

RESEARCH

Psychological Needs of Parents whose Children Have Cancer in the Treatment Process

Çocukları Kanser Olan Ebeveynlerin Tedavi Sürecindeki Psikolojik İhtiyaçları

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Abstract

The aim of this study is to determine the needs of parents who have a child with cancer, how they cope with the problems they encounter, and the positive changes they observe in themselves during the treatment process. The research was conducted in the pediatric oncology department of a state university and parents with a child diagnosed with cancer were determined as the population group. The purposeful sampling method was used. A total of eight parents (5 mothers, 3 fathers) participated in the study. Face-to-face interviews were conducted with the parents using the semi-structured interview method, which lasted an average of 55 minutes. The interviews were analyzed with the content analysis method. Participants reported that their first reactions after being diagnosed with cancer were rejection, collapse, being upset, crying, shocked, denial, rebelling, hopelessness and despair. Their needs in this process are grouped under two headings: Social support and hospital conditions. They stated that the most effective coping methods they used were praying and accepting. They expressed the positive changes they observed in themselves during the treatment process as accepting of illness, maturation, change of their priorities and positive thinking. It is seen that there is a need for arrangements to meet the psychological and physical needs of the parents and that they come out of a difficult treatment process. According to these results, it is recommended to establish necessary intervention programs for both children undergoing cancer treatment and their families.

Keywords: Psychological factors, parent, cancer

Öz

Bu çalışmanın amacı kanser tanıları çocuğa sahip ebeveynlerin tedavi süreciyle bağlantılı ihtiyaçlarını, karşılaştıkları sorunlarla nasıl başa çıktıklarını ve tedavi sürecinde kendilerinde gözlemedikleri olumlu değişimleri belirlemektir. Araştırma, bir devlet üniversitesinin pediatrik onkoloji bölümünde yapılmış ve kanser tanısı almış çocuğu olan ebeveynler popülasyonu grubu olarak belirlenmiştir. Çalışmanın örneklemini için, amaca yönelik örnekleme yöntemi kullanılmıştır. Çocukları bir devlet üniversitesi hastanesinin pediatrik onkoloji bölümünde tedavi gören toplam sekiz ebeveyn (5 anne, 3 baba) çalışmaya katılmıştır. Yarı yapılandırılmış görüşme yöntemi kullanılarak ebeveynlerle yüz yüze görüşme yapılmıştır. Görüşmeler içerik analizi yöntemi ile analiz edilmiştir. Katılımcılar, çocuklarının kanser tanısı aldıktan sonraki ilk tepkilerinin; kabullenmeme, yıkılma, aile faciası olarak görme, altüst olma, ağlama, şok olma, inkâr etme, isyan etme, umutsuzluk ve çaresizlik hissetme olduğunu belirtmişlerdir. Ebeveynlerin tedavi sürecindeki ihtiyaçları ise sosyal destek ve hastane koşulları olmak üzere iki başlık altında toplanmıştır. Kullandıkları en etkili baş etme yöntemlerini dua etmek ve kabullenmek olarak belirtmişlerdir. Tedavi sürecinde kendilerinde gözlemedikleri olumlu değişiklikleri ise hastalığı kabullenme, önceliklerini değiştirme, olumlu düşünme ve olgunlaşma olarak ifade etmişlerdir. Sonuç olarak, ebeveynlerin psikolojik ve fiziksel ihtiyaçlarını karşılayacak düzenlemelere ihtiyaç olduğu ve zorlu bir tedavi sürecinden kişisel olarak olgunlaşarak çıktıkları görülmektedir. Bu sonuçlara göre, hastanelerde hem kanser tedavisi gören çocuklar hem de aileleri için gerekli müdahale programlarının oluşturulması önerilmektedir.

Anahtar sözcükler: Psikolojik faktörler, ebeveyn, kanser

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Received: 16.09.2021 | Accepted: 16.11.2021 | Published online: 28.12.2021

ALTHOUGH the number of children with cancer increases every year, an increase is observed in the rate of children who survive and continue their lives after cancer treatment (The National Cancer Institute Report 2020). In the same report, it was reported that the ten-year survival rate after the diagnosis of cancer and initiation of treatment varied between 73% and 83.8%. Kutluk (2006), in his study, stated that in the report prepared by the Turkish Pediatric Oncology Group in 2002, 1073 patients from 33 oncology centers had a ten-year survival rate of 77% after treatment. Despite these high survival rates, cancer treatment is considered a difficult and tiresome process for both the child and his/her family.

When a child is diagnosed with cancer, all individuals in the household are affected dramatically, and the routine of individuals lives changes. At the same time, besides being a medical disease, cancer is a challenging process that affects individuals' mental, social, and economic status and involves the whole family (Yıldız et al. 2016). In the international literature, in the treatment process of parents whose children have cancer, it is stated that they constantly experience negative emotions such as fear of losing their child, depression, anxiety, and shock (Nair et al. 2017, Katz et al. 2018, Warmerdan et al. 2019, McCarthy et al. 2021). Similar findings were obtained in studies conducted in Turkey. For example, in a study conducted by Toros et al. (2002), three groups of parents who have a child diagnosed with cancer, who are chronically ill, and whose child does not have a known health problem, were compared in terms of depression and anxiety symptoms. The level of depression symptoms was found to be higher in the parents with a child diagnosed with cancer compared to the parents in the other two groups. Although there was no difference between the fathers in the three groups in terms of anxiety symptoms, the anxiety levels of the mothers with a child diagnosed with cancer were again found to be higher than the mothers in the other two groups. However, it has been reported that there is a positive relationship between the depression and anxiety levels of children and their mothers. In the study, the depression and anxiety levels of the mothers were higher due to the gender difference between the mothers and fathers. Rich et al. (2013) also showed that families experienced problems of anger, apathy, sleep problems, difficulty in fulfilling their responsibilities, sensitivity, difficulty in making decisions, loneliness, pessimism, and hopelessness about the course of the disease. In another study conducted in Turkey (Eker 2019), parents often experience anger, self-blame, denial or disapproval at the diagnosis stage; It was reported that they continued to experience depression and denial during the treatment process. In addition, it has been suggested to establish continuous and repetitive support systems for parents to reduce the effects of depression, anxiety and these negative feelings throughout the treatment (Ay Kaatsız and Öz 2020, Erkul 2020). It has been reported that there has been an increase in the anxiety levels of families due to the uncertainty and the high risk of being infected in the recent Covid-19 epidemic (Darlington et al., 2021).

In addition, Gurtovenko et al. (2021) stated that as caregivers' stress levels increase, their psychological compliance to treatment decreases. However, the effects of parental involvement in the treatment process can also be negative when parents are captive to the new situation and role, stay in the hospital in inappropriate conditions, and if the anxiety and tension that can be experienced in the hospital environment are passed from the parents to the child (Palmer 1993). On the contrary, it was found that parents who participated in the treatment process felt themselves useful and important, and their self-

confidence and self-efficacy beliefs increased in coping with the difficulties they encountered in the treatment of their children. Leff et al. (1991) state that when working together professionally, parents reduce the stress and fears of their children under difficult conditions.

Children may also experience various psychological problems during the cancer treatment process. Palmer (1993) states that problems related to separation anxiety and deprivation from the mother are frequently experienced during the treatment process. For this reason, the involvement of the family, especially the mother, in the child's caring process and learning how to care for the child is effective for both the child and the family in terms of compliance with the treatment process (Long and Marsland 2011).

In addition to the problems experienced by parents during the treatment process of their children, some needs that need to be met also arise. Fisher (2001) concluded in an evaluation study that parents' needs are clustered in three areas. These are the need for normality and certainty, the need for information, and the need for partnership. Since the parents are affected negatively emotionally and physically in this process, it is stated as a need to protect the parent against mental and physical exhaustion (Palmer 1993).

At the beginning of cancer treatment, feelings of fear, anxiety and uncertainty come to the fore. It was found that the coping skills of the parents during the treatment process positively affected the treatment process and increased their quality of life (Koudys and Orlick 2002). In the study of McCaffrey (2006) on coping strategies, children who are sick stated that they feel good in activities such as watching TV or movies, listening to music, painting, and doing handicrafts. Parents, on the other hand, stated that exercising, listening to music, doing relaxation activities, reading books and magazines, watching TV or movies, going out with friends and writing about their feelings made them feel good. In addition, it was revealed that good communication with hospital staff is important in coping with their fears of uncertainty. Families may limit themselves socially because of the lack of time due to cancer treatment and the tiredness and boredom of the treatment. Meleski (2020) pointed out that a strong social support system helps parents cope with stressful situations. Therefore, Hjemdal et al. (2006) stated that the development of social support for parents is very important in coping with this difficult process. They also emphasized that social support acts as a buffer between difficult life events and psychological symptoms.

Although the cancer treatment process is difficult, it has been observed that people emerge stronger from the treatment process, and studies have been conducted showing that people cope positively (Luszczynska et al. 2012, Moreno and Stanton 2013). Tedeschi and Calhoun (2004) determined that as a result of life-threatening traumatic events or losses, there are positive changes in some people, such as establishing more meaningful relationships, increasing the feeling of stronger sides, richer existential life and being open to new experiences. Thus they called this condition post-traumatic growth. In the study of Barakat, Alderfer, and Kazak (2005) with adolescents with cancer and their families, they stated that both adolescents and their parents experienced more than one positive change in their lives, such as their plans for the future and their thoughts about their lives. In addition, families stated that they were more patient after successful cancer treatment and that the things they cared about changed.

Leff et al. (1991) stated that the psychological state of children and parents is the most important and helpful issue in the treatment process. Since cancer treatment is a process that causes intense stress and anxiety in the patient and his family, it is normal

for psychological problems to occur during or after treatment. Therefore, this study points out the importance of psychological support in terms of reducing these negative emotions and learning coping skills. It is thought that this study will be an important resource in the development of support programs in order to learn what parents experience during the cancer treatment process and determine their needs. In this context, this study aims to determine the needs of families during the treatment process, learn the coping methods they use against the problems they experience, and evaluate the positive changes in the treatment process, which is called post-traumatic growth in the literature. For this purpose, answers are sought for the following questions: 1. What does the parent need the most during the treatment process, and how much of these needs are fulfilled?; 2. What methods do parents use to cope with the difficulties they encounter during the treatment process?; 3. What are the positive changes that parents noticed in themselves during the treatment process?

Method

The researcher adopted a phenomenological perspective (Bogdan and Biklen 2007) by using the qualitative measurement method to understand better parents' psychological state with a child diagnosed with cancer. The qualitative approach investigates the event from a holistic perspective, and the researcher searches for meaning with the inductive method (Bogdan and Biklen 2007). For this reason, interviews were conducted with semi-structured questions to understand the families' experiences during the treatment. It is aimed to reach more meaningful data thanks to the benefits of positive communication during individual interviews. This research is also an exploratory study that descriptively shows parents' psychological state during the treatment process. The research was conducted in the Pediatric Oncology Department of a state university, and parents with a child diagnosed with cancer were determined as the population group.

Sample

The 'Pediatric Oncology Department' in a state university's medical faculty was contacted for this study. The sample of the study was determined using the purposeful sampling method. The researcher was in the interview room within the process allowed by the Pediatric Oncology Department head and met with the parents who met the criteria. Two criteria were determined for participation in the study: First, it should be the families whose children's cancer treatment had been completed at the time of the study and who were in the follow-up period with medication. This was because parents experience more negative emotions at the beginning of the treatment (McCarthy et al. 2021). It has been assumed that the parents of children whose cancer treatment had been successfully completed would be more willing to talk about their feelings and thoughts. Second, the people who participated in the research were parents willing to talk about their feelings and thoughts. In this context, eight parents (five mothers and three fathers) were reached within the allowed process and following the aforementioned criteria.

Procedure

Before starting the interviews, the required ethics permission document (Applied Ethics Research Center, METU, 126/06-91, 26.01.2010) was obtained from a state university's Applied Ethics Research Center. For the interviews, the research was conducted in the

interview room on the patient floor, within the process allowed by the Pediatric Oncology Department Head of a state university hospital. The interviews were conducted individually in a single session, with one researcher and one participant in a room suitable for the interview. The researcher completed her qualifications in qualitative studies and individual interviews during her higher education. The interview started by briefly explaining the purpose of the study after the participant's consent was obtained. Each interview was recorded with a voice recorder. The interviews lasted between 28.41 minutes and 82.46 minutes.

Measures

First, a detailed literature review about the study was conducted. After this literature review, a conceptual draft was created, and the researcher prepared interview questions and demographic questions. In order to conduct the interviews, the questions were formed following the semi-structured interview technique (Patton 2002). The questions were finalized as a result of the consensus made with a researcher who is an expert in the field of qualitative analysis and the examination of an expert in the field of psychology. The first part of the interview form consisted of demographic questions. The demographic form included information about the participant's gender, age, occupation, educational status, monthly income, and their child's treatment process. The second part of the interview form consisted of questions about understanding the experiences of the participants. The first question is to determine how the family first heard about cancer and how it was perceived. Other questions of the interview are related to the needs of the parents during the treatment process, the difficulties they face and the methods they use to cope with them. Finally, they were asked what positive changes they noticed in themselves and their children during the treatment process.

Statistical analysis

The researcher deciphered all interviews. The data obtained using the interview technique were evaluated using the content analysis method (Miles and Huberman 1994). First, two experts in qualitative analysis separately analyzed the deciphered interview text according to recurring ideas and themes. More than one researcher coded data to ensure validity and reliability. Later, two researchers came together and cross-checked their codes, and a code list was created. In cases of conflict, the codes were discussed, and an external auditor's opinion on the common code list was sought to ensure validity and reliability. Finally, the codes were divided into categories and themes were created from these categories. Some of the answers given by the families during the interview were given in the findings section through direct quotations.

Results

Eight parents, five mothers and three fathers participated in the study. The average age of the participants is 42. Of the parents participating in the research, two are university graduates, three are high school graduates, one is a high school graduate, and two are primary school graduates. Six participants reside in the city receiving treatment, and two reside outside the city. When we look at the families' monthly income, it is reported that two families are at the lower socio-economic level, four families are at the middle socio-economic level, and two families are at the upper socio-economic level. While three of

the parents received psychological support during the treatment process, five did not receive any professional support. When the participant parents were asked about their reactions and information about their child's illness, it was stated that 4 of the children did not know about the disease at all, and 4 of them had knowledge of it. All parents stated that they were informed about the process before the treatment process of their children started, and they were involved in this process. When their involvement in the treatment process was evaluated, the families stated that they were mostly involved in the treatment process regarding their child's self-care, drug use, and deciding on the type of treatment (e.g., surgery).

The codes obtained according to the results of the content analysis were organized under four themes: (1) Parents' Initial Reactions; (2) Parents' Needs in the Treatment Process; (3) Parents' Coping Methods; (4) Parents' Positive Changes. Table 1 provides an overview of the categories and codes under each theme.

Table.1. Key findings

Themes	Categories	Codes
Parents' Initial Reactions		Denial
		Devastation
		Crying
		Shock
		Rebellion
		Hopelessness
		Despair
Parents' Needs in the Treatment Process	Social support	Talking to Family/Spouse
		Sharing with a Friend
	Hospital Conditions	More sensitive behavior of floor attendants
		More comfortable physical conditions
		Having helping staff
	Other	Financial issues/Money
		Being understood by others/Empathy
		Suitable working conditions for working mothers
Thinking positive		
Parents' Coping Methods		Praying
		Accepting
		Talking with Spouse/Friend,
		Thinking positively,
		Engaging in a hobby
		Laughing
Parents' Positive Changes		Changing priorities
		Starting to think positively
		Accepting
		Being mature

Parents' initial reactions

Seven of the parents who participated in the interview stated that they heard about their child's cancer diagnosis from the doctor and one from his wife when he was in the military. Participants reported that their initial reactions were rejection, devastation, crying, shock, denial, rebellion, hopelessness, and despair. One of the fathers participating in the study describes his first reaction as follows:

"I felt very bad, there was something in my throat, I was done, there was a tie or something, it seemed to suffocate me, I threw it in the trash, of course, I cried a little bit, and the process had now started there" (K-3, Father)

The reactions of other families experiencing the same situation are presented below:

"At that moment, we had a family disaster. We were shocked" (K-7, Father).

"I laid myself flat due to emotional pain I had. I said it could not be, I said I do not believe it, I said I do not accept it like that, I mean it was a very bad day, at that moment I felt that I wanted to run away. I thought as if I took my baby in my arms, ran, I did not hear what was said, if they did not say, maybe they said it was a lie if they said that there was no such thing, I wanted something like this" (K-2, Mother).

As can be seen from the quotes above, the first reaction of families is that they have negative experiences. Considering these reactions, it is revealed that cancer is seen as a deadly disease by families. The interviews show that while the emotional reactions of some families became more positive in the process, no changes were observed in the reactions of some participants. Most of the families stated that they accepted the situation in the process, developed a more positive perspective, but still experienced fear of the relapse of the disease. As can be seen in the excerpt below, a mother expresses what the treatment process was like for herself in the following words:

"Right now, it is like nothing happened, as if nothing had happened. We are good, but the process continues. There is always a question mark and fear somewhere over there" (K-5, Mother)

Parents' needs

Since cancer treatment is a difficult and long process, certain needs of families arise in the process. These needs can be similar as they differ. When families are asked what they need most during the treatment process, their stated needs are divided into three categories. The first level needs are named as 'Social Support'. Families stated that they needed the support of their families, friends, friends and spouses the most during this process, and all participating parents stated that they saw this support in the treatment process. One father stated that they found the social support they needed the most as follows:

"Financial issue is not at the forefront in these matters. Sorrows can also be overcome with a partner, and happiness is multiplied with a partner. So, you need moral support the most. I found it, too, from my social environment." (K-7, Father).

Secondary-level needs are specified in the 'Hospital Conditions' category. It is seen that families need the floor attendants to act more sensitively in the hospital, the auxiliary personnel in the hospital and the physical conditions to be more comfortable. Although some of the participants stated that these needs were met, some of them stated that they had problems during the treatment process in the hospital.

Families mostly stated that the treatment process went well and that they did not experience any difficulties. However, other than that, families mentioned that issues such as the child's lack of appetite, the severe conditions of the illness, the problem of companions, coming from outside the city, hospital conditions (roommates, nurses, floor attendants), financial difficulties, not being able to fulfil their responsibilities at work, and desperation, were compelling for them from time to time. The requirements, in this case, are presented in the order in the following excerpts:

I think that training should be given to nurses and doctors working in such services. What does the mother of a cancer patient feel or think? What does the child with cancer think and feel? For example, in the hospital room, things like a bathroom and toilet are in room conditions, making it more comfortable. For example, if there were more cleaning staff, such as when

my daughter vomited if a cleaning staff came and cleaned it for me, if there were a phone in my room, I would not be so tired. I am responsible for everything. I do the cleaning; I do the cleaning of the room, I do the work that the nurse has to do, I act my mother role, the food is not of good quality, I try to find and arrange something myself. Because the budget is not enough, you cannot eat anything from outside every day. So it would have been a little easier if such conditions had existed." (K-2, Mother)

The other needs category was expressed as a financial issue, being understood by others, suitable working conditions for working mothers, and positive thinking. A working mother expressed her difficulties as follows:

"As a working person, I was devastated when I heard the sentence mothers in Ankara cannot stay accompanied when the child is to be accompanied." I even went to the ministry of health for the issue a lot. It was said that mothers in the city are not allowed; those coming from outside the city are allowed for two years. So, I said, why is this happening" (K-1, Mother)

Parents' ways of coping with difficulties

Families stated that they usually try to cope with the difficulties they face by praying. Other coping methods are talking with a spouse/friend, thinking positively, accepting, engaging in hobbies (beekeeping, fishing, folk dances) and laughing. One participant stated that he used laughter as a good coping tool:

"For example, we try to laugh even when we are crying inside. We tell a lot of stories and jokes next to him, although we are not at all a jovial nature, we joke, play, laugh with him as if nothing had happened, we tried not to upset him, I believe we have been successful until today." (K-8, Father)

A mother stated that accepting the difficult experience she experienced is also a way of coping:

"Acceptance actually made the job a little easier. How can I say I accepted life like this.?" (K-1, Mother)

A father states that he copes with the difficulties of the process more easily by sharing:

"Well, we did not hide it from anyone, whether they are our close relatives or neighbours, so maybe that was a way to relax. The more you share, the more you tell, the more you feel psychologically relieved, that is so that we did not hide it from anyone, we shared it with everyone." (K-7, Father)

The participants, who tried to cope by praying according to their beliefs, expressed their feelings as follows:

"We are praying that he will get better, so there is nothing else." (K-3, Father)

"I always wanted to see these good days of my child. I prayed to my God that those days would go away, and they would remain as a bad memory; I hope it will always be like this. I have always lived thinking that way" (K-5, Mother)

The participant, who stated that thinking positively is good for her, explains how she did it:

"Thinking positively gives energy. When I am bored, I put on make-up, I blow dry my hair myself because going to the hairdresser or something is a big luxury for me; I cannot leave my daughter, I do it myself, and I feel very good, I think positively." (K-2, Mother)

Parents' positive changes

Finally, when asked about the positive changes they noticed in themselves during the treatment process, the parents stated that their priorities changed the most, such as giving less importance on the things; however, health came to the fore. The families

stated that there was a significant change in their perspectives towards life, and they did more favour during and after the treatment; they became more mature, accepted life, and finally started to think well and positively. Participants expressed the changes in their lives as follows:

"I do not know my perspective on life, I can be more transparent, I can say that I have become more tolerant. How can I say, I accepted life, that is, I learned to accept it" (P-3, Father)

"I have become more mature towards life. I used to be a person who gets angry easily in some situations and can hurt like that easily as well but now I think ten times and say it once" (P-4, Mother).

"One day, I realized how precious it is to even take a breath. When a person is in good health, s/he can overcome everything, I no longer worry about trivial things; I had debts, I still have them, but I do not give any importance, I say nothing but the only health is important" (P-2, Mother).

"There are things that you cannot prevent, and this changes your perspective in a positive way. You say that no matter what you do, you cannot prevent some events, so I should not be sad, and you say it is good to let it happen; you accept. You get more comfortable when you accept it" (P-7, Father)

"You look at the environment more positively; for example, you do not want to upset anyone. You understand that one should not worry about a small thing" (P-3, Father)

Discussion

The caregiver is an important part of the care and treatment of a child with cancer. Caregivers are usually the parents of the child, and they have multiple and complex responsibilities such as meeting the physical and psychological needs of the cancer patient during the difficult treatment process (Bozkurt et al. 2019). It is known that parents often ignore their own needs while focusing on the needs of their children in treatment. Therefore, this study aimed to determine the psychological states of parents with a child diagnosed with cancer related to the treatment process. In this context, families were asked about their reactions during the treatment process, their needs, how they coped with the problems they encountered, and the positive personal changes they observed in themselves.

It was found that the psychological reactions of the families when they first heard about the cancer diagnosis were crying, rejection, shock, rebellion, hopelessness and despair, and then they developed acceptance and a positive perspective. These findings are also similar to the literature. Families enter a grieving process when they receive the news of cancer, and denial, anger and rejection are accepted as normal reactions of the grieving process (Günay and Özkan 2019). The fact that cancer treatment is very stressful and tiring can cause depression, anxiety, fatigue and low quality of life in families (Seiler and Jenewein 2019). During the interviews, it was observed by the researcher that the participants experienced a period of depression and that they accepted the situation and started to adapt to it.

When asked about the needs of the families during the treatment process, they emphasized that their needs were related to social relations (e.g., spouse, friends, family) and hospital conditions (transport and accommodation to the hospital, more sensitive behaviour by the hospital floor attendants, more comfortable physical conditions of the hospital). Other studies in the literature support these needs. For example, Bozkurt et al. (2019) stated in their study that families mostly have problems with transportation and accommodation due to coming from a different city, and their personal needs have increased. Chino et al. (2014) also emphasized that families experience financial difficulties during the treatment process. Since parents undertake the burden of care

during the treatment process, there are changes in their daily routines and work lives. It has been found that recognizing their needs and meeting these needs increase the quality of life of parents (Yıldız et al., 2016).

Families stated that they mostly needed support from the social environment such as spouses, friends and relatives during the treatment process, and these needs were more than met. As Bozkurt et al. (2019) suggest, families need social support throughout the whole process. Moreover, Yıldız et al. (2016) emphasized that meeting the physical and emotional needs of families positively affects the treatment process, reduces the stress level of families and increases their quality of life. In addition, Üzar-Özçetin and Hiçdurmaz (2017) emphasized the importance of the relationship between the health care team and people who have experienced cancer in terms of a positive treatment and suggested the development of intervention plans to strengthen this relationship and develop empathy.

When families were asked about the coping resources they used during the treatment process, it was stated that praying was the most effective method they used. In the literature, it is stated that religious rituals are very effective in coping with difficult life events (Smith et al. 2003). Günay and Özkan (2019) stated that they are relieved when they perform their religious rituals not only in the Islamic faith but also in countries such as South Korea and the United States of America. In a study conducted with cancer patients in Turkey, 82.3% of the participants stated that praying is an important coping method (Fadiloğlu 1996). In this context, it can be said that the participants were able to protect their own psychological health by coping with the negativities, stress and anxiety brought about by the treatment process.

Acceptance is the most important coping resource used by the participants in the study. Acceptance allows the process to progress faster and parents to develop strategies to adapt to the situation (Günay and Özkan 2019). Acceptance provides psychological flexibility (Lopez et al., 2021) and positively affects the child's adherence to treatment (Murrell and Scherbarth 2006). For this reason, families need to manage the process as quickly as possible and accept the situation, and it is important to carry out intervention studies for a healthier progress. In addition, in this study, families stated that social support was very effective in coping. Bayat et al. (2008) emphasized that the social support of the parents reduced the depression, hopelessness and anxiety levels of the individuals. When the literature is examined in general, it is seen that praying, accepting the situation and having social support increase the coping skills of the parents.

When the participants were asked whether there were any positive changes that they noticed in themselves, almost all of them stated that they observed positive changes such as maturation and acceptance. The traditional view says that the diagnosis and treatment of cancer has a devastating effect on people. However, instead of this point of view, the idea that it is possible to cope with the cancer treatment process in a positive way and even to grow or strengthen in people is getting stronger (Üzar Özçetin and Hiçdurmaz, 2017). It is stated by many different studies that this positive growth state observed in individuals diagnosed with cancer and their caregivers increases the quality of life and reduces the negative psychosocial effects caused by cancer (Coyne and Tennen 2010, Connerty and Knott 2013, Gunst et al. 2016). For this reason, the growth and positive change in people should be considered for those receiving cancer treatment and their relatives, and these characteristics should be supported by intervention programs.

As with any study, this study also has limitations. The first limitation is the small sample size and the small number of participants. Although this situation limits the generalizability of the study, qualitative studies do not have any concerns about generalization (Yin 1984). Secondly, the fact that the researcher is alone and manages the whole process alone may limit the use of energy and time. Finally, the reliability of the study can be strengthened to improve the method of further studies.

Conclusion

Considering the relevant literature and findings, it is possible to understand and express the emotional difficulties experienced by children and their families undergoing cancer treatment by health professionals, to evaluate unmet needs and to provide support to each of their family members, to support effective coping mechanisms and to increase positive experiences throughout the treatment process. It is thought to have a positive effect on the post-treatment period. In the study, the difference between mother and father was not examined due to the small sample size. Large groups can be studied to investigate further whether the results differ in terms of parents. In addition, in future studies, more detailed information can be obtained -regarding the differences in opinion and experience between parents.

References

- Ay Kaatsız MA, Öz F (2020) The effectiveness of psycho-education given to mothers of children with cancer. *J Psychiatric Nurs*, 11:129-140.
- Barakat LP, Alderfer MA, Kazak AE (2005) Posttraumatic growth in adolescent survivors of cancer and their mothers and fathers. *J Pediatr Psychol*, 31:413-419.
- Bayat M, Erdem E, Gül Kuzucu E (2008) Depression, anxiety, hopelessness, and social support levels of the parents of children with cancer. *J Pediatr Oncol Nurs*, 25:247-253.
- Bogdan R, Biklen, SK (2007) *Qualitative Research for Education: An Introduction to Theory and Methods*. New York, NY, Allyn & Bacon.
- Bozkurt C, Uğurlu Z, Tanyıldız HG, Yeşil Ş, Kiraz H, Toprak Ş, et al. (2019) Economic and psychosocial problems experienced by pediatric with cancer patients and their families during the treatment and follow-up process. *Turk Pediatri Ars*, 54: 35–39.
- Chino F, Peppercorn J, Taylor DH, Lu Y., Samsa G, Abernethy AP, et al. (2014) Self-reported financial burden and satisfaction with care among patients with cancer. *Oncologist*, 19:414–420.
- Connerty TJ, Knott V (2013) Promoting positive change in the face of adversity: Experiences of cancer and post-traumatic growth. *Eur J Cancer Care*, 22:334-344.
- Coyne JC, Tennen H (2010) Positive psychology in cancer care: Bad science, exaggerated claims, and unproven medicine. *Ann Behav Med*, 39:16-26
- Darlington ASE, Morgan JE, Wagland R, Sodergren SC, Culliford D, et al. (2021) COVID-19 and children with cancer: Parents' experiences, anxieties and support needs. *Pediatr Blood Cancer*, 68:1-10.
- Eker T (2019) Çocukluk çağı hematoloji ve onkoloji hastalarının ailelerinin stres, kaygı ve umutsuzluk durumlarının değerlendirilmesi (Yüksek lisans tezi). Ankara, Yıldırım Beyazıt Üniversitesi.
- Erkul M (2020) Kanserli çocuk ve ebeveynlerine yönelik geliştirilen eğitim programının hasta uyumu, bilgi ve kaygı düzeylerine etkisi (Doktora tezi). Antalya, Akdeniz Üniversitesi.
- Fadıloğlu Ç (1996) Kanserli hastaya bakım veren aile üyelerinin hastalıkla başa çıkma davranışlarının incelenmesi. *Ege Üniversitesi Hemşirelik Yüksek Okulu Dergisi*, 12: 21-34.
- Fisher HR (2001) The needs of parents with chronically sick children: A literature review. *J Adv Nurs*, 36: 600-607.
- Gunst DCM, Kaatsch P, Goldbeck L (2016) Seeing the good in the bad: which factors are associated with posttraumatic growth in long-term survivors of adolescent cancer? *Support Care Cancer*, 24:4607-4615.

- Gurtovenko K, Fladeboe KM, Galtieri LR, King K, Friedman D, Compas B et al. (2021) Stress and psychological adjustment in caregivers of children with cancer. *Health Psychol*, 40: 295–304.
- Günay U, Özkan M (2019) Emotions and coping methods of Turkish parents of children with cancer. *J Psychosoc Oncol*. 37:398-412.
- Hjemdal O, Friberg O, Stiles TC, Rosenvinge JH (2006) Resilience predicting psychiatric symptoms: A prospective study of protective factors and their role in adjustment to stressful life events. *Clin Psychol Psychother*, 13:194-201.
- Katz LF, Fladeboe K, Lavi I, King K, Kawamura J, Friedman D, et al.(2018). Trajectories of marital, parent-child, and sibling conflict during pediatric cancer treatment. *Health Psychol*, 37: 736–745.
- Koudys J, Orlick T (2002) Coping with cancer: Lessons from a pediatric cancer patient and his family. *Journal of Excellence*, 7:36-53.
- Kutluk T (2006) Çocukluk çağı kanserlerinin epidemiyolojisi. *Klinik Gelişim*, 20:5-12.
- Leff PT, Chan JM, Walizer E M (1991) Self-understanding and reaching out to sick children and their families: An ongoing professional challenge. *Child Health Care*, 20:230-239.
- Long KA, Marsland AL (2011) Family adjustment to childhood cancer: A systematic review. *Clin Child Fam Psychol Rev*, 14:57–88.
- López J, Velasco C, Noriega C (2021) The role of acceptance in parents whose child suffers from cancer. *Eur J Cancer Care*, 30:e13406.
- Luszczynska A, Durawa AB, Dudzinski M, Kwiatkowska M, Knysz B, Knoll N (2012)The effects of mortality reminders on posttraumatic growth and finding benefits among patients with life-threatening illness and their caregivers. *Psychol Health*, 27:1227-1243.
- McCaffrey CN (2006) Major stressors and their effects on the well-being of children with cancer. *J Pediatr Nurs*, 21:59-66.
- McCarthy MC, Marks IR, Mulraney M, Downie P, Matson A, De Luca, CR. (2021) Parental adjustment following their child's completion of acute lymphoblastic leukemia treatment. *Pediatr Blood Cancer*, 68:1-10.
- Miles MB, Huberman AM (1994) *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage.
- Moreno PI, Stanton AL (2013) Personal growth during the experience of advanced cancer: a systematic review. *Cancer J*, 19:421-430.
- Murrell AR, Scherbarth AJ (2006) State of the research & literature address: ACT with children, adolescents and parents. *Int J Behav Consult Ther*, 2:531-543.
- Nair M, Paul LT, Latha PT, Parukkutty K (2017) Parents' knowledge and attitude regarding their child's cancer and effectiveness of initial disease counseling in pediatric oncology patients. *Indian J Palliat Care*, 23:393–398.
- Palmer SJ (1993) Care of sick children by parents: A meaningful role. *J Adv Nurs*, 18:185-191.
- Patton MQ (2002) *Qualitative Evaluation and Research Methods* (3rd ed.). Thousand Oaks, CA, Sage Publications.
- Seiler A, Jenewein J (2019) Resilience in cancer patients. *Front Psychiatry*, 10:208.
- Smith TB, McCullough ME, Poll J (2003) Religiousness and depression: Evidence for a main effect and the moderating influence of stressful life events. *Psychol Bull*, 129:614-636.
- Tedeschi RG, Calhoun LG (2004) Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychol Inq*, 15:1-18.
- The National Cancer Institute (2020) Survival rates increasing for children with certain hematologic malignancies. Available from: URL: <https://www.cancer.gov/about-cancer/understanding/statistics>. Accessed 12.08.2021.
- Toros F, Tot Ş, Düzovalı Ö (2002) Kronik hastalığı olan çocuklar, anne ve babalarındaki depresyon ve anksiyete düzeyleri. *Klinik Psikiyatri Dergisi*, 5:240-247.
- Üzar-Özgetin YS, Hiçdurmaz D (2017) Kanser deneyiminde travma sonrası büyüme ve psikolojik sağlamlık. *Psikiyatride Güncel Yaklaşımlar*, 9:388-397.
- Warmerdam J, Zabih V, Kurdyak P, Sutradhar R, Nathan P, Gupta S (2019) Prevalence of anxiety, depression, and posttraumatic stress disorder in parents of children with cancer: A meta-analysis. *Pediatr Blood Cancer*. 266:e27677.
- Yıldız E, Dedeli Ö, Pakyüz-Çınar S (2016) Kanser hastalarına bakım veren aile üyelerinin bakım yükü ve yaşam kalitesinin incelenmesi. *Hemşirelikte Eğitim ve Araştırma Dergisi*, 13: 216-225.
- Yin RK (1984) *Case Study Research: Designs and Methods*. London, Sage.
- Zengin O, Saltık S, Duysak Y , Soytürk G, Orbay E, Tekin O (2013) Kanserli çocuğa sahip ailelerin aşama yaklaşımına göre gösterdikleri tepkiler . *Düzce Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, 2:1-4 .

Authors Contributions. Authors attest that they have made an important scientific contribution to the study and have assisted with the drafting or revising of the manuscript.

Peer-review: Externally peer-reviewed.

Ethical Approval: Ethical approval was obtained from METU Applied Ethics Research Center for the study. All participants gave informed consent.

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: This study was previously presented at the IPOS World Congress of Psycho-Oncology and Psychosocial Academy held on 21-24 August 2017 in Berlin, Germany.