

Nine centuries waiting: The experiences of Iranians surrogacy commissioning mothers

Mitra Zandi¹, Zohreh Vanaki¹, Marziyeh Shiva², Eesa Mohammadi¹

ABSTRACT

Background: There are a few studies about commissioning mothers' understanding from the surrogacy during 9 months of waiting for delivery in Iran and other countries. This study was conducted with an aim to explore and explain the nature of concerns (experiences) of commissioning mothers.

Materials and Methods: A qualitative design with a conventional content analysis approach was used to gather and analyze the experiences of commissioning mothers. They were selected from Royan Research Centre and other infertility centers in Iran. After purposive sampling for the selection of the participants, unstructured interviews were held for data collection. Twenty-four unstructured interviews were conducted with 12 commissioning mothers, 2 surrogate mothers, and 2 infertility center social workers who directly and continuously dealt with these mothers.

Results: Two main themes emerged from the data analysis: 1. cultural dilemma (consisting of three subthemes: Social taboo, concerns about disclosure to others and the child, concerns about altering maternal and child's identity, and 2. uncertain waiting (consisting of three subthemes: Concerns about health of fetus and surrogate, concerns about an unfamiliar surrogate, and concerns about lack of preparation for maternal role).

Conclusions: The study reveals the importance of maternal emotional care in this group and introduces a new arena for nurses' activity. These findings help the mothers by nurses' activities in health care clinics and anywhere they deliver nursing care.

Key words: Iran, nursing, reproductive techniques, surrogacy

INTRODUCTION

Despite global reductions in fertility rates, parenthood remains a central life goal in most societies.^[1] In recent years, progress in medical technology has offered hope to many infertile couples, especially in the developed world.^[2] The US is one of the countries with the highest rate of multiple births in the world. This rate is directly attributed to the increased use of assisted reproductive technologies (ART) in achieving pregnancy.^[3] The number of babies born to gestational surrogates increased to 89% in just 4 years, from 2004 to 2008.^[4]

Having children remains a fundamental drive for many couples after marriage in Iran. Both religious and cultural norms and values reinforce such perceptions. Iranian culture generally considers children as "divine gifts," and producing

children is the fundamental reason for marriage among many couples. Having children is generally regarded as strengthening the institution of the family and as a sign of commitment to Iranian cultural values. Infertility is a social onus for women who are expected to produce children early within marriage in Iran.^[5]

According to the World Health Organization, over 80 million people (about 10-15%) of the families experience infertility. In Iran, one-fourth of families experience primary infertility.^[6]

Surrogacy is one of the new ART which has attracted many Iranian infertile couples.^[7] Surrogacy was carried out for the first time in Iran in 2001.^[8] This practice of transferring an embryo or fetus from one womb to another is not forbidden in Shiite jurisprudence.^[9] Gestational (Full) Surrogacy is becoming increasingly popular in Iran.^[7]

Treatment with ART can be a shocking experience. There is little experimental data about surrogacy and its social and psychological aspects.^[10] Most researches have focused on a number of specific issues such as attachment and disclosure to surrogate offspring; experiences, characteristics, and motivations of surrogate mothers; and changes in profiles of the commissioning mothers.^[11]

¹Department of Nursing, Faculty of Medical Sciences, Tarbiat Modares University, ²Department of Endocrinology and Female Infertility, Reproductive Biomedicine Research Center, Royan Institute for Reproductive Biomedicine, ACECR, Tehran, Iran

Address for correspondence: Dr. Zohreh Vanaki, Department of Nursing, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran.
E-mail: vanaki_z@modares.ac.ir

While some researchers have shown that clients experienced powerful emotions as a result of infertility and its treatment,^[12,13] and women experienced more stress than their partners,^[12] and this factor may delay their adaptation with the parenting process,^[13] in a retrospective qualitative study in UK, McCallum *et al.* showed that throughout the pregnancy period of a surrogate mother, couples recalled their levels of anxiety as low and their experience as positive,^[14] and in Pashmi's quantitative study, most of the surrogate and commissioning mothers did not consider surrogacy a problematic issue.^[15]

Klock and Greenfeld found that in *in vitro* fertilization (IVF), women experienced more satisfaction with being able to get pregnant than the women who conceived naturally and reported decreased anxiety as the pregnancy progressed.^[16] Although surrogacy is essentially done with IVF technique, the key difference between surrogacy with other methods of IVF is that commissioning mothers in surrogacy will not experience the physical changes of pregnancy.

Most of the studies in Iran have focused on defining surrogacy,^[17] demonstrating the legal aspects,^[18] ethical aspects,^[19] survey of cultural attitudes about the use of this technique,^[10] and ethnography of volunteer surrogate women.^[7] But studies about the third-party reproduction in Iran are few, and the impacts of these methods on recipients, donors, and children are unknown.^[20] We found only one quantitative study, conducted by Pashmi *et al.* in Iran, on commissioning mothers' experiences. Pashmi *et al.* evaluated the experiences of the 30 women involved in surrogacy (15 surrogate mothers and 15 commissioning mothers) and compared them with 30 normal mothers (women who conceived spontaneously) in Isfahan, a province of Iran, using a questionnaire and structured interviews. Results showed that the commissioning mothers had happy experiences as well as anxious feelings during the pregnancy of the surrogate mother. They were anxious about the health of both the surrogate mother and the baby.^[15]

Based on Mercer, identifying a mother's unique concerns and available resources to address these concerns and reinforcing her caretaking skills are important in fostering the mother's sense of competence as she works on gaining a maternal identity. Nurses are in a unique position to have long-term positive effects on mothers during this transition,^[21] and have a leadership role in providing anticipatory guidance and education that is grounded in the unique experiences of primigravid and multigravid women.^[22] There are a few studies that investigated the quality of commissioning mothers' experiences such as their anxiety and stress. Since the number of spouses treated by ART such as surrogacy is growing worldwide, it

is crucial to understand their emotional and psychological reactions toward surrogacy during the 9 months of the waiting period. This is the first qualitative study in Iran, which assessed the experiences of commissioning mothers. With their diverse culture and social contexts, developing countries demand much more context-dependent studies.^[23] This study has aimed to explore and explain the nature of concerns (experiences) of commissioning mothers.

Aim of the study

The aim of this study was to explore and explain the nature of concerns (experiences) of commissioning mothers.

MATERIALS AND METHODS

This was a qualitative study conducted through conventional content analysis with inductive approach. Content analysis is a research method that has come into wide use in health studies in recent years. This type of design is usually appropriate when an existing theory or research literature on a phenomenon is limited.^[24]

Setting

Participants were selected from Royan Research Centre and other infertility centers in Iran. Royan Research Centre consists of six departments (Endocrinology and Female Infertility, Epidemiology and Reproductive Health, Reproductive Genetics, Reproductive Imaging, Andrology, and Embryology) and one clinic actively working on different aspects of infertility and the development of new methods for infertility treatment.

Participants

Our participants were first-time commissioning mothers, during the waiting period (pregnancy of the surrogate mother) or after that (child rearing period). They had to be able to speak Persian and willing to participate in the research. There were no age restrictions. Participants were selected from gestational surrogacy cases (the conceptions were with own gametes), as gestational surrogacy is more prevalent in Iran than partial surrogacy and we had a better access to them. Women who were in a waiting list for finding a surrogate by the infertility centers or those who were waiting to know the result of embryo implantation and the women whose embryo was aborted after implantation were not included in this study.

Sampling strategy

All participants were selected purposefully. It means for selection, at first, we clarified mothers who had the first-time commissioning mothers, during the waiting period (pregnancy of the surrogate mother) or after that (child rearing period), and then, interviews were conducted.

Data collection

The data were collected through unstructured interviews. The first author (MZ) conducted all the interviews from November 2010 to August 2011. The questions asked in the interviews are shown in Table 1. Of the 10 commissioning mothers suggested by Royan Research Centre, 7 agreed to participate in the study and the other 3 mothers refused due to a fear of disclosure. From the infertility centers of other provinces, five women agreed to participate. Finally, this research was conducted with 24 interviews, and 16 people including 12 commissioning mothers, 2 surrogate mothers, and 2 of the infertility center staffs who directly and continuously dealt with the mothers (social workers). The average length of the interview was about 70 min. The interviews were continued to obtain richer data and stopped when no new information was obtained.

Data management and data analysis

The conventional content analysis was used to analyze the data. In this method, the analysis starts with reading all data repeatedly to achieve immersion and obtain a sense of the whole. Then, data are read word by word to derive the codes by first highlighting the exact words from the text that appear to capture key thoughts or concepts. As this process continues, the labels for codes emerge as the reflection of more than one key thought. These labels often come directly from the text and then become the initial coding scheme. Then, the codes are sorted into categories based on how different codes are related and linked. These emergent categories are used to organize and group codes into meaningful clusters.^[24] Coding and analysis was done by a single researcher who was the first author (MZ), and the other researcher checked them again and confirmed them as it is necessary for credibility.

The interviews were recorded and typed (in Persian) as soon as possible in the exact words, along with all nonverbal gestures such as crying, laughter, or silence. Then, they were entered in MaxQDA2007 software that makes it easier to organize and keep an overview over memos and contents. They were read and reviewed several times and, eventually, disintegrated into meaning units. After reviewing

Table 1: Interview questions

Open-ended questions	How do you spend 9 months of waiting period? Please tell me about your feelings and experiences in this period.
Following questions (according to participants' answers)	Is it possible to explain this further? What do you mean? Can you provide an example? For example, if the mother said that "it was terrible," the next question was, "please explain your feeling" and/or "who helps you in this situation?" and/or "could you explain about your senses toward others?"

each meaning unit, proper codes were written for each unit. Next, the primary open codes were classified based on conceptual and meaning similarities and put in the main categories which were more general and more conceptual. The categories were finally reduced to the two main themes of cultural dilemma and uncertain waiting.

Consideration of rigor

In order to maximize credibility of the findings in this study, prolonged engagement with data (1 year), members check, externals check, and triangulation recourses (commissioning mothers, surrogates, and infertility center staffs) were used. In order to keep confidentiality, as some of the commissioning mothers did not have any opportunity to express their emotions and concerns, they found the interviews so relaxing since they could release their pressures and this matter increased the credibility of the study. Data source triangulation helped with validity and transferability of the data. The study process was carefully recorded step by step so that conformability, validity, transferability, and audit of the study were achieved and another researcher could follow this research.

Ethical considerations

Before data collection, an approval was obtained from the Ethics Committee of Tarbiat Modarres University and Royan Institute. By a phone call in the beginning, the research purpose, interviewing techniques, confidentiality of information, and the right to withdraw from the study were explained to the participants. A suitable time and place for an interview were arranged. Interviews were conducted individually in a quiet environment like home, the park near participants' homes, or at Royan Research Centre.

RESULTS

Commissioning mothers' mean age was 35.8 years. The demographic characteristics of commissioning mothers and surrogate mothers are shown in Tables 2 and 3, respectively.

The experiences of the participants were classified in two main themes:

1. Cultural dilemma with three subthemes: Social taboo, concerns about disclosure to others and child, concerns about altered maternal and child's identity
2. Uncertain waiting with three subthemes: Concerns about health of fetus and surrogate, concerns about unknown surrogate, and concerns about lack of preparation for maternal role [Table 4].

Cultural dilemma

Cultural dilemma included the three categories of 1. social taboos, 2. concerns about disclosure to others and child, and 3. concerns about altered maternal and child's identity.

Table 2: Demographic characteristics of mothers

Mother	Age (years)	Level of education	Occupation	Infertility duration	Infertility cause	History of unsuccessful pregnancy	Status in interview time	Relation with mother
1	34	High school diploma	Homemaker	14 years	Lupus	Repeated abortion – 9 times	Having a 7-month-old son	No
2	31	Bachelor's degree	Stylist	7 years	Lupus	Repeated abortion – 2 times	Having a 7-month-old daughter	No
3	39	Elementary school	Homemaker	20 years	Infantile uterine	–	Having an 18-month-old daughter	No
4	32	Associate degree	Homemaker	6 years	Raki Tanski Synd.	–	Waiting	No
5	34	Elementary school	Homemaker	9 years	Hysterectomy due to fibroma	–	Waiting (twins, boy and girl)	No
6	49	Master's degree	Faculty member	9 years	Abdominal tumor and repeated abortion	Unsuccessful micro – 4 times	Having a 15-month-old daughter	No
7	30	Bachelor's degree	Homemaker	6 years	Raki Tanski Synd.	–	Having 2- and 6-month-old sons	No
8	35	Middle school	Homemaker	20 years	Raki Tanski Synd.	–	Having a 2-month-old son	Sister
9	40	MD	Medical doctor	17 years	Unknown	Unsuccessful IVF – 3 times	Having 2-month-old twin daughters	No
10	34	Bachelor's degree	Homemaker	13 years	Raki Tanski Synd.	–	Having a 31-month-old son	No
11	20	Bachelor's degree	English teacher	3 years	Raki Tanski Synd.	–	Having a 30-month-old daughter	Mother
12	29	Bachelor's degree	Homemaker	3 months after hysterectomy	Urgent hysterectomy	One death at birth	Waiting	No

Table 3: Demographic characteristics of surrogates

Surrogate	Age (years)	Level of education	Occupation	Status of having children
1	35	High school	Homemaker	Had two children
2	30	High school graduate	Homemaker	Had one child
3	40	High school graduate	Homemaker	Had three children
4	26	High school graduate	Homemaker	Had one child

Table 4: Summary of themes and subthemes

Cultural dilemma	Social taboo Concerns about disclosure to others and child Concerns about altering maternal and child's identity
Uncertain waiting	Concerns about health of fetus and surrogate Concerns about an unfamiliar surrogate Concerns about lack of preparation for maternal role

1. Social taboos have rooted in the cultural barriers of surrogacy usage in the society. Infertile couples decide to use this technique after desperate years of trying other treatment modalities and prolonged resistance toward using surrogacy, but concerns about other people's blaming points of view about surrogacy turn into a frightening experience and a taboo. One of these mothers stated her experience as follows:

“Well, for the things people say. My in-laws for instance, my mother in-law, for example, was saying that one of our relatives had an implantation! Although she is an educated person, supposedly, they should know better, but still their reaction was so bad. These all were too much for me to take, too much to take.” (M7)

2. Mothers were also worried about their secret disclosure to others and child. Concern about revelation of using surrogacy to other was reflected in one of the statements:

“I was worried that my secret would be revealed. I mean I was anxious all the time about this idea ‘what should I do if somebody finds out?’” (M1)

All mothers also were worried about disclosure to their child and its revelation by relatives or young children. They believed this cannot be done suddenly without preparation and should be planned to be revealed by parents themselves. They were afraid of the child to be informed when he/she does not have proper understanding of the events yet and the ability to analyze the truth, so that disclosure by others may lead to huge psychological trauma and his/her blaming parents as liars. One of the mothers said:

“I feel that telling this subject to the child has to be done at a certain age. I mean, we should reveal the truth when she is mature enough to be able to understand what you are telling her. Earlier than that, what will happen to my child? She will be destroyed, because she cannot really get it. If she is told all of a sudden, she would think of me as a liar because I didn’t tell her the truth, she would not believe me and I might struggle with her a lot.” (M2)

3. Another concern in this category was altering the maternal and child’s identity. Mothers were worried about their children not being accepted by family, relatives, and peers, and that they might look differently to the child and have social stigma. These mothers even suffer more after the child’s birth.

“What if someone doesn’t respect my child, treat him like a foster kid, what should I do? These are the facts, these are my worries.” (M6)

Statements of social workers in the infertility center confirmed this kind of emotions in mothers:

“They are worried about the relationship between their relatives and their newborn babies.”

Concerns about altering maternal identity means that they were worried about not being accepted as a real

mother by others and even by the baby. Mothers were worried that in case of a disclosure, they may not be accepted as the genetic mother. These statements showed the concern:

“I don’t know whether they will accept me as a mother now if they know this is my baby. I have this kind of baby.”(M6)

They were also concerned about not being assumed as a real mother by the child, for example:

“I am afraid that in future my baby would tell me that we found him in the street and adopted him or got him from a foster home.” (M10)

Uncertain waiting

This theme included three subthemes of 1. concerns about health of the fetus and surrogate, 2. unknown surrogate, and 3. lack of preparation for maternal role.

1. Mothers were strongly concerned about the fetus’s health and the possibility of abortion, stillbirth or disabilities, and premature labor. These statements were repeated by almost all mothers and are some of the disturbing factors in mothers’ psychological well-being.

“Well, one thing that disturbs me is that I sometimes tell myself maybe because the baby is injected until 9 months long ..., I have heard many times about premature babies’ birth in the 7th or 8th months, or miscarriage, or the baby born with deformities. Even before birth in the 9th month, he may be strangulated by umbilical cord. All these things scare me” (M4 in waiting period)

Based on most of the mothers’ thoughts, it was clear that they had always been worried to hear horrible news about their fetus.

“I thought all the time something would happen to them (her three fetuses). I felt what would happen to the babies now over and over again. What would happen now? Really, every night, I have this nightmare that the surrogate mother is sending me an SMS.” (M9)

Mothers’ concerns were increased in critical conditions such as a threatened abortion or decreasing fluid of amniotic sac partially during delivery.

“During the last month after check-up, the Dr. told me that I was dehydrated, my amniotic fluid was too little, and the mother was so horrified.” (SM2)

Since the physical and psychological relaxations of pregnant women directly affect the baby’s physical and psychological well-being, mothers were worried about the surrogates’ comfort:

“When I call her up, the first thing I ask her is how she is doing. And then, I ask about the baby. For example, I ask her, ‘Is everything ok in your home? Are you relaxed?’” (M4 in waiting period)

In addition to the effect of surrogate’s health on fetus, mothers had also had an altruistic feeling to the surrogate and they were worried about the possibility of a physical damage or even death because of their child’s delivery. Such concerns are clearly reflected in this statement:

“After the child’s birth, I was really worried about the surrogate mother. How is she doing now? Is she awake? These were very hard for me. I cried a lot.” (M2)

2. Another important subtheme of uncertain waiting was the concerns about an unfamiliar surrogate. In the beginning of the process, mothers did not have enough knowledge about the surrogate; they were worried about giving their fetus to a strange family. They were also terrified that the surrogate might not adhere to the religious principles during pregnancy or might not give the newborn after delivery or may extort the couples after child’s birth continuously or have intentional abortion, which are all related to their lack of knowledge about the surrogate leading to unreliability, for example:

“I told my husband, ‘Don’t take me home tonight.’ He asked me ‘why?’ I said, ‘I can’t come home tonight. How can I leave my baby in her womb and go home?’ I just couldn’t.” (M3)

3. The other subtheme of uncertain waiting was about the lack of preparation to becoming a mother for different reasons. Although most of these women became a mother at an older age and they had previous experience of taking caring of their relatives’ children, they were more concerned about the inability in taking care of their own child, insomnia, and inability for emotional attachment with the child, and so on; for example:

“During these 9 months, you wish to have what you have always wanted in one thing, the baby. Now, when you got what you wanted for so long, you found out you are not ready. I kept telling myself, ‘My God when this child is born, I am not even able to touch him. How can I make a relationship with him?’ I think those 9 months of pregnancy makes you prepared for that.” (M6)

DISCUSSION

Mothers participating in this study had chosen surrogacy as their last hope, after years of infertility and sometimes after repeated unsuccessful treatments, and this turns them to sensitive people as the stress during the waiting period

can intensify the remaining effects of infertility in these individuals. Study findings have shown semantic elements of commissioning mothers’ concerns (experiences) in the two themes of cultural dilemma and uncertain waiting. These themes suggested that the experience of becoming a mother through surrogacy is highly stressful for mothers, and during the waiting period, they experience such a stressful situation in which according to one of the mothers, 9 months of waiting period passes like nine centuries.

The study findings have shown that the traditional society of Iran has not universally accepted surrogacy and cultural rejection is a great stressful element for commissioning families. This finding was similar to Pashmi’s study findings. In Pashmi’s study in Iran, most of the concerns were related to the social attitude toward surrogacy. About 46.6% of commissioning mothers had hidden the surrogacy from their relatives.^[15]

Abbasi-Shvazy *et al.* showed that women who receive donor oocytes believe that the Iranian community has not accepted ART yet, as in the case of a disclosure, infertility stigma, which they have been attributed to, is transferred to their children as an illegitimate baby. This can create real problems for their child in the future. Mothers in the above-mentioned study also expressed their fear of disclosure of surrogacy to their children, and that their children might feel being a different human being in comparison with their friends.^[25]

In Hershberger *et al.*’s phenomenological study on received donor oocytes in California, women addressed social acceptance of this method as a social support. They expressed their concern as disclosing the nature of conception may have the potentiality to cause discordances in the relationships and identities within the family, maternal identity, and maternal insecurity. Fear of social stigma and rejection by the society were the other concerns of these women.^[26] The predominant traditional cultural and social context and lack of cultural preparation were the major effective factors concerning mothers’ emotions, which, based on our findings, led to the concerns about the others’ reactions and altered maternal identity. It should also be considered that full surrogacy is a completely different condition from oocyte donation in which mothers do not experience pregnancy, which is important in collation of findings of different studies. Also, in Kirkman’s study, women who became mothers through egg donation mentioned concerns about their maternal identity.^[27] No information reflecting concerns about children’s identity was found in other studies.

In contrast with the present study, the retrospective study of McCallum *et al.* in UK showed a low level of anxiety in

couples throughout the pregnancy of a surrogate mother. In their study, the majority of the couples' families reacted either positively or neutrally to the news, with only 7% reporting any negative reactions from the family.^[14] Also, in contrast to our findings, studies in UK showed that families using surrogacy (complete and partial) acted openly in exposing the truth to the child.^[14,28,29] It seems that the main reason for this difference is different cultural contexts in Iran and UK. Iran is in a historical transition phase from tradition to modernism, which simultaneously causes special conflicts in utilization of new treatment modalities such as surrogacy by families.^[30] So, giving the public sufficient information about surrogacy and the other supplemental therapies for infertility by media such as TV and newspapers can improve the negative attitude toward surrogacy and assist most of the surrogate mothers and infertile couples.^[15]

Uncertain waiting was another theme that emerged from mothers' experiences in this study. Concerns about fetus's and surrogate's health, lack of preparation for motherhood role, and an unfamiliar surrogate were all aspects of uncertain waiting, so that the mothers imagined an uncertain future for them during this period. Being anxious about the health of both the surrogate mother and the baby has been mentioned by commissioning mothers in Pashmi's study too. van den Akker reported fear of the treatment failure and a normal baby worries in 15% and 8% of the mothers, respectively.^[28] It is clear that even in natural pregnancies, mothers are concerned about the child's health, the consequences of the waiting period, and lack of their preparation for a maternal role,^[31] but based on commissioning mothers, their unawareness about fetus was an important factor that intensified their concerns. Hamaberg *et al.* reported a high level of anxiety about pregnancy security and fetal health among the participants, which is similar to our findings.^[13] Uncertainty about the outcome had a great impact on the stress level of the women experiencing IVF, which is consistent with the study of Ardent *et al.*^[12] All findings about these mothers must be interpreted cautiously, as this method is different from other techniques of mothering, with no waiting period.

Also, in another study comparing the women with a natural pregnancy with IVF, the results showed that both IVF mothers and IVF partners were more anxious about losing the pregnancy compared to couples who conceived naturally, possibly as they themselves had a difficulty in getting pregnant successfully. IVF partners had a high degree of anxiety about the expected baby concerning not being healthy or normal, but their anxiety decreased as the pregnancy progressed to similar levels of those who conceived naturally.^[32] In the present study, only one mother reported that her anxiety decreased as the pregnancy progressed in the surrogate mother. Meanwhile,

other participants felt more anxious in the later stages of the waiting period. This difference may be related to perceiving the movements of fetus through pregnancy progression of the mothers with other infertility treatments, which makes mothers more relaxed and confident about their fetus's health, while this cannot be felt by surrogacy commissioning mothers, so they become more concerned about losing the baby and missing their dreams of becoming a mother while waiting. van den Akker also found that commissioning mothers' anxiety (in full or partial surrogacy) could be significantly intensified in the final stages of surrogate pregnancy.^[11]

Lack of knowledge about the surrogate, relying on the surrogate mother, and fear of not delivering the baby after birth were the other stated concerns of those mothers, which were also partially found in van den Akker's study. In her study, 23% of commissioning mothers were worried that relinquishing the baby may become emotionally difficult for the surrogate mother. Other types of worries included emotional difficulties for commissioning (3%) or surrogate mother (19%).^[28] Keen (as cited in Teman^[33]) stated that 99% of the surrogate mothers willingly relinquished the child as they had contractually agreed to do. Less than 0.1% of surrogacy cases end up in court battles. Based on McCallum *et al.*'s report, only one of the surrogate mothers had doubts about relinquishing the baby and the others did not have any problem to do that.^[14] In the present study and in Pashmi's study in Iran, all of the surrogates gave the baby to the commissioning mother immediately after delivery and there was not any problem reported.^[15] van den Akker believes that the surrogate agency information appears to be quite successful in assisting the surrogates to achieve a cognitively consonant state.^[11]

In conclusion, the study results found that mothers experienced a continuous stressful waiting period and psychological and social insecurity. This study suggests being more supportive for commissioning mothers^[15] through psychological consultations, application of relaxation techniques, and family education classes. In these classes, presence of husbands or partners is crucial.

Even though this study tried to collect in-depth information by utilizing various resources on one hand and the participating mothers were studied in both waiting period and after child birth on the other hand, there were some limitations. Due to unavailability of partial surrogate samples, this research has been conducted only on gestational/full surrogacy, while partial surrogacy may yield different results. It is recommended to consider these differences in the future studies. In addition, cultural and, particularly, religious differences in women can influence their experiences and perceptions.

The result of this study can be used as a practical guide for nurses and other team members of ART in Iran and other Muslim countries where ART is not forbidden. In addition, in the countries with similar culture, where these technologies are not permitted, it can be used in decision making about this matter.

Provision of the best health care, as the purpose of nursing, requires careful assessment and evaluation of people's experiences about diseases and treatment methods. In order to provide sophisticated care, ART nurses should first know about clients' experiences, and then, plan nursing care accordingly. The study results showed that psychological support is necessary before a successful intervention during the waiting period and after child birth.

CONCLUSION

The study results showed mothers' psychological insecurity and stress during the waiting period. It is recommended that since surrogacy is considered as a high-risk psychological experience, these mothers should be cared for and receive special consultations before making such a decision. These findings help the mothers through nurses' interventions in health care clinics or wherever they provide nursing care. Nurses who work in ART field should identify their roles and abilities to positively affect mothers' experiences. Increasing the use of ART necessitates nurses' planning and preparation to improve the health of the families who use this technology and are the fundamental institutions in the society.

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