## RESEARCH

# Hope and Hopelessness in Infertile Women: Phenomenological Study

İnfertil Kadınlarda Umut ve Umutsuzluk: Fenomenolojik Çalışma

Sezer Er Güneri 📵, Oya Kavlak ゆ, Ege Nazan Tavmergen Göker 🕩

#### Abstract

The aim of this study was to investigate hope and hopelessness in infertile women by using Seligman's theory of "learned helplessness". The study was conducted using a phenomenological research design. Fifteen infertile women whose treatment had failed were purposively selected. Data were collected via a semi-structured interview technique. Interviews were transcribed verbatim and were analyzed using interpretative phenomenological analysis. The main themes relating to hope were individual and social/environmental factors; the main themes relating to hopelessness were individual and social/environmental factors, and the treatment processes. The infertile women made more statements expressing their sense of hopelessness than hope. Women experienced fluctuating feelings during treatment and that unsuccessful treatment resulted in a sense of hopelessness and helplessness. Hopelessness experienced as a result of negative unsuccessful experiences of treatment leads to feelings of helplessness by suggesting to infertile women that their treatment will fail and that they will not be able to live a successful life. These feelings cause women to cease treatment. Health professionals need to take infertile women's psychological needs into account and consider their personal feelings and values.

**Keywords:** Hopelessness, hopefulness, infertility, qualitative research.

#### Öz

Bu çalışmanın amacı, infertil kadınların umut ve umutsuzluklarını Seligman'ın öğrenilmiş çaresizlik teorisi kullanarak incelemektir. Çalışma, fenomenolojik araştırma yöntemi ile yürütülmüştür. Olumsuz tedavi deneyimi olan 15 kadın amaçlı yöntem ile seçilmiştir. Veriler yarı yapılandırılmış görüşme yönte-mi ile toplanmıştır. Görüşmeler, harfi harfine yazılmış ve yorumlayıcı içerik analizi ile analiz edilmiştir. Umudun ana temaları, bireysel ve sosyal/çevresel; umutsuzluğun ana temaları bireysel, sosyal/çevresel ve tedavi süreci ile bunların alt temaları oluşturulmuştur. İnfertilite tedavisi sürecinde kadınların değişen duygular yaşadıkları; olumsuz tedavi deneyimlerinin umutsuzluk ve çaresizlik duygularının yaşanmasına yol açtığı belirlenmiştir. Olumsuz tedavi sonucu deneyimlenen umutsuzluk, infertil kadınların tedavide ve hayatta başarıya ulaşamayacağını düşündürerek çaresizliğe yol açmaktadır. Bu hisler, kadınların tedaviyi bırakmalarına neden olmaktadır. Sağlık profesyonellerinin infertil kadınların psikolojik ihtiyaçlarını kişisel duygu ve değerleri göz önüne alarak incelemeleri gerekir.

Anahtar sözcükler: Umutsuzluk, umut, infertilite, kadın, kalitatif araştırma.

Submission date: 22.02.2019 | Accepted: 02.04.2019 | Online published: 22.05.2019

<sup>&</sup>lt;sup>1</sup>Ege University Nursing Faculty, Izmir, Turkey

<sup>&</sup>lt;sup>2</sup> Ege University Family Planning and Infertility Practice Research Center, Izmir, Turkey

Sezer Er Güneri, Ege University Nursing Faculty, Izmir, Turkey, Turkey er.sezer@hotmail.com

**ACCORDING** to Mascarenhas et al. (2012), one in every four couples in developing countries is affected by infertility. Factors affecting this include women getting married at an older age, late motherhood and women's changing role in society (Robinson and Stewart 2005). Infertility may be considered as a developmental crisis. Fertility is a crucial function of adult development (Kırca and Pasinlioğlu 2013). Infertility is sometimes unexplainable, diagnosing infertility commonly takes a long time, being infertile causes excessive stress and it can be very difficult for sufferers to adapt. Infertility adversely affects psychological well-being more than physical health (Oskay et al. 2009). Individuals with infertility may consider this condition a serious disability, and they commonly isolate themselves from their environments because of feelings of inadequacy (Kavlak and Saruhan 2002, Oskay et al. 2009, Sen and Sevil 2016). Studies conducted to determine the experiences of women receiving infertility treatment have shown that women were subjected to harsh treatment from their families, experienced changes in their daily lifestyle, viewed the future with suspicion, experienced sexual difficulties and suffered from anxiety, stress, depression, desperation and loneliness (Hammarberg et al. 2001, Kavlak and Saruhan 2002, Franco et al. 2002, Yanikkerem et al. 2008, van Rooij et al. 2009, Şen and Sevil 2016).

Hope is the most valuable resource enabling an individual to cope with difficult and stressful situations (Öz 2010, Kargın and Ünal 2011). Being hopeful allows motivated individuals to accomplish many things. The opposite of hope is hopelessness. While a positive outcome is common when there is hope, there is likely to be a negative outcome when hopelessness is involved. A hopeless person tends to avoid various experiences (Kargın and Ünal 2011). Having negative feelings can complicate the treatment process, decrease its effectiveness and increase the likelihood that individuals for whom treatment might have been successful choose instead to quit (Hammarberg et al. 2001, Hoşgör et al. 2017). Because the treatment process is stressful, couples receiving infertility treatment require emotional and physical care (Hammarberg et al. 2001, Yılmaz and Oskay 2015).

"Learned helplessness" refers to the condition of organisms that have faced uncontrollable situations; as a result, they remain unreactive during events which they could control since they have lost their belief in their ability to change the situation (Gökkaya 2015, Mohanty et al. 2015, Nuvulla 2016). According to Seligman's learned helplessness theory (Akbaş 2007), what causes learned helplessness to occur is that causal attributions are made by the organism about negative or uncontrollable events being internal, general, and fixed. People who experience problems for an extended period learn that their responses cannot affect the events that occur. In this situation, learning weakens the ability to understand the events more closely and leads to inactivity. Ultimately, they will fail to try to resolve any issue even if it can be resolved (Mohanty et al. 2015, Nuvulla 2016).

The theory suggests that the individual notes that there is no relationship between their behaviors and outcomes, and, that this will affect future behaviors. The individual will see the negative situation as occurring for internal, general and fixed reasons, and cognitive, motivational and emotional distortions will arise as a result of the individual's lack of self-confidence. The theory of learned helplessness was expanded to include human behavior within a model describing depression, defined as lack of affect and emotion (Akbaş 2007). Learned helplessness includes the individual's causal explanati-

ons of the original negative events. It proposes that specific causal explanations tend to produce helplessness and depression following negative events (Mohanty et al. 2015). The most important regulator of learned helplessness is how individuals explain what happens to them. People who do not experience learned helplessness do not become resentful and do not experience depression when they fail at something (Akbaş 2007). Depression is seen in a person who has lost hope that he or she has effective control over significant events occurring in her or his environment and learned helplessness induces depression-like states in humans (Akbaş 2007, Nuvulla 2016).

It is believed that gender is an important factor in learned helplessness, as women experience the condition more than men do (Gökkaya 2015). When addressing women's sensitivities, both biological characteristics and social roles are important factors. In various studies conducted in Turkey and worldwide failed infertility treatment is ranked first among events adversely affecting women (Franco et al. 2002, Verhaak et al. 2007, van Rooij et al. 2009, Kraaij et al. 2009, Ozan and Okumuş 2013, Vural and Beji 2014). Studies conducted with infertile women reported that they experienced fear, loneliness, decrease in self-esteem, guilt, sadness, hopelessness, depression, physical violence and social isolation (Drosdzol and Skrzypulec 2009, Kraaij et al. 2009, Behboodi - Moghadam et al. 2013, Ozan and Okumus 2013, Hasanpoor-Azghdy et al. 2014, Şen and Sevil 2016, Yılmaz and Beji 2016, Cetişli et al. 2018). Most of these studies were descriptive and there has been no qualitative study about hope and hopelessness in infertile women. This study used Seligman's learned helplessness theory to examine feelings of hope and hopelessness in women being treated for infertility and addressed their underlying thoughts, emotions, and behaviors using interviews, in order to raise the awareness of health professionals working in the field.

#### Method

A qualitative, phenomenological approach was used in this study. Qualitative research designs provide flexibility to the researcher and allow greater coherence to various stages of research with a particular focus. A phenomenological design focuses on the facts that we are aware of but do not have an in-depth and detailed understanding of (Yıldırım and Şimşek 2005). In the phenomenological approach, the aim is to define the reality of the situation. Phenomenology is an inductive, descriptive research method. The aim of this methodology is to define the whole phenomenon as it appears, including individual experiences. The researcher investigates the deeper meanings of individuals' experiences related to time, their location and their background (Baş and Akturan 2008). This study was carried out using the phenomenological method in order to reveal the feelings and thoughts of women about their experiences of infertility.

# **Participants**

Fifteen purposively selected infertile women participated in the study. The sample comprised literate women who were currently in their first marriage, had been diagnosed with primary infertility, were receiving their second in vitro fertilization-embryo transfer (IVF-ET) treatment to become pregnant, and who had not received psychiatric treatment. The clinical nurses selected women who met the criteria for the study. Two women did not participate in the study for emotional reasons (i.e. they had difficulty

discussing infertility) and three women did not participate in the study because they did not want their interviews to be recorded.

The socio-demographic and infertility-related characteristics of the women were determined using a personal information form based on the literature consisting of 25 questions (Akyüz and Sever 2009, Oskay and Bayram 2009, Kırca and Pasinlioğlu 2013, Dağ et al. 2015, Yılmaz and Oskay 2015, Şen and Sevil 2016, Yılmaz et al. 2016, Cetişli et al. 2018). The age range of the participants was 24-43 years (mean age=35.06±5.14). Eight of the participants had a low education level, 11 of the women were housewives, all participants had health insurance, eight of the women had a monthly income between \$389 and \$555; nine believed that their incomes were lower than their expenditure, eight of the women had been married for 6-10 years (mean=8.46±4.24), and 14 lived in nuclear families.

Furthermore, four of the women had been infertile for 1-2 years, eight for 3-5 years, two for 6-10 years, and one for over 11 years; five had been receiving infertility treatment for 1-2 years, seven for 3-5 years, two for 6-10 years, and one for over 11 years. The cause of infertility was known in 14 of the women; six of these women had female-factor infertility, while eight had male-factor infertility. The treatment costs of two of the women were covered by themselves, two were covered by health insurance, nine were covered partly by themselves and partly by health insurance, and two were covered by themselves and their families. Nine women received financial support from their families and relatives and five thought the support they received was sufficient. In Turkey, reports are provided for people who fulfill the necessary conditions for assistive reproduction and a certain part of the treatment is covered by health insurance, whereas the rest is covered by the people themselves (Turkish Disclosure of Health Practices 2013). The research question was "What feelings of hope and hopelessness are experienced by women being treated for infertility with reference to learned helplessness theory?"

## Procedure

Before data collection, this study was approved by the ethics committee of Ege University Medical Faculty (11-2/37) in accordance with the Declaration of Helsinki Research Principles. Written permission was obtained from each woman prior to her participation. The most commonly used data collection tool in discovering phenomenological patterns is the interview (Yıldırım and Şimşek 2005, Kümbetoğlu 2008). A semistructured interview form was used to collect data regarding hope/hopelessness in infertile women. The form was created in collaboration with a clinical psychologist. The questions were prepared in accordance with Seligman's theory of learned helplessness and the relevant literature (Akbaş 2007, Gökkaya 2015). To determine the sense of hope/hopelessness, questions were grouped under the following four categories: general hope/hopelessness about life (3 questions), hope/hopelessness about having children (1 question), hope/hopelessness about treatment (6 questions), and hope/hopelessness about the future (3 questions). Some of the questions were as follows: "When you look at your life in general, how would you describe yourself in terms of feeling hopeful/hopeless?", "What did you feel when you realized for the first time that you couldn't have a baby?", "What did you feel when you learned that the first treatment had had a negative result?", "What are your hopes of having children now?", "What are your

expectations for your life in the future life?"

The study was performed at a university hospital in-vitro fertilization (IVF) center. Two preliminary interviews were conducted before the data collection and they were not included in the data. These interviews were listened to by the researcher who conducted the interview and a clinical psychologist. As a result of this, the semi-structured questions were revised and their comprehensibility ascertained. During data collection, interviews were conducted by the researcher and recorded with a digital voice recorder and then a full transcription was made. A separate interview room was arranged and a suitable physical environment was created to make the participants feel comfortable and allow for effective interviews to be conducted without being disturbed.

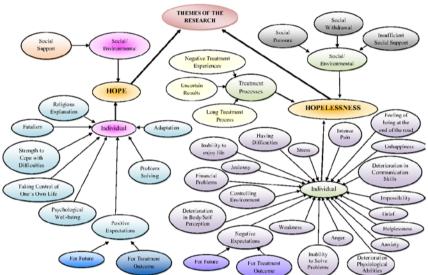


Figure 1. Themes of hope and hopelessness phenomenon of infertile women

## Statistical Analysis

Interpretative Phenomenological Analysis (IPA) was used for data analysis. Theoretically, the IPA reveals participants' personal life experiences and how these experiences affect them. In this context, it focused entirely on individual perception and narratives and investigated the experience from the perspective of the "insider." Smith (31) suggests that the method has an idiographic (i.e., focusing on the subjective/personal information), inductive, and interrogative stance that constantly questions mainstream psychological knowledge. IPA is preferred, especially in health psychology (Smith 2004, Smith 2011, Tanyaş 2014). IPA believes in a relationship between embodied experiences, talk about those experiences and a participant's making sense of, and emotional reaction to, those experiences. IPA contains a double hermeneutic. First, the participant tries to make sense of their lived experiences; second, the researcher tries to make sense of the participant and makes sense of what is happening to them (Smith 2011).

First, the data collected was copied and the copies were compared to the originals

to locate any mistakes. Then, the interviews were transcribed. Transcripts were coded and analyzed on a case-by-case basis. The data were read repeatedly to identify phenomenological themes that were then cluster-analyzed interpretatively into main themes according to their conceptual consistency. The resulting themes and sub-themes were compared with the original texts and checked by an external researcher and discussion of the analytic process was conducted.

## Results

The findings were coded into two groups: hope and hopelessness. Hope contained two main themes: individual and social/environmental factors. Hopelessness contained three main themes: individual and social/environmental factors and the treatment process. Sub-themes were also created (Figure 1). The number of statements related to hope in this study (85 statements) was less than the number of statements related to hopelessness (113 statements). For reasons of space, example statements are not given for all themes.

## Hope

#### **Individual Factors**

Eight sub-themes were determined under the main theme: religious explanations, fatalism, having the strength to cope with difficulties, taking control of one's own life, psychological well-being, positive expectations (for future and for treatment outcomes), problem-solving and adaptation.

Having the strength to cope with difficulties: This sub-theme was determined based on the statements that women used when explaining their feelings, "when they learned that their first treatment had been unsuccessful", "when they decided to undergo their second (current) treatment", "when they were receiving the treatment", "when talking about their ideas about receiving a third treatment", "about their hope of having children" and "when talking about what their lives would be like if they could not have a baby." For example:

"Well, when I am hopeful, I feel as if I can accomplish things that I am normally able to, you know. It's something that I can't do, but I will manage to do it." [Woman (W) 1].

**Positive expectations:** This subtheme had two further subthemes: "for the future" and "for the treatment outcome". The women who had positive future expectation used phrases such as "believing that everything is going to be all right", "having a baby and raising it", "being happy with my husband and family", "experiencing motherhood", and "completing the missing part of me". For example:

"What do I expect in the future? To have a baby, to be happy, to have a nice family, to be healthy...a more active happier life...As far as happiness goes...to be happy with my own family, as well as my husband's family. I think that I'm going to have a different life...I'm going to be a mother, first of all. Then, my husband will be more connected to his marriage, to his family." [W6].

The women who had positive expectations about the outcome of their treatment stated that they felt hopeful "about the treatment in general", "when they realized that they could not have children for the first time", "when they received the first treatment" and "about the third treatment." For example:

"If you are asking me whether I'm going to have IVF this time (my second treatment), I'd say it's a 50% possibility. It might not happen too, I have thoughts about that too, about what I

would do. But I feel like I'm ready for a positive outcome this time. I feel positive. You know, I even interpret my dreams in a positive way. When someone tells me about his dream, I always interpret it to be a positive one, no matter what...I say to myself I'm going to make it this time; I say I'm more hopeful." [W2].

**Adaptation:** This subtheme was found when women "received negative results after the first treatment", "were having the second treatment (recent treatment)" and "were talking about how life would be if they could not have a child". They made statements such as the following when talking about the latter issue:

"I guess I will go on the same way. You know, I have a good thing going; I have a job that I love. I have a husband that I love. I have a happy life. I think I will go on the same way." [W4].

#### Social/Environmental Factors

This subtheme within the theme of hope comprised the social support sub-theme. Social support was provided by the husband, the family, friends/colleagues and health professionals. A statement made by a woman supported by her husband:

"Well, I'm hopeful. My husband is very hopeful; he is giving me hope too. He is more hopeful than I am; he is more positive. I'm normally a rather negative person, but I'm much more positive when I'm with him...during the operations, he is always talking to nurses saying don't let her lie like that, she has a bad back; he is always standing at the door, warning the nurses [laughing]. Seriously, everybody says the same thing, I'm not exaggerating, and everybody around us says the same thing. They say he takes care of me as if I were a baby. That's why I don't think our life will change after this." [W12].

## Hopelessness

Hopelessness was comprised of three main themes: personal and social/environmental factors, and the treatment process.

#### **Individual Factors**

This theme comprised 20 sub-themes: stress, having difficulties, inability to enjoy life, jealousy, financial problems, controlling the environment, deterioration in body/self-perception, negative expectations (for future and for treatment outcome), weakness, inability to solve problems, anger, deterioration in physiological abilities, anxiety, help-lessness, grief, the impossibility of things, deterioration in communication skills, unhappiness, feeling of being "at the end of the road" and intense pain.

**Jealousy:** The women stated that they got jealous "when they saw people with children or when they were around people with children" and "when they were involved in activities related to children". For example:

"Of course, I get jealous, for example, when I see a children's choir, I feel like crying for no reason. I experience things like that sometimes." [W13].

**Helplessness:** The women expressed their helplessness with statements like "not being able to have children" and "not being able to have anything".

"As I said before, I feel as if nothing's going to happen. [I'm] pessimistic like that. I feel as if nothing's ever going to happen for me; for example, as if I were never going to have kids. You know, my husband doesn't have that much money; I feel as if we will never have a house for ourselves. It's like we are never going to have anything, I have come this far in life, to this age. I feel pessimistic, as if we were never going to have anything after this point." [W14].

Feeling that they were "at the end of the road": The women made statements that revealed they felt as if they were "at the end of the road" when they "felt hopeless", "learned that the first treatment had been unsuccessful" and "thought that they were

never going to be able to have children". Some shared about the time when they learned that their first IVF treatment had been unsuccessful:

"I got sad; very, very sad. I didn't feel like doing anything. I didn't have any expectations in life. It was all over for me at that moment." [W2].

Negative expectations of the treatment: Women had expectations of negative outcomes "when they felt hopeless", "about the second treatment", "due to single embryo transfer", and "due to their advanced age". Some shared their expectations that the second treatment would be unsuccessful:

"I was very hopeful then [during the first treatment]. I'm not that hopeful anymore. I'm more worried now, more hopeless. Even now, I'm trying to have a kid...I feel as if everything could be negative." [W5].

**Negative expectations of the future:** This subtheme has two subthemes of its own: "about the future" and "about the treatment outcome". The negative expectation of the future was deduced from the statements that the women used to describe their feelings, "when they were hopeless" and "when they learned that the first treatment had been unsuccessful."

"It crossed my mind that I'd never have a baby. I got sad. I thought about whether we could do it. I mean, I got sad, I wondered if I would ever be a mother." [W10]).

#### Social/Environmental Factors

This theme comprised three sub-themes: "social withdrawal", "social pressure" and "insufficient social support".

**Social withdrawal:** The women used expressions such as "reluctance," "reluctant to go out," "introversion," and "reluctant to communicate." For example:

"I didn't want to go out that much. In general, I mean recently, I don't want to socialize. I used to be more social; I used to do more stuff. I'd go out; I'd talk more; then I started to sit back and stay home and withdraw." [W1].

**Social pressure:** The women made remarks about feeling "family pressure" and "peer pressure". One woman who suffered from family pressure shared the following:

"Right now, I mean most recently, they say, S. [herself] is the problem; because, you know, the egg doesn't develop; so, the blame is on me...What I mean by pressure is that they [her husband's family] say there is nothing wrong with our son; we will get him married (again, and to someone else)...and they're not joking when they say...There was pressure on me when we were back there, and now there is pressure here too, especially from my mother-in-law...His mother, for instance, didn't even accept the treatment after we got married. Because it's wrong to be alone, they will want him to marry someone else. That's what I'm afraid of." [W8].

#### **Treatment Process**

This theme consisted of three sub-themes: "negative treatment outcomes," "long treatment process," and "uncertain results".

**Negative treatment outcomes:** Some women expressed their concerns about "receiving a negative result again." For example:

"But of course, we are a little upset that we have to go through a new stage [a second treatment]... new difficulties. I mean, of course, it felt as if it wasn't going to happen. When it didn't happen after three tries, we thought it was never going to happen. I mean, we didn't get our hopes high [laughs]. Of course, if it doesn't happen again, we could feel more sad, and more hopelessness too. I mean, maybe those feelings will repeat themselves. That's why there's hopelessness." [W15].

### Discussion

Hope is very important for people and it is a factor that strengthens the ability to cope

with hardships and process grief. Even under difficult conditions, most people hope that things will be better one day (Öz 2010). Mosalanejad et al. (2014) stated in their study that spiritual resources (praying to God, family prayer, shrines), family interaction and support were factors increasing hope in infertile women. Bell and Hetterly (2014) stated that women explained their infertility in terms of fate. Using this explanation enabled them to retain hope and remove individual blame.

In Bergart's (2000) qualitative study on infertile women, it was found that women who could not maintain a pregnancy stated that they would go on with treatment until they conceived. Hammarberg et al. (2001) showed that 40% of women who quit treatment still hoped to become pregnant. Akyüz and Sever (2009) found that women's expectation of pregnancy was higher than the success rate of IVF per embryo transfer (ET) treatment. From our findings it is possible to say that infertile women almost always have hope that the treatment will prove successful, whether before, during, or afterwards.

It was found that the women were supported by their husbands, families, and medical staff. In a qualitative study conducted by Bhatti, Fikre, and Khan (1999) on infertile women, women were also supported by their husbands and families. In a study conducted by Taşçı et al. (2008), 50% of women needed psychological support occasionally and 93.1% received support from their husbands. In Ozan and Okumuş' (2013) qualitative research on infertile women, women stated that their families supported them consistently during the treatment process and most of them were supported by their husbands' families as well. In Sen and Sevil's (2016) qualitative study on infertile women, social support received in the treatment process affected the process positively. In this respect, it can be suggested that social support makes it easier for women to cope with infertility by making it possible for them to maintain hope.

According to these results, feeling hopeless was attributed to individual, social and treatment-related factors. In this study, the women stated their feelings of hopelessness by using expressions such as "not being able to have children" and "not being able to have anything." In a study conducted by Abbey et al. (1992), stated that most individuals did not have doubt that they would be a parent and felt hopeless when they lost their ability to have children in the future. Kraaij et al. (2009) found that the majority of infertile people had no hope of having children in the future. Although the focal point of hopelessness was mainly negative expectations of the future, the definition given by the North American Nursing Diagnosis Association focuses on the perception of having limited personal options and a lack of energy. Both are characteristics of helplessness and helplessness is a part of hopelessness (Öz 2010).

A woman who loses the belief that she has control develops a fatalistic point of view. A woman who thinks that nothing changes even if she does something and that she cannot control events thinks she will never achieve success in a specific area, loses her courage, and faces learned helplessness (Yılmaz and Oskay 2015). Hasanpoor-Azghady et al. (2014) stated that infertile women experienced fear, anxiety and worry; fatigue and helplessness; grief and depression, and hopelessness. Dağ et al. (2015) found that women who had waited 7-9 years to have a baby and the group that had received treatment for 2-4 years had the lowest score on the helplessness subscale. In Filetto and Makuch's (2005) study, women who had undergone further treatment experienced problems with self-image, psychological problems and loss of hope, and some had

adopted a child. Women who had not undergone further treatment showed a strong tendency to consider adoption, and a less intense tendency to experience psychological problems and loss of hope (Filetto and Makuch 2005). Women who had not undergone further treatment showed a less intense association with psychological problems and loss of hope (Filetto and Makuch 2005). Akyüz and Sever (2009) found that "failed treatments and fear of not being able to cope" and "psychological and physical burden" were among the reasons for not continuing IVF-ET treatment. It seems that unsuccessful treatment affects women's faith in treatment.

Pedro (2015) found that half of the women explained that they were infertile only to "close" family and friends. Women experienced social pressure. They used coping mechanisms such as social withdrawal and isolating themselves from social events and meetings, avoiding pregnant women and women with children (Pedro 2015). In Ozan and Okumus's (2013) qualitative study, all the women stated that people from their social circle asked questions about the treatment process and gave advice about the treatment. Some of the women preferred to hide the fact that they had started the treatment. Imeson and McMurray (1996) found that infertile couples experienced social pressure regarding not having children and they were isolated from their friends who had children after every failed attempt. In particular, the women expressed a feeling that they were "growing away" from close friends and acquaintances and a feeling of exclusion from couples with children. Bhatti et al. (1999) found that women preferred to stay away from environments with children to avoid being asked questions regarding having children, and considered that social pressure was the reason they were isolating themselves from society. It has been determined that people who do not have the opportunity to control their immediate environment and who are continuously controlled by the people they interact with develop learned helplessness more easily. Women develop this sense of learned helplessness more frequently. Women who do not accept failure, who decide to overcome their helplessness and choose to try again in other words, women who do not submit to their situation, who desire to make the best of their own existence and who try to rebuild their happiness - are generally not tolerated by society and are exposed to various negative behaviors and attitudes (Gökkaya 2015).

Monga et al. (2004) reported that 83.3% of infertile couples experienced pressure about having children primarily from their parents, followed by their friends and grandparents. Upkong and Orji (2006) reported that women were held responsible for infertility in most African countries such as Nigeria, and that, as a result, married men without children were pressured to marry again. Çoban and Dinç (2013) reported that 8% of women experienced negative reactions from their husbands and 12% were subject to critical and depreciatory responses from their husbands' families. Şen and Sevil (2016) found that women who stated that their families' attitude towards infertility were negative, experienced behaviors such as not being supported, as well as arguments, sadness and negative attitudes. In this study, it was found that women hid that they were receiving treatment from their support network, distanced themselves from them to avoid being asked questions, and that their husbands were pressured by their families to marry someone else.

Mosalanejad et al. (2014) found that the nature of treatments (difficult and painful treatments, lack of facilities, expensive treatments) and a negative mindset (denigration

of wishes and desires, increased life troubles and difficulties, feelings of fear and hopelessness) decreased hope in infertile women. Hasanpoor-Azghdy et al. (2014) found that participants stated that they stopped treatment for financial reasons. Negative treatment outcomes were also found to be the most distressing factor in studies conducted by Hammarberg et al. (2003), Ozan and Okumus (2013) and Rajkhowa et al. (2006), while they were the second most distressing factor in the study conducted by Franco et al. (2002). Durat et al. (2018) pointed out that having previous unsuccessful infertility treatment resulted in a severe level of hopelessness. Keskin and Gümüş (2014) expressed that women have increased in despair as the treatment period increases. In the literature, the leading causes of treatment cessation were failed treatments and inability to cope (Rajkhowa et al. 2006, Akyüz and Sever 2009, Hoşgör et al. 2017). In this regard, it can be said that unsuccessful treatment adversely affected women's faith in treatment and their willingness to continue with it. Our data showed similarities with the literature in that women's experiences of negative outcomes caused them to have negative feelings about their current and future treatment.

The study presents result that reveal individuals' experiences using their own words and in a more realistically manner than the generalizable findings obtained from research with standardized forms. Qualitative research examines the totality of the phenomenon and focuses on the analysis of the results. In accordance with the nature of qualitative research, the study may not produce definitive and generalizable results (Yıldırım and Şimşek 2005). However, it can provide examples, explanations and experiences that will help to better define and understand a phenomenon. In this regard, it can make important contributions to both scientific literature and practice.

The study sample was small and purposive. The study's results can therefore not be generalized. The study was conducted only with infertile women.

In conclusion, having a sense of hope leads to positive feelings and expectation in infertile women as in the population in general. Hopelessness experienced as a result of unsuccessful treatment leads to a sense of helplessness by suggesting to infertile women they will not have positive treatment outcomes or be able to live a successful life. This feeling causes women to cease treatment. The results of this study may provide guidance to those who care for and provide psychological support to infertile women. Health professionals need to take infertile women's psychological needs into account and consider their personal feelings, expectations and values.

## References

Abbey A, Andrews FM, Halman LJ (1992) Infertility and subjective well-being: The mediating roles of self-esteem, internal control, and interpersonal conflict. J Marriage Fam, 54:408-417.

Akyüz A, Sever N (2009) Reasons for infertile couples to discontinue in vitro fertilization (IVF) treatment. J Reprod Infant Psychol, 27:258–268.

Baş T, Akturan U (2008) Araştırma Yöntemleri NVivo 7.0 ile Nitel Veri Analizi. Ankara, Seçkin Printing.

Behboodi Moghadam Z, Salsali M, Eftekhar-Ardabilty H, Vaismorad, M, Ramezanzadeh F (2013) Experiences of infertility through the lens of Iranian infertile women: A qualitative study. Jpn J Nurs Sci, 10:41-46.

Bell AV, Hetterly E (2014) There's a higher power, but He gave us a free will: Socioeconomic status and the intersection of agency and fatalism in infertility. Soc Sci Med, 114:66-72.

Bergart AM (2000) The experience of women in unsuccessful infertility treatment: what do patients need when medical intervention fails?. Soc Work Health Care, 30:45-69.

Bhatti LI, Fikre FY, Khan A (1999) The quest of infertile women in squatter settlements of Karachi, Pakistan: A qualitative study. Soc Sci Med, 49:637-649.

Cetişli NE, Ören EDT, Kaba F (2018) İnfertil çiftlerde çift uyumu ve umutsuzluk. Acıbadem Üniversitesi Sağlık Bilimleri Dergisi, doi: 10.31067/0.2018.81.

Çoban TK, Dinç A (2013) İnfertilitenin cinsel yaşam üzerine etkisinin incelenmesi. Uluslararası Klinik Araştırmalar Dergisi, 1(2):46-53.

Dağ H, Yiğitoğlu S, Aksakal BI, Kavlak O (2015) The association between coping method and distress in infertile woman: A cross-sectional study from Turkey. Pak J Med Sci. 31:1457-1462.

Drosdzol A, Skrzypulec V (2009) Depression and anxiety among polish infertile couples: An evaluative prevalence study. J Psychosom Obstet Gynecol, 30:11–20.

Durat G, Özdemir K, Çulhacık GH (2018) Dyadic adjustment and hopelessness levels among infertile women. Cukurova Medical Journal, 43(Suppl 1):1-6.

Filetto J, Makuch M (2005) Long-term follow-up of women and man after unsuccessful IVF. Reprod Biomed Online, 11:458-463.

Franco JG, Baruffi RLR, Mauri AL, Petersen CG, Felipe V, Garbellini E (2002) Psychological evaluation test for infertile couples. J Assist Reprod Genet, 19:269-273.

Gökkaya VB (2015) Çaresizliği öğrenen kadın: Öğrenilmiş çaresizlik. Turkish Studies, 10(14):53-70.

Hammarberg K (2003) Stress in assisted reproductive technology: implications for nursing practice. Hum Fertil (Camb), 6:30-33.

Hammarberg K, Astbury J, Baker HWG (2001) Women's experience of IVF: A follow up study. Hum Reprod, 16:374–383.

Hasanpoor-Azghdy SB, Simbar M, Vedadhir A (2014) The emotional-psychological consequences of infertility among infertile women seeking treatment: Results of a qualitative study. Iran J Reprod Med., 12:131-138.

Hoşgör H, Akyüz I, Cengiz E (2017) Infertil hastalarin tüp bebek tedavisini birakmasında etkili olan faktörlerin öncelik sirasinin belirlenmesi: bir ahp uygulamasi. Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 9(19):64-84.

Imeson M, McMurray A (1996) Couples' experiences of infertility: A phenomenological study. J Adv Nurs, 24:1014-1022.

Kargın M, Ünal S (2011) İnfertil bireylerde umutsuzluğun belirlenmesi. Yeni Symposium, 49:54-60.

Kavlak O, Saruhan A (2002) İnfertil kadınlarda yalnızlık düzeyi ve bunu etkileyen faktörlerin incelenmesi, Ege Tıp Dergisi, 41:229–232.

Keskin G, Gümüş AB (2014) İnfertilite: Umutsuzluk perspektifinden bir inceleme. Psikiyatri Hemsireliği Dergisi, 5(1):9-16.

Kırca N, Pasinlioğlu T (2013) İnfertilite tedavisinde karşılaşılan psikososyal sorunlar. Psikiyatride Güncel Yaklaşımlar, 5:162-178.

Kraaij V, Garnefski N, Schroevers MJ (2009) Coping, goal adjustment, and positive and negative affect in definitive infertility. J Health Psychol, 14:18-26.

Kümbetoğlu B (2008) Niteliksel Araştırmalarda Analiz ve Yorumlama, Sosyolojide ve Antropolojide Niteliksel Yöntem ve Arastırma. İstanbul, Bağlam Yayıncılık.

Mascarenhas MN, Flaxman SR, Boerma T, Vanderpoel S, Stevens GA (2012) National, regional, and global trends in infertility prevalence since 1990: A systematic analysis of 277 health surveys. PLoS Med, 9:e1001356.

Mohanty A, Pradhan RK, Jena LK (2015) Learned helplessness and socialization: A reflective analysis. Psychology, 6:885-895.

Monga M, Alexandrescu B, Katz SE, Stein M, Ganitas T (2004) Impact of infertility on quality of life, marital adjustment and sexual function. Urology, 63(1):126-130.

Mosalanejad L, Parandavar N, Gholami M, Abdollahifard S (2014) Increasing and decreasing factors of hope in infertile women with failure in infertility treatment: A phenomenology study. Iran J Reprod Med., 12:117-124.

Nuvvula S (2016) Learned helplessness. Contemp Clin Dent, 7:426-427.

Oskay ÜY, Bayram GO, Dişsiz M (2009) İnfertilitenin psikososyal ve psikoseksüel etkileri. In İnfertilite Hemşireliği (Ed. NK Beji):177-196. İstanbul. Acar Basım.

Öz F (2010) Sağlık Alanında Temel Kavramlar, 2. basım. Ankara, Mattek Basım.

Ozan YD, Okumuş H (2013) Experiences of Turkish women about infertility treatment: A qualitative study. International Journal of Basic and Clinical Studies, 2(2):56-64.

Pedro A (2015) Coping with infertility: An explorative study of South African women's experiences. Open J Obstet Gynecol, 5:49-59.

Rajkhowa M, Mcconnell A, Thomas GE (2006) Reasons for discontinuation of IVF treatment: A questionnaire study. Hum Reprod, 21:358–363.

Robinson GE, Stewart DE (2005) Infertility and new reproductive technologies. In Review of Psychiatry (Eds JM Oldham, MB Riba). Washington, American Psychiatric Press.

Seligman MEP (2007) Öğrenilmiş İyimserlik (Translation Ed. SK Akbaş) Ankara, HYB Basım.

Şen S, Sevil Ü (2016) Stigma experiences of infertile women: a qualitative study in Turkey. Uluslararası Hakemli Kadın Hastalıkları ve Ana Çocuk Sağlığı Dergisi, 6:63-82.

Smith JA (2004) Reflecting on the development of interpretative phenomenological analysis and its contribution to qualitative

research in psychology. Qual Res Psychol, 1:39-54.

Smith JA (2011) Evaluating the contribution of interpretative phenomenological analysis. Health Psychol Rev, 5(1):9-27.

Tanyaş B (2014) Nitel araştırma yöntemlerine giriş: Genel ilkeler ve psikolojideki uygulamaları. Eleştirel Psikoloji Bülteni, 5:25-38.

Taşçı E, Bolsoy N, Kavlak O, Yücesoy F (2008) İnfertil kadınlarda evlilik uyumu. Türk Jinekoloji ve Obstetrik Derneği Dergisi (TJOD Derg), 5:105-110.

Resmi Gazete (2013) Sosyal Güvenlik Kurumu Sağlık Uygulama Tebliği, 24.03.2013. Ankara, Başbakanlık Mevzuatı Geliştirme ve Yayın Genel Müdürlüğü.

Upkong D, Orji E (2006) Nijerya'daki infertil kadınlarda ruh sağlığı. Turk Psikiyatri Derg, 17:259-265.

van Rooij FB, van Balen F, Hermanns JM (2009) The experiences of involuntarily childless Turkish immigrants in the Netherlands. Qual Health Res, 19:621-632.

Verhaak CM, Smeenk JMJ, Evers AWM, Kremer JA, Kraaimaat FW, Braat DD (2007) Women's emotional adjustment to IVF: A systematic review of 25 years of research. Hum Reprod Update, 13:27–36.

Vural PI, Beji NK (2014) İnfertilite sorununun psikoseksüel etkileri. Androloji Bülteni, 57:135-138.

Yanıkkerem E, Kavlak O, Sevil Ü (2008) İnfertil çiftlerin yaşadıkları sorunlar ve hemşirelik yaklaşımı, Atatürk Üniversitesi Hemşirelik Yüksekokulu Derqisi, 11:112-121.

Yıldırım A, Şimşek H (2005) Nitel Araştırma Yöntemleri. 5. Basım. Ankara, Seçkin Yayıncılık.

Yılmaz SD, Beji NK, Serdaroğlu H (2016) Levels of hopelessness and depression in infertile women. Turkiye Klinikleri J Obstet Womens Health Dis Nurs-Special Topics, 2(3):46-50.

Yılmaz T, Oskay ÜY (2015) İnfertilite stresi ile başa çıkma yöntemleri ve hemşirelik yaklaşımları. Sağlık Bilimleri ve Meslekleri Derqisi, 2(1):100-112.

**Authors Contributions:** All authors attest that each author has made an important scientific contribution to the study and has assisted with the drafting or revising of the manuscript.

Ethical Approval: The study was approved by the Local Ethics Committee. Written informed consent was obtained from all participants.

Peer-review: Externally peer-reviewed.

**Conflict of Interest:** No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study has received no financial support.

**Acknowledgement:** We thank the IVF center for allowing the study to be conducted and the participants for sharing their feelings. We would like to thank Benal inceer for his guidance and assistance in the creation of interview questions and data analysis. We would like to thank Polen Tercüme for its English translation.