

## Original Article

# The Experiences of Surrogate Mothers: A Qualitative Study

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### ABSTRACT

**Background:** Surrogates are women who bear a genetically unrelated child for another individual or couple. Experiences of surrogate mothers need further investigation. **Objective:** The objective of the study was to answer the questions of what were the experiences of surrogate mothers and what problems they confronted during the process of surrogacy. **Methods:** The present study was a qualitative content analysis. Purposive sampling was used in the study. Pregnant women with various ages and educational levels were invited for semi-structured interviews. Graneheim and Lundman's method was used for analyzing the data. **Results:** In this study, 15 participants were interviewed. The codes extracted from the interviews were categorized into five main themes and 13 subthemes. The main themes were: (1) desperation; (2) pain and suffering with the subthemes of physical pain, emotional suffering, suffering caused by others, and fears; (3) emotional involvement and self-alienation; (4) looking for the positive aspects of the surrogacy with subthemes of positive interpretation of the experience, and the sense of pride; (5) and supportive systems including the commissioning parents, the surrogate's family, the health system, and the community as subthemes. Financial motivations were the reason for surrogacy which made women endure many physical, psychological, and social problems. The women expressed some positive feelings about surrogacy and also mentioned several support sources. **Conclusion:** Surrogate mothers reported numerous physical, emotional, and social problems that require better counseling services. A supportive system, especially the health system, should provide better and more humanistic services for surrogate mothers.

**KEYWORDS:** *Gestational carrier, Qualitative study, Surrogate mothers*

## INTRODUCTION

Assisted reproductive technology (ART) dates back to 1978 when the first infant was born with *in vitro* fertilization (IVF).<sup>[1]</sup> It is estimated that every year, 3.75 million infants are born with ART.<sup>[2]</sup> Moreover, 1%–3% of the births in Europe and the United States are the result of ART.<sup>[3]</sup>

Many women suffer from infertility due to congenital or acquired uterine abnormalities. Besides, some women have serious medical problems that are contraindicated to pregnancy.<sup>[4]</sup> For these women, surrogacy is the last chance to have a child with a genetic link to one or both parents.<sup>[5]</sup> A retrospective cohort study showed that the number of gestational surrogacies (GSs) had increased

from 727 (1%) in 1999 to 3432 (2.5%) in 2013, in the United States.<sup>[6]</sup>

In GS, the embryo of the commissioning parents is moved to the uterus of a surrogate mother.<sup>[2]</sup> It was first used in 1985 by Utian.<sup>[7]</sup> A surrogate mother is a woman who bears a genetically unrelated child for another individual or couple usually through IVF.<sup>[7]</sup>


GS has induced many ethical and legal controversies; it is even considered illegal in some countries.<sup>[2]</sup> In Iran, GS has been approved by religious law and is widely used,

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even though there are many legal and social concerns around it.<sup>[8]</sup> There are many maternity complications that can threaten the health of the surrogate mother such as the rupture of uterus, preeclampsia, and gestational diabetes.<sup>[9,10]</sup> Psychological problems such as depression can also endanger the health of the surrogate.<sup>[11]</sup>

Most studies have focused on the legal and ethical aspects of this method, and there are limited studies about the experiences of the surrogate mothers.<sup>[12]</sup> Jadvá *et al.* found that 32% of surrogate mothers had experienced a kind of loss and sorrow after delivery.<sup>[13]</sup> In one study, the women who had presented their oocyte to infertile couples said that payment made them feel worthless.<sup>[14]</sup> Many women volunteered for surrogacy to earn money without adequate information about its physical and psychological consequences.<sup>[11]</sup> Sometimes, there are unfair contracts between rich couples and poor women that may make the latter feel abused.<sup>[15]</sup>

There are lots of discussions around maternity and surrogacy. Some believe that surrogate mothers could not simply be seen as a mean for carrying the fetus. The diet and epigenetics will influence the development of a child within the womb. Hence, surrogate mother has a crucial role in the development and characteristics of the child. While some believe that, genetic parents are more influential in surrogacy.<sup>[16]</sup> These discussions show the complexity of surrogacy. Surrogacy can be challenging for surrogate mothers, commissioning parents, and even physicians. In a qualitative study in India, the physicians that were engaged in surrogacy were interviewed. It was observed that the decisions on the number of embryos that should be transferred, the possibility of fetal reduction that can end in total abortion, and decision about the mode of delivery were the most difficult decisions that physicians should have made.<sup>[17]</sup>

Transnational commercial surrogacy is a form of medical tourism wherein the intending parents seek to hire women from other countries as surrogates. These women are hired from poor families in developing countries that engage in surrogacy to earn money.<sup>[18]</sup> This kind of surrogacy is an international issue. The experiences of surrogate mothers and their problems have mostly been ignored. Qualitative studies can provide deep insight to the topic and help the researchers to understand the experiences from the viewpoints of the participants.

### Objective

This study started to answer the questions of what are the experiences of surrogate mothers and what problems they confront during the process of surrogacy and how they try to solve these problems. The study questions

had qualitative nature, so qualitative content analysis was used for this study.

## METHODS

### Study design and sampling framework

The present study was a qualitative content analysis that was carried out at fertility and infertility centers in Isfahan/Iran. Only married women that had at least one previous normal delivery are allowed to be a surrogate mother at this center. The husband of the surrogate woman is required to give permission, and the couple would sign a contract regarding the financial rewards and other conditions such as nutrition and medicine during pregnancy. The women who were currently pregnant and accepted to talk about their experiences were involved in the study. A purposive sampling was carried out in this study. The first participants were chosen from volunteers, and then, women were invited with regard to the maximum possible variation in age and education and also special experiences such as those who had volunteered for surrogacy for the second time.

### The interviews

Semi-structured interviews were used for this study. The first author attended in the center from January 2015 to March 2016. The surrogate mothers were asked if they wished to share their experiences, and thus, the volunteers were invited to the interviews. All the interviews were performed individually. The questions were developed during the interviews. After the first interview, the researchers discussed the questions that could make the interview better and deeper. The first questions were about their general experiences such as how did you enter into the process of surrogacy? How was your experience as a surrogate mother? How do you feel about your surrogate pregnancy? Then, more precise questions were asked such as how is your current pregnancy compared to the earlier one? What were your problems during pregnancy? How was your interaction with the commissioning parents? What happened after delivery? How do you feel about that? Would you want to repeat this experience? The interviews were followed by questions such as can you explain it more? How was your feeling? What did you do? according to the answers. All the interviews were conducted in a private room at the center. The interviews were recorded and then transcribed as soon as possible after the interviews. The feelings and emotions of the participants during the interviews also were transcribed as notes.

### Data analysis and trustworthiness

To analyze the data, the suggested method by Graneheim and Lundman<sup>[19]</sup> was used. For this study, the content of interviews was completely transcribed. The first and

second authors read the interviews several times. Then meaning units, which were those parts of the interviews that could express the experiences of participants, were extracted and then were transformed to condensed meaning units and codes. Subthemes and themes were formed by consensus between researchers. An example of data analysis is presented in Table 1.

In-depth interviews were used as data collection method for increasing the credibility of the study. The credibility was assured by inviting the surrogate mothers with various ages and social conditions such as educational level.

For transferability of the data, selected interviews along with codes and categories were shared with two surrogate mothers other than the participants, and they agreed that these codes represent their real experiences. The vigorous presentations of the findings and quotations have been provided to enhance the transferability of the study. The findings were sent to the participants, and they confirmed that the findings could show their real experiences. An expert who was not a member of the research team and was familiar with qualitative studies approved the meaning units, subthemes, and themes and made some suggestions that were considered in the final analysis.

### Ethical considerations

Ethical approval was obtained from the ethics committee of Isfahan University of Medical Sciences with the code number 292213. All participants received information about the purpose of the study and the confidentiality of the data. Participation was voluntary, and women could withdraw at any time. Informed written consent was signed by the participants that included allowance for recording their voice. The participants were informed that the decision to take part in the study or not would not affect the services they would receive.

## RESULTS

In this study, 15 participants were interviewed. Duration of the interviews was between 38 and 75 min, with an average of 55 min. Their average age was  $30 \pm 4$  years.

All the women were married for an average of  $10.3 \pm 3.6$  years. All the women were pregnant, and three women were experiencing surrogacy for the second time. The participants' demographics including their education and job are summarized in Table 2. Although data saturation was reached in 11 interviews, the authors chose to interview four additional women.

A total of 420 meaning units were extracted from the interviews that were categorized into five main themes and 13 subthemes [Table 3].

### Theme 1: Desperation

The interviews showed that difficult financial problems of the family were the starting point for thinking about surrogacy. Poverty made the family and women feel desperate. Women chose to be surrogate to help the family earn money.

All the participants stated that financial problems were the main motivation for surrogacy. The participants quoted reasons such as renting a house, the education of children, or paying back loans. A 35-year-old homemaker said: *"I did this for my husband. He had many debts. It was time to clear his checks. With the money we received, we paid all his debts. This money helped us a lot."* (P 1)

Another 31-year-old woman noted: *"I was so desperate that I even thought of selling my child. A doctor told me that there was a center that would put a baby in my womb to carry for nine months, and I would be getting lots of money in return. I did this because I had no money to rent a house. My husband is sick and cannot work. But the money was not enough and it was spent very fast."* (P 4)

### Theme 2: Pain and suffering

Surrogacy is a painful process. It consists of numerous painful and invasive procedures. Women were used to experience considerable stress during different phases of the surrogacy, from the time that they were waiting to see whether the IVF was successful till the time of delivery to see if the infant was healthy. Besides, many women thought about the reason why they should

**Table 1: An example of the data analysis process**

The transcribed interview	Condensed meaning units	Subthemes	Themes
"The child was with me for one night after delivery, and the mother (commissioning) was also with us. The baby was very healthy; she didn't even have the yellowish color that most babies have. She was crying but she stopped crying after hearing my voice as if she had known my voice. The blood connects you anyway. (The participant was crying the whole time she was talking about this experience.)"	The presence of the commissioning mother	Support of the commissioning parents	The supportive system
	Gave birth to a healthy child	A sense of pride	Looking for positive aspects of the surrogacy
	Baby can recognize my voice	Emotional involvement	Emotional involvement and self-alienation
	Blood connection		
	Feeling depressed	Postnatal depression	Pain and suffering

**Table 2: The demographics of the participants**

Number	Age (years)	Job	Education	The duration of marriage (years)
1	35	Homemaker	Under diploma	14
2	31	Homemaker	Under diploma	11
3	37	Homemaker	Under diploma	18
4	31	Homemaker	Under diploma	12
5	33	Homemaker	Diploma	15
6	28	Homemaker	Diploma	6
7	23	Homemaker	Under diploma	7
8	28	Homemaker	Under diploma	10
9	33	Student	Phd student	8
10	33	Shop keeper	Diploma	11
11	27	Clerk	Master's degree	6
12	28	Homemaker	Under diploma	10
13	23	Homemaker	Under diploma	6
14	30	Homemaker	Under diploma	14
15	29	Homemaker	Diploma	10

bear this much pain and suffering. It made them feel miserable sometimes. This theme consists of physical pain, emotional suffering, suffering caused by others, and fears as subthemes.

#### Physical pain

Many women complained about physical problems during surrogacy. A 28-year-old homemaker said: *"In the 7<sup>th</sup> month of pregnancy, skin rashes started to erupt all over my body. My doctor said it might be because of the drugs that I had injected. I didn't have such a problem during my own pregnancy. She gave me anti-histamine ampoules, but still my skin is very sensitive. I also had severe morning sickness. For my own child, it stopped after four months, but I had morning sickness during the entire nine months in my surrogacy. I think I will have to spend all the money earned to treat my problems."* (P 6)

Some women had twins and triplets. These are high-risk pregnancies that can induce physical problems. A 33-year-old woman stated: *"I had a triplet pregnancy. I was hospitalized from the fifth month of the pregnancy. I had hypertension. I couldn't lie down anymore. I used to feel choked. I had to sit all the time. I wished I could sleep normally for one night. I couldn't eat anything but chicken. I couldn't drink milk. They gave me supplements. It was a terrible pregnancy. I was more like a sick person than a pregnant woman. Those who have had triplet pregnancies can understand what I am saying."* (P 9)

#### Emotional suffering

Emotional suffering was expressed by surrogate mothers. Some said that they felt depressed after delivery. A 33-year-old PhD student said: *"After delivery, I suffered from severe depression. I couldn't continue my*

*studies; I couldn't even take care of my own child; I didn't want to see my husband, because I thought if he had more money I shouldn't go through this. I went to my parents' house for six months and started treatment. Now, it is about eight months that I have stopped my pills and started my education in university."* (P 9)

#### Suffering caused by others

Surrogacy could cause social problems. Some participants said that they were hiding the surrogacy from their family. Later, they were anxious about how to explain the end of the pregnancy without an infant. Some women said that others had looked down on them and treated them as inferior. Many people think that surrogacy is not Islamic, so they have bad attitude toward the surrogate mothers. Some women were afraid that someone known may see them at the center and come to know about it. A 28-year-old homemaker said: *"I had hypertension and I needed to be hospitalized. The other women in the hospital ward found out that I was a surrogate; they used to talk behind my back, like I had done something very wrong. I requested my doctor to put me in a private room. I have pride and dignity. I am educated. No one should humiliate me."* (P 6)

Some women noted financial conflicts with their husbands. A 28-year-old woman said: *"My husband took all the money. He didn't give me anything. I was the one who tolerated the problems but I didn't see any money."* (P 6)

#### Fears

Breaching the contract, abortion, and the fear of a cesarean section were some of the concerns that made the surrogate mothers anxious. A 35-year-old homemaker said: *"I had spotting, and I was anxious that I might lose this child after spending so much time and effort; Enduring all these injections and treatments for nothing."* (P1)

### Theme 3: Emotional involvement and self-alienation

Pregnancy is a deep experience. Women said that it was a strong feeling that they could feel the fetus inside their body, and it made them emotional with a complex feeling that this child is not theirs. Some women tried to protect themselves by self-alienation. This theme consists of two subthemes of emotional involvement and self-alienation.

#### Emotional involvement

All the women were curious about the child they were carrying: how she/he would look like. Some were interested and loved the child. A 28-year-old homemaker said: *"The child was with me for one night after*

**Table 3: The themes and sub-themes categories**

Themes	Sub-themes	Some of the Meaning units
Desperation	Unemployment and desperate need for money	High costs Needing money to rent a house Economic pressures Poverty
Pain and suffering	Physical pain	Severe morning sickness Severe physical problems Pregnancy complications Adverse effects of the Drugs Prescription of complete bed rest
	Emotional suffering	Postnatal depression The sense of self-pity Anger and emotional over-sensitivity Mental pressure
	Suffering caused by others	Husband's disapproval Lying to others Feeling inferior Looked upon negatively by the society Concealing the situation Family reluctance Humiliation Feeling ashamed and embarrassed Economical exploitation
	Fear	Fear of cesarean section Fear of abortion or still birth Fearing breach of contract and not receiving the money
Emotional involvement and self-alienation	Emotional Involvement	Loving the child Being curious about the child
	Self-alienation	This child has nothing to do with me Doesn't want to engage with the commissioning couple Different from other pregnancies with no feelings towards the child
Looking for positive aspects of the surrogacy	Positive interpretation of the experience	Making an infertile couple happy The child will be happy and raises in a good family Gaining husband's appreciation A sense of selflessness
	The sense of pride	Bearing a healthy child Successful IVF in the first attempt Earning money legally Being helpful

Contd...

**Table 3: Contd...**

Themes	Sub-themes	Some of the Meaning units
The supportive system	The support of the commissioning parents	Emotional support Instrumental support Bonding with the commissioning parents
	The support of the surrogate's family	Emotional support from the husband Support of the commissioning parents
	The support of the health system	Health situation of the surrogate mother Adequate counseling services The role the professional personnel The role of the mediators
	The support of the community	Inadequate laws Lack of public awareness

delivery, and the mother (commissioning) was also with us. The baby was very healthy; she didn't even have the yellowish color that most babies have. She was crying but she stopped crying after hearing my voice as if she had known my voice. The blood connects you anyway. (The participant cried the whole time she was talking about this experience)." (P 6). A 29-year-old homemaker said: "Sometimes I think whether he will recognize me after 20 years when he is a young man? How will he look like? What should I tell him if I see him? Will he like me or not?" (P 15)

#### Self-alienation

Some women tried to emotionally detach themselves from the child. Many said that they did not want any kind of relationship with the commissioning parents during the pregnancy, and they try not to think about the baby. A 33-year-old homemaker said: "I told myself from the beginning that this is not my child, I will just carry her for nine months, and I had no feelings for her." (P 5)

#### Theme 4: Looking for positive aspects of the surrogacy

The financial rewards were the main motivation for the surrogacy. However, many women were trying to bring something more meaningful to this deep experience. There were many quotations about the positive aspects of the surrogacy such as stopping a divorce following infertility or creating life and joy. Some women were very proud of themselves. This theme consists of two subthemes.

#### Positive interpretation of the experience

Some participants were trying to interpret the positive aspects of the experience. Some of these interpretations were being helpful, making a family happy, and even

saving their marital life. A 33-year-old homemaker said: *“This work is really helpful. Some couples even consider divorce because of this problem. Do you know the rate of divorce in Iran? It is very high. This work that we are doing is noble, and incomparable with any other work.”* (P 5)

### Sense of pride

Some women felt a kind of feminine strength in the process of surrogacy. Many women were proud that the surrogacy was successful in the first attempt and that they were giving birth to a healthy baby. A 30-year-old homemaker said: *“I became pregnant in the first attempt”* (said very proudly). *“Then they told me I was carrying twins. The parents (commissioning) hired a nurse for me. Even, if I had a headache, they called me several times to check, if I was okay or not. I gave them two healthy and beautiful children. I am proud of myself that I did my job well.”* (P 14)

### Theme 5: The support system

Surrogate mothers mentioned several potential support systems during surrogacy that could make this experience easier and healthier or worse. Four support systems were recognized during the interviews including the commissioning parents, the surrogate’s family, the health system, and the community.

#### The support of the commissioning parents

The surrogate mothers expected support from their commissioning couples. The support could be financial, instrumental, or emotional. A 30-year-old homemaker said: *“When you are pregnant, you feel sad, you feel alone, and you need someone besides you. Just exchanging money for a baby is very cold and heartless. It makes you feel bad as if it is a duty. But if the parents are kind and supportive, it is much better. In my case, the mother (commissioning) was like a sister to me. She spent the night of delivery with me and took care of me. I was very happy to see that she cares about me.”* (P 6)

#### The support of the surrogate’s family

The support of the family, especially the husband, had a crucial role in the experience of the surrogate mothers. A 37-year-old homemaker said: *“My husband was un-accepting at first. He said it was very difficult and not worth it. But I convinced him that this money could solve our problems. Now, he is doing all the work in the home: He washes the dishes, cooks, sweeps the house, and washes the clothes. I just rest. My skin was dry; he bought skin cream for me.”* (P 3)

#### The support of the health system

The professional team for surrogacy had a key role to play in the quality of services that women received.

Sometimes, this support was not satisfactory in the eyes of the surrogate mothers. A 33-year-old woman said about the personnel of the center: *“Their behavior was very cold. I went to a doctor. When I entered her room, she told me to take off my clothes and lie there without saying any greetings. Just like that. In the waiting room they called me loudly, “surrogate” like I don’t have name, everybody presented turned to look at me. It was humiliating. I have a right to be respected like any other patient.”* (P 10)

Moreover, the women complained that they did not receive the necessary information. A 33-year-old woman said: *“You should have a designated place to answer questions about the drugs and procedures and their complications. Many times, I had questions and they hardly answered me. I even argued with them once. I had many questions about the contract we signed with the commissioning parents, but no one answered me. They had written something on a paper and displayed it on the wall. When I asked a question, they referred to that note. But that is not enough; someone should explain these things patiently.”* (P 10)

#### The support of the community

The need for public awareness and support was mentioned by surrogate mothers. A 31-year-old homemaker said: *“I like to watch the programs about surrogacy on the television. I want to talk to people and tell them that this work is not illegal, it is Islamic, and it is not a sin. In fact, it is a respectable work approved by God. If someone is poor and wants to earn money by surrogacy, she should not feel guilty. The government should make people aware of the importance of our work.”* (P 4)

A 33-year-old homemaker said: *“They talk about organ transplants. There is encouragement given to people and families of brain-dead individuals to donate their organs, but when it comes to surrogacy there is no support or encouragement.”* (P 10)

## DISCUSSION

This study showed that financial motivations were the main reason that made women volunteer for surrogacy. The surrogate mothers were experiencing numerous physical, social, and emotional problems related to pregnancy. There were considerable social pressures, fears, and anxieties that could threaten the health of surrogate mothers. They were emotionally involved in the pregnancy, although many tried to detach themselves from the situation. There were some positive aspects in surrogacy such as creating a life and bringing joy to a family. Some women were proud of their feminine power in bearing a healthy child. Supportive systems could play a key role in the surrogacy process. The main supportive

systems were commissioning parents, the surrogate's family, the health system, and the community.

In this study, financial gain was the main motivation for the surrogate mothers. The commercial arrangements of surrogacy can create risks for vulnerable women, especially when we consider that these women are from underprivileged backgrounds.<sup>[5]</sup> In England, Jadva *et al.* reported that the most common motivations stated by women were "wanting to help a childless couple," "enjoyment of pregnancy," and "self-fulfillment." Only one surrogate mother said that money was a motivating factor.<sup>[13]</sup> In a qualitative study conducted in Greece, the experiences of commissioning women regarding the birth of a child through surrogacy were explored. In Greece, only noncommercial GS is legal. The study revealed that a very close bond was developed with the surrogates; this was characterized by daily contact and caregiving behavior. All the participants were deeply grateful to their surrogates.<sup>[20]</sup> The close relationship that was reported in this study could not be seen in the present study, mainly because surrogacy was noncommercial in Greece and surrogate mothers were not receiving payment.

However, in Iran, financial gain was the main motivation for surrogate mothers.<sup>[15]</sup> Surrogacy may be commercial or altruistic (the surrogate carries the child with no financial gain).<sup>[21]</sup> Familial surrogacy, in which a member of the family such as the sister acts as the surrogate mother, has many advantages and is common in some countries, but this method is not commonly practiced in Iran as it requires education and awareness. Considering the strong familial bonds in Iran, altruistic familial surrogacy may be an accessible option for infertile couples that could help decrease the current commercial atmosphere surrounding surrogacy and make this procedure more acceptable for the community.

Commercial surrogate mothers are normally stereotyped as poor, single, young, and ethnic minority women facing financial difficulties in their families or some other circumstances that pressure them into a surrogacy arrangement. The reviews of empirical researches in the United States and Britain did not support this view. On the contrary, the studies showed that surrogate mothers were mature, experienced, stable, and self-aware women who made an informed decision about surrogacy.<sup>[22]</sup> Our study also showed that, although most surrogate mothers needed the money, it did not mean that they were poor and uneducated women. The surrogate mothers came from varied backgrounds and possessed various educational degrees; some even had high educational degrees and most of them were well

informed about their decision and should not be judged stereotypically.

The participants mentioned numerous physical, emotional, and social problems. Unlike other ARTs, GS causes considerable medical risks for the third party.<sup>[23]</sup> Like any other pregnancy, the medical risks related to surrogate pregnancies can include miscarriage, ectopic pregnancy, and other common pregnancy-related complications. Nevertheless, these risks increase further by the risk of multiple pregnancies when IVF is used to create the embryo(s).<sup>[5]</sup>

In a retrospective study in the Netherlands, 20.6% of surrogate pregnancies were complicated by a hypertensive disorder and postpartum hemorrhage (>500 ml) which occurred in 23.5% of the pregnancies, which was higher than expected.<sup>[24]</sup> In our study, some surrogate mothers mentioned experiencing twin or triplet pregnancies, which caused them many physical problems during the pregnancy. IVF surrogacy with multiple gestations is associated with an increased risk of preeclampsia, postpartum hemorrhage, hysterectomy, gestational diabetes, higher risk of hyperemesis, and anemia.<sup>[25]</sup> The psychological reactions such as depression are worse in surrogate mothers when surrendering the child.<sup>[5]</sup> Women also complained about social problems and negative judgments of others. In a qualitative study in India, the perspectives on surrogacy in men and women were explored. There were diverse perspectives about surrogacy. Some believed that the surrogate mother violated the concepts of motherhood through "selling her own child," so she is a "bad woman," and some mentioned surrogate mother as a woman worthy of respect for helping a childless couple.<sup>[26]</sup>

The experiences of surrogate mothers in our study reflected that there are still some people who think of commercial surrogacy as a negative and unethical behavior. There is a strong need for generating awareness regarding surrogacy and its advantages in the community. Some women stated that they were financially abused by their husband. Another study showed that there is also the issue of familial coercion in surrogacy.<sup>[5]</sup>

Some women stated that they were emotionally involved with the fetus. This feeling could be very strong; in 1986, a woman refused to give up the baby she was carrying as a surrogate and the pregnancy changed to a court case.<sup>[22]</sup> In addition, in a qualitative study in India, participants believed that an emotional bond would form between the surrogate mother and the child, and they concluded that giving birth on behalf of someone else was unfeasible.<sup>[26]</sup> In the Netherlands, surrogate

mothers are under the supervision of a specially trained team of psychologists to evaluate their motivation and psychological well-being.<sup>[24]</sup> Undoubtedly, the psychological and emotional states of the surrogate mothers play an important role in the well-being of the fetus. It is a double-edged sword; the surrogate mother might not accept the embryo emotionally and would not care about it or, on the other hand, she may recognize the embryo as her own and there would be a possible risk for attachment to the fetus.<sup>[25]</sup> Both of these reactions were heard in the interviews.

In our study, women mentioned the positive aspects of surrogacy. In a qualitative study in India, people believed that a surrogate mother would risk her emotional and physical health to help a childless couple and also her own family. They believed it to be a selfless act that deserves great respect.<sup>[26]</sup>

Women mentioned some support systems in the interviews. A study showed that 70% of the participants stated that the support of the family and friends was important for them when deciding for surrogacy.<sup>[27]</sup> At the studied infertility center, only married women having at least one healthy child and with the permission of their husband could be a surrogate mother. Hence, the participants were more likely to receive the support of their husbands. In a study, the participants believed that the marital status of a surrogate mother was very important as an eligibility criterion. In contrast to men, more women agreed that surrogacy should happen only through married women rather than by widowed or divorced women. The main reasons for this were the support of the husband during pregnancy.<sup>[28]</sup> Further investigations are needed to study the impact of surrogates' marital status on the outcome of pregnancy.

Health system can provide counseling services for surrogate mothers. This study showed that the counseling system is not adequate in Iran, resulting in women not receiving the necessary information. The Ethics Committee of the American Society for Reproductive Medicine recognizes that psychological and legal counseling along with full informed consent regarding the risks of GS is needed to protect the interests of surrogate mothers.<sup>[23]</sup> A study in Australia showed that official online websites were the most common source of information for surrogacy.<sup>[27]</sup> This result indicated that reliable online services could address the need for correct information to some extent. Another study showed that phone counseling also was a feasible and helpful method.<sup>[29]</sup>

## CONCLUSION

Making the decision for surrogacy usually starts with financial motivations. Women would endure a painful

journey, from the initial tests and prescriptions and then through the IVF procedures, a high-risk pregnancy, a major surgery of cesarean section, and sometimes postnatal depression. There were some positive feelings about the surrogacy such as helping infertile couples and the sense of creating joy and life. Women needed several support sources. Many were not adequately informed about the process and possible complications. The health system needs to support the surrogate mothers more and have a more humanistic approach in providing services for these women. There is a need for public awareness about the importance of surrogacy, and surrogate mothers should be encouraged and respected. Altruistic and familial surrogacy in Iran should be more encouraged. This study had some limitations. First, it was about the experiences of a limited number of women in one city. Second, the participants were very cautious in expressing their experiences, so there might be some aspects that have not been revealed in this study. Nevertheless, this was one of the rare qualitative studies about the experiences of surrogate mothers. We recommend further studies about the long-term effects of surrogacy on the health of surrogate mothers and the relation of the commissioning parents with the surrogate mothers and its effect on the health of the mothers and infants.

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## Conflicts of interest

There are no conflicts of interest.

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