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The Experiences of Women Fertilized through Egg Donation during Their Treatment Process

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Abstract

Background: There has been a dramatic increase over the past few decades in the use of modern fertility technologies and the demand by infertile couples for using these techniques have increased as well. Studies exploring the experiences of women fertilized with egg donation technique in their treatment process have been rare.

Aim: This study aimed to explore and explain the treatment experiences of women fertilized with egg donation.

Method: This is a Qualitative study. Data were analyzed simultaneously as they were being collected and according to the conventional content analysis method. The study began in July 2013 and continued until September 2014. Fourteen unstructured, in-depth interviews were carried out with 12 infertile women who had been fertilized or had given birth to children through egg donation. One of Tehran's referral centers for infertility was used as the study setting. All participants submitted their written consent prior to the start of the study.

Results: Analysis of the findings showed "difficult and stressful treatment" as the final theme with 6 subthemes, including: 1) religious barriers, 2) treatment difficulties, 3) treatment frustration (including the following subcategories: fatigue and despair, and the experience of frequent failures), 4) dissatisfaction with the services provided, 5) confusions in treatment, and 6) Perception of relative peace.

Implications for Practice: Exposure to various assisted reproductive technologies, including egg donation, is a stressful process, and providing emotional support to patients is one of the most essential care services they require from treatment centers. The results of the present study can assist in planning future strategies for meeting the specific needs of these distinguished patients.

Keywords: Assisted Reproductive Techniques, Experiences, Infertility, Nursing care, Oocyte Donation, Qualitative

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Introduction

In many cultures, including Iran's, childbearing is considered as one of the functions of families and infertility is thus regarded as unpleasant (1). According to the World Health Organization, 10-15% of couples across the world (more than 80 million) experience infertility (2). In Iran, about a quarter of couples experience primary infertility over the course of their married life (3).

In recent decades, there has been a dramatic increase in the use of Assisted Reproductive Technologies (ART), and infertile couples' demand for the use of these technologies has increased ever since the first successful fertility treatment was achieved in 1984 through egg donation (4). Egg donation is the answer to the problems of women suffering from diseases such as premature ovarian failure, impaired quality of eggs, loss of ovaries, ovarian dysgenesis or old age and a demand for postmenopausal pregnancy (4, 5). *In vitro* fertilization involves obtaining a woman's oocytes, fertilizing the oocytes in the laboratory *in vitro* with sperm, and then transferring typically one to three embryo(s) into a woman's uterus through the cervix. For women undergoing ART using donor oocytes, there are additional components in the ART process. These components include a third party (the oocyte donor) and the need to coordinate both the donor's and the recipient's hormonal responses to optimize oocyte retrieval in the donor and uterine implantation readiness in the recipient woman (6).

In Iran, egg donation in exchange for monetary compensation is acceptable and freely performed with the approval of religious references and authorities (7). Numerous studies have revealed the effects of psychological, social and moral issues on the process of using donated eggs (6, 7); however, few studies have addressed the treatment problems faced by women using egg donation as their chosen reproductive technology. Studies have mostly focused on moral (8, 9) and legal issues (9-11), considerations of the treatment, opinion polls on the use of the technology (1, 12), methods of disclosing the arrangement to the child born through these modern reproductive technologies (13-16), health assessment and matching the donor and the recipient for their characteristics (17, 18), and the experiences and motivations of the donors (19).

In a qualitative study using conventional content analysis, Latifnejad Roodsari *et al*. (20) investigated the experiences of women utilizing this method of their selection of the donor. In their study, most of the couples agreed with unknown donors and the most important criterion for donor selection from couples' point of view was moral issues. In one phenomenological study, Eyzadyar *et al.* (21) described the experiences of infertile women using egg donation as a means of becoming a mother. In their study, six main themes emerged from the women's descriptions of their experiences: (1) the possibility of maintaining the confidentiality in egg donation; (2) the opportunity of having the experience of pregnancy, childbirth, and breastfeeding; (3) the chance of genetic transition from husband; (4) the impact of time factor in choosing oocyte donation; (5) oocyte donation being permissible from a religious point of view; and (6) emotional and social burden of infertility. Hershberger (6) conducted a systematic review for studying the psychosocial characteristics of 827 recipients of donated eggs. Her research involving the psychosocial aspects of donor oocyte recipient women is in the infancy stage. None of these studies have focused on the problems encountered in the process of treatment.

Experiences associated with treatment process have not been adequately investigated in women using the egg donation technique. The present study was therefore carried out to scrutinize the treatment experiences of women fertilized through egg donation. Understanding the problems of this group of patients helps design proper care models based on their needs which can be used for providing optimal care.

Methods

The research question was: "What are the experiences of women fertilized through egg donation during their process of treatment?"

Royan Institute, one of the main fertility referral centers in Tehran, was selected as the study setting.

The study population consisted of women fertilized through egg donation who were pregnant or had children at the time the study was being carried out. There were no limitations for the participation of mothers in terms of their own age or the age of their child born this way. There were no exclusion criteria for the participants.

The selection of participants began according to purposive sampling and continued until data saturation (the point at which no new information are observed in the data). Data were collected through interviews and field notes. A total of 14 unstructured interviews were carried out with 12 women who had become pregnant or already given birth through egg donation (two participants were interviewed more than once). After briefing participants on the objectives of the study, formal interviews were conducted with participants' consents and in any location they suggested (such as at the fertility center, at home, at work or at a nearby park). Interviews began with an open-ended question: "What did you do once you decided to use this method? Please describe your feelings and experiences of the issue". More probing follow-up questions were asked to clarify the concept under study and depending on the information provided by the participants. More in-depth questions were also posed according to the responses provided: “Could you elaborate? What do you mean? Can you give an example?” Each interview lasted 30 to 60 min with an average of 37 min. All interviews were recorded with the permission of participants. The study began in July 2013 and continued until September 2014.

Data were analyzed continuously as they were being collected and through the conventional content analysis method (22). Conventional and inductive content analysis methods are applicable when there is little information available through theories and studies on the phenomenon under study (23). Each interview was promptly transcribed and reviewed several times. After typing and entering them into MAX 2010, the interview text was re-read line by line and then divided into meaning units (codes) and the codes with similar meanings were then merged into one category. Finally, after frequent categorizations and the formation of subcategories according to their similarities and differences, the ultimate study category/theme was formed.

Field notes were used to describe the actual participants’ experiences and events as well as to complete and validate the interview data. The recorded field notes concerned mostly the interaction between the medical personnel and mothers and any other event that took place during the interviews and pertained to the objectives of the study.

To increase data validity, the researchers resorted to holding long periods of immersion in the research subject, obtaining both participants’ and observers’ review. Using a sampling technique with maximum diversity helps the reliability and transferability of the findings. For confirmability, reliability, transferability and auditing of the study, the stages and processes have been recorded and reported every minute and step by step for others to be able to follow the study.

The ethical considerations observed in the study included briefing participants on the objectives of the study, significance and methodology, obtaining permission from participants to record the interviews, letting participants know their right to withdraw from participating in the study and to disallow the recording of the interviews, letting participants decide on the time and place of their interviews, maintaining the confidentiality of the data and observing the rights of the research team members, permitting Tarbiat Modares University and Royan Institute to publish the results.

Results

The women who participated in the present study were aged 28 to 48. Table 1 presents participants' characteristics. The final theme emerging from the analysis of the data was "difficult and stressful treatment", which included the 6 following subthemes.

Table 1: Demographic characteristics of participants

Mothers' Age	28-48, with a mean of 39.8 (years)
Education	1 illiterate (8.3%), 5 below high school diploma (41.6%), 4 with a high school diploma (33.5%), 2 with bachelor's degree or above (16.6%)
Occupation	9 housewives (75%), 3 employed (25%)
Cause of Infertility	2 with genetic problems (16.6%), 10 with infertile or poor quality eggs (83.3%)
Current Status	2 pregnant (16.6%), 10 with a child born through egg donation (83.3%)

1. Religious barriers

Authoritative Islamic religious proclamations called fatwas have profoundly affected the practice of donation in ways that are not commonly seen in the West. Indeed, in the Muslim world, infertile couples are usually extremely concerned about making their babies in the religiously correct fashion.

However, the different fatwas on the use of donated eggs is one of the major challenges of donation recipients. For example, sometimes the wishes of the Parents are against the opinions of their religious reference or making temporary marriage vows at the time of conception —, which some Fatwas do not take necessary.

"We called our religious scholar*'s office and asked them, and they said that this arrangement was not acceptable. What if we change our* religious scholar*? "We then asked. They said we were not allowed to do that either. But we said, 'okay, but this is our life decision'. (Chuckles) What can we do? I swear to God I had to, for my life, for my husband's sake. I don't want my life to fall apart after 20 years of marriage …" (Code 2, age 37).*

2. Treatment difficulties

Treatment difficulties are problems arising from the treatment process including physical and psychological complications and a lack of facilities for clients as well as financial problems. Having no means to accommodate patients traveling from other cities, long waiting lists, intense physical, psychosocial and financial pressures caused by treatment methods, the center advising couples to find donors themselves, and the potential financial abuse by the donors were among the problems that had made treatment more difficult for these women.

On the one hand, there is economic pressure, while on the other hand, there is psychological pressure.

The mental pressure bothered me a hundred times more than the financial pressure. Both of us are busy. I also had to convince my busy husband to come here and wait in a long line" (Code 3, age 37).

Physical complications persist until after the end of the treatment due to the prolonged process of treatment, the use of several hormonal medications, frequent injections, the side-effects of medications and the diagnostic and therapeutic procedures performed, which make the process of treatment too arduous for the women.

"Oh well, my weight was less than 60 kilos, and now I'm 85, [due to hormonal medications]" (Code 3, age 34).

"I become very nervous and aggressive even with a simple contraceptive LD. Hormonal treatments do not sit well with me" (Code 12).

Finding a donor is also an arduous part of the treatment process. Considering the limited number of fertility centers that are in charge of finding the donor and given the long waiting lists for finding the right donor, suggesting that the couples should look for donors themselves and the potential of financial abuse from the donors make the treatment even more stressful.

"The center counselor asked us to find a donor ourselves, who is not a relative. Actually, we found someone who was very greedy and asked for money" (Code 12, age 41).

3. Treatment Frustration

This category included two subcategories: fatigue and despair and the experience of frequent failures.

A) Fatigue and despair: Mental and physical exhaustion due to frequent treatment failures, fatigue due to the constant burden of traveling for tests, losing hope of getting pregnant, getting disheartened and getting depressed are among the consequences of treatment difficulties.

"I was mentally down. I cried day and night. My husband said it was OK and that we could at most adopt a child, but I bluntly refused" (Code 7, age 37).

"I'm stressed, may God want it for me. Will it happen? Will it not? I'm so tired like this. Now that I have done a lot of treatments, I do want to have my own baby" (Code 1, age 42).

B) The experience of frequent failures: This subcategory indicates frequent failures in the many infertility treatments pursued (for example frequent miscarriages, failure in the other fertility methods used and the experience of stillbirth due to genetic defects, etc).

"I had a miscarriage after two to three months. My last child, who was born about 6-7 years ago, had gender issues. It was not clear if he was a boy or a girl. He was born prematurely because of the premature rupture of my amniotic sac before my 8th month. He died 2-3 days later" (Code 2, age 37).

4. Dissatisfaction with the services provided

This category is often caused by the limited number of fertility centers given the large number of infertile applicants, the long waiting lists, the inability of fertility centers to introduce donors and the couples' own responsibility for finding egg donors, undergoing many examinations by various physicians, inadequate explanations to the infertile couple about the process of treatment, and feeling a lack of coherence and harmony in providing care and treatment.

"Making appointments is a bit difficult. It's very time-consuming. It's hard to come all this way and have to wait for such a long time. I had to come here from Tabriz, and it was really too difficult and exhausting" (Code 10, age 48).
"What bothered me was that I had no specific doctors, and had to explain everything many times for each doctor who visited me" (Code 5, age 47).

5. Confusions in treatment

In many cases, the cause of infertility is unclear and patients have to undergo several tests, which is very time-consuming and leads to frustration and mental fatigue in woman.
"Doctors got me to do so many different things. They said different things every time, different procedures, different this and that, which worn us out, the treatment had taken so long and it depressed me" (Code 11, age 37).

6. Perception of relative peace

This category represents mothers' positive experiences and comprises the two subcategories of "mother's renewed life after childbirth" and "peace as an outcome of parental identity". Mother's renewed life after childbirth refers to the mother's deep happiness of experiencing motherhood for the first time and the emergence of peacefulness with the presence of baby. Having a new-born child in the family is a deeply calming experience for mothers to the extent that they believe it was worth all physical, mental and financial complications of the treatment process and that they are finally satisfied to go through this experience.
"Perhaps I'd have taken the same path even if I didn't get to become a mother with donated eggs. You know, I don't think I'd have given up and I believe I'd have gone the same way more than once. Although I knew the answer would have been 'no', I would have done my best. I know it's worth it to fill the gap. To be honest, I think it's much better to have a baby even if you have to raise somebody else's from the streets…I feel the very presence of the baby, whether it's yours or someone else's, brings peace to life even if the amount of this peacefulness is different from person to person (code 3, aged 34).
"Peace as an outcome of parental identity" denotes the calmness experienced as a result of the child assimilating to the father as well as finding a new parental identity inside the society and family which is among the most important factors behind the achievement of peace from the point of view of families. The attainment of motherhood identity, both individually and socially, has been a calming factor for mothers using donated eggs.

Discussion

ART are rapidly spreading throughout the world, especially in the Islamic world. Egg donation is one of the methods that has treated many infertile couples (8). The present study was performed to explain the experiences of women using egg donation in their treatment process; the results revealed these experiences to be very difficult, stressful and exhausting for these women. Identifying clients' treatment experiences and understanding their problems and concerns will provide the means to manage and manipulate regulable factors. For instance, familiarity with the existing defects in the area of service provision and the attempts to resolve them can pave the way to provide better care for these clients.
A study by Eyzadyar *et al.* (21) reported that women are affected by mental, social and personal pressures over the course of treatment. In a study investigating the experiences of women using surrogacy, Zandi *et al.* (24) found similar results and indicated that women tolerate a lot of psychological pressures over the course of the treatment. Although surrogacy is a different technique from egg donation, some crucial stages of treatment are common to both, including drug-therapy for triggering ovulation and egg retrieval, which make the comparison between the two methods possible. The results revealed that the approval of egg donation in Sharia law was highly important to the women using this technique and that they first sought the opinion of their religious reference on this procedure and only when it was approved did they proceed with it. Studies carried out by Inhorn (2006) in Muslim countries such as Egypt and Lebanon revealed that religion plays a decisive role in people's choice of ART and that infertile couples only opt for a particular treatment if it is compatible with their religion (4). A study carried out by Abbasi-Shavazi (2006) on the perspectives of infertile women about gamete donation revealed that, despite the absence of legal prohibitions on the use of these modern techniques, not all infertile couples favor these technologies, mostly due to their

religious beliefs (1). A study by Eyzadyar *et al.* (2014) revealed that one of the reasons for using egg donation is the approval of this method in Sharia law. Informing clients about the process of egg donation and accepting the need for each patient to investigate the opinions of his religious reference before proceeding with the treatment and having access to them to resolve all religious ambiguities can help reduce the pressures imposed by religious beliefs (21).

Fatigue and despair experience was another finding of this study. Mohammadi Hoseini *et al.* (25) also revealed that fatigue due to the constant traveling to and from clinics was another stressor that made infertility treatment extremely exhausting. Other stressors associated with ART included the array of medical tests required, the different techniques for treatments and the physical and mental side-effects of medicines, and the poor success rates of ART (26). Focusing couples' attention on the success rate of these methods, helping them be realistic and preventing their over optimism about the results, and helping them enter this process with an open eye are among the strategies that can be adopted to prevent a fatigue, stress and frustration. In addition, monitoring and providing counseling services to couples with failed treatments and not leaving them to themselves after their treatment comes out negative are some overlooked issues that require a greater attention by the medical team.

Considering the novelty of ART in Iran, the limited number of well-recognized fertility centers that provide services such as finding egg donors, and the large number of ART applicants, fertility centers have not yet been able to provide optimal services to these patients, which has then led to the dissatisfaction of patients as well as their confusion in the process of treatment. In her study on the experiences of women using surrogacy, Zandi (27) revealed that patients are dissatisfied with the services provided by some centers due to the "failure of these centers to provide comprehensive health care services". The results of this study also confirm that the large numbers of applicants intending to use ART and the limited centers providing these services as well as the limited number of egg donors are among the causes of the dissatisfaction and stressful experiences of couples with the treatment.

These findings reveal that a greater attention should be given to the effective provision of services, emotional support of patients during the process and the devising of strategies for the better management of the number of applicants and facilities, and can act as a warning for healthcare policy-makers and authorities of fertility centers.

The results of the present study and other studies reveal that exposure to various infertility treatment methods including egg donation is a stressful process that requires the emotional support of clients as a core part of the care they need. The results of these studies can assist in planning future strategies for meeting the specific needs of these distinguished patients. One of the ~~main~~ limitations of this study, was sampling of the only one infertility institute in Tehran. With regard to the clients' problems and complications in the course of the treatment, the implementation of quantitative research methods and standardized tools may help monitor the quality of care service provision in the case of these clients and evaluate their level of satisfaction of these services as a solid basis for further actions.

Implications for Practice

The results obtained in the present study revealed that limitations and problems such as~~,~~ the large number of applicants and the limited number of fertility treatment centers, the long waiting lists for appointments that are also too far ahead in the future, frequent traveling to the clinic and frequent experiences of treatment frustration lead to a greater fatigue and frustration stress during the process of treatment for infertile couples. Gaining more knowledge about these problems and limitations and planning to resolve them, informing couples about the process of treatment, providing emotional support to the couple during the treatment, and a better management of the services provided at fertility centers with an eye toward the needs and problems discussed can be effective strategies for reducing anxiety and stress caused by the process of treatment in patients using modern assisted reproductive technologies.

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Conflict of interest

The authors declare that there is no conflict of interest.

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