Over-challenging Mothers: Motherhood after Assisted Reproductive Technology

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Background & aim: The experience of having a child is a new experience that can be challenging for mothers. However, this experience can be different for mothers who are subjected to assisted reproduction techniques, compared to mothers with normal fertility experience. The assisted reproductive techniques influence the attitudes and expectations of mothers towards their children, as well as the mother-child relationship. This study aimed to investigate the challenges mothers face after assisted reproduction techniques.

Methods: This study was conducted using a descriptive-interpretive phenomenological approach. The participants in this study included a total of 13 ART mothers, who took part in 21 in-depth interviews. Data were collected using semi-structured interviews. Six methodical activities introduced by van-Manen, were used during data collection, data analysis, and reporting the findings.

Results: Challenges of mothers who had children through assisted reproduction techniques was summarized in the main theme of "Over Challenging Mothers". This theme incorporated into three sub-themes: (1) child-centered maternity; (2) maternity in an aura of fear; (3) doubts in accepting the maternal role.

Conclusion: Undoubtedly, the experience of motherhood through assisted reproduction techniques is a challenging and stressful condition. In fact, this experience is a big challenge for mothers since these mothers used to be nulliparous. They may feel considerable anxiety about their child's health. Most of these mothers had their newborns after a long period of time, emotional investment, difficulty, and anxiety. These experiences lead to the emergence of the main theme of over challenging mother.

Introduction

According to the previous definitions, the inability to achieve a successful pregnancy after 12 months of regular sexual intercourse is known as infertility (1). Based on the statistics, 20% of women aged 15-44 years (7.3 million women) used infertility services during 2006-2010. Moreover, 17% of the women aged 25-44, (6.9 million) utilized infertility services, a significant decrease from 20% in 1995. On the basis of the literature, 38% of nulliparous women with current fertility problems used infertility services during 2006–2010, significantly less than 56% of such women in 1982 (2). Moreover, the infertility rate is estimated approximately at 10-15% in Iran (3).

In a study conducted by Chelsea, it was reported that infertility was not limited to developing countries. This method represents

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A pragmatic advance in our ability to measure and monitor infertility in the developing world, with possibly far-reaching implications for plans intended to manage infertility (4). An attempt to cure infertility may affect various aspects of daily life, including personal and financial security, occupational and career planning, and sexual and emotional relationships (5). Even in the best conditions, the experience of having a child can be a new and challenging experience for parents. It goes without saying that this experience for infertile couples can be different, compared to fertile couples. In fact, infertile couples experience a high-risk pregnancy after suffering from psychological problems resulting from their infertility (6, 7).

The infants conceived through assisted reproductive technologies (ART) are considered high-risk children. These infants mostly suffer from various problems arising at birth, including low birth weight, as well as the risk of congenital malformations and long-term behavior. Therefore, this group of mothers faces various challenges in accepting their role as a mother after waiting for a long time and giving birth to a high-risk child (6-8). According to the studies conducted on these groups of parents, they suffer from higher levels of anxiety (9, 10) and experience lower levels of psychological well-being and well-off (11).

In the last two decades, advances in biomedical science and technology have given physicians, patients, and their families a vastly expanded range of options. This issue requires people’s ability to choose between health care choices and ethical issues, which may arise at the same time. If there are concerns about the implications of ART on the welfare and health of infertile men and women, the future child, or the candidates of ART, these concerns have to be considered in the light of the available scientific evidence. After ART, it is important to avoid the use of the double effect. Wert et al. in his article declared that it is needed to conduct more studies on the psychosocial implications of raising children in non-standard situations (12).

The experience of motherhood and childbearing can be both a challenge and a crisis (13). The challenge to be a mother after ART is a stressful phenomenon, more specifically for nulliparous women. Health-care teams need to consider the challenged mothers and provide efficient care system for these mothers (14). It can be even more challenging for mothers who were previously infertile and experience childbearing through ART. In other words, the experience of childbearing and mothering through ART has not been thoroughly investigated in the literature. Furthermore, culture is one of the factors that have an influence on the experience of motherhood and childbearing, meaning that women from different cultural backgrounds may have different experiences of motherhood through ART. Moreover, there is limited information in the literature about the lived experiences of motherhood with Iranian backgrounds, particularly about the experience of childbearing through ART.

This article was part of a larger phenomenological study that aimed to discover the experience of motherhood after ART among Iranian mothers. Therefore, the purpose of this article was to describe the challenges that mothers experienced after ART.

Materials and Methods

This hermeneutic phenomenological approach (using van-Manen method) was used to describe, interpret, and understand challenges that mothers experienced after ART. Phenomenology is a way to investigate subjective phenomena and is based on the belief that essential truths about reality are grounded in everyday experience (15). Hermeneutic phenomenology was selected for this study since it is an approach, which can deal with the human experience of a complex phenomenon. This approach focuses on the exact description of the world as it is experienced (15). In a hermeneutic approach to phenomenology, the researcher sought and interpreted the sense of unity using an established method. The van-Manen's method of doing phenomenological research was used by the researchers through the interplay of six activities (15).

A purposeful sampling method was utilized to recruit the participants from an infertility clinic affiliated to Tehran University of Medical Science, Tehran, Iran (15). The researchers maintained regular contact with the hospital...
staff through the recruitment phase of the study. When potential participants were identified, the researchers made contact with them in the hospital. It needs to be notified that the formal interviews did not take place at that time and participants were only identified in the hospital setting and invited to participate in the interview. Finally, a total number of 13 mothers were interviewed in this study.

Participants living in Tehran and those who speak Persian were included in this study. They were diagnosed as an infertile woman before they were subjected to the ART procedure once or more; moreover, they had delivered their first child using ART. The exclusion criteria included delivery through gamete/sperm donation or surrogacy and multiparity. The children in this study were within the age range of 9 months to 7 years and mothers were within the age range of 28-45 years. Finally, the data were extracted from 13 ART mothers through 21 in-depth interviews.

Data collection was directed through in-depth semi-structured interviews from October 2012 to September 2013. The subjects of the study participated in 21 individual-based interviews. The interviews lasted for about 45-70 min. All the interviews were performed at the participants’ home in a separate and quiet environment. Participants were completely informed about the research purpose and encouraged to participate in the study in an introductory session. Adequate time was allocated to the subjects to make the decision on whether to participate in this study. During the interview, the opening question was, “Please tell me about how your new life is with your child.” Interviews were dialogical with a special focus on the mother-child relationship and their connectedness. The answer to the primary question directed the interviewee to ask other exploratory questions considering the concept of motherhood. All interviews were audiotaped with a voice recorder in MP3 format. These tapes were later transcribed to plain text word verbatim. In the next step, the records were analyzed before conducting the next interview.

This study was ethically permitted by the Ethics Committee of the Research Deputy at Tehran University of Medical Sciences. Anonymity was achieved through the adoption of a pseudo name for each participant during the analysis of data and reporting the research findings. Moreover, the participants were fully informed of the research purpose before data collection. The confidentiality of any given data was guaranteed by the researchers. Furthermore, the written informed agreement was signed by each participant before the interviews.

Each phase of the study, especially the data analysis phase was conducted based on the interplay of six steps introduced by van Manen. The first step is turning to the nature of the lived experience. This step includes thinking and sensitizing about couples with a child conceived by ART, formulating the phenomenological question (i.e., what is the essence of motherhood for ART mothers? What is different in these mothers?). The second step is investigating the experience as we live it. In this study, this step refers to thinking on pre-understandings, prolonged engagement with ART mothers, and conducting in-depth interviews. The third step is reflecting on essential themes. In fact, this step deals with listening to the audios, immersing in data, conducting thematic analysis using holistic, selective and line by line approaches. The fourth step deals with hermeneutic phenomenological writing, meaning that it is composed of writing the transcripts, writing about themes, and writing to create a phenomenological text. The fifth step is maintaining a strong and researcher-oriented relation to the phenomenon, which includes discussion about the themes in relation to caring science. The final step of this analysis involves balancing the research context by considering the parts and whole, which addresses moving between transcripts and themes in relation to mother-child nursing.

In order to explore the attitudes of ART mothers, the taped interviews focused not on the reflections of the motherhood or exploration of the perceptions but rather on the details of their everyday life with a child after ART. The first step of thinking and focusing on couples who have a child using ART was to formulate the phenomenological question, including what is the essence of mothering for ART mother. What is different in these mothers? The second step
included thinking about the essence of motherhood, prolonged engagement with ART mothers, and conducting in-depth interviews.

The third and fourth steps (i.e., listening to the audio recordings and transcripts of interviews) were conducted to analyze the essential themes using a two-level approach. The word files were imported into MAXQDA (text analysis software). The thematic analysis involved a holistic reading where the researcher's attention was directed at the extraction of the overarching themes. The second method for extracting data included conducting thematic analysis using holistic, selective, and line-by-line approaches (16, 17), as well as writing about themes in order to create a phenomenological text. The fifth step is discussing the themes in relation to caring science. After the first interview, the prepared text file was read and the researcher tried to answer the phenomenological questions, such as what is the text saying? By selective coding, the researcher's attention was directed at extracting the hidden units of meaning in the text through holistic, selective, and line-by-line approaches. The main theme was redefined and renamed during the researchers' discussion sessions.

The phenomenological research can be evaluated using the three criteria of creditability, auditability, and fittingness (18, 19). Credibility refers to how carefully the written report of the researcher comes to the factual experience of the phenomenon. Researchers used some principles to provide a methodologically rigorous study.

Initially, an established method of doing phenomenological research was accepted to improve the rigor of research (15, 20). Emerging themes and codes were discussed by the two authors and methodological experts to check the ongoing clarifications and interpretations. In relation to the main themes, respondent validation was used when themes were deliberated with participants during the following interviews. Prolonged engagement and sustained contact with the data collection were accomplished through conducting interviews at participants' homes and spending time with the participants, these methods were used to increase the validity of data.

The researchers benefited from different methods to validate data. In this regard, the audit trail of analysis, peer checking, and participant checking of themes and a reflective diary were used. Furthermore, the appropriateness of the findings was confirmed through the ongoing presentations related to the phenomenological approach. In other words, the experienced peers in the field helped the confirmation of the main themes as well as the subthemes. This provides helpful reassurance that there is a fit between the findings and those who experienced the investigated phenomenon. Finally, the reflexivity, role, and influence of the researchers during the study were recorded in a research diary.

Like other qualitative studies, there are some limitations to generalize the findings of the current study to a larger population. Firstly, this study was conducted on a small number of participants. Secondly, the preliminary themes in this study were extracted through the discussion with the participants; accordingly, the emergence and modifications of the themes were based on the obtained feedbacks of the participant. In addition, the preliminary research text was mailed to two participants, who were asked to reflect on the accuracy of the written interpretation in response.

**Results**

The themes in this study were extracted from 21 in-depth interviews of 13 ART mothers. Table 1 presents more details of the demographic characteristics of the participants. The main extracted theme was "Over-challenged mother", which incorporated into three sub-themes, namely (1) child-centered maternity; (2) maternity in an aura of fear; (3) doubts in accepting the maternal role (Table2).
Table 1. Demographic characteristics of participants

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of participating mothers</td>
<td>31.9 ± 7.5 SD ± Mean</td>
</tr>
<tr>
<td>Children's age</td>
<td>3.9 ± 1.3 SD ± Mean</td>
</tr>
<tr>
<td>Infertility period (year)</td>
<td>6.5 ± 2.4 SD ± Mean</td>
</tr>
<tr>
<td>Demographic variable</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
</tr>
<tr>
<td>Child's gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>41%</td>
</tr>
<tr>
<td>Female</td>
<td>59%</td>
</tr>
<tr>
<td>Mother's job</td>
<td></td>
</tr>
<tr>
<td>Housekeeper</td>
<td>38.5%</td>
</tr>
<tr>
<td>Employed</td>
<td>61.5%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>54%</td>
</tr>
<tr>
<td>Bachelor</td>
<td>46%</td>
</tr>
<tr>
<td>Infertility reason</td>
<td></td>
</tr>
<tr>
<td>Woman</td>
<td>61.5%</td>
</tr>
<tr>
<td>Man</td>
<td>48.5%</td>
</tr>
<tr>
<td>Type of ART</td>
<td></td>
</tr>
<tr>
<td>IUI</td>
<td>30.7%</td>
</tr>
<tr>
<td>IVF</td>
<td>23.1%</td>
</tr>
<tr>
<td>ICS</td>
<td>46.2%</td>
</tr>
</tbody>
</table>

ART: assisted reproductive technology
IUI: intrauterine insemination
IVF: in vitro fertilization
ICS: intracytoplasmic sperm injection

Table 2. Themes, sub-themes, and subcategories of over-challenged mother

<table>
<thead>
<tr>
<th>The main theme</th>
<th>Sub-theme</th>
<th>subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-challenged Mothers</td>
<td>Child-centered maternity</td>
<td>High tolerance for a child's behaviors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mothering in the child manner</td>
</tr>
<tr>
<td></td>
<td>Maternity in an aura of fear</td>
<td>Maternal familiar with the concept of fear</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Induce fear in the mother by close contacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The fear of bearing another child</td>
</tr>
<tr>
<td>Doubt in accepting the maternal role</td>
<td>Mother's doubt about accepting the child</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father's doubt about accepting the child</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Close contacts doubt about accepting the child</td>
</tr>
</tbody>
</table>

Over-challenged mother
The participants who used ART to have a child mentioned that they had experienced a lot of challenges in their daily life. This led to the emergence of the main theme of the Over-challenged mother. This concept includes three sub-themes, including "child-centered maternity", "maternity in an aura of fear", "doubts in accepting the maternal role".

Maternal-child centered
The centrality of a child in life was a sub-theme, which was extracted from deep interviews. “High tolerance for child’s behaviors” and "child-centered maternity" are two semantic units that helped us to achieve this concept. The components of this sub-theme are as follows.

- **High tolerance for a child’s behaviors**

Considering the parent's relationship with their children, most participants hint to the points that they can be categorized as "High tolerance for the child's behavior". The majority of mothers said they could not punish their child and acknowledged that they were different from other mothers in this regard and posed more limitations for their children, compared to their surrounding people. Participant number 10, for example, said "It seems surrounding people feel more comfortable with their children, and they can easily control them". Participant number 12 said, "I will feel really guilty if I blame my child".

- **Mothering in the child manner**

The majority of the mothers using ART cannot resist against unreasonable demands of their children and almost everything is according to their children's desire. Participant number 3 talked about the complaint that the
kindergarten trainer of her child raised. She said, "Since I give her what I have borrowed from other people, she thinks other people are required to give her what they have".

Participant number 11 talked about the desires of her child by mentioning that "my daughter sometimes has very unreasonable desires, but I and my husband prepares everything for her, even if it is unusual". Participant number 13 talked about her child’s behavior and emphasized that their life was based on the desires of their child. As she said, "we would do everything she wanted".

Maternity in an aura of fear
The ART mothers pointed out to the fears they experienced from the beginning of their treatment, after the childbirth, and during their childhood upbringing. Furthermore, the fear to lose their children, the fear to lose their mutual life, and the fear to lose their happiness seemed to accompany them. The semantic units that led us to this sub-theme include the familiarity of mothers with the concept of fear induced by close contacts and attitude of bearing another child.

- Familiality of mothers with the concept of fear
Although ART mothers provided full-fledged care for their children, they always faced the fear of loss and this led to a constant and intense concern for them. One of these mothers said, "I’m very careful, I’m afraid that something bad happens for him, always keep an eye on him and keep him with me". Participant number 9 talked about the fears and anxieties she faced in her daily life. She said, "The fear to lose my child is the fear to lose everything I have".

- Induced fear of the mother by close contacts
The majority of mothers talked about their fears induced by close contacts. The fear originates from how to take care of their child. Participant number 1 says, "When people know about your difficulties to have a child, they care more about your child and this induces the feeling that something bad is going to happen".

The fear induced by close contacts was also experienced by participant number 8. She says, "My husband wants me nothing to do but taking care of our child, which lays heavier responsibility on my shoulder and increases my fear". The participant number 13 talks about the impact of close contacts behaviors as, "Once I went for the sonography test, the doctor found out that I have got pregnant via IVF, the pressure of the sonography increased, as if she was looking for a problem more accurately, and all these increased my sensitivity".

- The fear of bearing another child
The mothers that used one of the ART methods to have a child may not have the opportunity to have another child. Accordingly, some of them have the fear to begin the treatment process once again and have only one child. Participant number 7 talked about her pregnancy as, "My doctor at that time told us that this will be your first and last child". Participant number 3 said, "Having only one child increases your fear of losing your child, now if I want to bring another child I’m afraid that what will happen about the second one".

Doubts in accepting the maternal role
Husband and wife should mutually decide to have a child through ART, whether the infertility problem is related to the wife of the husband and they should participate in all steps. The ARTs are considered the last solution for couples. A mother who has been through a period of infertility with no option but to use ART methods will face some uncertainty about the result of ART approaches. Therefore, ART approaches to fertility and its difference from natural pregnancy can change maternity to a challenging experience. Interviewing ART mothers about three semantic units of "mother’s doubt about accepting the child", "father’s doubt about accepting the “child”, and “close contacts” doubt about accepting the child" led us toward "doubt in parent’s acceptance".

- Mother’s doubt about accepting the child
Uncertainty about ART raises challenges for mother, her husband, and close contacts. The majority of the participants were in doubt about the correctness of ART approaches, and they doubt whether the child is ours.

Participant number 10 said about using ART, "Using these approaches is interfering the God
will, in addition, there is a possibility of making mistake”. Participant number 1 says, “When hugging your baby, you look for similarities, when one says he looks like his father or he looks like you, then you feel relieved”. Participant number 12 told, “When I see that one of his behaviors looks like my behavior or his father’s behavior I feel happy deep down in my heart”.

- Father’s doubt about accepting the child

The husband’s doubts about having a child are due to using ART. Participant number 2 talked about her husband's doubt, "From the very beginning, my husband wasn’t satisfied wholeheartedly to do this, but he always said I accept it because you want".

Participant number 3 talked about her husband's emotions regarding ART by saying, “Maybe women can deal with this issue, but I don’t think so about men”. “He hasn’t told me anything about this, but sometimes I feel so”.

- Close contacts doubt about accepting the child

The ART parents try to hide this issue even after childbirth and they are even worried about this issue that their secret may be uncovered. Participant number 10 talked about her close contacts, “I hid this issue throughout my pregnancy because I can’t tolerate people talking about it”. Moreover, this participant mentioned that I was looking for similarities as if I wanted to prove s/he was our own child.

Discussion

The essence of the everyday life meaning of motherhood after ART led us to the main theme of the over-challenged mother. Experience the challenges of ART mothers is full of challenges that lead us to think about these mothers. These faced many challenges at the beginning of their pregnancy, after the childbirth, and during their childhood upbringing. The acceptance of maternal identity in mothers using ART is another issue that makes their experience unique. The underlying reasons for this are the late experience of pregnancy, no opportunity for another pregnancy, or a problem of getting pregnant once again. All the mentioned points make their condition even more special.

On the basis of the results, there were many semantic units that led to the emergence of the sub-theme of "child-centered maternity", which includes smaller theories or meaning units. Indeed, an important part of the theme is "challenging mother". Listening to the participants made it clear that their child plays a central role in their life, which may disrupt the child’s upbringing. The two semantic units, including "high tolerance for child’s behaviors" and "child-centered maternity" helped us to achieve this theme, which is presented below by the components of this sub-theme. The acceptance of maternal identity in total is a complex and multilateral process. As reported in a study, mothers over 35 years will be affected by other factors, such as restrictions on social protection (21). Those mothers who experience their first childbirth experience over 35 years usually feel a higher level of anxiety. The risk of incompatibility and postpartum depression is also more common in these mothers (21). Nurses and midwives who take care of women over 35 years during their pregnancy and childbirth use two terms “difficult” and “needy” to take care of these help seekers. They describe taking care of these mothers as a "stressful" and "challenging" job. Nurses and healthcare teams call them "hopeless", "past I" and "deliberately making it [motherhood] difficult" (21).

Taking care of these mothers will be associated with emotional, mental, and psychological challenges and it will also be a challenging task for Health care staff (21). Most of the time these mothers are primiparous and have only one child; they also experience pregnancy and motherhood in old age (22). The investigation of ART complications by Jackson et al. revealed that complications of ART are related to the components and the manner of their administration as well as the side effects of infertility. In some cases, all three factors can cause adverse effects on the child and mother (23). Younger couples hope to get pregnant naturally and ART methods are gradually adopted after disappointment from other natural methods (24).

It is worth mentioning that these parents may face special conditions, including mental aspects of infertility, as well as neonatal challenges, such as preterm birth and low birth...
weight. It can also be accompanied by other long-term high-risk conditions, including behavioral problems or growth and development problems. All these factors affect a parent’s behavior and their parental role. The psychological needs of the couples and families may be challenging over ART or after giving birth to an ART child (5).

If the infertility treatment ultimately succeeds, their personal investment may lead to the high expectations of the children and desire to have an “ideal child” due to having only one child. Some parents may have unrealistic expectations and these expectations may not maintain compliance with potential abilities and needs of the child, which can lead to the insecure attachment between parents and children (25).

The mothers using ART spend every moment of their life trying to meet the needs of their children. They unconditionally satisfy all the desires of their children and they give priority to the desire of children, compared to their own desires or the desires of other people.

Most mothers using ART cannot resist against unreasonable demands and desires of their children and almost everything proceeds according to the desire of their children and “maternal in the manner of the child” is obvious. Those mothers who show extreme supportive behaviors easily ignore the mistakes of their children and cannot correct the behavior of their child or discipline them (26).

In the analysis of data, a number of experience units emerged that helped us in creating the theme of “maternity in an aura of fear”. Mothers who after having a childhood helpless infertility treatment experience all the fears about initiating treatment, and it is evident in the mother’s talk about their own self-care fear after birth. The fear of losing a child, the fear of losing their common life and their happiness in life is always with them. The concepts that guided us in the creation of this theme include a familiar mother with the concept of fear, intimidation of the mother by her relatives and fear of rejuvenation. With the full care of their children, these mothers are always with them with a fear of losing their baby. And this causes severe and permanent worry in the mother. As profound interviews progressed toward the subjective world of contributors, they spoke of their thoughts and thoughts. This unit is an extract of participants’ contributions to their fears. In the words of mothers, we got "Maternal familiar with the concept of fear ". Most moms, when talking about their fears, point out to others how they inculcate fear with the kindness and care of their mother and child. In in-depth interviews with participants, one of the things that increases the fear of mothers is the fear of “Induce fear in the mother by close contacts “These mothers have developed a child-bearing fertility method, and some have no rejuvenation opportunity. And some are afraid of starting a new treatment and having a single child” The fear of bearing another child”.

Another major theme was maternity in an aura of fear, and under this theme examples of minor themes were the familiarity of mothers with the concept of fear and induced fear in the mother by close contacts. One of the items that increase the fear in these mothers is “the fear of bearing another child”. Fear of losing their child, as well as the fear of losing their life and happiness are always along with each other. The sub-themes that led us to this understanding includes familiarity of mothers with the fear concept, induced fear in the mother by close contacts, and the fear of bearing another child. Despite the provision of the full-fledged care for the children, mothers always faced with fear and this led to constant and intense concerns. The fear of losing a child means the fear of losing all the reasons for being alive.

Three sub-themes, including “mother’s doubt about accepting the child”, “father’s doubt about accepting the child”, and “close contacts doubt about accepting the child”, led us toward “parents’ doubt about the acceptance of a child”. The mothers using ART have a challenge with themselves, their husbands and their close contacts about using these methods. The majority of these mothers have doubt about the correctness of using ART. They also doubt whether this child can really be their own child. Challenges about accepting ART by husband, the response of husband about having a child through ART are the main concerns that affect these mothers. The attempt of these mothers to hide using ART is because of their fear of close
contacts reactions. They even had tried to hide this issue after childbirth because the prolonged marriage increases the pressures and curiosity of the close contacts, especially the husband’s family and relatives. Therefore, the increase in tensions and psychological pressures lays the ground for more anxiety (26). All couples with infertility problem do not use ART. In many societies, medical methods in the field of health affect the attitude of the individuals and the formation of behavioral patterns (27, 28).

The problem of infertility in Iran, similar to other parts of the world, is a fundamental problem. The ART is not accepted by many groups of people in Iran and across the world (29). Therefore, all couples will not use ART due to the influencing factors of cultural and religious. Some couples may have different attitudes about ART; for example, it is possible that one of them accept ART but the other one feels disappointment and leaves the treatment (30). Given the codes of conduct, medical centers should take into consideration the religious values and beliefs of patients (31).

Affection is not merely a feeling that a child inspires his or her mother; emotions of the mother can change over time. These changes depend on children behavior, location, time, facilities, desires, and expectations that mothers have to their children, as well as mothers’ failure and frustration. Doubt and uncertainty of the mothers are based on a contradictory feature of maternal experience. Uncertainty about long-term outcomes in children intensifies uncertainty in mothers (32).

Conclusion
The present study was an interpretive phenomenological study to investigate the experiences of those mothers who used ART. The content analysis of their statements revealed that having a child after a lot of problems during their childbirth process led to the extreme sensitivity of these mothers. They face many problems from the beginning of their pregnancy, after childbirth, and during their childhood upbringing. The acceptance of maternal identity in mothers using ART is another issue that makes their experience unique. They mostly have the late experience of pregnancy, no opportunity for another pregnancy, or a problem of getting pregnant once again. The present study sheds light on the dark aspects of the life of mothers using ART. Phenomenological reflections indicated that these mothers endure many hardships in the process of becoming a mother, which leads to differences in their maternal feelings and children upbringing.

The experience of motherhood after ART could be challenging due to delivering a child after a period of infertility and using an abnormal approach. This group of mothers is vulnerable and requires special attention and considerations. The medical team can pay attention to the constant fear and anxiety of mothers. In other words, mothers expect to be emotionally due to their difficult process of pregnancy and childbearing. Health care professionals, especially maternal-child nurses should consider the concept of over-challenged mother to understand these mothers.

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Conflicts of interest
The authors declare no conflicts of interest.

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