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Research Article

Psychosocial Problems and Coping Strategies among Turkish Women with Infertility

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SUMMARY

Purpose: The aim of our study was to determine the factors affecting the psychosocial problems of infertile Turkish women and to identify their coping strategies.
Methods: This study employed a descriptive qualitative approach. We conducted in-depth interviews to examine the psychosocial problems faced by infertile Turkish women. The participants were selected in two stages. In the first stage, 118 women diagnosed with primary infertility completed a personal information form and the Fertility Problem Inventory (FPI). In the second stage, in-depth interviews (lasting 45–90 minutes) were conducted with 24 (age 20 to 41 years) infertile women randomly selected from the groups formed according to their FPI global stress levels determined in Stage 1. Content analysis was used to examine the qualitative data.
Results: The results comprised nine main themes regarding the psychosocial problems encountered by women and the methods used to overcome these problems. These included the meaning attributed to being childless, negative self-concept, perceived social pressure, perceived social support, psychological symptoms, social withdrawal and isolation, spiritual coping, cherishing hope/restructuring life, and adopting traditional methods. Social pressure and stigma were common. Infertility was found to negatively affect the participants' self-perception and view of life. The women used spiritual methods for overcoming stress and avoiding society, as well as traditional fertility remedies.
Conclusions: Infertile women suffer from various psychosocial problems because of infertility and they adopt emotion-focused coping methods.
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Introduction

Infertility is defined as the inability to become pregnant or maintain a pregnancy despite having intercourse three to four times per week for at least a year [1–4]. Rather than a medical issue, due to the problems it can cause for individuals and marriages, infertility is seen as a developmental crisis [1,5–7].

Although both sexes are emotionally affected by infertility, women appear to experience greater stress and pressure as well as higher rates of anxiety and depression [4,8–16]. Several studies have found that up to 50% of infertile women specified that infertility was the most challenging issue in their lives. Other studies have found that the psychosocial pain was similar to that reported by patients with life-threatening diseases, such as cancer and coronary failure [2,10].

In women, the most important underlying causes of the high levels of stress and anxiety upon learning about their infertility have been the loss of motherhood and reproductive abilities, greater negative self-concept, and loss of genetic continuity [1,11,18]. High stress may also result from the socially determined status of children within certain traditional societies, which can lead to social stigma because of infertility [13,14].

Women generally respond to infertility with deep sorrow and mourning, which can lead to the adoption of emotion-focused coping strategies such as crying, praying, and a belief in God [3,6,15–18]. Other studies have found that women who adopt better coping strategies are more socially active and tend to share their feelings and opinions. These women are also able to set realistic goals for the future. On the other hand, women who do not successfully cope often develop unhealthy beliefs and behaviors, such as believing that a miracle is their only hope, feeling unable to

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share feelings or opinions, and avoiding children [15,18,20]. In regions where traditional Turkish practices prevail, infertile women can be excluded and subjected to violence by their husbands or in-laws [20,21]. As people in these regions may be biased against infertility treatments, women avoid sharing their experiences with others, and the use of traditional fertility methods is quite high [2]. Most studies by Turkish researchers have focused on the psychiatric problems that occur during infertility treatment. However, there has been no in-depth qualitative investigation of the psychosocial problems and coping strategies of infertile women. Moreover, in Turkey, nurses with expertise in clinical psychiatry do not work in infertility clinics; thus, the psychosocial problems and cultural coping strategies of infertile women have not been studied. Our study was to determine the factors affecting the psychosocial problems of infertile Turkish women and to identify their coping strategies.

Methods

Study design

Participants in this study were selected through criterion sampling, which is a purposive sampling method [22]. Sampling was conducted in two stages, to enable selection of women with different levels of stress. The first stage of the study began with the calculation of the sample size. To calculate the sample size, we considered the number of women with primary infertility ($N = 297$) who applied to the gynecology polyclinic of the university hospital at which the study was being conducted over a period of one year. We planned to keep the size of the sample above 100. During the study, the sample size reached 118. The power of this study was found to be 100% ($\alpha = .001$).

Sampling was done among the women visited the gynecology polyclinic of the university hospital. Global stress score (GSS) was measured by using 46-item FPI during February to September 2010. Women were four grouped randomly by the GSS scores (low, medium, slightly high and very high). The first stage of the study (collection and analysis of data) was conducted from February to September 2010. At the second stage of recruitment, the women were separated into four groups according to their stress scores (low, medium, slightly high, and very high), to assess experiences and coping strategies according to stress levels. The participants to be interviewed are determined using the method of casting lots among the participants listed according to the four different stress scores. Finally, 24 women (6 in each stress level group) were randomly selected and contacted by phone. The second stage of the study (selecting the participants, conducting in-depth interviews, and analysis of data) was conducted from September 2010 to April 2011.

Setting and sample

The participants were aged 20–41 years ($M = 30$ years), had been married for 2–19 years, and their infertility problems had been present for 2–19 years ($M = 6.7$ years). Ten women had graduated from primary school, 9 from secondary school/high school, and 5 from a university. Eight women had full-time jobs (factory worker, nurse, bank clerk, or teacher) and 16 women were housewives. The causes of infertility included female reproductive system problems ($n = 8$), male reproductive problems ($n = 7$), male and female reproductive system problems ($n = 2$), and unknown causes ($n = 7$). Fifteen of the 24 women had previously attempted treatments for infertility, while this was the first attempt at fertility treatment for the remaining nine women.

Ethical consideration

The Non-invasive Clinic Studies Ethical Committee of Duzce University approved this study, and permission was obtained from the university hospital where the study was conducted. The participants gave both oral and written informed consent. Dr. Nurdan Eren, who adapted the FPI scale for the Turkish population, permitted its use.

Measurements

Quantitative measures

Personal information form. The researchers developed this form for the present study, which included sociodemographic information of the participants and their spouses, such as age, occupation, insurance, and education, as well as the infertility diagnosis and treatment procedures. The participants completed this form after their appointment at the fertility clinic.

Fertility Problem Inventory (FPI). The FPI is a scale developed to measure an individual's global stress level regarding infertility and consists of 46 items rated on a 6-point Likert scale (1 = *I totally agree* to 6 = *I don't agree at all*) [8]. It was designed for use with couples with primary and secondary infertility. The scale consists of five subscales: social problems, sexual problems, relationship problems, the need to be a parent, and lifestyle without a child. The GSS is the sum of the scores on all items. A previous study determined that the Cronbach α coefficient for the Turkish adaptation of the FPI was .860 [2]. All the women completed the FPI after their appointment at the fertility clinic.

Qualitative measures

Unstructured in-depth interviews were conducted, in a location of the participant's choice, to ensure a feeling of safety and comfort. Nineteen women chose places outside their homes and neighborhoods (such as their mother's or friend's home, cafés, or hospitals). Women selected places other than their own homes for a number of reasons, which included, "I wouldn't be able to say any of these things if I were between those walls," "It would not be nice if my mother-in-law heard this," "I do not want any of my neighbors to hear about it," and "Not many people know about it, so they might ask." Great care was taken to find places quiet enough to ensure that our interviews were not interrupted. We attempted to create a natural atmosphere for the interviews and only addressed the situations and feelings experienced by the participants regarding their infertility.

Data collection

All interviews were tape-recorded. Brief notes were taken during the interview, particularly regarding the responses, tone of voice, and behaviors of the participants. At the end of each interview, we checked the audio clarity of the tapes. When the interviews of the day were completed, we reviewed all the tapes and noted down our impressions and assessments of the interview. The length of the interviews varied from 45 to 90 minutes. One of us conducted all the interviews.

Data analysis

Quantitative data

The quantitative data was analyzed using the SPSS for Windows 16.0 software (SPSS Inc., Chicago, IL, USA). Cronbach α was calculated to assess reliability. The data from the personal information form and FPI were presented as numbers and percentages.

Qualitative data

The analysis of the qualitative data focused on identifying themes and patterns related to the feelings and behaviors of the participants using content analysis [22]. The basic purpose of content analysis is to extract concepts and relations that would explain the collected data. Content analysis requires deep analysis of the collected data, thereby revealing themes and dimensions that may initially have been unclear. The taped interviews were transcribed and read thoroughly by one of us. Codes were established during the second reading of the data. We then compared these codes for similarities and differences, which culminated in the formation of the thematic categories. Two independent qualitative research experts examined the codes and confirmed or adapted the proposed themes. Themes, subthemes, and examples of codes have been listed in Table 1. Various quotes from the interviews in this article have been selected to represent particular themes and codes.

Results

Nine themes representing the psychosocial problems and coping strategies of infertile Turkish women were identified. These included the meaning attributed to being childless, negative self-concept, perceived social pressure, perceived social support, psychological symptoms, social withdrawal and isolation, spiritual coping, cherishing hope/restructuring life, and adopting traditional methods. Each of these themes had a number of subthemes, which were described below.

Meaning attributed to being childless—"I crave for a child!"

There were highly emotional moments with tears when the participants spoke about giving birth to a child and being a mother. Moreover, they had difficulty in explaining why their desire to have a baby was so intense, except to say that it was instinctive.

> I crave to give birth to a child…I want to give birth, does a person crave in this way? Is this how a person feels if he craves for a hamburger? I also want to have the feeling of giving birth, I mean, [the feeling of] my stomach swelling. I normally cannot stand twinges or stomachaches, but I dream of having a normal delivery. Maybe it is not possible with a tube baby but, well, I crave for birth… Is such a thing possible? (Participant began to cry.) — Participant 1 (35 years old, infertile for 18 years, very high GSS)

Future concerns

Some women said that they desired a child because they believed that a child would put an end to their feelings of loneliness and would care for them in their old age. They were also concerned about failing to fulfill their responsibilities, such as having a grandchild, taking care of a child, or helping their children get married. Most of the women who reported such issues were over 30 years old and had been married and had fertility problems for at least 10 years.

> I have been feeling more upset for a couple of years. I have started feeling lonely. You have nobody to look after you during any illness, you are alone. So being childless gets to me more now. I never felt it so strongly. My longing for a child is greater now. — Participant 12 (41 years old, infertile for 19 years, low GSS)

> If I don't have a child, I will probably cry like this when I'm 70 or 90 [years old] while talking about children…because [at that point] the love of a child runs out and the longing for grandchildren begins…there are women who become grandmothers—I envy them too. — Participant 1 (35 years old, infertile for 18 years, very high GSS)

Negative self-concept—"Even a stone would get pregnant if you put this [man's] sperm on it."

More than half of the participants stated that they blamed themselves and their body for not being able to have a child. Further, many reported that they felt responsible even if the medical reason for the infertility did not lie with them.

> I caused all this; I take it so hard. In the end, his sperm is not normal and they could not find anything wrong with me, but one day my doctor told me "Even a stone would get pregnant if you put this [man's] sperm on it," and "How come it doesn't [impregnate] you?" (Participant began to cry.) You are the first one I am sharing this with… — Participant 2 (35 years old, infertile for 10 years, low GSS)

Perceived social pressure—"Don't you have a child?"

All participants reported feeling social pressure in response to their infertility and were quite uneasy when asked questions about having children.

> My depression is [primarily] because of my neighborhood. Whenever I socialize, they ask me questions like, "Don't you have a child?" I am exhausted because I cannot say that I might have a tube [*in vitro*] baby. If I say that I am trying to get a tube baby, it will fly around immediately and we will become a subject of gossip. — Participant 3 (29 years old, infertile since for years, medium GSS)

"Go get someone else's fingers burned!"

Participants reported feeling pressure and exclusion, especially from their husband's families. Women said that their mother-in-law blamed them and tried to force their sons to get a divorce.

> My source of stress is living with [my mother-in-law] in the same apartment. She has told me many times, "Leave my son! (Participant began to cry.) You leave him, you do not deserve him. You are beautiful and can find someone else, go get someone else's fingers burned! You see, you do not have a child; there is nothing to hold you to my son!" What has she done to me? — Participant 4 (39 years old, infertile for 11 years, low GSS)

> I do not want to go to my parents-in-law. They have no mercy. My mother-in-law even said he should have a second wife if I [cannot] have a child. In our region, things get really ugly if you do not give birth to a child. This scares me most. They even called me "infertile cow" in our region, I mean, our village. (Participant's eyes filled tears and she did not make eye contact for some time.) Of course, I inwardly felt upset but you cannot say anything. You are of no use—just like an infertile cow, you see.

> — Participant 5 (23 years old, infertile for 6 years, very high GSS).

Table 1

Themes & subthemes		Codes
Theme 1	Meaning attributed to being childless "I crave for a child!"	– Instinctively expressing the desire to have a child. Desiring to be a mother/give birth/breastfeed – Expressing that having a child will obviate the feeling of loneliness
	Future concerns	– Believing that the child will take care of the parent in old age – Accepting being childless as a situation which will prevent the experiences & responsibilities of parenthood in future
Theme 2	Negative self-concept "Even a stone would get pregnant if put this [man's] sperm on it."	– Irrespective of the reason for infertility – Seeing the body as at fault/blaming self – Thinking that infertility is unfair to the spouse/feeling sorry for the spouse
	Perceived social pressure "Don't you have a child?"	– Feeling uncomfortable about the questions, suggestions, & consolations from the environment about childlessness – Being unable to reveal to the society (hiding) that she cannot have a child – Feeling excluded from her husband's family
Theme 3	"Go get someone else's fingers burned!"	
	Perceived social support "Only people like me understand me."	– Preferring only other infertile women as friends for emotional sharing – Believing that those who have children do not understand her sensitivity
	Spousal support	– Expressing that her husband supports her in this process – Suggesting divorce to her husband/husband not accepting
Theme 4	Psychological symptoms "I can't stop my mind."	– Being constantly preoccupied with thoughts of her inability to have a child – Becoming obsessed with these thoughts/not being able to put these thoughts off – Experiencing physical problems like insomnia & loss of appetite due to her thoughts – Expressing the emotions that she experienced during infertility treatments such as hope, disappointment, fear & excitement
Theme 5	Sisterhood of hope & disappointment	– Expressing the emotions she felt when she was faced with a negative outcome during infertility treatment – Mourning as a reaction to negative treatment outcomes
Theme 6	Social withdrawal & isolation	– Not visiting friends who have children/are pregnant – Avoiding visiting those who have given birth – Avoiding social activities such as visiting a new baby/religious celebrations for a baby
Theme 7	Spiritual coping "Shining baby in heaven." "Is it a test or retribution?"	– Expressing that she is comforted by religious activities such as reading the Koran or praying – Believing that dealing with distress will be rewarded by God (with being granted a baby in Heaven) – Finding various reasons for the inability to have a child (e.g., fate, punishment, this is the most propitious) – Having difficulty in finding meaning in the inability to have a child – Questioning or being suspicious about the justice of nature or God
Theme 8	Cherishing hope/restructuring life	– Expressing that she is hopeful about having a child – Being able to plan on having a child
Theme 9	Adopting traditional methods	– Applying traditional methods proposed by the mother-in-law or other people around her – Preferring traditional methods after the failure of medical treatments

Perceived social support—"Only people like me understand me."

Some women did not see their families as a source of social support and felt excluded, especially by their husband's family. Some found social support from other infertile women.

> Someone with a child cannot understand. Only someone craving for a child can understand this. People [who are not infertile] are unaware of this craving and the problems experienced, they cannot understand the fear, expectation, or worry… They get pregnant naturally, they have only been to a gynecologist once or twice, how can they understand me? — Participant 4 (39 years old, infertile for 11 years, low GSS)

Spousal support

Most of the women (92%) described their husbands as their most important source of support. However, women whose infertility was attributed to the female reproductive system or an unknown cause expressed concerns about their husbands' support.

> I told [my husband], "You can let me go and marry someone else," but he constantly refuses. — Participant 6 (32 years old, infertile for 10 years, very high GSS)

> My husband supports me a lot and always says "It's okay; we'll take care of each other." He must be thinking, "I wish I had married someone else, and then I would have a child." I suppose every woman thinks like this, however much her husband supports her. — Participant 7 (32 years old, infertile for 3 years, slightly high GSS)

Psychological symptoms—"I can't stop my mind."

Many women stated that they were preoccupied with thoughts related to infertility, and some said it had become an obsession. This affected their daily lives and led to sleep and eating problems.

> Even when I tell myself, "Okay, I'm not going to worry," it is always on my mind. I cannot get it out of my mind. I always try, but I cannot stop my mind. — Participant 6 (32 years old, infertile since 10 years, low GSS)

Sisterhood of hope and disappointment

The women who tried supplementary reproduction methods reported a process of hope, expectation, and eventual disappointment when the method failed. They felt that surviving this process was emotionally very difficult. In recalling the moment that they learned of the negative results of their attempt, most began to cry.

I'm afraid it won't come true. Those waiting moments, the first 10–12 days after it was implanted drove me crazy. It was all over when the result [came back] negative. (Participant's eyes filled with tears.) I was utterly devastated on hearing the result. I was about to go crazy and I just froze. My eyes were swollen because of crying. I could not go out in public for days. It was at a weekend. I still hate weekends… I literally feel the depression and pain in my groin, [the feeling of loss] was that much.

— Participant 8 (38 years old, infertile for 5 years, low GSS)

I have been severely depressed five times. It all happened when the tube baby [*in vitro* fertilization] treatment failed; I just passed out and was lying dead, you know. — Participant 6 (32 years old, infertile for 10 years, low GSS)

Social withdrawal and isolation

In this theme, we found that women tried to overcome stress by keeping themselves away from social environments where they would encounter children.

I was surprised at myself at first but when I saw them [pregnant women], things that I could not do or experience came to my mind. I realized that I could not deal with this. Therefore, I decided to stay away from it all. I even told my husband that I wanted to live somewhere with other residents. Then, not having a child would not be a problem. — Participant 8 (38 years old, infertile for 5 years, low GSS)

I do not want to meet people and go out. I am worried all the time about people asking me about this [having a child]. People wonder “Will Participant 9 have a child or not, when is she [going to]?” So, I do not go out to avoid these questions. Now it seems to me that they will understand right away that I do not have a child. — Participant 9 (22 years old, infertile for 4 years, slightly high GSS)

Spiritual coping—“Shining baby in heaven.”

All the participants adopted spiritual coping strategies; some turned to religion and others struggled to find meaning in what they were going through.

I read that a woman who cannot have a baby will be in the best spot in heaven. She will be bestowed with a shining baby in a swaddle. Think about it, people get to have babies through pain in the world. But there [in heaven], shining babies will be given to us. I mean it is better. There would be no pain and no work. Isn't that nice? — Participant 10 (32 years old, infertile for 4 years, medium GSS)

Participant 1 explained her belief that enduring being childless will be rewarded as follows:

Maybe it is atonement for my sins. [But] heaven is under mothers' feet. Our prophet Mohammed and Mother Aişe did not have a child. She coped with it. — Participant 1 (35 years old, infertile for 18 years, very high GSS)

“Is it a test or retribution?”

Some of the women questioned the meaning of being childless. Some considered it a test or an act of fate, while some thought that they were being punished for their mistakes. Other participants had difficulties in attributing meaning to the situation, and still others considered it an injustice.

I don't know how to put it—whether it is God or nature, you sometimes question God, and think, “He is unjust.” [But then,] you ask, “Is there a God?” because I see that He grants kids to those who throw them on the street, who do not want them, and who commit crimes. What could I have done to deserve such punishment? What crimes did I do to serve this sentence. (Her voice trilled and became angry.) — Participant 11 (37 years old, infertile for 4 years, slightly high GSS)

Cherishing hope/restructuring life

Women who had known about their infertility for a long time (11–19 years) took steps to construct and reach toward the future, while those with a shorter duration of infertility (3–5 years) had no concrete plans.

I applied for adoption 2 years ago. But no answer yet. Thinking that he/she would be my child, I registered again. Now we are waiting on paperwork and bureaucracy.

— Participant 12 (41 years old, infertile for 19 years, low GSS)

Adopting traditional methods

Six of the women reported using traditional fertility methods (subsequent to medical treatments) to treat their infertility. Most women confessed to using such methods, despite their disbelief, at the insistence of their mother-in-law.

I did all I could. I visited all the professors, yet no solution. I even went to Konya to meet a woman I found online. They rub garlic and stuff on [your] groin. I even tried that. — Participant 2 (35 years old, infertile for 10 years, low GSS)

Discussion

Infertility manifests itself as a life crisis that requires adaptation and coping, especially for women [1,19]. Our study revealed that infertile women experienced high levels of stress and psychosocial problems, and they often adopted emotion-focused coping strategies.

One of the themes described the meaning participants attributed to being childless. Being childless was associated with a range of invisible losses (pregnancy, feeling of delivery, femininity, feeling of breast-feeding, or social roles). Moreover, the meaning attributed to having a child has changed with the change in family structure in Turkey. According to the Turkish Study of Family Values [23], the emotional worth of children has increased because children are now seen as safeguards for the family's future. Six women (11–19 years infertility) considered a child to be someone who could take care of them in their old age and put an end to loneliness, which suggested that they saw children as moral utilities for the future. In addition, one of these women remarked, “I won't have a grandchild,” and another said, “Maybe no bride will ever leave my house.” They saw being childless as the knowledge that they had no chance of ever experiencing these roles. The loss of being a grandmother and experiencing the varied roles of parenthood were features that caused grief [1].

We observed that women felt inadequate, frustrated, and guilty about their infertility, regardless of the reason that they could not bear children. We observed that these emotions were felt by women of all stress levels. The participants' reports suggested that

having a child was seen as women's primary social duty, which appeared to reflect wider societal attitudes. Women who internalized this role and considered being childless as a violation of social norms often perceived their infertility as a threat to their personal identity [15,17,19,22]. Furthermore, although not an obvious physical inadequacy, infertility appeared to engender stigmatization because of the accompanying feelings of embarrassment, wanting to hide, and the pressure to have a child [13].

According to previous studies in traditional countries (Iran, Israel, Nigeria, and Cameroon), women have often been blamed for their infertility, left by their husbands, and exposed to violence [14,24–26]. A Turkish study found that many infertile women experienced violence at the hands of their husbands and families [27]. In our study, it was clear that some women were being marginalized, especially by their spouse's family, had encountered discrimination, and had received threats and pressure to get divorced. Couples, particularly those in this type of family, likely felt pressure resulting from their families' authority and involvement in their domestic issues. Although education and working opportunities have been shown to prevent stigmatization [28]. In our study, in particular, the stress levels of the women who were subject to emotional abuse by their husbands' families were high. On the other hand, in a study that was conducted in Turkey, in 2014, it was observed that the amount of emotional, physical, and sexual abuse infertile women were subject to in their marriage was directly proportional to the level of stress they experienced [29]. In conclusion, it can be said that women who are subjected to abuse during the infertility process are at high risk for developing high stress levels and psychological problems.

Women may obsess over their infertility and the potential of successful treatment which can affect daily life [30]. Indeed, infertility may cause women to isolate themselves. Isolation as a coping strategy can lead to depressive symptoms because it causes loneliness, self-accusation, and rumination on past events [16]. In addition, failure of supplementary reproduction techniques may provoke feelings of inadequacy, emptiness, deficiency, guilt, sorrow, bereavement, and failure [15,17,19]. For instance, Participant 6, who had experienced failures with alternative reproduction strategies, was subjected to attacks of depression. In addition, Participant 3 felt unable to go to work for some time and did not want to see anyone following the failure of an assistive reproductive technique.

Social withdrawal and avoidance were some of the most prevalent and ineffective coping strategies among infertile women. In particular, many of them avoided interactions with those expecting a baby or who had children [31]. It is an important finding for the professionals working in the field, that all women from all the stress levels groups in our study displayed social withdrawal, which is a drawback for women while trying to overcome and adjust to infertility [31,32]. Clinic nurses must not rule out the fact that women displaying “social withdrawal” are at risk of high stress levels. The women in our study did not want to get involved in social interactions for similar reasons. A majority of our participants had adopted this type of coping by staying alone and avoiding all activities that reminded them of children.

Another observed coping strategy was turning to God, religion, and prayer, which was also emotion-based. However, this emotion-based strategy appeared to be more effective, as indicated by previous research. A study in Iran, one of the countries where Islam is widely practiced, confirmed that most infertile women (79.3%) tried believing in God and praying as a coping strategy [6]. Individuals searching for the meaning in painful and challenging experiences seek out God and religion, and this has been shown to be factor in reducing despair [33]. The belief that “the ones bowing without rebelling will be rewarded by God” might serve as a mechanism for maintaining women's self-respect. In this way, infertile women can find some meaning in their life, which reduces their feelings of despair. However, strikingly, some women rationalized that being childless was a retribution for mistakes or sins, which has also been noted in studies in other Muslim countries such as Iran, Kuwait, and Nigeria [13,14,25]. The fatalist approach of Islam and the belief that God rewards good deeds and punishes misdeeds have been used by infertile women as “spiritual coping” methods and are of great importance to the meaning that women attribute to being childless. The adoption of emotion-based coping strategies was not associated with stress scores or sociodemographic characteristics of women in this study. Concurrently, the data provides information on the systematic belief that women in the Turkish culture develop during their experience with infertility. The use of these cultural elements within the scope of consultancy and psychotherapeutic intervention performed on infertile people could improve the effectiveness of the intervention in general.

The women in this study, who had been infertile for more than 10 years, reported making plans for the future, which is reminiscent of the “hope and restructuring” stage that Atwood and Dobkin [34] defined as the last acceptance of their infertility. “Hope and restructuring” are significant indicators of adequate infertility management. Women reported receiving emotional support from both their husbands and other infertile women. This finding was consistent with those of Watkins and Baldo [15], who found that women sought out other infertile couples and friends as another method of coping. Women with negative feelings, such as guilt, inadequacy, jealousy, hostility, and rage, choose other infertile women for emotional support because they believed they would not be judged.

Many studies examining the correlation between marriage and infertility have had controversial results. However, the majority of our participants reported having a positive relationship with their spouse. This was concordant with the finding that infertility can affect marriages positively [2,18].

Some of the women in our study, particularly those with 7–13 years of infertility experience, had used traditional methods to treat infertility because they had a strong craving for a child. This need made them willing to try any approach. Traditional medicine strategies included consulting the neighborhood midwife or *hodja* about using herbal mixtures. Such methods resembled the strategies found in other studies in Turkey [22,35,36]. Although strategies peculiar to our culture may be a part of seeking spiritual assistance or keeping expectations alive, these approaches were not as effective as other coping methods for the women in the present study. We observed that women behaved hesitantly in the interviews when admitting that they used traditional methods. Therefore, it is important not to display a judgmental attitude when listening to infertile women recounting how they used traditional methods, and to try to understand them.

The fact that infertility is the most challenging experience that couples may face in their lives requires collaborative work by clinical specialists from psychology and reproduction. The work performed by psychiatric, gynecological, and obstetric nurses regarding the psychosocial aspects of infertility in the last 5 years, especially in our country, has raised interest in this field. However, it must also be mentioned that the issue of infertility has not yet been included in the field of interest of psychiatric nurses in Turkey. While it is possible for psychiatric nurses to take on an important role in ensuring that the women go through a healthy process during their infertility treatment as they evaluate the stress and psychosocial problems, these women experience and provide therapeutic consultancy. We are of the opinion that our study will draw attention to psychiatry nurses' role of an “infertility

consultant" in our country, while providing an opportunity to define this role. It would be beneficial to submit a proposal to the National Psychiatric Nurses Association for the inclusion of the role these nurses play with regard to infertility. Studies on the role played by psychiatric nurses in crisis and stress management, psychosocial consultancy and psychotherapy similar to those carried out in other countries need to be conducted for Turkey. The publication of these research findings, along with those dealing with the effects of this role on the rate of pregnancies achieved, in particular, would ensure that these nurses receive higher levels of visibility in their fields [18,19]. It this sense, it will help prove that psychiatric nurses are an important part of the treatment team in infertility clinics.

The results of the present study also provide data on the ways in which women in our country attempt to overcome infertility. It is our belief that the data would also contribute to the development of a culture-specific scale that can be used in determining the methods employed by women in overcoming their problems with infertility.

Conclusion

We found that infertile women encountered psychosocial problems due to the inability to have children. Social pressure and stigmas were frequent problems that these women encountered. They also felt excessive responsibility toward the society and their spouses, and deemed being unable to have a child as a burden. Having children was vital for these women, and being unable to do so negatively affected their view of life and caused great harm to their self-perception. Moreover, regardless of the reason for infertility, the women felt guilty due to the expectations of their spouse and the society. Insomnia, eating problems, obsessive thoughts, and depressive symptoms were observed while these women strove to accept their infertility. The coping strategies of women in this study included sharing problems with their spouse and with other infertile women, turning to spiritual coping methods to overcome stress, avoiding society, and using traditional methods of treating infertility.

It is necessary to define women's changing emotional needs, empower them with healthy coping skills, and make individual and group action plans toward crisis management at every stage of the treatment in infertility clinics. Considering the availability of the nurses at every stage of the treatment, including psychiatry nurses, on the team working on infertility, will help women manage this process in a healthy manner, by recognizing their psychosocial problems and providing solutions. These findings should be an invaluable data resource because they reveal the necessity of psychiatry nurses' active role in infertility clinics in our country.

Conflicts of interest

The authors declare no conflict of interest.

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