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Coping Strategies of Women Following the Diagnosis of Infertility in Their Spouses: A Qualitative Study

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Abstract

Background: Infertility affects women more profoundly than men, even when the male partner is the cause of infertility. Therefore, identifying the coping strategies of women in confrontation with their husbands' infertility is very important.

Aim: This study aimed to explore women's coping strategies following the diagnosis of infertility in their husbands.

Method: This qualitative study was performed on 18 women whose husbands were diagnosed with infertility. The subjects were selected from those who referred to Milad Fertility Clinic and public health centers in Mashhad, Iran, through purposive sampling within 2014-2016. The data were collected by conducting semi-structured interviews. Data analysis was manually carried out using conventional content analysis.

Results: The main theme emerged from the content analysis was the attempts to overcome the threat, including two categories, namely emotional coping and active coping. Emotional coping included strategies like attributing infertility to herself and others, selective disclosure, religious coping, seeking emotional support, as well as being considerate and offering verbal support to the spouse. active coping consisted of strategies namely attempting to verify the diagnosis, accepting infertility, searching for information, adhering to medical and surgical treatments, trying fertility superstitions, using alternative medicine, and changing lifestyle.

Implications for Practice: Women may use a diverse set of coping strategies to adapt to their husbands' infertility. A deep perception of these strategies is critical for controlling and managing the consequences of this diagnosis, designing interventions to strengthen preferred actions and strategies, as well as facilitating women's coping with the infertility crisis of their spouses.

Keywords: Coping strategies, Male infertility, Qualitative study, Women

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Introduction

Infertility is a major reproductive health issue with potentially profound impacts on an individual's well-being. According to the World Health Organization, one in every four couples suffers from infertility problems (1-3). It has been reported that 51.2% of infertility cases are caused by the fertility problems of men (4). Infertility is a highly stressful condition that can severely damage the interpersonal, marital, and social relationships of both men and women.

However, in many societies, there is still an undercurrent of bias that considers infertility a predominantly female problem. Therefore, even in cases that infertility is caused by the male partner, mostly the women are stigmatized and bear the burden of infertility of their spouses (5-7). In addition, these women often experience a much deeper sense of suffering and distress than their partners (8-10). In such situations, coping strategies can play a key role in a woman's ability to protect and maintain her physical and mental health.

Coping has been defined as an individual's behavioral and cognitive efforts to manage stress or deal with stressful situations (10, 11). Infertility is also a major stressor with potentially devastating effects on a person's life and health in physical, psychological, social, and financial dimensions (12) (13). Therefore, both men and women need a way to cope with this problem. Infertility coping strategies refer to a set of cognitive and behavioral strategies that people use to cope with the infertility crisis (14, 15). Although there have been many studies carried out on the coping strategies of infertile couples, most of these studies have been quantitative and descriptive, and only a few of them (Zandi et al., 2017; Donkor and Sandall, 2009) involved the qualitative examination of infertile people seeking treatment (16, 17).

To the best of our knowledge, there has been no study to date conducted on the coping strategies of women following the diagnosis of infertility in their male partners. The physical and psychological complexities of infertility and the dearth of knowledge necessary to gain a deep understanding of many aspects of this problem are very important. Moreover, the strategy of coping is associated with a person's perceived experiences, background, and characteristics. Therefore, considering all the aforementioned issues, using a qualitative research approach to explore infertility coping strategies from the perspective of those who have experienced it can offer valuable insights into this area (18-21). The present study aimed to qualitatively investigate the coping strategies that women use following the diagnosis of infertility in their spouses.

Methods

The present qualitative study was carried out using conventional content analysis (20) between 2014 and 2016. The participants were women whose spouses were diagnosed with primary infertility. The participants were selected from the women who referred to Milad Fertility Clinic and public health centers in Mashhad, Iran. The participants were asked to give written consent. Sampling was carried out using purposive sampling and continued up to achieve data saturation. To maintain maximum diversity, the study population were the subjects with different age groups, duration of infertility, education level, and socioeconomic status. A total of 30 semi-structured interviews were conducted with 18 participants.

Before the interview, the researcher introduced herself, explained the purpose of the study, obtained informed consent to record the interview, and ensured the interviewee about the confidentiality of the discussed issues. After the collection of personal information, the researcher tried to establish a cordial relationship with the participant and gained her trust in order to prepare the conditions for the interview.

The data were collected through semi-structured interviews. Each interview started by asking open-ended questions about the interviewee's coping strategies after becoming aware of her spouse's infertility. According to the answers, exploratory questions were asked for clarification. Some of the questions asked in the interviews were as follows:

- What was your reaction to the infertility of your spouse?
- How did you deal with this issue?
- What emotions and feelings did you experience? How did you think about it?
- How did you behave?
- What helped you go through this experience?

- What changed in your life after your spouse was diagnosed with infertility? How did you deal with these changes?

The collected data were analyzed using conventional qualitative content analysis through a procedure that will be described. After each interview, the recorded conversations were transcribed verbatim by the researcher. The interview and its transcripts were then repeatedly reviewed to gain a general sense and be immersed in the data. Afterward, the process of coding was initiated through grasping and tagging the main concepts of the transcripts. After reviewing the obtained codes to examine their differences and similarities, similar codes and those with similar meanings were grouped together to construct a series of initial categories. The obtained categories were then reviewed, and similar categories were grouped together. This process continued up to reaching a hierarchy of primary categories, as well as categories and main theme.

The criteria introduced by Lincoln and Guba (19) (i.e., credibility, dependability, confirmability, and transferability) were used to ensure the validity of the findings. To confirm the credibility of the data, the researcher was careful to spend enough time on data collection and analysis to gain a deep understanding of the participants and interviews. Furthermore, the coding process was reviewed by the research team, and a cordial relationship was established with the participants to facilitate in-depth interviews. The researcher attempted to remain engaged with the data for a prolonged period; accordingly, the interviews were reexamined, and the codes were repeatedly modified. The stages of the analysis were also reviewed and revised in frequent meetings with the research team.

For data triangulation, the interviews were conducted with a diverse group of people in different places and times. In addition, the collected data were fed back to the participants to explore their perspectives. To ensure dependability, all the stages of the analysis were recorded and described to supervisors and experts outside the study for evaluation. Moreover, confirmability requires an audit tool. In the present study, confirmability was assured by recording the details of the study for review and producing a detailed report of the research process for audit. To ensure transferability (i.e., generalizability), the researcher attempted to provide a rich account of the information in the final report to allow readers to assess the applicability of the data in other contexts.

Results

The mean age of the participants was 37.1 ± 1.4 years, and the duration of infertility was within the range of 1-42 years (Table 1). Coping strategies consisted of one main theme, namely the attempts to overcome the threat, with two categories, including emotional coping and active coping. Table 2 tabulates the main theme, categories, and subcategories identified in this study.

Table 1. Demographic characteristics of women participating in the study

Participant no.	Age (year)	Level of education	Infertility duration (year)	Employment status
1	33	Middle school	12	Employed
2	49	High school diploma	33	Employed
3	59	Illiterate	42	Housewife
4	32	Elementary school	9	Housewife
5	35	Bachelor's degree	10	Employed
6	28	Master's degree	2	Employed
7	35	Elementary school	11	Housewife
8	44	High school diploma	23	Housewife
9	29	High school diploma	4	Housewife
10	27	Bachelor's degree	9	Employed
11	41	Illiterate	7	Housewife
12	35	Elementary school	3	Housewife
13	30	High school diploma	14	Housewife
14	29	Bachelor's degree	8	Employed
15	27	High school diploma	5	Employed
16	34	High school diploma	6	Employed
17	26	High school diploma	7	Housewife
18	24	High school diploma	3	Housewife

Table 2. Main theme, categories and subcategories emerged from data analysis

Examples of statements made by participants	Subcategory	Category	Main theme
I told myself that I must had a role in it too. If I had a strong womb, it could made up for his (testicular) laziness.	Attributing infertility to herself and others		
I didn't tell anyone that my husband had a problem, because I didn't want people to talk about him. Since he's a man you know, I didn't even tell his own family.	Selective disclosure		
I told my nephew. She is my confidant and I only trust her.		Emotional coping	
It has strengthened his fate. He told Imam Reza to pray for him. When you hear this, for example, you remember that Imams are the links between you and God, so you can pray to Imam Reza to help you with this.	Religious coping		
I just needed someone to talk to, someone to comfort me, at least to take the weight off my mind.	Seeking emotional support		
My husband was very upset and depressed. I tried to give him hope; I talked to him and said: it will be ok; we didn't marry just to have a baby.	Being considerate and offering verbal support to the spouse		
We went to many doctors; they tested more than two times and we showed the results to a few different doctors. All of them said that he has no sperm.	Attempting to verify the diagnosis		Attempts to overcome the threat
We went to several doctors who also said that it is the sever oligospermia. With passage of time, you gradually try to accept it.	Accepting the infertility problem		
I searched the internet and looked anywhere for some information.	Searching for information		
My husband underwent varicocelelectomy. We also took medications.	Adhering to medical and surgical treatments	Active coping	
I went to get Indian astrology to read for my husband. It was saying that you will have seven or eight kids.	Trying fertility superstitions		
I heard that a woman couldn't get pregnant for a few years, but the problem was solved after her husband started drinking an herbal medicine. I went to an apothecary and bought a bottle of that herbal medicine.	Using alternative medicine		
We changed our diet a bit. We started eating more mutton because they said it's good for us. Also, we started eating more honey, cinnamon, and ginger. We basically changed our diet.	Changing lifestyle		

Emotional coping

Emotional coping refers to the actions or thoughts of women for controlling the adverse reactions to the diagnosis and avoiding a crisis.

Attributing infertility to herself and others

After becoming aware of the diagnosis, some of the women attempted to find an alternative cause for infertility. In these cases, women blamed themselves and others, including the spouse, physician, and even acquaintances and relatives.

“I told myself that I must’ve had a role in it too. If I had a strong womb, it could’ve made up for his (testicular) laziness.” (Yas, 28 years old, with 2 years of infertility)

Some of the women considered infertility a punishment for their past acts, sins, or ingratitude toward God or blessings.

“I was very sinful when I was single, so I thought it’s a punishment for my sins.” (Zainab, 29 years old, with 4 years of infertility)

Some participants blamed others for the infertility of their spouses and attributed it to negligence or even conspiracy.

“I said it is the fault of my father-in-law because no one had looked after my husband.” (Masoumeh, 35 years old, with 3 years of infertility)

Selective disclosure

Since the traditional section of the Iranian society considers male infertility a taboo and an attack on masculinity, some of the women chose to either completely hide the issue or discuss it only with some of their peers and those who have had similar problems.

“I didn’t tell anyone that my husband had a problem because I didn’t want people to talk about him. Since he’s a man, I didn’t even tell his own family.” (Roya, 44 years old, with 23 years of infertility)

Religious coping

Many of the women attempted to escape or solve the problem by engaging in religious practices, for example by praying to God for fertility, praying for the intercession of holy Imams (i.e., a religious tradition in Shia Islam), and going on pilgrimage.

“I made a nazr (i.e., an Islamic vow) that I would hold a prayer ceremony in Muharram (i.e., the first month of the Islamic calendar) and sacrifice a sheep if my prayer was answered.” (Masoumeh, 35 years old, with 3 years of infertility)

Seeking emotional support

Some of the women sought to gain the support and sympathy of others, discuss their problems with someone, and feel understood. Accordingly, they talked with friends and relatives about their problems and their feelings. Some women found it difficult; however, they were ultimately very helpful to talk about infertility and used this approach to seek emotional support.

“I just needed someone to talk to, someone to comfort me, at least to take the weight off my mind.” (Hananeh, 27 years old, with 9 years of infertility)

Being considerate and offering verbal support to the spouse

Some of the women tried to give hope to their spouse and bring back peace to their marital life by expressing that having children is not the only purpose of marriage.

“My husband was very upset and depressed. I tried to give him hope; I talked to him and said: it will be ok, we didn’t marry just to have a baby.” (Yas, 28 years old, with 2 years of infertility)

Another strategy used by women was to pretend everything is all right and not to talk about the problem.

“I couldn’t say anything; I didn’t want to hurt his pride. I just said that science has progressed, but I was always worried.” (Hananeh, 27 years old, with 9 years of infertility)

Active coping

The active coping strategies are the strategies in which women took an action to change or reduce the stressful situation (i.e., coping with the infertility of the spouse). These strategies included attempting to verify the diagnosis, accepting infertility, searching for information, adhering to medical and surgical treatments, trying fertility superstitions, using alternative medicine, and changing lifestyle.

Attempting to verify the diagnosis

Some of the women, who were shocked by the news of infertility and considering it a risk to their marital life, attempted to consult with several other physicians hoping that they discover a mistake in the original diagnosis or recommend treatment. They repeated the fertility tests several times and presented the results to multiple physicians to make sure of the diagnosis. The women more frequently used this strategy when infertility was severe, and the physician emphasized that there was no treatment, or they were advised by others to have a second opinion. An example of the statements with this concept is given as follows:

“We went to many doctors; he tested two more times and we showed the results to a few different doctors. All of them said that he has no sperm.” (Haniye, 27 years old, with 5 years of infertility)

Accepting infertility

After becoming assured that the diagnosis was correct, many women accepted the infertility of their husbands as an inevitable fact and a difficult challenge to overcome.

“We went to several other doctors who also said that it is the acute sperm decline. With time, you gradually try to accept it.” (Haniye, 27 years old, with 5 years of infertility)

Searching for information

Some of the women started to collect information about infertility and its treatments as much as possible. They had many questions and tried as many sources as possible to find some answers.

“I was asking people around me, from those who had no children, a lot about what to do.” (Haniye, 27 years old, with 5 years of infertility)

“I was searching for the treatment regarding weak sperm, what is the treatment for zero sperm?” (Nourieh, 26 years old, with 7 years of infertility)

“I searched the internet and looked anywhere for some information.” (Yas, 28 years old, with 2 years of infertility)

Adhering to medical and surgical treatments

Most women stated that they adhered to the physician's recommended instructions and therapies, including medical and surgical treatments.

Trying superstitions

Many of the participants believed in superstitions, such as prayer amulets (i.e., a superstitious pseudoreligious practice involving writing mystical scripts on amulets or body). Believing in superstitions, especially prayer amulets, was more common among the participants from the poorer sections of the society.

“We went to a mystic for prayer amulets. He said that we are going to have a baby.” (Narges, 24 years old, with 3 years of infertility)

“I went to get Indian astrology reading for my husband. It was saying that you will have seven or eight kids.” (Zainab, 29 years old, with 4 years of infertility)

Using alternative medicine

Many of the participants expressed belief in the power of herbal remedies. The peers who successfully used herbal medicine had an important impact on women's opinions about this method.

“I heard that a woman couldn't get pregnant for a few years, but the problem was solved after her husband started drinking an herbal medicine. I went to an apothecary and bought a bottle of that herbal medicine.” (Hananeh, 27 years old, with 9 years of infertility)

Changing lifestyle

Following the recommendation of physicians or acquaintances, most participants showed more interest in self-care, changing diet to eat more nutrient and high-protein foods, exercising to lose weight, and demanding from the husband to reduce or quit smoking or substance abuse.

“We changed our diet a bit. We started eating more mutton because they said it's good for us. Also, we started eating more honey, cinnamon, and ginger. We basically changed our diet.” (Mohaddesse, 29 years old, with 8 years of infertility)

“I’m telling my husband that we’ll have kids too if you don’t smoke cigarettes or something else.”
(Maryam, 32 years old, with 9 years of infertility)

Discussion

The participants of the present study were women who had the experience of living with an infertile spouse. The coping strategies of these women included emotional coping (including attributing infertility to herself and others, selective disclosure, religious coping, seeking emotional support, as well as being considerate and offering verbal support to the spouse). Moreover, the coping strategies consisted of active coping (including attempting to verify the diagnosis, accepting infertility, searching for information, adhering to medical and surgical treatments, trying fertility superstitions, using alternative medicine, and changing lifestyle).

Coping can cause a wide range of behaviors, actions, as well as internal and external reactions in response to a stressor. Coping involves two types of action, namely 1) problem-focused action, which is an attempt to solve the problem, and 2) emotion-focused action, which is an attempt to relieve the stress caused by the problem. Since problem-focused strategies can result in the elimination of the problem, they are known to have a positive effect on mental health.

Although researchers have not ruled out the health benefits of emotion-focused strategies, some believe that these strategies are associated with poor adaptation to stressors. However, regarding infertility, some researchers believe that infertile people should be flexible in their use of coping strategies, meaning that they should use both problem-focused and emotion-focused strategies simultaneously. Some researchers have even argued that since infertility is an almost uncontrollable stressor, emotion-focused coping can be more effective in the reduction of stress (2, 11, 22).

The findings of the present study showed that the interviewees used different strategies to face the threat. One strategy was to attribute infertility to oneself or others. Some of the women considered infertility a punishment for past sins or consequence of a curse or witchcraft. Some of the women regarded themselves as responsible for infertility; a view that in the long run may put them at risk of psychological problems.

Another important strategy adopted by the interviewed women was selective disclosure that is either completely hiding the diagnosis or selectively sharing it with a few confidants. Consistent with the findings of this study, other qualitative studies also reported that revealing infertility is not a common strategy. In another study, almost half of the participants only told their close friends and relatives or confidants, as they were concerned about the loss of reputation and consequently preferred to disclose the information very selectively (16, 23, 24). The high intensity of social pressure and anxiety associated with the label infertile in traditional societies may help to explain why women hide the problem. The effort of these women to hide the issue can be observed from the perspective of traditional customs as a means to limit the unwelcome attention of others.

Another strategy employed by the interviewees was to seek emotional support which means to gain the support and sympathy of others, discuss problems with someone, and feel understood. This process involves talking with friends and relatives about the problem and feelings, describing the distressing experiences, and releasing the pent-up psychological pressure. Other studies have also indicated that one of the infertility coping strategies of women is to share infertility-induced stress and emotions with others (22, 24-26).

One of the most important strategies followed by the interviewed women was the use of generic and Islamic religious practices, such as praying, seeking solace in faith in God, praying for the intercession of holy Imams, and making nazr. In the study conducted by Donkor and Sandall (2009), one of the coping strategies used by the majority of Christian women was praying and finding solace in religious beliefs, which helped them remain hopeful (16). The results of other studies have also suggested that religion and belief in God can help infertile people to relax and experience less stress in the face of this challenge (27, 28).

Another strategy used by the women was to be considerate which is to act as if everything is normal and not to overwhelm the husband with one’s own emotions and feelings. In other words, women tried to maintain self-controlled and avoid hasty actions and behaviors not to make the problem more complicated and find a way to address the issue more effectively. A study carried out by Donkor and Sandall (2009) on women seeking infertility treatment also reported that one of the women’s coping strategies was to act normal, as many women refused to talk about their feelings and problems with their husbands and tried to control their emotions (16). In the present study, women not only avoided

emotional responses but also tried to put the issue behind them as quickly as possible by expressing compassion and sympathy in verbal communication with their husbands.

Another strategy adopted by the women was to make sure multiple times that the problem is correctly diagnosed. Some of the women hoped that there was a mistake in the diagnosis or perhaps the physician is not experienced enough to properly diagnose and treat the problem. Therefore, they repeated the examination and testing process with multiple physicians to make sure of the diagnosis. Once becoming assured that the diagnosis was correct, many women accepted the infertility of their husband as a fait accompli and difficult challenge to overcome.

Accepting the reality of a medical condition is an important step that helps the patient and his/her family to cope better with the condition and consequences. This acceptance is the prerequisite for the desire to get involved in activities and pursue a goal (29-31). Following the acceptance of infertility, many participants tried to gather information about the problem, adhere to medical and surgical treatments, adopt traditional and alternative methods, or change their lifestyle. Information collection can be considered a proper strategy for coping with medical problems, as the collected information can help people to identify their treatment options and decide which option is personally the best. In a qualitative study conducted by Zandi et al. (2017), it was also reported that one of the coping strategies followed by infertile people was to seek information and counseling (17).

One of the actions that were repeatedly taken by many of the participants was the use of alternative medicine, especially herbal medicine, for the treatment of infertility. The results of studies carried out in other countries also showed that many women tend to try complementary and alternative medicine to treat infertility. In Turkey, for example, 82% of participants in a study tried the aforementioned method (32-34). A study conducted by Khodakaramy et al. (2010) also reported that one of the extracted themes was nonmedical treatments, including herbal remedies and traditional therapies (35). The use of traditional methods to treat infertility was also one of the concepts extracted from a study carried out by Karaca and Unsal (2015) (36).

In the present study, some of the participants had superstitions, such as prayer amulets, astrology, and witchcraft, for the treatment of infertility. A review of the literature indicated that mystical, pseudoscientific, and pseudoreligious methods are extensively used by many couples across the world for the treatment of their infertility (32, 33, 35). In general, most of the women interviewed in the present study used emotional coping strategies, such as emotional release through crying, praying, and seeking emotional support from others. Selective disclosure for the prevention of increased external pressure was another approach chosen by most women.

The active coping strategies used by the women included seeking a second opinion from several physicians to ensure that the diagnosis is correctly made. After making sure of the diagnosis and accepting the problem, many of the women attempted to gather information from a variety of sources, including the treatment cadre, Internet, as well as acquaintances and peers. In addition, they tried to use the obtained information to solve the problem through modern medicine or surgery, traditional and alternative methods, or lifestyle changes.

Based on the results of this study, women's health authorities are recommended to develop a program for teaching women how to cope with the infertility of their spouses. Additionally, collaborative counseling, as one of the stress management strategies, could be recommended to these women to decrease their perceived infertility related stress (37). In qualitative studies, the subjective nature of data collection and small sample size restrict the generalizability of the results. Nevertheless, the present study attempted to minimize the aforementioned issue by maximizing the diversity of the study population and selecting information-rich participants; therefore, the results can be largely applicable in similar situations.

Implications for Practice

The results of the present study suggested that women may use a diverse set of coping strategies to adapt to the infertility of their husbands. A deep perception of these strategies is important for controlling and managing the consequences of this diagnosis, designing interventions to strengthen preferred actions and strategies, and facilitating women's coping with the spouse's infertility crisis.

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Conflicts of Interest

The authors declare that there is no conflict of interest.

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