed a midwife to come up for me, my companion would inform the midwife. When I was close to giving childbirth, I started to have nausea and vomiting and I felt pressure on my back. My companion quickly informed the midwife and after the internal examination, the midwife quickly transferred me to the delivery bed. If it weren't for my companion, I might've given birth on the same ordinary bed." (Participant No. 10).

Another mother said: "I was close to giving childbirth, and my back was under a lot of pressure. My companion informed the midwife, and after being examined by the midwife, I was transferred to the delivery bed." (Participant No. 7).

Many participants considered the presence of a companion to be effective in reducing the length of labor.

"When I was admitted, my water bag (i.e., amniotic sac) had ruptured and the midwife told me that my cervix was 2 centimeters dilated. My mother was supposed to come from another city, and it took her 2 h to arrive. When my mother came with me, my cervix was still 2 centimeters dilated. But when my mom stayed with me for an hour, my cervix was 4 centimeters dilated. My mom's presence was very comforting for me, and I felt that my strength was multiplied because of my mom's presence." (Participant No. 1).

Satisfaction with the comprehensive support of the midwife

This theme includes two sub-themes, namely "midwife's spiritual support" and "midwife's professional support."

Midwife's spiritual support

Emotional care and support, as the interviewed women in this study stated, were as important as physical care, and care with empathy and attention was one of the factors leading to a positive childbirth experience.

All the participants were of the opinion that the caregivers were able to understand their pain in a satisfactory way. They tended to cheer the parturient women up and encourage them to be hopeful and have peace of mind so that they could have sufficient energy to continue the labor when they were tired. The women expressed that the caregivers behaved kindly, managed to guess the women's needs, and tried to satisfy them.

"When the midwife introduced herself to me, she smiled at me and asked about my baby's name, and whenever she wanted to listen to the baby's heart, she called the baby by her name. She was very kind, and even though I had a companion with me, when the midwife came up to me, I had an inexplicable peace." (Participant No. 5).

"When I was in pain and screaming, the midwife would come up by my side and hold my hands, and she was not rude or yelling at all. Rather, she was very patient, and when I asked her a question, she would answer me very well and treat me and my companion with respect. I felt wonderful when she was by my side." (Participant No. 11).

Midwife's professional support

The majority of the participants believed that when a midwife is skillful enough to perform the practices, the

mothers will gain more trust in her, and this gives them feelings of encouragement and peace of mind. In fact, the mothers' satisfaction with the midwife's skillfulness in performing care practices correctly and quickly has been reported as a factor contributing to their positive birth experience.

As one of the parturient women put it: "When I was admitted, I told the midwife who wanted to insert the angiocath that I have very bad veins (my veins are difficult to detect). She looked at the veins in my hand and said: "if anything, your veins are very good." When she quickly connected the angiocath with a single try, I realized that she knew the ropes, so I trusted her and was sure that she knows what she was doing." (Participant No. 8).

Another woman talked about her quick recovery from the episiotomy incision: "I was very afraid of getting stitches, but the midwife was sewing my stitches so quickly, and when she said it was done, I was surprised, because it was done so quickly. My midwife had a lot of experience and from the beginning when I was hospitalized, she was very attentive to me and regularly took my pulse, checked my blood pressure, and listened to the baby's heart." (Participant No. 6).

Satisfaction with the emotional support of the husband

All participants were very satisfied with the fact that they were allowed to see their husbands or talk to them on the phone. They all cited the positive effect of feeling empathy and understanding from their husbands, which helped them to endure the pain of childbirth. This theme includes two sub-themes, namely "creating a sense of tranquility" and "creating a sense of security."

Creating a sense of tranquility

The presence of their husbands during labor and delivery, even outside the maternity, was said to give the women in our study psychological peace and strength.

In response to the question about how she felt when seeing her husband, one of the participants said: "I was allowed to see my husband in the entrance corridor to the maternity. When my husband saw me in pain, he got very upset all of a sudden and started to console me and hugged me, and I felt that my husband understood my condition, and that made it easier for me to bear the pain. A feeling of peace took over my whole body, and when I returned to the maternity and the midwife examined me, to her surprise, my cervix had opened very well, and she said: If only you had seen your husband sooner." (Participant No. 5).

Creating a sense of security

The women interviewed in our study admitted that the presence of their husbands in the hospital and meeting

him at different intervals created a sense of security in them.

As one of the women recounted: "Before seeing my husband, it was very difficult for me to bear the pain, and I kept telling myself that I'm in pain and my husband doesn't know what I had been through. I thought that my husband was at home, but when I talked to him on the phone, I realized that he was waiting behind the door of the labor room, and I took heart and felt a sense of security." (Participant No. 12).

Satisfaction with the mutual interaction between the midwife and the parturient mother

Most of the participants attributed their satisfaction with childbirth largely to their efficient communication and mutual cooperation with the birth attendant. This theme includes two sub-themes: "mutual cooperation" and "mutual respect."

Mutual cooperation

Most of the interviewed women highlighted the positive effect of the mother's cooperation with the midwife on the satisfactory outcomes of childbirth. According to one of them: "The midwife told me what to do at each stage of my delivery, and I followed all of what she said. I listened to all her words and did every single instruction she gave me. During the delivery, if the midwife told me to breathe, I would breathe, and if she told me to push, I would do exactly the same thing, and because I cooperated well with the midwife, I didn't get stitches. I'm very satisfied with my delivery, because even though it was my first delivery, I didn't get stitches, the reason was that I listened to all her words and I followed every single instruction she gave me." (Participant No. 3).

Mutual respect

Some of the participants believed that good treatment of midwives results from the cooperation of the parturient mothers with the midwives, and if some mothers are unhappy with the treatment of their midwives, the blame should be placed on their own behavior. In fact, the women in this study considered mutual respect between the mother and the midwife as an indispensable prerequisite for the proper behavior of the midwife.

One of the interviewed women said: "The midwife gave me the necessary trainings and I followed all of them, and when the midwife saw that I was following her instructions, she encouraged me, and whenever she came over me, she smiled at me and even would brought me fruit juice herself and pour it into a glass so that I can drink, even though I had a companion. Of course, I kept thanking her, and at the time of my delivery, I prayed for her to get whatever she wished for." (Participant No. 13).

Preparation for the challenges of different stages of childbirth and postpartum through training

All participants attributed an important part of their satisfaction with childbirth to the information and training they received. According to the contents of the checklist, this included the importance of the presence of a companion during labor, danger signs during labor and in different stages of labor and after delivery, requests for help from midwives, the necessity of staying at the hospital for at least 24 h, skin-to-skin contact between the mother and baby, breastfeeding, family planning education, arrangement of follow-up appointments after discharge, and maternal and newborn risk symptoms after discharge. This theme includes three sub-themes: "Training tailored to the parturient mothers' needs and understanding," "Elimination of the parturient mothers' worries by raising their awareness," and "Change of attitude towards vaginal delivery and breastfeeding style after training."

Training tailored to the parturient mothers' needs and understanding

According to the mothers participating in this study, one of the main reasons for their positive experience of childbirth was related to the midwives' training according to different stages of childbirth and the women's getting prepared for each stage. One of the participants recounted: "The midwife gave me the instructions in simple language; she spoke to me in my own language, so that I could understand, and this was very good, and she gave me a series of other instructions at each stage of my delivery; the way she taught me was very well. I knew what to do and I didn't forget anything." (Participant No. 4).

Elimination of the parturient mothers' worries by raising their awareness, Making them mentally prepared to deal with the challenges of different stages of childbirth, and providing them with sufficient information when faced with danger signs reduced their stress and promoted their performance.

"When I was close to giving birth, I felt like passing stool, I was very stressed and I was afraid lest I would make the bed dirty, but the midwife told me that this is a good sign and it means that my delivery is close, and she told me to push whenever I felt like this and not to worry at all. She told me that all women have this feeling at this stage. With her reassurance, my stress disappeared." (Participant No. 2).

Also, providing sufficient information when faced with maternal and newborn risk symptoms reduced stress and promoted the mothers' proper performance in relation to breastfeeding and how to care for the baby after discharge.

"After the birth of the baby, I was very worried because I had no experience in childbirth, and I didn't know what I should do if there was a problem with the baby. I asked many of these questions while the midwife was sewing the episiotomy, but before discharge, all mothers who had given birth were gathered in a room, and they explained to us the breastfeeding training and the danger signs for the baby and for ourselves. With these trainings, my stress decreased a lot." (Participant No. 9).

Change of attitude towards vaginal delivery and breastfeeding style after training

Receiving sufficient information from the midwife about the benefits of natural childbirth and breastfeeding has changed the mothers' attitudes and behavior.

"When I was admitted, I didn't want to have a natural birth at all and I wanted to have a cesarean section, but when the midwife told me about the complications of cesarean delivery for the mother and the baby, I changed my mind. Because I thought that cesarean section had no complications at all. I even brought baby bottles and formula. I was not going to breastfeed my baby because I thought that breastfeeding would distort my body, but when the midwife told me about the benefits of breast milk for the baby, I completely changed my mind." (Participant No. 3).

Satisfaction with pain coping strategies with the help of the companion

Training and using common non-pharmacological pain relief methods to control and manage labor pain with the help of companions were cited by the participants as important factors contributing to their positive experience of childbirth. Satisfaction with non-pharmacological pain relief methods included the following sub-themes: "Massage by a companion for pain relief," "Mindfulness techniques and creative visualization for pain relief with the help of a companion," "Stretching techniques for pain relief with the help of a companion" and "Hydrotherapy technique for pain relief with the help of a companion."

Mindfulness techniques and creative visualization for pain relief with the help of a companion

Some participants expressed that their companions used methods during labor to distract them from the pain of childbirth and tried to visualize peaceful and happy moments instead. As one of the participants put it: "My mother used to talk about the baby and told me that when she is born, I will forget all my pains. My mother used to talk about her own childbirth when she was carrying me, and this way I was distracted from the pains. She used to tell me how I could become a mother if I didn't feel pain, and she told me to think about the moment when I would hug the baby. This way, my pain would be relieved a lot." (Participant No. 6).

Massage by a companion for pain relief

According to the participants, when their companion massaged their back and waist, their labor pain would be relieved, and they were satisfied with this method.

"I was in a lot of pain as if my back vertebrae were coming apart. The midwife taught my sister how to massage my back, and my sister acted accordingly, and I felt less pain, but when my sister didn't massage my stomach and back for a moment, all my pains would return. It was very fortunate that I had a companion who could massage my back." (Participant No. 8).

Stretching techniques for pain relief with the help of a companion

From the participants' point of view, performing stretching exercises with the help of a companion is effective in reducing labor pain, and they were satisfied with this method.

"In the childbirth preparation class, I had learned how to do stretching exercises to reduce pain, and with the help of my companion, I was able to perform these stretching movements when I was in pain during labor. I used the companion as a support. Sometimes she would hold my hand and sometimes she held my back still so that I could do the movements more easily, which was very good." (Participant No. 1).

Hydrotherapy technique to reduce pain

Most of the participants took hot water showers during their labor with the help of a companion, and from their point of view, this method could not only effectively reduce the pain of labor but also make them feel relaxed. According to them, one of the factors that allowed them to use the hot water shower was the presence of a companion next to them, which was of considerable help. Otherwise, they maintained, it was not possible to take a hot water shower due to the overcrowding of the maternity and the small number of midwives.

One of the parturient mothers said: "When I went under hot water, my pain was eased and I quickly returned to my bed with the help of my companion, but as soon as I lay down, my pain intensified again. My companion helped me again to take a hot shower once more. If she wasn't with me, I wouldn't have been able to get out of bed and get back under the shower all by myself, because my midwife had three other mothers besides me to take care of, and she couldn't be with me all the time." (Participant No. 7)

Satisfaction with skin-to-skin contact and early breastfeeding

From the participants' point of view, the moments of skin-to-skin contact with the baby are the most enjoyable

and pure moments in their lives. This theme includes four sub-themes: "Mother's feeling of belonging and love for the baby after skin-to-skin contact," "Feeling motherhood after skin-to-skin contact," "Positive attitude towards breastfeeding after skin-to-skin contact," and "The positive effect of skin-to-skin contact on the successful initiation of breastfeeding."

Mother's feeling of belonging and love for the baby after skin-to-skin contact

The participants regarded skin-to-skin contact as a factor contributing to their attachment to the baby. Some participants declared that the first sense of attachment to the baby came after the first skin-to-skin contact, and that this attachment became familiar in an inexplicable manner.

"Until I saw the baby and placed him on my abdomen, I had no feelings for him, but when he was placed on my abdomen, I felt a strange feeling of love, as if the child was a part of me that I couldn't live without." (Participant No. 13).

Some participants stated that after making skin-to-skin contact for the first time, they felt a sense of ownership and lasting attachment to the baby, which they strangely got used to.

"When the baby was placed on my abdomen after I gave birth, it was as if I had for the first time something that was completely mine, and I had to use everything in my power to properly care for him, and a strange feeling of love took over my whole being, which is still there." (Participant No. 7).

Feeling of motherhood after skin-to-skin contact

Some women reported that they felt motherhood for the first time after they had skin-to-skin contact with the baby. They stated that after skin-to-skin contact for the first time, the maternal instinct was awakened in them.

In this regard, a mother pointed out: "I had heard a lot from my mother about how incomparable loving a child is to any other feelings, but not until I put the child on my abdomen, could I understand what my mother said when the child was on my abdomen. I just realized what it feels like to be a mom. Before that, I had no feelings, but after skin-to-skin contact, I unconsciously loved her a lot." (Participant No. 7).

Positive attitude towards breastfeeding after skin-to-skin contact

Some mothers experienced a change in their attitude towards breastfeeding after observing the baby's searching effort to feed from their breast during skin-to-skin contact, and this made them decide to

breastfeed despite their previous decision to bottle-feed the baby.

"I didn't like to give my own milk to the baby, I even brought baby bottle and formula for the baby in the hospital, but when the baby was placed on my abdomen and I saw him looking for my breast to feed, I felt very sorry for him and I saw how eagerly he was trying to latch on his food source. Then I changed my mind and put my breast in his mouth and gave him milk, and then I threw away the bottle and handed the formula to the maternity. If the baby hadn't been placed on my abdomen, maybe I would've never given him my own milk." (Participant No. 4).

The positive effect of skin-to-skin contact on the successful initiation of breastfeeding

According to one of the participants, the success in starting breastfeeding was because of the early contact of the mother with her baby through skin-to-skin contact, which caused the milk to flow from the mother's breast immediately after the contact.

"My sister didn't want to give her own milk to her baby, because she didn't have milk. I thought that like my sister, I can't give my own milk to the baby either, but when they put the baby on my abdomen, I felt a shooting pain in my chest, and when I pressed my hand on my breast and saw that the my milk was coming, I got very happy. Of course, they didn't put my sister's baby on her abdomen, and they had given her the baby to breastfeed two hours later. But they gave me my baby right away before cutting the umbilical cord." (Participant No. 2).

Satisfaction with the strengthened relationship between the couples and acceptance of the father's role after the husband's meeting with the parturient mother

Seeing the mother from time to time outside the labor room or speaking with her on the phone was said to make the father ready to perceive and accept the sense of fatherhood, to have a bond with the child, and to improve the relationship with his wife. This theme includes two categories: "Preparation to accept the paternal role" and "Improving relationship with husband."

Preparation to accept the paternal role

A mother recounted the events when her husband visited her as she was in labor pain:

"I was in a lot of pain, the midwife allowed me to see my husband in front of the door of the labor room. When my husband saw that I was in a lot of pain, he told me that by seeing my pain, he felt like he was experiencing that pain too. My husband put his hand on my abdomen and left it there and started talking to the baby, telling her

that daddy loves you very much! Don't bother mommy and come quickly. It was the first time that he put his hand on my abdomen and talked to the baby and called himself daddy." (Participant No. 9).

Improved relationship with husband

"My husband never shows his feelings. I was very sad because my husband wasn't feeling the pains that I had been going through. I thought that I had to bear all this pain, and he didn't understand my pains at all. But when the midwife let me see my husband, he noticed that I had been through a lot of pain, and he started pampering me. When I was crying because of the pain, he was also crying and kept telling me that he loves me and cheered me up. It was then that I realized I love him too." (Participant No. 8).

Discussion

This is the first qualitative study conducted in the Iranian context with the aim of exploring mothers' experiences of the QoC and the benefits of implementing the WHO's SCC. The main themes extracted from the interviews with mothers about the causes of their satisfaction with the use of the checklist included the following: "Satisfaction with the comprehensive support of the companion," "Satisfaction with the comprehensive support of the midwife," "Satisfaction with the emotional support of the husband," "Satisfaction with the mutual interaction between the midwife and the parturient mother," "Satisfaction with the pain management strategies adopted by the companion," "Satisfaction with skin-to-skin contact and early breastfeeding," "Satisfaction with strengthened relationship between the couples and acceptance of the father's role after the husband's meeting with the parturient mother," "Satisfaction with the provision of sufficient information and training which were in accordance with the needs and understanding of the parturient mother during labor, delivery, after delivery, and before discharge."

Previous studies have shown a direct relationship between childbirth experiences and the "support" women feel from health professionals and their families during labor and delivery.^[30,31] Emotional support in times of stress can help women in labor feel that they are cared for.^[32] In our study, women's feelings of a positive experience of childbirth and a sense of peace and security could be explained by the presence of and their reliable relationship with the midwife and companion, along with the emotional support of the husband.

Research has consistently shown that pregnant women largely trust, value, and benefit from having someone present by their side during labor and delivery.^[33] According to the experiences of the women in our study,

the presence of a first-degree relative during labor grants them peace, strength, and confidence. Also, the presence of a companion is considered helpful in performing non-pharmacological methods such as massage and baby care. Our study showed that the companion can act as a bridge connecting the parturient mother and the midwife. Other studies have reported findings similar to ours. One study, for instance, found that women who have a companion during labor will feel safe, strong, and confident.^[34] Companions can support women in labor in many ways. They can bridge the communication gaps between health care providers and women. A labor companion can express the woman's wishes to the health care providers and may speak on her behalf as an advocate.^[35] Labor companions also provide practical assistance, including encouraging women to move, offering massage, or holding hands to facilitate non-pharmacological pain relief. Similarly, in our study, companions played an important role in performing various non-pharmacological pain reduction methods. Labor companions have been reported to provide emotional support to women by encouraging and reassuring them to constantly feel self-control.^[35] By the same token, the companions in this study were mentioned to provide emotional support to women by using hopeful words and encouraging them. Based on the experiences of the women in our study, the presence of a companion is effective in shortening the duration of labor and increasing satisfaction with the birth experience. There is evidence that labor companions improve maternal and perinatal outcomes, which includes enhancing the physiological process of labor. Clinical research has also shown significant benefits of support during labor, including shorter length of labor, increased rate of spontaneous vaginal delivery, reduced cesarean section rate, pain relief during labor, and increased satisfaction with childbirth experiences. Women have also reported less fear and discomfort during labor thanks to the presence of a companion.^[34] The 2015 recommendations by WHO on interventions to promote maternal and newborn health also include the identification of a companion in labor and delivery and preparation for childbirth, allowing women to consider and choose who will accompany them during pregnancy.^[36]

Due to the regulations of the studied hospitals and the lack of a separate room for each parturient mother, it was not possible in this study for their husbands to attend the labor and delivery. However, an arrangement was made so that the women could meet their husbands outside the labor room. The experiences of women in our study showed that those who managed to see their husbands or talk to them on the phone felt calmer and more secure. This is consistent with a previous study showing that one of the aspects of husband involvement

during labor is emotional support. The participants in that study stated that the husband can bring security and peace to the mother.^[36] Similarly, in our findings, after meeting her husband outside the maternity, one of the mothers who had a slow labor process developed cervical dilatation, according to the midwife's examination. This corroborates the findings of the studies in which the presence and involvement of the husband during childbirth have a positive role in reducing pain, the use of painkillers, the length of labor, and the promotion of satisfactory labor experiences.^[37,38]

Professional support can be understood as "being with a woman" that includes providing emotional support and assessment.^[39] Another concept that is close to professional support is caregiver presence, as described by de Jonge *et al.*^[40] When the woman is constantly supported, the risk of medical interventions such as emergency cesarean section or regional anesthesia will be less, and the labor process will be shorter.^[41] The interaction between mothers and midwives has significant consequences for women^[42], at least because active listening and effective communication are important elements in promoting safe and high-quality birth care at national and international levels.^[43] Mothers' interaction with midwives beforehand is very important for their birth experience. There is evidence from mothers' statements in a study that when there is no personal interaction and shared decision-making between the mother and her midwife, dissatisfaction and challenging experiences will be inevitable.^[44] In our study, communication and mutual interaction between midwives and women were reported to bring about positive birth outcomes, including uncomplicated births and positive birth experiences.

In our study, one of the effective factors contributing to women's pleasant childbirth experience was receiving sufficient information from midwives in different stages of childbirth, which is considered as a kind of support for women, and this support plays a role in having a pleasant experience of childbirth. Similar to our findings, Simkin *et al.*^[45] reported that childbirth support includes providing information and guidance to the woman and her life partner, helping her to express her needs and desires, and providing advice, predictive guidance, and explanation of the process.

Our findings showed that women's attitudes towards natural childbirth and mother-child attachment had a prominent role in making women feel satisfied with their childbirth experience. Skin-to-skin contact was reported to be effective in creating this positive experience. The skin-to-skin contact of the mother and the baby not only made the mother feel a sense of belonging and love for the baby but also facilitated the successful initiation of the breastfeeding process

and improved women's satisfaction with childbirth. According to Bowlby, attachment is one of the basic needs of humans: it starts from the outset of pregnancy, is strengthened during various pregnancy events, reaches its higher levels in the third trimester of pregnancy, and thanks to the contact between the mother and baby, it reaches a peak in the postpartum period.^[46] Maternal attachment has a fundamental effect on the development of the baby and helps the woman in assuming her identity as a mother. These feelings of the mother's love and affection, which are associated with her high attachment to her infant, are often more sensitive to meeting their needs, and this sensitivity affects many aspects of the personality formation, such as curiosity, the ability to socialize, self-confidence, independence, cooperation, and honesty.^[47] The failure of the mother to create a warm, sensitive, and responsive relationship during the first months of life creates stable behavioral problems in the infant, which may be accompanied by intensified tension, anxiety, and a sense of hopelessness in mothers.^[48] Also, skin-to-skin contact can help women get to know their babies' reactions, reduce the duration of babies' crying, facilitate the baby's sleep, and improve the initiation of breastfeeding^[49,50] which can cause a positive experience for mothers.^[51] Our findings showed that the attitude of women towards the presence of their husbands during labor is positive due to the sympathy they feel from the husbands. In fact, the presence of and meeting with the husband not only strengthens the couple's relationship but also facilitates the process of assuming the paternal role for the first time during pregnancy. The presence of the husband strengthens the bond and relationship between the couple, and it also increases the husband's sense of responsibility during childbirth.^[52] Husbands can also share the pain their partner is going through by expressing sympathy, guilt, fear, and confusion.^[53,54]

Although childbirth is considered a normal milestone in women's lives, its medicalization in recent years has led to an increase in interventions that are not based on evidence. The goal of midwifery care should be to create safe and quality maternal and newborn outcomes, including a positive birth experience for women. Therefore, it is important that facilities providing services to mothers adopt an evidence-based approach to childbirth to provide individualized support to women during labor and increase their chances of a positive birth experience. Providing emotional and professional support during labor and delivery is at the heart of quality maternal care that can improve maternal and fetal outcomes and bring about a positive birth experience for the mother.

Implementation of SCC has the potential to improve the quality of maternal and newborn care and promote

a positive birth experience. SCC can empower women, especially by (a) emphasizing and giving them information about the danger signs in different stages of labor and delivery and before discharge, (b) encouraging breastfeeding and skin-to-skin contact, (c) offering information about family planning, and (d) ensuring that women are aware of how to pursue their follow-up care. One of the strengths of our study is that we included women who could provide an in-depth and comprehensive view of their experience with childbirth. Also, the interviews were conducted 1 month after the women had given birth, which, we expect, prevented them from providing unrealistic information under the influence of the emotional excitement or fatigue immediately after delivery.

Limitations and recommendation

One of the limitations of our study was that the interviewed women had given birth at university hospitals in which it was not possible for the husband to be present inside the maternity due to restrictions and violation of privacy. Companions were not allowed to be present at the moment of giving birth either. Moreover, since most of the interviewed women were of Arab and Bakhtiari ethnicity and gave birth in public teaching hospitals, the results may not be generalizable to women of other ethnicities giving birth in different hospitals. Also, this study was conducted on women who had their first pregnancy when they were over 18 years of age, had healthy-term babies, and did not have any maternal complications. Therefore, the findings may not be comprehensive or universally applicable. Further studies are recommended to be carried out on adolescent mothers, those having a premature baby or underlying diseases, those having birth complications, or multiparous women. It is also recommended to conduct interviews with midwives about the use of the SCC in midwifery practices.

Conclusion

Implementation of SCC by providing evidence-based practice and midwifery standards to mothers and neonates can help improve women's experiences of the birth process. By reminding midwives to encourage women to have a companion during childbirth and by giving the necessary training to them about danger signs in every stage of childbirth from admission to discharge, this checklist can not only lead to positive birth experiences but also improve the interaction of mothers with midwives. Therefore, it is recommended that this checklist be used in maternity wards.

Acknowledgements

This study is approved by Jundishapur Ahvaz University of Medical Sciences with the code of ethics (IRAJUMS.REC1401.049). We are grateful to the WHO for giving

us permission to use the SCC and to all the mothers who participated in the study. Our thanks also go to the midwives and health care providers for the management of labor based on the SCC. Finally, we express our gratitude to Ahvaz Jundishapur University of Medical Sciences for the financial support.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

- Bell AF, Andersson E. The birth experience and women's postnatal depression: A systematic review. *Midwifery* 2016;39:112-23.
- Tani F, Castagna V. Maternal social support, quality of birth experience, and post-partum depression in primiparous women. *J Maternal Fetal Neonatal Med* 2017;30:689-92.
- Naghizadeh S, Sehati F, Atri Barzanjeh S, Ebrahimi H, Eghdampour F. Comparative study of mothers' satisfaction with physical care provided by laborers, maternal and postpartum carers in Tabriz educational and Non-educational hospitals. *Woman Fam Stud* 2012;3:129-41.
- Organization WH. Maternal, child and adolescent mental health: Challenges and strategic directions for the Eastern Mediterranean Region. 2011.
- Ahmad Shirvani M, Bagheri-Nesami M, Tayebi T. Exploration of women birth experiences role in deciding the type of next delivery. *Nurs Midwifery J* 2014;12:286-96.
- Madadi S, Sehati F, Mohammad Alizadeh S, Mirghafurvand M. Effect of hot shower and Hyssine's intravenous injection on childbirth experience of primipara women: A Randomized Clinical Trial. *Iranian J Obstet Gynecol Infertil* 2017;20:78-88.
- A R. Health Ministry of Iran. Tehran; 2008.
- Sehhati Shafai F, Kazemi S. Comparing maternal outcomes in nulliparous women in labor in physiological and conventional labor: A randomized clinical trial. *J Maz Univ Med Sci* 2013;22:122-31.
- Askari F, Atarodi A, Torabi S, Delshad Noghabi A, Sadegh Moghadam L, Rahmani R. Women's labor experience: A phenomenological study. *Int Med Today* 2010;15:39-46.
- Collins K, O'Cathain A. The continuum of patient satisfaction—from satisfied to very satisfied. *Soc Sci Med* 2003;57:2465-70.
- Karlström A, Nystedt A, Hildingsson I. The meaning of a very positive birth experience: Focus groups discussions with women. *BMC Pregnancy Childbirth* 2015;15:1-8.
- Thomson GM, Downe S. Changing the future to change the past: Women's experiences of a positive birth following a traumatic birth experience. *J Reprod Infant Psychol* 2010;28:102-12.
- Bryanton J, Gagnon AJ, Johnston C, Hatem M. Predictors of women's perceptions of the childbirth experience. *J Obstet Gynecol Neonatal Nurs* 2008;37:24-34.
- Green JM, Baston HA. Feeling in control during labor: Concepts, correlates, and consequences. *Birth* 2003;30:235-47.
- Hodnett ED. Pain and women's satisfaction with the experience of childbirth: A systematic review. *Am J Obstet Gynecol* 2002;186:S160-S72.
- Hales B, Terblanche M, Fowler R, Sibbald W. Development of medical checklists for improved quality of patient care. *Int J Qual Health Care* 2008;20:22-30.
- Hales BM, Pronovost PJ. The checklist—A tool for error management and performance improvement. *J Crit care* 2006;21:231-5.
- Kumar S, Yadav V, Balasubramaniam S, Jain Y, Joshi CS, Saran K, et al. Effectiveness of the WHO SCC on improving adherence to essential practices during childbirth, in resource constrained settings. *BMC Pregnancy Childbirth* 2016;16:1-11.
- Spector JM, Lashoher A, Agrawal P, Lemer C, Dziekan G, Bahl R, et al. Designing the WHO Safe Childbirth Checklist program to improve quality of care at childbirth. *Int J Gynecol Obstet* 2013;122:164-8.
- Lewallen LP. The importance of culture in childbearing. *J Obstet Gynecol Neonatal Nurs* 2011;40:4-8.
- Organization WH. Standards for improving quality of maternal and newborn care in health facilities. 2016.
- Jones E, Lattot SR, Coast E. Interventions to provide culturally-appropriate maternity care services: Factors affecting implementation. *BMC Pregnancy Childbirth* 2017;17:1-10.
- Agus Y, Horiuchi S, Porter SE. Rural Indonesia women's traditional beliefs about antenatal care. *BMC Res Notes* 2012;5:1-8.
- D'Ambruoso L, Byass P, Nurul Qomariyah S. Can the right to health inform public health planning in developing counties? A case study for maternal healthcare from Indonesia. *Glob Health Action* 2008;1:1828.
- Doria S, Diba F, Susanti SS, Vollmer S, Monfared IG. Mothers' experiences of quality of care and potential benefits of implementing the WHO safe childbirth checklist: A case study of Aceh Indonesia. *BMC Pregnancy Childbirth* 2019;19:1-8.
- Dencker A, Taft C, Bergqvist L, Lilja H, Berg M. Childbirth experience questionnaire (CEQ): Development and evaluation of a multidimensional instrument. *BMC Pregnancy Childbirth* 2010;10:1-8.
- Pirdil M, Pirdel L. A comparison of women's expectations of labour and birth with the experiences in primiparas and multiparas with normal vaginal delivery. *J Kathmandu Med Coll* 2015;4:16-25.
- Shenton AK. Strategies for ensuring trustworthiness in qualitative research projects. *Educ Inf* 2004;22:63-75.
- Graneheim UH, Lundman B. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today* 2004;24:105-12.
- Neerland CE, Skalksky AE. A qualitative study of US Women's perspectives on confidence for physiologic birth in the birth center model of prenatal care. *J Midwifery Women's Health* 2022;67:435-41.
- Sigurdardottir VL, Gamble J, Gudmundsdottir B, Kristjansdottir H, Sveinsdottir H, Gottfredsdottir H. The predictive role of support in the birth experience: A longitudinal cohort study. *Women Birth* 2017;30:450-9.
- Sleutel MR. Intrapartum nursing: Integrating Rubin's framework with social support theory. *J Obstet Gynecol Neonatal Nurs* 2003;32:76-82.
- Bohren MA, Hofmeyr GJ, Sakala C, Fukuzawa RK, Cuthbert A. Continuous support for women during childbirth. *Cochrane Database Syst Rev* 2017;7:CD003766.
- Bohren MA, Berger BO, Munthe-Kaas H, Tunçalp Ö. Perceptions and experiences of labour companionship: A qualitative evidence synthesis. *Cochrane Database Syst Rev* 2019;3:CD012449.
- Organization WH. WHO Recommendations on Health Promotion Interventions for Maternal and Newborn Health 2015: World Health Organization; 2015.
- Abasi E, Borghei NS, Farjamfar M, Goli S, Keramat A. Mothers' experiences of husband's involvement in maternal fetal attachment: A qualitative study. *Iran J Psychiatry Behav Sci* 2022;16:e119140.
- Porrett L, Barkla S, Knights J, De Costa C, Harmen S. An exploration of the perceptions of male partners involved in the birthing experience at a regional Australian hospital. *J Midwifery Women's Health* 2013;58:92-7.

38. de Melo RM, de Brito RS. The fathers' perception about their presence in the labor room during the birth of their child: A descriptive study. *Online Braz J Nurs* 2013;12:596-8.
39. Bradfield Z, Kelly M, Hauck Y, Duggan R. Midwives 'with woman' in the private obstetric model: Where divergent philosophies meet. *Women Birth* 2019;32:157-67.
40. de Jonge A, Dahlen H, Downe S. 'Watchful attendance' during labour and birth. *Sex Reprod Healthc* 2021;28:100617.
41. Hodnett ED, Gates S, Hofmeyr GJ, Sakala C. Continuous support for women during childbirth. *Cochrane Database Syst Rev* 2007;(3):CD003766.
42. Spiby H, Walsh D, Green J, Crompton A, Bugg G. Midwives' beliefs and concerns about telephone conversations with women in early labour. *Midwifery* 2014;30:1036-42.
43. Gilligan C, Eddy J. Listening as a path to psychological discovery: An introduction to the Listening Guide. *Perspect Med Educ* 2017;6:76-81.
44. Shallow HE, Deery R, Kirkham M. Exploring midwives' interactions with mothers when labour begins: A study using participatory action research. *Midwifery* 2018;58:64-70.
45. Simkin P. Reducing pain and enhancing progress in labor: A guide to nonpharmacologic methods for maternity caregivers. *Birth* 1995;22:161-71.
46. J B. Attachment. New York: Jessica Kingsley Publishers; 2008.
47. Bryant-Waugh R, Markham L, Kreipe RE, Walsh BT. Feeding and eating disorders in childhood. *Int J Eat Disord* 2010;43:98-111.
48. Tabaeh ES, Nouri A, Malekpour M, Abedi A. The relationship between child's secure attachment and factors of maternal behavior. *J Fam Res* 2011;7:293.
49. G h a n b a r i - H o m a y i S , F a r d i a z a r Z , Mohammad-Alizadeh-Charandabi S, Meedya S, Jafarabadi MA, Mohammadi E, *et al.* Skin-to-skin contact, early initiation of breastfeeding and childbirth experience in first time mothers: A cross sectional study. *J Neonatal Nurs* 2020;26:115-9.
50. Bigelow A, Power M, MacLellan-Peters J, Alex M, McDonald C. Effect of mother/infant skin-to-skin contact on postpartum depressive symptoms and maternal physiological stress. *J Obstet Gynecol Neonatal Nurs* 2012;41:369-82.
51. Deys L, Wilson V, Meedya S. What are women's experiences of immediate skin-to-skin contact at caesarean section birth? An integrative literature review. *Midwifery* 2021;101:103063.
52. Pestvenidze E, Bohrer M. Finally, daddies in the delivery room: Parents' education in Georgia. *Global Public Health* 2007;2:169-83.
53. Johnson MP. An exploration of men's experience and role at childbirth. *J Men's Stud* 2002;10:165-82.
54. Golmakani N, Gholami M, Shaghaghhi F, Safinejad H, Kamali Z, Mohebbi-Dehnavi Z. Relationship between fear of childbirth and the sense of cohesion with the attachment of pregnant mothers to the fetus. *J Edu Health Promot* 2020;9:261.