

2021 / 12(2)

# Spiritual Survivors: Strategies for Coping with Breast Cancer <sup>1</sup>

# Manevi olarak hayatta kalanlar: meme kanseri ile başa çıkma stratejileri

Mehpare TOKAY ARGAN <sup>2</sup>, mehpare.argan@bilecik.edu.tr Metin ARGAN <sup>3</sup>, margan@eskisehir.edu.tr

Received: 10.03.2021; Accepted: 17.12.2021

Breast cancer (BC), a life-threatening illness, is the most widespread cancer affecting women in the world. Women may experience a number of physical and psychological problems after being diagnosed with breast cancer. To deal with these problems, women use different strategies. This study was used netnography method to examine the strategies used by women with cancer to deal with their problems. The strategies examined were based on the COPE scale developed by Carver et al. (1989) and used by Kershaw et al. (2004). This study examines coping strategies under two headings: active strategies and avoidance strategies. The study was analyzed close to 1000 consumer (patient) comments, posted on five different message boards for consumers. Patients in the group were observed to tell their own stories, ask for help from others in the group, and use different coping strategies in their fight against cancer. In particular, cancer patients were found to use multiple strategies together rather than using a single one. In addition, patients using active coping strategies were observed to be more optimistic, happier, and more appreciative of life, whereas patients using avoidance strategies were observed to avoid taking responsibility, ignore their illness, and blame others for the illness.

**Keywords:** Breast Cancer, Coping, Qualitative Research, Netnography

Yaşamı tehdit eden bir hastalık olan meme kanseri (BC) dünyadaki kadınları etkileyen en yaygın kanserdir. Kadınlara meme kanseri tanısı konulduktan sonra fiziksel ve psikolojik problemlerle karşı karşıya kalmaktadırlar. Kadınlar bu problemlerle baş etmek için birbirinden farklı stretejiler kullanmaktadır. Bu çalışmada meme kanserli kadınların yaşadıkları problemler ile baş etmelerinde kullandıkları stratejiler netnografi yöntemi kullanılarak incelenmiştir. Carver vd. (1989) ve Kershaw vd. (2004) tarafından geliştirilen baş etme stratejileri (COPE) temel alınmıştır. Baş etme stratejileri bu çalışmalarda aktif ve kaçınma stratejileri olarak iki başlık altında incelenmiştir. Çalışma kapsamında beş farklı tüketici (hasta) forum sitesinden (5 Türkçe) 1000 tüketici yorumu analiz edilmiştir. Grup içerisinde hastaların kendi hikâyelerini anlatması, gruptakilerden yardım istemesi ve kanserle mücadelelerinde farklı baş etme stratejilerini kullandıkları gözlemlenmiştir. Özellikle kanser hastalarının tek bir strateji değil birçok stratejiyi bir arada kullandığı bulunmuştur. Ayrıca aktif baş etme stratejisini kullanan hastaların daha umutlu, mutlu ve hayatın farkına varan, kaçınma stratejisi kullanan hastaların ise, sorumluluk almayan, hastalığı yok sayan ve hastalıkları konusunda başkalarını suçlayan özelliklere oldukları sahip gözlemlenmiştir.

**Anahtar Kelimeler:** Meme Kanseri, Başetme, Nitel Araştırma, Netnografi

<sup>&</sup>lt;sup>1</sup> This paper is an extended version of a conference paper entitled "Experience and sharing in virtual community regarding patients with breast cancer in Turkey: a netnography study" presented as an oral presentation at "International Conference on Marketing, Tourism & Hospitality" held in New York, US, April 28–30, 2017.

<sup>&</sup>lt;sup>2</sup> Bilecik Seyh Edebali University, Faculty of Applied Sciences, Teaching Staff (Corresponding Author)

<sup>&</sup>lt;sup>3</sup> Eskisehir Technical University, Faculty of Sport Sciences, Faculty Member, Teaching Staff

### 1. INTRODUCTION

Breast cancer is the most common malignant neoplasm among women both in developed and developing countries. In statistical terms, one in every 12 women and one in every four cancer patients has breast cancer (Czerw, Religioni, & Deptala, 2016). Every year, 180,000 new cases are diagnosed in Europe, 184,000 cases in the United States, 17,531 cases in Turkey. Frequency of breast cancer varies between countries (Aslan et al., 2007). In Turkey, 45% of women diagnosed with breast cancer are in the 50-69 age group, and 40% are in the 25-49 age group (kanser.gov.tr). Thanks to early diagnosis and advanced treatment options, survival rates of patients with breast cancer are on the increase. However, despite these positive developments, with its intensive treatment process, cancer is an important source of stress that is difficult to accept and that gives rise to various psychosocial and mental issues both for patients and their families (Dastan & Buzlu, 2010).

Most women with breast pain undergo examination with certain suspicions and anxiety. Following examination and tests, women diagnosed with cancer feel shock, bewilderment and grief. Patients hearing the word cancer for the first time associate it with death and supernatural features (Hammoudeh, Hogan, & Giacaman, 2016). In addition, there is a saying in Turkish, "giving someone cancer" ("kanser ettin beni"), that is used to describe unpleasant experiences. Due to the possibility of death, breast cancer and cancer treatment are experienced as bereavement by patients and their families (Levenson & Bemis 1991). Many studies show that women diagnosed with cancer experience a rapid change in their lives, and develop various psychological symptoms, such as general anxiety disorder, depression, concentration difficulties, lethargy, negative thoughts, suicidal thoughts, and worries about treatment, relapse, distortion of body image, and death (Al-Azri, Al-Awisi, & Al-Moundhri, 2009; Khodaveirdyzadeh et al., 2016; Nosarti et al., 2002). Victims of breast cancer suffer many physical, psychological, social and mental problems. Survivors of breast cancer, on the other hand, suffer from fears associated with body image, sexuality and recurrence of the disease. It was observed that, because of these fears, 30% of patients experience psychological issues even years after the treatment is over (Marieke et al., 2008). Women who have had breast cancer and were successfully treated use a number of strategies to deal with their problems.

#### 2. CONCEPTUALIZATIONS OF COPING

The concept of meaning refers to "cognitive and behavioral efforts" undertaken to control, tolerate, or minimize internal and external conflicts (Folkman & Lazarus, 1980: 223). During the diagnosis and treatment of breast cancer, patients experience high stress, emotional devastation and different conflicts regarding the illness, and face fears concerning the treatment and uncertainty of cancer. Women recently diagnosed with breast cancer can potentially face negative side effects (e.g. nausea, lymphedema, hair loss) or debilitating surgical and medical treatment. Adjuvant therapies, on the other hand, have a significant impact on women's ability to continue their work, home responsibilities and social roles. Even after the treatment and recuperation are over, patients experience uncertainty regarding relapse. This stress can have negative repercussions on women's self-image in the long term, and create significant difficulties concerning their responsibilities (Luecken & Compas, 2002).

In the diagnosis, treatment and post-treatment stages of breast cancer, women have to struggle with the psycho-social effects of the illness on their lives. Studies show that breast cancer affects physical, psychological, social and spiritual aspects of women's lives. Dilemmas arising from uncertainty concerning recurrence of the illness, fear of death and the desire to live despite these fears, are reported to be the most common sources of anxiety among women with breast cancer (Baqutayan, 2012: 121; Landmark & Wahl, 2002: 113; Carver, Meyer, & Antoni, 2000: 966). A woman with breast cancer experience problems, such as negative physical changes resulting from treatment, emotional issues, and changes in family, work and social roles. In addition, because it is a long and intensive process with many side effects, cancer treatment makes it more difficult for women to perform activities in daily life and leads to various psycho-social problems (Gümüs, 2006: 108).

Women with breast cancer face a number of physical and psychological challenges. They face a life-threatening illness, and the experience and side effects of surgery and other treatments. Among others, these treatments can include radiation, chemotherapy and hormonal therapy (Holland & Holahan, 2003; Moyer & Salovey, 1996; Royak-Schaler et al., 1997). Women usually experience negative psychological and behavioral responses in the process of treatment and diagnosis of breast cancer (Glanz & Lerman, 1992; Moyer & Salovey, 1996). These responses include anxiety and depression, anger or hostility, lack of concentration, feelings of shame and worthlessness, suicidal thoughts, lack of sleep, loss of appetite, disruption of daily activities and the increased use of alcohol and tranquilizers (Holland & Holahan, 2003; 18).

Women also become more emotional, as their life is suddenly at risk and they try to deal with multiple problems and 'make life worth living' (Akyolcu, 2008). In the first years following the diagnosis of breast cancer, in addition to many personal and interpersonal conflicts, patients have to struggle with many other issues, such as accepting the illness, a difficult treatment process, the possibility of relapse and fear of death. In fact, following the initial shock of diagnosis, most women begin their own struggle, become more demanding and more driven, and have a better focus on what they want to do with their lives. This process also brings about greater self-realization and appreciation of self-worth. It is difficult to generalize this behavior to all patients, however, and significant individual differences are observed among women in the post-diagnosis process, as everyone uses different coping strategies to deal with their issues, informed by their unique circumstances (Stanton et al., 2002; Doumit, El Saghir, Abu-Saad Huijer, Kelley, & Nassar, 2010; Kernan & Lepore, 2009; Liamputtong, & Suwankhong, 2015; Nelson, 1996).

Coping strategies can be classified in many different ways (see Figure 1). Passive / avoidance strategies, as opposed to active strategies, is one of the most commonly used classifications. Active coping strategies involve focusing on solutions to the problem and finding ways to minimize the effects of stressors. Passive / avoidance coping strategies, on the other hand, refer to behavior that avoids rather than confronts the problem (Folkman & Lazarus, 1984). Apart from the effects of individual circumstances and specific external conditions, active coping strategies create better results, in terms of reduced pain and depression and a higher quality of life (Holmes & Stevenson, 1990). On the other hand, relying on passive / avoidance strategies may not be appropriate in every case (Kim et al., 2010; Clement & Schonnesson, 1998). Coping strategies are examined under two headings: active strategies and avoidance strategies. Active coping strategies are acceptance, emotional support, religious coping, planning and positive

reframing. Conversely, avoidance strategies include self-distraction, venting, humor, denial, behavioral and emotional disengagement and substance use (Carver, 1997; Kershaw et al., 2004).

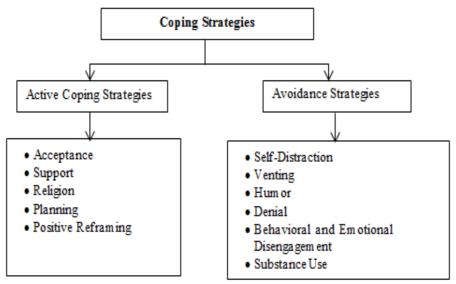


Figure 1. Coping Strategies

In order to deal with the psychosocial problems they experience, women diagnosed with breast cancer feel the need to acquire information about their illness, and share this information and their own experiences with others (Al-Azri et al., 2014). The aim of this study is to examine which strategies women use to cope with breast cancer.

#### 3. METHODOLOGY

### 3.1. Study Design and Subjects

This study applied an online ethnography approach frequently titled as netnography (Kozinets, 2002). Netnography, also known as online ethnography, is a qualitative research method that observes and interprets interactions between individuals and communities over the Internet. As women integrate virtual environments into their daily lives, the Internet has become an important site for learning, socialization and self-expression. The face-to-face interviews, discourse analysis, focus group work, ethnography, which are frequently used in the literature, have been developed due to the limitations of analyzing online data. Netnography aims to develop insights into consumer behavior and consumer culture and thus contribute to the theory by analyzing online content created by women and the interactions between them (Kozinets, 2002). In this study, interactions and the sharing of experiences and health information among patients with breast cancer were analyzed using netnography, in order to understand how patients cope with cancer.

As it would be difficult for women with breast cancer to meet other cancer patients in their social environments, netnography is one of the best research tools to discover the motivational factors underlying the strategies used by women to cope with their psychosocial problems. There is a large amount of online content created by women with different demographic and sociocultural characteristics. Given that this is an important health issue, another consideration

was that the number of users on the examined websites is much larger (hundreds per website) than the number of patients that could be reached using other methods. In addition, netnography enables the accessing of content that has naturally developed, without the intervention of researchers, therefore making it possible to unearth new concepts and relationships without any restriction (Kozinets, 2002; 2010).

# 3.2. Choice of Study Site

To select the netnography sites, initially, message boards, blogs and online consumer platforms were examined that featured frequent interactions concerning cancer and breast cancer and a large amount of content created by patients and families. An effort was made to select fields that introduce new perspectives and allow examining concepts in detail. Two fields with these characteristics were identified. To select the websites, the phrases "cancer" and "breast cancer" (in Turkish) were searched using the Google search engine, results pointing to online communities were examined, and those with the most interaction were taken into consideration. Of these websites, ekşi sözlük ("sour dictionary"), kanserledanset ("dance with cancer") and pembeizler ("pink scars") were selected for the study, as well as the facebook group meme kanseri bilgilendirme grubu ("breast cancer information group") and memekanseriolanlar ("those with breast cancer") page on the website kadınlar kulübü ("women's club"). Netnography websites regarding breast cancer are provided in Table 1. All of these websites function as national forums with a large number of participants discussing breast cancer.

**Table 1.** Netnography Websites

Website address	Name of website	Abbreviation
1. www.kanserledans.org/	Kanserle Dans Et (Dance with Cancer)	DWC
2. www.kansertakip.com	Kanser Takip (Monitor Cancer)	MC
3. www.kanserleyasamak.org/	Kanserle Yaşamak (Living With Cancer)	LWC
4. www.facebook.com/groups/238492184065	Meme Kanseri Bilgilendirme Grubu (Breast	BCIG
	Cancer Information Group)	
5. www.kadinlarkulubu.com/forum/index	Kadınlar Kulübü (Women's Club)	WOC

Kozinets (2002) proposes the following steps with regard to the implementation of netnography procedures. Entree: the identification the research questions and specific virtual community, especially through search engines. Data collection and analysis: Copying of data on virtual communities and examining in depth regarding observations, interactions, and meanings about virtual community members. Trustworthy interpretation: to focus on "trustworthiness" rather than "validity," and focus on procedures of classification, coding, reporting and triangulation. Research ethics: (1) Researchers should explain the presence to online community members during any research; (2) the researchers should ensure confidentiality and anonymity to informants; and (3) the researcher should seek and incorporate feedback from members of the online community being researched. (4) The researcher should take a cautious position on the private-versus-public medium issue. Member checks: presenting some or all of a final research report's findings to the members who have been studied in order to solicit their comments (Kozinets: 63-66). This research is based on the execution of these steps netnography method.

## 3.3. Data Collection and Analysis

Two types of data were collected: content created and shared by individuals and communities in online platforms (archive data) and interactions that the two researchers observed and had in the online environment (field notes). Archive data consists of a data set that covers a three-year period (1 January 2013 - 1 January 2016) and contains 1000 posts. In the process of data collection, both researchers kept detailed field notes on their observations. After the collection of the first 600 data points, data collection proceeded in parallel with data analysis, and when theoretical saturation was reached in terms of cases and themes (Creswell, 2013), data collection was ended after 700 data points.

#### 4. RESULTS

In the analysis stage, concepts and ideas about the topic were analyzed and the contents were read repeatedly, by adopting an inductive approach and organizing coping strategies under two headings. Rather than being concerned with quantitative enumeration and a generalization of the findings from data analysis, we have focused on understanding and describing subjective realities constructed by individuals in the context of narratives on cancer and empowerment.

Analysis of the data on comments posted in five forums shows that ordinary, simple behaviors can be very significant for patients, and the same behavior may be motivated by different reasons. All strategies identified in the data for coping with illness were classified into two main categories and their sub-categories. Coping strategies are examined under two headings: active strategies and avoidance strategies. Active coping strategies are acceptance, support, religion, planning and positive reframing. Conversely, avoidance strategies include self-distraction, venting, humor, denial, behavioral disengagement and substance use. To provide evidence for the findings, sample patient comments that have explanatory significance and are representative of the themes and concepts identified, were selected and presented in what follows.

# 4.1. Active Coping Strategies

Patients using active coping strategies focus their efforts on doing something about their situation and take action to improve it. In short, active coping strategies involve focusing on solving the problem and developing potential solutions to minimize the effects of the stressors created by the problem (Kim et al., 2010).

### Acceptance

One of the main requirements for being able to deal with the illness is to accept it, once the initial shock of the illness is over. The patient needs to accept the reality of their situation and learn how to live with it. In this respect, breast cancer patients experience a great shock after learning of the diagnosis and respond to the aftermath in different ways. In this sense, acceptance emerges as an important factor in the treatment of the illness. The process of accepting the illness is different for every patient. This strategy is especially important at the time of diagnosis. Even though they have specific complaints and suspect cancer, patients nevertheless strongly believe that they do not have cancer. Nevertheless, once the diagnosis is made, patients state that acceptance is essential in order to overcome this process.

K1(DWC): ...I was being more careful because my sister had cancer. The doctor requested a breast ultrasound, and a biopsy was made on the same day. When the biopsy results were in, my husband came to me and said we needed to go to Istanbul. When I asked why, he said another biopsy was to be made there. I knew my husband, and was sure that he was hiding something from me. I wasn't able to accept [it]. Our kids were visiting, and they wouldn't look me in the eye. They all knew something, but they acted as if they didn't. I cannot describe that shock to you, it was so difficult to accept, but I had no option. We just wept and sobbed... I realized that a difficult process lay ahead of me...

K2 (LWC) ... I felt no anxiety. Whatever Allah sends is most welcome. I had a breast protection surgery 20 days ago. I am not sad or stressed in any way.

## Support

Previous studies show that social support, emotional support and family support are all important in coping with breast cancer (Ross et al., 2005; Olgun et al., 2010). We have also found that patients benefited from these three types of support on the platforms examined in this study.

# **Emotional Support**

This kind of support refers to the encouragement, sympathy and understanding of people in the patient's social environment. This support makes patients feel better about their illness, and strengthen their resolve to fight it.

K3 (MC) ... I don't know who to mention, there were so many. All my friends formed a shield of love and protection around me. There was so much spiritual support that it would be ungrateful to say I was shaken.

K4 (DWC) ... My husband's family and my family came and they supported me. Everyone was in shock, of course... I haven't received much support from my husband... But I didn't care much, because I wasn't alone. My husband acted like there was nothing going on, which was a big problem for me.

Although they were few in number, some women on the examined platforms were unable to carry out the household chores they considered to be their duty and when they were unable to find family or friends who they could turn to for help, they hired others to do these tasks. Even though it made them uncomfortable psychologically, this behavior sometimes served as a positive coping strategy because it reflected a desire to take responsibility again.

K5 (LWC) ... When I was receiving chemo, I felt exhausted all day and would just lie in bed on the day I got the medication. For the next three days, I would have terrible bone pain. I would get angry with myself when my children asked for something and I wasn't able to do it. I don't want them to need anyone else, I have always been their guardian angel. But what was I thinking? I was in a difficult situation and I had no one else with me. We hired a woman to do the housework. I felt so bad about it.

# Social Support

Social support can be defined as advice, information, help and psychological support (Yıldırım, 1997). This support can be informative, emotional or instrumental. In the context of

breast cancer, social support means interpersonal support that strengthens the self-respect and reduces the stress of the patient. Social support is known to balance or reduce illness-related stress (Aro, Hanninen, & Paronene, 1989). Social support is found to reduce cancer diagnosis-related stress among breast cancer patients in particular (Israel & Schurman, 1990), and improve and change their lives for the better (Bozo, Gundogdu, & Buyukasik-Colak, 2009).

We have observed that women looking for social support on the websites examined were in search of information that would help them to gain control and management of the process. Family members or the patients themselves can play an active role in this process. Receiving psychological support from experts and consulting books, social media and friends are important practices for acquiring accurate information that can be used for this purpose.

K6 (BCIG) ... I went to a bookstore right away, and bought books and CDs on relaxation and acceptance. I gathered information on acceptance and positive thinking... I received reiki energy from a friend. I selected sentences from the books about acceptance, and hung them on the walls of my hospital room in large letters. Facebook, you are right, it feels good to write here. You realize you are not alone. Normally, there are no people or very few people around you, who understand how you feel and are kind to you.

K7 (DWC) ... Because I wouldn't be able to go out for the new year, they turned my home into the lobby of a five-star hotel. All my friends came and decorated my house, and set up our tree. Even though they could go out and have fun in clubs, they all spent the New Year's Eve with me.

K8 (WOC) ... I don't even want to remember. I felt so bad; it was like the hospital had collapsed around me. I couldn't believe it. I kept asking, "How is this possible? There must be a mistake." But unfortunately it was true. I am a nurse, I knew how this illness progresses. Even thinking about what could happen scared me. I wasn't able to sleep for days. At last I went to see a psychiatrist to get help. Now I don't worry so much, I got used to living with cancer. My eyes filled with tears now that I remembered those days. May Allah heal us all.

People who provide social support concerning the illness also include health personnel, other patients and their families. Health personnel provide support by informing and encouraging patients in the process of diagnosis and treatment. In the process of treatment, other patients and families provide both emotional and social support.

K9 (DWC) ... When I was crying desperately by the hospital gate, the words and the support of people, who I didn't know, who I just saw once, meant the world to me. I too should have been a beacon of hope to them. My mother, on the other hand, was worrying for people sharing the same fate next door, and praying for them.

K10 (WOC).... My support was to go to see an accomplished psychologist. She worked at a private hospital, had lost her mother to this disease, and argued in her master's thesis that cancer patients would live a higher quality life if they received social support. She was a torrent of positive thinking.

## Family Support

De Nour et al. (1996) found that cancer patients received support from their spouses, parents, friends, neighbors and children. Ferrell et al. (1998) found that 70% of the support received by cancer patients during their diagnosis and treatment came from spouses, 20% came from

children and 10% came from other family members (Akdeniz, 2012). Women with breast cancer expect their female relatives to help with taking care of family and housework. This support is important for women who are physically weak and unable to meet the basic needs of their family. Our analysis of the messages on platforms included in the study shows that in many cases, in line with the traditional family structure in Turkey, the entire family came together and made a joint decision on how to manage the process. Parents took responsibility for young families, and children did so in the case of elderly patients.

K11 (DWC) ... I am lucky I have a large family. My mother in law looks after my baby. We live in the same building, and she is like a mother to my child, which is good for my health and for the health of the baby. Thank goodness for grandmas and grandpas, for large families. They are a great support.

K12 (MC) ... First, my children, my dear ones, and my family, my mother, my siblings, I received a lot of support from them. I realized how much I was loved. They took care of me so well, they still do, I can never repay them. Family is the most important thing in life. They are always with me through thick and thin. I call my children 'child therapy'. They have cured me. I liked that phrase, child therapy. They must be in their 20s now, what a joy!

## Religion

Religion in this context refers to the totality of spiritual behaviors / perceptions that make people strong in the face of a stressful life and unexpected events. Religion plays an important role in the lives of people afflicted with breast cancer and receiving treatment. Because cancer has a reputation as a terminal illness, religion and spiritual beliefs provide peace and comfort for some patients. This coping strategy can involve praying, asking for prayers, participating in various religious ceremonies, relating with God/supreme being, reading religious texts, and talking to religious functionaries (Pargament et al., 1998; Koenig et al., 2001).

K13 (PS) ... My colleagues, neighbors, friends, everyone did whatever they could for me. They read the Quran, sent prayers to me, fed the poor in my name, and did other things. And I said, Gülşen, 'there are so many people who love you.' Sometimes we don't realize that because we are always in such a rush.

K14 (BCIG) ... The night I found out that I had cancer, I waited for the kids and my husband to go to sleep, and then I found myself praying, "God, please spare me for my sake, please spare me for the sake of my children."

In Islam, the concept of tawakkul, trusting in God's plan, plays a very important role. An important source of strength for believers is that they avoid the question of "Why me?", and trust in the wisdom and might of God. Sometimes, the illness and its treatment make patients weak, both in physical and emotional terms. Religion and faith play an important role in creating acceptance of illness as part of one's fate. In addition, the religious discourse that the more people suffer in this world, the more rewards they will get in the afterlife can provide comfort for patients (Hammoudeh, Hogan, & Giacaman, 2016).

K15 (DWC) ... I was asking God "Why me?", but then an idea occurred to me and I pulled myself together: What if it had been my sister, my daughter, someone I loved? I was so shaken by the idea, tears started flowing from my eyes. I could not bear it if they were sick, and I chastised myself for saying "Why me?". I need to get my act together, because the marathon was about to begin.

K16 (WOC) ... My deep feelings of tawakkul allowed me to face my troubles bravely. Sufism and tawakkul gave me strength. With the spiritual guidance I received, I believe that divine power is what keeps people going.

K17 (BCIG) ... I said, if this is how I am going to die, it is up to God, and if I am going to die in some other way, it is up to God, too. And I trusted in God's plan.

K18 (BCIG) ... I don't need psychological support. I leave everything to God, and when I do, I become happier. People's support is okay, up to a point. Support from medication is a dilemma. I have God to thank for everything.

Patients who are unable to receive emotional, social and family support from their family, friends and acquaintances rely more on religion and ask for God's help.

K19 (LWC) ... I was all alone. There was no one at all to take care of me. The treatment took a heavy toll on my health. I will never forget how I just lay in bed, hungry, for days on end, was taken to the hospital in the arms of taxi drivers in the middle of the night, passed out in corridors. I relied on God only, I asked from Him, I expected from Him.

## Planning

Planning refers to the process in which, after the cancer diagnosis is made, the patient tries to decide what to do, what steps to take next.

K20 (DWC) ... When I found out, I started making plans on how to fight without attracting attention and without worrying the people who loved me. I believed in my strength and I knew I would overcome this, but convincing people I loved that this was an illness that I would get over took extra effort. I secretly started treatment, partly to spare them. I received almost daily therapy from a psychologist specializing in Ericksonian hypnosis. Fighting the illness is a wrong description. In fact, what happens to us is not bad. Even if we die because of this, it is not bad. It is all about whether you decide to stay or go.

## Positive Reframing

This strategy refers to breast cancer patients rediscovering the meaning of life during their illness, trying to make the best of their lives now that they realize it is limited, and in general, looking at events and their experiences in a positive light. Positive reframing is based on adopting a different perspective so that the illness is seen in a different light, and looking for positive/good aspects of one's situation (Carver et al., 1993).

K21 (DWC) ... All you can do is to shake up my body a little bit, but no matter what you do, I will still laugh as much as I can when I am with people I love, I will always be in high spirits, and I will keep making plans for the next day, for the next week and even for the next month. The more you try to keep me pinned to the bed, the more I will rise. I may not be able to run, but I will definitely walk. Maybe with the help of someone, but I will walk. Another thing you cannot take away from me is my hope. I will always have hope. When I am able to sleep, I will dream about beating you. When I am awake, I will always think about beating you. You know what else you can't take away from me, my resolve to fight? I will breath down your neck till the last moment. You are not letting me off the hook; I will do the same to you. So, this is how it's gonna be, my dear cancer.

K22 (LWC) ... I hope everyone is able to see the light at the end of the tunnel.

Even when patients try to think positively about the illness, the fears and difficulties experienced can hinder positive reframing.

K23 (LWC) ... I know stress is the source of all illness, but I can't shake it. Also, I keep thinking negatively about stuff. I know I am supposed to think positive thoughts, but I can't do it. Whenever I need to go for follow-ups, I get all nervous. In short, I haven't been able to learn how to live with cancer for 17 years. I would be really glad if you could write me something in response.

# 4.2. Avoidance Strategies

Passive / avoidance coping strategies refer to behavior that avoids rather than confronts the problem (Folkman & Lazarus, 1984).

Self-Distraction

This refers to patients keeping busy to distance themselves from their situation, or to forget. Patients who use this strategy may focus on their jobs and spend all their energy at work. Or, they can fill up their spare time with new activities, movies, books, etc.

K24 (DWC) ... I cry if need to cry, but I don't obsess about things. I choose people, movies, places and books that make me laugh. I try to spend more time with people I love. I try, as much as I can, to stay away from people who drain my energy. As far as it's possible, I try to live a fulfilling life.

K25 (WOC) ... All the psychologists recommended the same thing: that I should pick up a demanding hobby. What does a mother with three children do best? Cakes, pies and cookies. I overdid it. I would make so many cookies that, after handing them out to kids in the neighborhood, I would send the rest to the nursing home. Later, a psychiatrist I saw said, "This is your way of thanking God. If they have lots of money, they can donate money. If they are healthy, they can give their labor." Later, I realized that this activity took away all my negative energy. It was as if my troubles were being washed away as I used my hands. It was during this time that I met with the ribbons. I was enchanted by their colors, in particular. I spent hours trying to find just the right tone of green. What a great therapy.

### Venting

Cancer patients use venting emotions as a strategy to cope with the process of adjusting to the illness. Observations made in group therapies with cancer patients show that venting emotions contributes to the improvement of symptoms of anxiety and depression and overall mood among women with metastatic breast cancer. A number of studies on traumatic experiences found that writing or talking about the trauma was associated with lower anxiety levels and better health over the long term, but increased anxiety in the short term. For cancer patients, venting means sharing unpleasant, disturbing emotions with other people (Compas et al., 1999).

K26 (DWC) ... When I noticed, two years ago, that my breast was pear-like, I immediately went to see a doctor. The doctor wrote urgent on all the paperwork for tests, and the next day test results were in. I was told I had cancer. My emotions were all stirred up. I wept, I cried, I kept asking "Why? What did I do? Whom did I hurt?". I express my negative thoughts.

K27 (DWC) ... But something had snapped in me, I was still thinking about jumping from someplace. Later, a neurologist I visited told me that I had been in depression and underwent a trauma even though I hadn't realized it at the time. This feeling overwhelmed me for three months.

#### Humor

Humor can be used to help cancer patients regain a sense of control and meet some of their mental needs. Humor enables cancer patients to tolerate challenging or stressful experiences. It improves the ability to deal with difficulties, and is an important survival and healing strategy. Many cancer patients report that laughter helps coping with diagnosis, treatment and prognosis (Canfield et al., 1996; Smith, 1996). Medical studies show that humor has positive effects on the immune system, stress levels and emotions (Aydın, 2005; Fry, 1992; Irwin et al., 1987; Johnson, 2002).

K28 (LWC) ... When everyone applauded, I got all pumped up! The next thing I know, I was dancing! Twirling during MRI, cocky moves when receiving chemo, bantering with the doctors, photos with my bald head; all sorts of silly things. You name it, I did it. Joking aside, I did my best to make fun of myself. It's probably because I was afraid. I was once told crabs wouldn't bite if I kept laughing. So I kept laughing. ... They remind you, those alien looks, that you are a human being first, before being a woman. But like every weak animal, it takes ten busloads of chemo to believe that. May God try no one with chemotherapy.

K29 (DWC) ... There are the factors that helped me overcome my health problems: nutrition, pilates, breathing exercises, and of course, laughter therapy. Believe it or not, my philosophy of life has changed completely. By activating my secretions, I have become the master of my thoughts, health, and most important of all, my feelings. I have internalized this now... I invite all members of the Dance with Cancer Association; or rather, I invite everyone to join me in this journey from internal peace to universal peace. When the mind whispers, the body listens. First, tell your mind to be quiet so that your body can be free, your soul can be free...

#### Denial

Avoidance and denial are among the most commonly used coping strategies among cancer patients. These strategies are more defensive than conflictual, as they are characterized by rejecting the problem, or rejecting the acceptance of the problem. Hackett and Cassem (1974) describe rejection as a measure "used to make the reality less threatening so that the patient can operate under less psychic stress". Whether denial is conscious or unconscious at the level of behavior and cognition is a difficult and controversial subject. Denial or rejection, even when used as a strategy for coping with cancer, represents the avoidance and fear of facing reality. From this perspective, arguing that women actively use this strategy, would not make much sense. In short, it can be described as refusing to believe one has cancer, and questioning the diagnosis (Watson et al., 1984, 2008-2010).

K30 (LWC) ... When my doctor shared the pathology results with me, I felt like I was falling off the earth. I didn't have anyone with me when I went to learn about the results. My doctor is the most perfect doctor on earth. Even though she gave me the news in the kindest and most appropriate manner possible, I kept falling. I got out, found some quiet corner in the hospital's yard, and sat. I started weeping. The world was no longer, my loved ones were no longer, my daughter was no longer, my mother was no longer... I had fallen so deep; it was impossible to

climb back out. But the next day the stubborn part of me restored me. I started laughing and hoping more then ever before.

K31 (WOC) ... I went to see the doctor alone. I wanted to learn what was going on. But that day, nine doctors with masks on their faces came to see me, asked for nine mammographies and ultrasound images and wanted to set a date for surgery. 'I was so angry that I acted paranoid when they recommended "urgent surgery," and rejected their recommendation, thinking this was a commercial ploy. Because my son was preparing for the university entrance exam. It was the reason my husband and I lived separately for 15 years. I could not have that surgery that would take me away from my goal. I lived that day like a nightmare. I walked the streets, desperate and all alone. My mind was under siege. Hundreds of questions were racing through my mind.

## Behavioral and Emotional Disengagement

Avoidance-disengagement had a two-dimensional factor structure. These items reflect passive disengagement to deal with stress (Kavas, 2013). This strategy refers to giving up in the face of illness, and not making any effort to get better. Other behaviors include not talking to anyone, not looking for information about the illness, and not participating in illness-related talks in one's social environment. Emotional disengagement is followed by behavioral disengagement.

K32 (LWC) ... Can you imagine what it means to be isolated from everyone else? Everyone is opening their arms to you, but you have to draw back, because it is not allowed. You are excluded from the society. And you are in a life and death struggle...

K33 (MC) ... You will lose this fight if you give up on yourself. I never gave up on myself, and I succeeded. No one should ever give up on themselves.

K34 (BCIG) ... When it comes knocking on your door, you feel like all your strength is drained, you need support." She didn't sleep at all that night. She just dozed off for a moment, and in that short moment, she dreamed she was being told that she didn't have breast cancer. But it was just a dream; she had breast cancer, and it had already progressed to the second of four stages. She was sad, she wept. She lived through the lowest moments a woman could imagine. "At that moment, you are very close to hitting rock bottom. For me, it was even more difficult, because in my 22 years experience of working in the health sector, I have observed patients in the worst condition possible, witnessed their desperation... When I was diagnosed with breast cancer, I was so afraid. Not knowing what to expect from the chemotherapy and radiotherapy made me afraid.

## Substance Use

This dimension is different from emotional-behavioral avoidance and disengagement. As a passive coping strategy, it refers to a tendency to produce physiological changes in the metabolism. This dimension covers behaviors with biochemical consequences, such as smoking and using alcohol, drugs and other substances (Kavas, 2013).

K35 (DWC) ...I was crying when I left the doctor's room. I didn't have anyone with me. I sat down in front of the hospital and smoked a pack of cigarettes. Did it help? Of course not. I was so afraid. My treatment is over, but I am still afraid. We are living on a knife-edge, but we should be thankful nevertheless.

Self-Blame

Self-blame refers to feelings of inferiority manifested in the form of self-criticism, guilt or social impotence (Dilmac, 2009). In this strategy, patients blame themselves for their illness, thinking they brought it on themselves.

K36 (DWC) ... Yes, I kept thinking, "What did I do? Who did I hurt? What was my mistake? Why am I being punished? Why?" But...

K37 (LWC) ... I deeply regret not exercising. I grew old quickly because I didn't exercise. I used to smoke two packs a day, and that was the biggest reason why I got cancer. If I had exercised, I wouldn't have smoked. And I would be healthy. Now I don't feel like exercising. I smoked, I didn't exercise, and I lost my health...

# 5. DISCUSSION AND CONCLUSION

Cancer is pictured as a sly, disrespectful, and uncontrolled guest who arrives without knocking and who can kick someone out their own house, from their body, very quickly. The fatal virus of cancer, as Turner (1995) argues, is a sociological phenomenon rather than physical one; it overflows barriers, oversteps boundaries, disturbs order, occupies places, expands and behaves unpredictably (Demir, 2016). The unique nature of this illness and the risk of death it brings, have psychosocial effects on women. In this sense, women who are diagnosed with breast cancer begin their own struggle following the initial shock, and become more demanding, more driven, and have a better focus on what they want to do with their lives when they realize they have limited time. This process also brings about greater self-realization and appreciation of self-worth. It is difficult to generalize this behavior to all patients, however, and significant individual differences are observed among women in the post-diagnosis stage, as everyone uses different coping strategies to deal with their issues, informed by their unique circumstances (Stanton et al., 2002).

By implementing a netnography, this study builds on coping strategies demonstrating that online forums, web sites and virtual communities are used in a multitude of ways, such as for seeking advice, building relationship and gaining psychosocial and spiritual support. The present study shows, in line with other findings in the literature, that women use multiple coping strategies together. In the first months after the diagnosis, denial and self-blame strategies are more common, whereas later, focusing on the problem, emotional venting and social support become more prominent. Once the anxieties and sadness that follow diagnosis are dealt with, coping strategies focusing on these issues become less important (Epping et al., 1999).

Patients who have accepted their illness do not have to avoid risk factors anymore, now that they have a good idea of what to expect. In this sense, acceptance can be considered as the beginning point of active coping strategies. The process of accepting the illness is different for every woman with breast cancer. Factors such as age, having children (especially infants) and having recently married, create difficulties in the process of acceptance. Upon hearing the diagnosis, one patient said her response was "But I am pregnant!", voicing her idea that you could not get sick when you are pregnant, which shows how different the process of acceptance can be for different patients. Women who use active coping strategies in the process

of accepting the illness are better able to adjust to the diagnosis (Bloom et al., 2001; Felder, 2004).

Following the acceptance of the diagnosis, patients need to organize and plan the next stages. Planning involves making arrangements concerning illness, family, work and social life. This is a strategy that requires patients to think about the process and try to come up with solutions to anticipated problems. Depending on the stage of the illness and individual circumstances, planning may involve other issues as well. After the planning process, the patient will make use of coping strategies, depending on the stress, worries and anxiety experienced. In this process, support becomes the most prominent strategy. This support can be psychological, social or professional. Social and psychological support is received from family members and friends, and many patients said they made ample use of this type of support. Many patients said that in addition to close family and friends, they also received much positive support from distant acquaintances. Such support helps patients put their daily lives in order and contributes to their family roles. Women report that this support improves their treatment and the side effects of treatment (Walsh, 2005; Maly et al., 2005; Balneaves et al., 2007). Women, who participate in psychological counseling, social support, or yoga programs, soon after diagnosis, receive professional support. Their doctors may have recommended these programs, or patients may have been influenced by the comments of other patients on the forums. This type of support alleviates patients' problems (Wilmoth et al., 2006; Kissane et al., 2003).

Women also said that as they were trying to cope and come to terms with breast cancer, religion and spirituality helped them to overcome powerful negative thoughts. Teachings of Islam include the idea that "illness is sent by God, and there is life after death", making religion a coping strategy. In addition, trusting in God's plan and the idea that the course of the illness is predetermined, result in acceptance, however difficult it may be. To find peace, deal with their despair, and find refuge in God, patients pray, give alms, and perform other religious acts. In addition to performing these acts themselves, patients also ask for prayers from their family and friends and from users of the forums. These findings parallel the findings of other studies in the literature (Al-Azri et al., 2014; Hamdy, 2009; Hammoudeh, Hogan, & Giacaman, 2016; Zwingmann et al., 2008; Pargament et al., 2004)

Like all cancers, breast cancer is a rapidly progressing illness that forces patients to slowly but surely face the reality of mortality. Cancer patients are on the brink of life and death. In addition to the fear of death it may create, cancer also requires the reformulation of pleasures, expectations, goals, work, medium and long-term plans, relationships, and values. At this point, faced with the realization that they have limited time left, patients use the positive reframing strategy to start pursuing dreams they have been delaying or were unable to follow in the past. In addition, patients realize the value of what they have, and develop better appreciation. As a post on the page of a participant said, "Hope is not sitting and waiting. Hope is about standing on your feet and taking action, in spite of destroyed dreams and crushed morale." This is the positive framing strategy used by patients in their struggle with illness.

Avoidance strategies are more common in the early period following the diagnosis, when patients are in a difficult situation and have a hard time accepting their illness due to the

impact of the initial shock. A common avoidance strategy is self-blame. Women using this strategy believe that they have got cancer because of unhealthy nutrition, smoking, failure to take care of oneself, not paying enough attention to health, assuming too much responsibility or worrying about things too much. Arguably, use of this strategy leads to psychological issues, which in turn makes treatment more difficult.

Although thousands of studies have been conducted on coping strategies in the face of trouble (Coyne & Racioppo, 2000), it is thought that individual patients have a limited array of strategies for coping with cancer. For example, Carver et al. (1993) found that coping by accepting and using humor progressively lowers anxiety over time, whereas coping via denial and behavioral disengagement increased anxiety among 59 women diagnosed with early-stage cancer. Stanton and Snider (1993) showed that cognitive avoidance, which was thought to apply only before breast biopsy, increased immediately following the diagnosis and following breast cancer surgery.

Even though findings are not always consistent, other researchers showed that coping strategies aimed at active participation were more successful in dealing with stress factors, whereas avoidance strategies were associated with more anxiety among cancer patients (Osowiecki & Compas, 1998; Manne et al., 1994; Stanton et al., 2000). Advanced strategies, such as the active acceptance of the cancer diagnosis, require making advanced arrangements, whereas avoidance-oriented coping strategies carry risks (Stanton et al., 2002).

Denial is one of the most commonly used strategies in the post-diagnosis period. Patients in this study stated that they initially had a hard time accepting the illness, and resorted to denial. However, messages posted on forums show that over time, patients realized that they needed to face the truth and could not get rid of this illness by denial. There is no consensus on whether denial can be considered as a coping strategy for people with life-threatening illnesses.

The word "cancer" is considered by patients to be too dramatic and is not used much. Women in the private Facebook group said they felt very comfortable talking among themselves, and writing on other social media platforms made them uncomfortable because of the attention and compassion it creates in other people. This can be seen as an indicator of disengagement among cancer patients.

Self-distraction among patients took the form of avoiding thinking about one's situation all the time, and instead keeping themselves busy with the rush of daily life and taking up different hobbies. Cancer patients can avoid focusing on their illness all the time by keeping themselves busy with various activities, and thus be better able to cope with illness. With every brush stroke on the canvas as she takes painting lessons, a cancer patient may be able to express pent-up feelings about her illness, and come to accept the illness now that it is manifested. Thus, the hobby can serve as self-rehabilitation. In the virtual communities examined, patients stated that reiki, laughter therapy, and attending art courses helped them in the treatment process and with their social lives.

Only a few patients, on the other hand, used the strategy of substance use to avoid problems, and many reported quitting alcohol or smoking in the process of treatment and chemotherapy. In addition, group members who keep smoking during chemotherapy are greeted with astonishment and advised to quit.

Active coping strategies are more common among breast cancer patients, but avoidance strategies are also used in various stages of the illness. Patients who use active coping strategies are better able to adjust to diagnosis and treatment, whereas the opposite is true for patients who use avoidance strategies. Finally, concerning humor, many patients state that they try not to take themselves and their situation very seriously, realizing that life is too short to be worried about everything, and they resolve to view life and illness through the lens of humor.

The results of this study add to literature by demonstrating that the coping with strategies is useful for understanding the dimensions of feeling and perception for patients with breast cancer. The current study highlights the role of coping strategies in the context of breast cancer. As with many chronic and serious diseases, active and passive strategies have a functional role in the fight against disease. Active coping strategies are acceptance, emotional support, religious coping, planning and positive reframing. Conversely, avoidance strategies include self-distraction, venting, humor, denial, behavioral and emotional disengagement and substance use (Carver, 1997; Kershaw et al., 2004). The results demonstrate the importance of the strategies regarding cope with serious diseases to preserve the quality of life. Specifically, the current research findings indicate that these tools in two strategies can be effective in the fight against disease. Our qualitative findings suggest that the patients are not always in a rational manner, they are often used avoidance tools (such as, venting, humor, denial) in the fight against disease. Those who plan social support services may use these findings to design interventions for patient population, and experts may learn to attend to and validate patients' subjective understandings of serious disease psychology and depression. The current study opens the door to a range of research possibilities including chronic disease and other types of cancers.

### 6. PRACTICE IMPLICATIONS

The current study offers some interesting insights that have potential implications for practice. This study has the potential to improve mood and emotional state for female with cancer. The results of this study support both strategies, revealing relax tools for reducing the possible effects of the disease. A first practical implication of the present study is that it highlights the need the support of psychological, social and religion. Second, boosting patients' courage, for instance, as part of integrating social and leisure programs in social support institutions or society, may strengthen their ability to handle, once they have realized that wellbeing is the main factor in deal with. Such social support programs would be beneficial, and organized programs by relatives or friends have recently emerged to increase the quality of life of the patient or to allow his or her escape. These social support programs are not only socially valuable, but they also represent an opportunity for researchers to conduct field studies and to develop new tools to train potential patients to fight chronic disease. More specifically, our findings about the cope strategies in serious or chronic diseases suggest that these may be fruitful tools of intervention to reduce fear of disease and increase mental well-being. These strategies may be attributed to a beneficial effect of social support and relief techniques in elevating patients' disease awareness.

#### 7. LIMITATION AND FUTURE STUDIES

The results of this netnography study should be interpreted in light of several limitations that may hinder the generalizability of the findings. As with all qualitative research, interpretation the results is limited by only limited specific virtual communities. The researchers evaluated patients' experiences on special virtual groups. The data were collected over a limited time period. The most important limitation of the current study is that we used virtual communities is limited to one country, Turkey. More precisely, patients with breast cancer may not representative other cancer patients in different social and cultural context. Consequently, although our study extended prior literature by investigating a sample of women with cancer, our findings may not be generalizable to all women. Future studies should also investigate how other virtual groups in different cultural contexts, such as different cultures, religious levels and interaction status in group, to overcome psycho-social problems. Therefore, future research should investigate more thoroughly the role of different social and cultural factors underlying the challenge of cancer. Additionally, future studies should expand the number of online communities both number and geographically. It would also be beneficial to explore how women with cancer navigate variant standards of life expectancy. Other limitation in the present study relate to context or disease. Finally, future research might also investigate other cancer types to study. For example, uterine cancer might be additional research subject in terms of strategies regarding avoidance and active coping.

# **Declaration of conflicting interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author(s) received no financial support for the research, authorship, and/or publication of this article.

#### REFERENCES

- Akyolcu, N. (2008). Sexual Life after Surgery in Breast Cancer. *Journal of Breast Health*, 4(2), 77-83. http://www.eurjbreasthealth.com/sayilar/12/buyuk/1151.pdf
- Al-Azri, M., Al-Awisi, H., & Al-Moundhri, M. (2009). Coping With a Diagnosis of Breast Cancer-Literature Review and Implications for Developing Countries. *The Breast Journal*, 15(6), 615-622. doi: 10.1111/j.1524-4741.2009.00812.x
- Anderson, J. C., & Gerbing, Akdeniz E. B. (2012). The Analysis of The Relationship Between Marital Adjustment and Coping Strategies in Married Women with Breast Cancer. *Journal of Psychiatric Nursing*, 3(2), 53-60. doi: 10.5505/phd.2012.08208

- Aro, H., Hänninen, V., & Paronen, O. (1989). Social Support, Life Events and Psychosomatic Symptoms Among 14–16-Year-Old Adolescents. *Social Science & Medicine*, 29(9), 1051-1056. https://doi.org/10.1016/0277-9536(89)90015-4
- Aslan, A., Temiz, M., Yiğit, Y., Can, R., Canbolant, E., & Yiğit, F. (2007). The Knowledge Attitude and Behaviorus of Nursery Students About Breast Cancer. *TAF Preventive Medicine Bulletin*, 6(3), 193-198. ISSN: 1303-734X
- Aydın, A. (2005). Nurse and Humor. C.U. *Journal of Nursing School*, 9(1), 1-5. http://eskidergi.cumhuriyet.edu.tr/makale/1118.pdf
- Baider, L. E., Cooper, C. L., & Kaplan De-Nour, A. E. (1996). *Cancer and the Family*. John Wiley & Sons.
- Balneaves, L. G., Bottorff, J. L., Grewal, S. K., Naidu, P., Johnson, J. L., & Howard, A. F. (2007). Family Support of Immigrant Punjabi Women with Breast Cancer. *Family Community Health*, 30(1), 16-28.
- Baqutayan, S. M. S. (2012). The Effect of Anxiety on Breast Cancer Patients. *Indian Journal of Psychological Medicine*, 34(2), 119. doi: 10.4103/0253-7176.101774
- Bloom JR, Stewart SL, Johnston M, Banks P, & Fobair P. (2001). Sources of Support and The Physical and Mental Well-Being of Young Women with Breast Cancer. *Social Science & Medicine*, 53(11), 1513–1524. doi: 10.1016/S0277-9536(00)00440-8
- Bozo, Ö., Gündoğdu, E., & Büyükaşik-Çolak, C. (2009). The Moderating Role of Different Sources of Perceived Social Support on The Dispositional Optimism—Posttraumatic Growth Relationship in Postoperative Breast Cancer Patients. *Journal of Health Psychology*, 14(7), 1009-1020. doi: 10.1177/1359105309342295
- Canfield, J., Henson, M.V., Aubery, P., & Mitchell, N. (1996). Chicken Soup for The Surviving Soul: 101 Stories of Courage and Inspiration from Those Who Have Survived Cancer. Health Communication, Inc., Deerfield Beach, Florida.
- Carver, C. S., Pozo, C., Harris, S. D., Noriega, V., Scheier, M. F., Robinson, D. S., & Clark, K. C. (1993). How Coping Mediates the Effect of Optimism on Distress: A Study of Women with Early Stage Breast Cancer. *Journal of Personality and Social Psychology*, 65(2), 375. doi: 10.1037/0022-3514.65.2.375
- Carver, C.S. (1997). You Want to Measure Coping but Your Protocol' Too Long: Consider the Brief Cope. International *Journal of Behavioral Medicine*, 4(1), 92-100. https://link.springer.com/content/pdf/10.1207%2Fs15327558ijbm0401\_6.pdf
- Carver, C. S., Meyer, B., & Antoni, M. H. (2000). Responsiveness To Threats and Incentives, Expectancy of Recurrence, And Distress and Disengagement: Moderator Effects in Women with Early Stage Breast Cancer. *Journal of Consulting and Clinical Psychology*, 68(6), 965-975. doi: 10.1037//0022-006X.68.6.965
- Clement, U., & Schonnesson, L. N. (1998). Subjective HIV Attribution Theories, Coping and Psychological Functioning Among Homosexual Men With HIV. *Aids Care*, 10(3), 355-363. doi: 10.1080/713612416

- Compas, B. E., Stoll, M. F., Thomsen, A. H., Oppedisano, G., Epping-Jordan, J. E., & Krag, D. N. (1999). Adjustment To Breast Cancer: Age-Related Differences in Coping and Emotional Distress. *Breast Cancer Research and Treatment*, 54(3), 195-203. https://link.springer.com/content/pdf/10.1023%2FA%3A1006164928474.pdf
- Coyne, J. C., & Racioppo, M. W. (2000). Never The Twain Shall Meet? Closing The Gap Between Coping Research and Clinical Intervention Research. *American Psychologist*, 55(6), 655-664. doi: 10.1037/0003-066X.55.6.655
- Creswell, J.W. (2013). *Qualitative, Quantitative, and Mixed Methods Approaches Research Design.*3. Edition, Sage.
- Czerw, A., Religioni, U., & Deptała, A. (2016). Assessment of Pain, Acceptance of Illness, Adjustment to Life with Cancer and Coping Strategies in Breast Cancer Patients. *Breast Cancer*, 23(4), 654-661. doi: 10.1007/s12282-015-0620-0
- Dastan, N. B., & Buzlu, S. (2010). The Effects of Spirituality in Breast Cancer Patients and Spiritual Care. *Maltepe University Journal of Nursing Science and Art*, 3(1), 73-78. https://hemsirelik.maltepe.edu.tr/dergiler/cilt3sayi1/73-78.pdf
- Demir, S. T. (2016). Disease and Death in The Modern Culture: On Now and Eternity. *Beytulhikme: An International Journal of Philosophy*, 6(1), 287-305. Doi: 10.18491/bijop.xxx
- Dilmac, B. (2009). Psychological Needs as A Predictor of Cyber Bullying: A Preliminary Report on College Students. *Educational Sciences: Theory and Practice*, 9(3), 1307-1325.
- Doumit, M. A., El Saghir, N., Huijer, H. A. S., Kelley, J. H., & Nassar, N. (2010). Living with Breast Cancer, A Lebanese Experience. *European Journal of Oncology Nursing*, 14(1), 42-48. doi:10.1016fj.ejon.2009.08.003
- Epping-Jordan, J. E., Compas, B. E., Osowiecki, D. M., Oppedisano, G., Gerhardt, C., Primo, K., & Krag, D. N. (1999). Psychological Adjustment in Breast Cancer: Processes of Emotional Distress. *Health Psychology*, 18, 315-326. doi: 0278-6133/99/S3.00
- Felder, B.E. (2004). Hope and Coping in Patients with Cancer Diagnoses. *Cancer Nursing*, 27(4), 320-324.
- Ferrell B., Grant, M., Otis-Green, S., Garcia N., & Funk B. (1998). Quality of Life in Breast Cancer Survivors: Implications for Developing Support Services. 5th Annual Conference of the *International Society for Quality of Life Research*, 7(7), 590-591.
- Fry, W.F. (1992). The Physiologic Effects of Humor, Mirth, And Laughter. JAMA, 267, 1857–1858. doi: 10.1001/jama.267.13.1857
- Folkman, S., & Lazarus, R. S. (1980). An Analysis of Coping in A Middle-Aged Community Sample. *Journal of Health and Social Behavior*, 21(3), 219-239.
- Glanz, K., & Lerman, C. (1992). Psychosocial Impact of Breast Cancer: A Critical Review. *Annals of Behavioral Medicine*, 14(3), 204-212. doi: abm/article/14/3/204/4616962
- Gümüs, A. B. (2006). Psychosocial Problems and Supportive Interventions in Breast Cancer. *Journal of Breast Health*, 2(3), 108-114, E-ISSN 2587-0831

- Hackett T.P. and Cassem, N.H. (1974). Development of a Quantitative Rating Scale to Assess Denial. *Journal of Psychosomatic Research*, 18(2), 93-100. doi.org/10.1016/0022-3999(74)90072-5
- Hammoudeh, W., Hogan, D., & Giacaman, R. (2017). From A Death Sentence to A Disrupted Life Palestinian Women's Experiences and Coping with Breast Cancer. *Qualitative Health Research*, 27(4), 487-496. doi: 1049732316628833.
- Hamdy, S. (2009). Islam, Fatalism, And Medical Intervention: Lessons from Egypt on The Cultivation of Forbearance (Sabr) And Reliance on God (Tawakkul). *Anthropological Quarterly*, 82(1), 173–196. doi: 10.1353/anq.0.0053
- Holland Dukes, K., & Holahan, C. K. (2003). The Relation of Social Support and Coping to Positive Adaptation to Breast Cancer. *Psychology and Health*, 18(1), 15-29. doi: 10.1080/0887044031000080656
- Holmes, J. A., & Stevenson, C. A. (1990). Differential Effects of Avoidant and Attentional Coping Strategies on Adaptation to Chronic and Recent-Onset Pain. *Health Psychology*, 9(5), 577. doi: 10.1037/0278-6133.9.5.577
- Irwin, M., Daniels, M., Bloom, E. T., Smith, T. L., & Weiner, H. (1987). Life Events, Depressive Symptoms, And Immune Function. *The American Journal of Psychiatry*, 144(4), 437-441. doi: 10.1176/ajp.144.4.437
- Israel, B. A., & Schurman, S. J. (1990). *Social Support, Control, and The Stress Process*. In K. Glanz, F. M. Lewis, & B. K. Rimer (Eds.), The Jossey-Bass health series. Health behavior and health education: Theory, research, and practice (pp. 187-215). San Francisco: Jossey-Bass.
- Johnson, P. (2002). The Use of Humor and Its Influences on Spirituality and Coping in Breast Cancer Survivors. *In Oncology Nursing Forum*, 29(4), 691-695. doi: 10.1188/02.ONF.691-695
- Kavas, E. (2015). The Relationship between Religious Attitude and Coping with Stress. *Dumlupınar University Journal of Social Sciences*, 37, 143-165. http://manevibakim.com/bilim\_alanlari/manevi\_bakim/makale\_16.pdf
- Kernan, W. D., & Lepore, S. J. (2009). Searching for and Making Meaning After Breast Cancer: Prevalence, Patterns, And Negative Affect. *Social Science & Medicine*, 68(6), 1176-1182. doi: 10.1016/j.socscimed.2008.12.038
- Kershaw, T., Northouse, L., Kritpracha, C., Schafenacker, A., & Mood, D. (2004). Coping Strategies and Quality of Life in Women with Advanced Breast Cancer and Their Family Caregivers. *Psychology & Health*, 19(2), 139-155. doi: 10.1080/08870440310001652687
- Khodaveirdyzadeh, R., Rahimi, R., Rahmani, A., Ghahramanian, A., Kodayari, N., & Eivazi, J. (2016). Spiritual/Religious Coping Strategies and Their Relationship with Illness Adjustment Among Iranian Breast Cancer Patients. *Asian Pacific Journal of Cancer Prevention*, 17(8), 4095-4099. doi: 10.14456/apjcp.2016.220/APJCP.2016.17.8.4095
- Kim, J., Han, J. Y., Shaw, B., McTavish, F., & Gustafson, D. (2010). The Roles of Social Support and Coping Strategies in Predicting Breast Cancer Patients' Emotional Well-Being

- Testing Mediation and Moderation Models. *Journal of Health Psychology*, 15(4), 543-552. doi: 10.1177/1359105309355338
- Kissane, D. W., Bloch, S., Smith, G. C., Miach, P., Clarke, D. M., Ikin, J., ... & McKenzie, D. (2003). Cognitive-Existential Group Psychotherapy for Women with Primary Breast Cancer: A Randomised Controlled Trial. *Psycho-Oncology*, 12(6), 532-546. doi: 10.1002/pon.683
- Koenig, H. G., McCullough, M., & Larson, D. B. (2001). *Handbook of Religion and Health: A Century of Research Reviewed*. New York: Oxford University Press.
- Kozinets, R. V. (2002). The Field Behind the Screen: Using Netnography for Marketing Research in Online Communities. *Journal of Marketing Research*, 39(1), 61-72. doi: 10.1509/jmkr.39.1.61.18935.
- Kozinets, R. V. (2010). Netnography. Doing Ethnographic Research Online. Sage Publications Ltd.
- Landmark, B. T., & Wahl, A. (2002). Living With Newly Diagnosed Breast Cancer—The Meaning of Existential Issues: A Qualitative Study of 10 Women with Newly Diagnosed Breast Cancer, Based on Grounded Theory. *Cancer Nursing*, 24(3), 220-226.
- Lazarus, R. S., & Folkman, S. (1984). Stress, Appraisal, and Coping. New York: Springer.
- Levenson, J. L., & Bemis, C. (1991). The Role of Psychological Factors in Cancer Onset and Progression. *Psychosomatics*, 32(2), 124-132. doi: 10.1016/S0033-3182(91)72083-5
- Liamputtong, P., & Suwankhong, D. (2015). Therapeutic Landscapes and Living with Breast Cancer: The Lived Experiences of Thai Women. *Social Science & Medicine*, 128, 263-271. doi: 10.1016/j.socscimed.2015.01.031
- Luecken, L. J., & Compas, B. E. (2002). Stress, Coping, And Immune Function in Breast Cancer. *Annals of Behavioral Medicine*, 24(4), 336-344, doi: 10.1207/S15324796ABM2404\_10
- Maly, R. C., Umezawa, Y., Leake, B., & Silliman, R. A. (2005). Mental Health Outcomes in Older Women with Breast Cancer: Impact of Perceived Family Support and Adjustment. *Psycho-Oncology*, 14(7), 535-545. doi: 10.1002/pon.869
- Manne, S., Cleveland, J. P., Gaub, H. E., Stucky, G. D., & Hansma, P. K. (1994). Direct Visualization of Surfactant Hemimicelles by Force Microscopy of The Electrical Double Layer. *Langmuir*, 10(12), doi: 4409-4413. doi/pdf/10.1021/la00024a003
- Manning-Walsh, J. (2005). Social Support as A Mediator Between Symptom Distress and Quality of Life in Women with Breast Cancer. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 34(4), 482-493. doi: 10.1177/0884217505278310
- Marieke van den Beuken-van Everdingen, M. Peters, M. L., de Rijke, J. M., Schouten, H. C., van Kleef, M., & Patijn, J. (2008). Concerns Of Former Breast Cancer Patients About Disease Recurrence: A Validation and Prevalence Study. *Psycho-Oncology*, *17*(11), 1137-1145. doi: 10.1002/pon.1340
- Moyer, A., & Salovey, P. (1996). Psychosocial Sequelae of Breast Cancer and Its Treatment. *Annals of Behavioral Medicine*, 18(2), 110-125. doi: 10.1007/BF02909583

- Nelson, J. P. (1996). Struggling To Gain Meaning: Living with The Uncertainty of Breast Cancer. *Advances in Nursing Science*, 18(3), 59-76.
- Nosarti, C., Roberts, J. V., Crayford, T., McKenzie, K., & David, A. S. (2002). Early Psychological Adjustment in Breast Cancer Patients: A Prospective Study. *Journal of Psychosomatic Research*, 53(6), 1123-1130. doi:10.1016/S0022-3999(02)00350-1
- Olgun N., Öntürk Z. K., Aslan F. E., Karabacak Ü. & Serbest S. (2010). Problem Solving Skills of The Nursing Students: Results of the 1-Year Observation Problem Solving Skills of The Students. *Acıbadem University Journal of Health Science*, 1(4): 188-194.
- Osowiecki, D., & Compas, B. E. (1998). Psychological Adjustment to Cancer: Control Beliefs and Coping in Adult Cancer Patients. *Cognitive Therapy and Research*, 22(5), 483-499. doi: 0147-5916/98/1000-0483\$
- Pargament, K. I., Koenig, H. G., Tarakeshwar, N., & Hahn, J. (2004). Religious Coping Methods as Predictors of Psychological, Physical and Spiritual Outcomes Among Medically Ill Elderly Patients: A Two-Year Longitudinal Study. *Journal of Health Psychology*, *9*(6), 713-730. doi: 10.1177/1359105304045366
- Ross, R., Zeller, R., Srisaeng, P., Yimmee, S., Somchid, S., & Sawatphanit, W. (2005). Depression, Stress, Emotional Support, And Self-Esteem Among Baccalaureate Nursing Students in Thailand. *International Journal of Nursing Education Scholarship*, 2(1), 1165. doi: 10.2202/1548-923X.1165
- Royak-Schaler, R., Stanton, A. L., & Danoff-Burg, S. (1997). *Breast Cancer: Psychosocial Factors Influencing Risk Perception, Screening, Diagnosis, and Treatment*. In S. J. Gallant, G. P. Keita, & R. Royak-Schaler (Eds.), Health care for women: Psychological, social, and behavioral influences (pp. 295-314. doi: 10.1037/10235-018
- Smith, W. D. (Ed.). (1996). A Portrait of Breast Cancer: Expressions in Words and Art. *Project Woman*.
- Stanton, A. L., Danoff-Burg, S., Cameron, C. L., Bishop, M., Collins, C. A., Kirk, S. B., & Twillman, R. (2000). Emotionally Expressive Coping Predicts Psychological and Physical Adjustment to Breast Cancer. *Journal of Consulting and Clinical Psychology*, *68*(5), 875-882. doi: 10.1037//0022-006X.68.5.875
- Stanton L. Annette, Sharon Danoff-Burg & Melissa E. Huggins (2002). The First Year After Breast Cancer Diagnosis: Hope and Coping Strategies as Predictors of Adjustment. *Psycho-Oncology*, 11, 93-102. doi: 10.1002/pon.574
- Turner, B. S. (1995). *Medical Power and Social Knowledge*. London, Thousand Oaks and New Delhi: Sage Publications.
- Cancer Statistics Turkey, (2016). The Ministry of Health, Public Health Agency of Turkey. Retrieved from http://kanser.gov.tr/Dosya/ca\_istatistik/ANA\_rapor\_2013v01\_2.pdf
- Yıldırım İ. (1997). Perceived Social Support Scale Which Is Developed, Reliability. *Hacettepe University Journal of Education*, 13, 81-87.

- Watson, M., Greer, S., Blake, S., & Shrapnell, K. (1984). Reaction To a Diagnosis of Breast Cancer Relationship Between Denial, Delay and Rates of Psychological Morbidity. *Cancer*, 53(9), 2008-2012. doi: 10.1002/1097-0142
- Wilmoth, M. C., Tulman, L., Coleman, E. A., Stewart, C. B., & Samarel, N. (2006, January). Women's Perceptions of The Effectiveness of Telephone Support and Education on Their Adjustment to Breast Cancer. *In Oncology Nursing Forum*, 33(1), 138-144. doi: 10.1188/06.ONF.138-144
- Zwingmann, C., Müller, C., Körber, J., & Murken, S. (2008). Religious Commitment, Religious Coping and Anxiety: A Study in German Patients with Breast Cancer. *European Journal of Cancer Care*, 17(4), 361-370. doi: 10.1111/j.1365-2354.2007.00867.x