

# The perception of primiparous mothers of comfortable resources in labor pain (a qualitative study)

Tahereh Boryri<sup>1</sup>, Noor Mohammad Noori<sup>2</sup>, Alireza Teimouri<sup>2</sup>, Fariba Yaghobinia<sup>1</sup>

## ABSTRACT

**Background:** Natural delivery is the most painful event that women experience in their lifetime. That is why labor pain relief has long been as one of the most important issues in the field of midwifery. Thus, the present study aims to explore the perception of primiparous mothers on comfortable resources for labor pain.

**Materials and Methods:** In the present study, qualitative content analysis technique was used. The participants had singleton pregnancy with normal vaginal delivery. These women referred to the Imam Javad Health Center within 3–5 days after delivery for screening thyroid of their babies.

**Results:** During the content analysis process, five themes emerged that indicated the nature and dimensions of the primiparous mothers' perception of comfortable resources. These themes were: "religious and spiritual beliefs," "use of analgesic methods" (medicinal and non-medicinal), "support and the continuous attendance of midwife and delivery room personnel," "family's and husband's support during pregnancy and in vaginal delivery encouragement," and finally "lack of familiarity with the delivery room and lack of awareness about structured delivery process."

**Conclusions:** The results showed that mothers received more comfort from human resources than from the environment and modern equipment. Despite the need for specialized midwife with modern technical facilities, this issue shows the importance of highlighting the role of midwife and humanistic midwife care. Therefore, considering midwives and the standardization of human resources in health centers are more important than physical standardization. This will result in midwife interventions being performed with real understanding of the patients' needs.

**Key words:** Comfortable resources, experiences, Iran, labor pain, perception, qualitative study

## INTRODUCTION

Pain is a subjective experience influenced by physiological, psychological, cultural, and environmental factors.<sup>[1]</sup> Labor pain is one of the

most severe pains that women experience during their life and can affect mothers and other family members' life in all aspects. Labor pain causes confusion and impaired mental health in women and damages their relationship with their husbands and other relatives. Also, this pain can be a cause of anxiety and fear for the next pregnancy.<sup>[2]</sup> Comfort is expressed as a critical and vital need in nursing<sup>[3]</sup> and it has a multidimensional concept with multiple literal meanings.<sup>[4]</sup> Comfort is a complex concept<sup>[5]</sup> with unclear,<sup>[4]</sup> holistic, valuable, and necessary terms in health care.<sup>[5]</sup> It is a major issue in nursing interventions and patient care outcomes,<sup>[6]</sup> and it has a broad definition from different points of view.<sup>[7]</sup> That is why researchers paid attention to comfort according to their own realization and context. Some researchers

<sup>1</sup>Department of Midwifery, Zahedan University of Medical Sciences, Zahedan, Iran, <sup>2</sup>Department of Pediatric Cardiology, Children and Adolescent Health Research Center, Zahedan University of Medical Sciences, Zahedan, Iran

**Address for correspondence:** Dr. Alireza Teimouri, M.phil, PhD in Demography, Children and Adolescent Health Research Center, Zahedan University of Medical Sciences, Zahedan, Iran.

E-mail: Alirezateimouri260@gmail.com

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have focused on the concept and some tried to study comfort with respect to patients. However, the gaps that remained, the patients' response to peace comfort, and the strategies used by nurses require identification, description, and diagnosis.<sup>[8]</sup> Treatment of pain is the first priority to satisfy the physiological needs of humans.<sup>[9]</sup> Therefore, pain relief is one of the most important scientific issues in midwifery. Moreover, with the increasing rate of cesarean in recent years, health authorities contemplate to solve this problem with painless promotion in natural childbirth. This promotion would lead policy makers in maternal health and reduce maternal mortality rate due to specific causes of cesarean such as bleeding, infection, and anesthesia, and also would encourage mothers to choose childbirth with natural delivery. Women's experiences of labor pain are varied and complex, such that most women are able to adapt themselves to labor and use non-pharmacological methods to relieve pain. Since a few studies have been performed in the field of women's perception of comfortable resources related to labor pain relief in Iran and have reported that reduction in cesarean rate to 10–15% is the main goal of WHO for many countries like Iran, and approximately half of the deliveries are cesarean, the rate of cesarean is around 90% in most of the private hospitals in Iran.<sup>[10]</sup> According to researchers' observations and their experiences, it is noteworthy that this study, in the field of qualitative research, aimed to assess the perceptions of primiparous women on comfortable resources during labor. The results would help us to take a step forward for increasing the use of non-pharmacological methods for pain relief and reduce the rate of elective cesarean.

## MATERIALS AND METHODS

In the present study, qualitative content analysis technique was used to determine primiparous women's perception of comfortable resources on labor pain. Information providers were 18 primiparous women from those who referred to a health center for screening tests of thyroid of their newborns within 3–5 days after childbirth. It means that after interviewing 18 participants, we reached data saturation. They had vaginal delivery without complications and using assistive device for childbirth, and born alive and healthy babies. These women expressed interest and ability to recall and describe their delivery processes. The participants were selected using purposive sampling. Researchers, after introducing themselves, explained the objectives of the project and tried to win the participants' trust and confidentiality concerning safe interview in compliance with ethical issues. The participants were free to withdraw from the study at any time. The participants were interviewed with open questions in a quiet and private place in the health center for 45–90 min.

An in-depth and unconstructed interview was conducted for collection of information. Because of the flexibility and being in-depth, these kinds of interviews are suitable for qualitative research.<sup>[10]</sup> General and main question of the study was, "What source of comfort did you experience during labor that helped you cope and tackle labor pain in the natural childbirth?" Most interviews were easily conducted concerning the objectives of the study and the conversations were tape-recorded.

Sampling process continued for 4 months until saturation. The tape-recordings were carefully listened and accurately noted. Content analysis was applied. According to the text book by Taylor, repeating the previous information and themes indicates adequacy of the sample size in qualitative research. This means that after interviews with 18 participants, no new information emerged. First, two pilot interviews were conducted and then the major interviews began. Text of each interview was carefully read several times and then modified. For each interview, the ways of comforts were written in the margin of the sheet. For example, some numbers of codes were addressed: Resorting to praying for pain relief, pain relief using massage, and pain relief with midwife's presence not abandoning women for a while in the labor process.

Before data collection and after getting approval for the proposal from the research consul of the nursing and midwifery faculty and permission from the ethics committee, ethics principles were taken into account in research, such as informed consent, keeping the information without name, secrecy, and leaving the study made optional for the participants. Finally, 156 non-repeated codes were extracted and similar codes were placed next to each other in five groups. In order to make sure about the validity of the information, results, and reliability in all phases of the study, a researcher with high skills in qualitative research was appointed to monitor the process.

## Ethical consideration

The Ethics Committee of Zahedan University of Medical Sciences approved this study. Written consent was signed by the participants.

## RESULTS

Mean age of the participants was 24.45 years, ranging from 18 to 32 years. Education distribution of participants was as follows: Three had bachelor's degree, two were seminary students, six had diploma, four had studied up to secondary school, two had primary education, and one woman was illiterate. Among the participants of this study, 2 were seminary teachers, 1 was an employee, and 15 were housewives.

**Table 1: Concepts, codes, and strategies for perception of primiparous mothers of comfortable resources in labor pain**

Subcategory	Category	Main concept
Appealing to God comforts me Quran and Surah Yasin recitation makes me forget my pain When I was in intense pain, I did pray God and my tolerance increased with the heart becoming stronger When I appealed, the Imams reduced pain I wanted benefit with the reward of Allah to run with the pain of natural delivery	Trust in God Direct or indirect relationship with God Reference to religious values	Religious beliefs and reliance on spirituality
When I got Entonox and took deep breath, my pain decreased Pethidine confused me when I received it and my pain reduced When I took hot showers, my pain overall decreased When I slept on my back, my pain was very severe; but on left lateral position, the pain was lower When my mother massaging my back, the pain relieved	Pharmacological Non-pharmacological	Using methods of reducing pain
I loved to press the hands of my midwife to reduce the pain I love the staff; they treat me better and make emotional sense with me I want them to answer me when I asked questions I loved the midwife to be with me at the time of labor and understand me The presence of a good midwife can be more calming compared to the presence of my mother or my husband	Availability The continuous presence of personnel Friendly relationship Emotional support Offering solutions	Support and constant presence of midwife and delivery room personnel
I loved my mother to be with me and give me energy I loved to press my husband's hand to reduce my labor pain I loved my sister to be with me with her spirit I am pleased to hear about my new baby from the family I loved one of my close relatives to be by my beside and give me comfort I loved my closest friend was with me and tell about her childbirth experience	Appropriate relationship Emotional support The continuous presence of family and friends Offering solutions	Husband and other family members' support during pregnancy
I loved to be in private hospital Whether private or public hospital, my pain does not decrease Anxiety and fear of being unfamiliar with the environment of the delivery room doubles the pain Clean labor room and bathroom gives me peace Good room and bed coloring was a source of comfort for me Books that I had read during pregnancy encouraged me to do natural labor and bear the pain Participating in training workshops made me more familiar with the labor room space and labor process Health of mothers and medical programs on TV gave me more information	Safe and comfortable environment Sources of information about the delivery process	Unfamiliar with the environment of the delivery room and Lack of knowledge of the labor process

From the rich and deep analysis of the collected information, 156 codes were extracted. After taking the meaning into account regarding the content analysis, five major themes were identified as follows: [Table1] 1. Religious beliefs and reliance on spirituality, 2. Using methods for reducing labor pain, 3. Support and constant presence of midwife and delivery room personnel, 4. The support of husband and other family members during pregnancy, and 5. Unfamiliarity with the atmosphere of the delivery room and lack of knowledge toward the labor process. When the women felt discomfort in the labor room, they sought their comfort very seriously and actively from other different sources such as own faith and beliefs, medicine and medical equipments, medical staffs and midwives, their families, and their environment. If any source of these comfort resources was not responding, they resorted to one another. For example, if the absence of midwife or other medical staffs in the labor room prevented access to the comfort, they resorted to non-staff comfort sources.

### Religious beliefs and reliance on spirituality

Among the comfort sources, many participants expressed the importance of religious and spiritual beliefs. This theme consisted of trust in God, direct or indirect relationship

with God, and reference to religious values. Women's declarations showed that when they are faced with pain, they resort to Imams and spiritual space, and the majority stated that the creation of a spiritual space relieves their pains greatly. Five participants said in this regard:

*"Whenever we do Lord's prayer during labor pain, we become calm and feel the pain is bearable for us, because with the remembrance of Allah, hearts find rest (a word of the Quran) and the pain also will find relief after the peace of mind."*

One of the participants mentioned in this regard:

*"When the pain was severe, I resorted to praying and vow, it relieved the pain".*

One of the participants said:

*"I am persuaded to have natural childbirth due to my religious beliefs. I chose natural childbirth." She said, "This is because I think the Lord gives us a lot of rewards for natural childbirth."*

### Using methods to reduce pain

Using medications and healing methods was another source of comfort with the following classes: Pharmacological and non-pharmacological.

Participants expressed the importance of this method in different ways.

Participant # 12 stated in this regard:

*“Whenever midwife massaged me, back pain decreased.”*

Participant # 14 declared:

*“When I was screaming and crying, the pain increased to the highest level. But when I received Entonox and was breathing through the nose, pain decreased. Pethidine confused me, I did not have the ability to express the pain and feel excursion in another universe above the clouds.”*

Participant # 6 expressed as below:

*“I was not able to open my eyes. Consuming drugs helped me very much to reduce labor pain.”*

Participant # 1 said:

*“When I was placed in the tub of warm water, pain decreased considerably.”*

Two participants expressed as below:

*When our pain began at home, we took a warm shower. We felt pretty well and happy. For these reasons, our labor pain was easy and comfortable.”*

Participant # 10 expressed:

*“I had severe labor pain when I slept in supine position. But when I slept on lateral position with a foot on another one and tightened my muscles, the pain was relieved noticeably.”*

### Support and constant presence of midwife and delivery room personnel

Among the listed comfort sources, “support and continuous presence of midwife and delivery room personnel” was considered important. The majority of participants stated:

*“When staffs of labor room had friendly relationship and they showed a specific attention with understanding and empathy sense, we felt comfortable, peaceful and secure.”*

This source of comfort has the following classes: Staff availability, continuous presence of personnel, friendly relationship, emotional support, and offering solutions creating a warm and peaceful environment to the participants.

Participant # 8 said:

*“I liked my midwife to be with me entirely and I liked to take and press midwife’s hands to reduce my pain, but she didn’t allow me to do so. I expected midwife to be with me at the labor time and understand me and say, for example, ‘I know how much pain you have,’ but it did not happen.”*

Only one of the participants expressed that husband’s presence is important in the labor room.

Participant # 4 expressed in this regard:

*“My mother’s presence was the cause of embarrassment for me.”*

Participant # 6 stated:

*“Nothing should be done by my mother or my husband to relieve my labor pain. I must tolerate the pain by myself. The presence of a good midwife can be more calming compared to my mother or my husband.”*

Participants # 3, 11, and 13 expressed:

*“The midwives were not present in the delivery room or did not pay attention to us at all.”*

Participant # 14 said:

*“At any stage of the labor process even when my pain was intense and severe, the midwives were not present in the labor room, but I occasionally saw service personnel. Finally, with the absence of midwife, I brought my child into the world on the normal bed.”*

Another topic that was echoed in the words of the participants was a huge gap between their expectations and perceptions. They expressed that they need to be understood by staff midwives and doctors during labor at delivery rooms. But they believed that their expectations were not met. Therefore, the role of the midwife and the behavior of staff of the labor room were placed in the main group of comfort sources.

### Husband and other family members’ support during pregnancy

Another source of comfort was the importance of “the presence of husband and other family members’ support

during pregnancy.” This theme was classified as follows: Appropriate relationship, emotional support, the continuous presence of family and friends, and offering solutions.

Participants indicated the importance of presence of husband and another family member in the labor room to receive physical comfort and mental relaxation. The presence of relatives during all stages of labor process from entering into the delivery room reinforces the morale and gives a sense of comfort and security among the participants.

Participant # 11 said in this regard:

*“I liked my mother to be with me and it gave me energy to reduce the pain.”*

Participant # 17 declared:

*My mother’s encouragements and my husband’s pieces of advice gave me trust for natural childbirth and stopped me from being worried, and accordingly bear my hardships. My mother told me that natural childbirth is good and my husband had told me that because he wants lots of children, I must try to give normal birth. You can have up to three children with cesarean delivery and three are too few.”*

Participant # 16 declared:

*“I was encouraged by reading books and training in classes during pregnancy to have natural delivery.”*

One of the participants stated:

*“My husband couldn’t help me because he was busy, but it could be better if he helped.”*

Although most participants declared that their family members such as siblings, parents, and neighbors had helped them, but the most important role was played by their husbands’ support for them.

Finally, support of husbands and families for having natural childbirth during pregnancy was categorized in the main group of comfortable resources of labor pain.

### **Unfamiliarity with the atmosphere of delivery room and lack of knowledge toward the labor process**

Attitude of primiparous women showed that a comfortable and safe delivery room with basic essential equipment plays an important role in maintaining their mental health and reducing labor pain. This main theme was concluded of safe and comfortable environment and sources of information about the delivery process. If, for any reason, this is not possible, the women experience unrest.

Participant # 9 mentioned:

*“One of my main concerns was to deal with the new environment that I had no familiarity with at all. Lack of knowledge and understanding about equipment and ignorance of the labor process and not participating in the training classes caused more anxiety and fear during natural childbirth.”*

Participant # 10 said:

*“If I had enough knowledge about the delivery room, the equipment, midwives and delivery process, it was far better, and maybe, I could tolerate better, but now I feel I can perform my second childbirth better and easier.”*

Five women stated:

*“One of the concerning and threatening factors was not receiving any answers for our questions from midwives and delivery room staffs.”*

## **DISCUSSION**

A review of participants’ experiences revealed that five major themes were identified as comfortable resources for labor pain as follows: “Religious beliefs and reliance on spirituality,” “using methods for reducing labor pain,” “support and constant presence of midwife and delivery room personnel,” “husband’s and other family members’ support during pregnancy,” and “unfamiliarity with the atmosphere of the delivery room and lack of knowledge toward the labor process.” All mothers expressed the methods to relieve labor pain based on their perceptions. The results showed that the main concepts were spirituality and religious beliefs. According to the Islamic religion and beliefs of Iranian population, all participants expressed that praying and invoking the saints have sedative effects.

Taylor introduced the element of religion as the most powerful element in reducing labor pain.<sup>[11]</sup> Golmakani *et al.* reported that religious women who spent most of their time in religious affairs had better coping behaviors related to labor pain. They accepted pain as an inevitable part of life and a powerful factor to tolerate labor pain.<sup>[12]</sup> Forohar *et al.* reported that the influence of pleasant and beautiful Quran voice is a complementary approach to reduce labor pain in primiparous women. Hence, considering the doctrinal issues and efficiency of the spiritual recommendations, labor pain could be reduced.<sup>[13]</sup> Mohammadi Tabar *et al.* demonstrated that Quran reading before childbirth reduced labor pain and made it more bearable with regards spiritual memory.<sup>[14]</sup>

Zakerihamidi *et al.* reported that specific and accurate training programs would be the methods to correct women's misconceptions about vaginal delivery. Therefore, they hoped that vaginal delivery could be increased even in regions with high rates of cesarean delivery.<sup>[15]</sup>

Mothers' positions during labor pain have been proposed to reduce their pain as a physiological method. According to some researchers, not only is uterus function better but also labor pain is lower and shorter in mothers in standing rather than lying or sitting positions. Shamaeian Razavi *et al.* concluded that mothers' positions have no effect on labor pain. In this regard, it is recommended that there is no specific position for mothers during delivery that gives them comfort. If there is medical limitation, the mother can pose as she feels comfortable.<sup>[16]</sup> In this connection, De Jonge and Largo-Janssen reported that midwives' roles are determinative in helping mothers to adopt an appropriate position. So, midwives should choose a convenient situation and according to mothers' desires.<sup>[17]</sup> Chaichian *et al.* expressed that intensity and duration of labor in giving birth in water is less than conventional methods.<sup>[18]</sup> In our study, using warm shower or hot tub reduces the labor pain. Using hot water and outpatient procedures under the supervision of a midwife can be useful to ease the labor pain in the delivery room.

Using relaxation techniques such as breathing allows women to rest during labor and save their energy for child birth. These techniques can be medicinal, e.g. Entonox, or non-medicinal, e.g. relaxation and breathing.

Women in our study declared that using Entonox reduced their labor pain. Gayeski *et al.* concluded that in the obstetric centers, nearly all non-pharmacological methods are accepted with the participation of an accompanying person. Also, they reported that methods with the highest degree of satisfaction are not widely used.<sup>[19]</sup>

Hodnett showed that ongoing support of pregnant women will decrease the rate of cesarean, reduce the requirement of means of delivery, and lessen the requirement of anesthesia drugs, and the overall satisfaction increased with the presence of supporters.<sup>[20,21]</sup> Leeman said that despite being approved by numerous studies, companions' presence during labor will both reduce the labor pain and decrease medical interventions and increase the maternal and neonatal satisfaction.<sup>[22]</sup> But our mothers benefited from these to a lesser level. Safarzadeh *et al.* found that companions' presence is the main cause of reduced duration of labor and maternal and neonatal complications.<sup>[23]</sup> In our study, midwives' support and their constant presence during labor were expressed by

mothers as the reason for reduction in fear, anxiety, and labor pain.

Pirdel revealed that provision of invasive medical care during labor process and a noisy and crowded environment influence the mother's experience and perception of pain. Pirdel suggested that delivery room personnel have a great role in diminishing pain by reducing stressors, especially the objective ones that are more stressful.<sup>[24]</sup>

Mohammadi Tabar and Kiani Asia Bar, in a study entitled "Midwife's role in health and medicine in the obstetric care centers," found that women who were controlled by the midwives used less painkiller drugs. Meanwhile, midwife's support can also reduce the labor duration and also have a positive connection with the mother and baby.<sup>[25]</sup> Preece found that most women need to be supported and communicated by the midwives.<sup>[26]</sup> Waldenström found that midwives' support is associated with a positive experience of childbirth.<sup>[27]</sup>

Barrett and Stark concluded that continuous labor support and the facilitation of normal birth are the best performances for women labor, but it is not provided by nurses typical.<sup>[28]</sup>

In general, midwives' support is provided through awareness, honoring, emotional and physical aspects, and protection in follow-up care. Abrams presented five templates to support patients and believes that these five templates play a supportive role in controlling labor: Counseling clients, reducing the fear of patients, soothing the patient, providing information to the patients, and assisting the patients in self-care when they cannot express their needs.<sup>[29]</sup> In our study, mothers introduced and expressed that taking part in classes and reading related books about pregnancy helped them to reduce labor in natural childbirth. Simkin also emphasizes the need for health managers to plan for childbirth preparation classes in their third trimester.<sup>[30]</sup> Lally *et al.* concluded that it would be more beneficial to concentrate efforts on providing information to women in a better way and engaging them in discussions around their values, expectations, and preferences and how these ways could affect labor. According to our research, lack of enough information about labor process was one of main causes for labor management in which it is supported by Lally's results.<sup>[31]</sup>

## CONCLUSION

Results of the present study showed that mothers received more comfort from their religious beliefs, reliance on spirituality, and human resources such as midwives and relatives than from the environment and modern

equipment. This issue shows the importance of highlighting the role of health givers and humanistic care despite the need for specialized nursing with modern technical facilities. On one hand, this implies the importance of highlighting the role of midwifery services in labor pain, unlike modern technical and specialized facilities. The attention of health authorities and policy makers should be concentrated on preparatory classes and workshops alongside with the factors mentioned already in pain management methods in the last trimester of pregnancy. These training programs could empower women to deal with labor and play an effective role in reducing the rate of elective cesarean. Therefore, considering nurses and the standardization of human resources in health centers are more important than physical standardization.

### Limitations

The majority of mothers used to talk in their own dialect and accent. This made communication difficult for the research team members. To eliminate these limitations, researchers took help from the staffs of the health centers who were familiar with formal Persian language.

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### Conflicts of interest

There are no conflicts of interest.

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