

The Effect of Having a Sibling Diagnosed with Cancer on the Perception of Family: Projective Evaluation of Healthy Siblings' Pictures

Kanser Tanısı Alan Bir Kardeşe Sahip Olmanın Aile Algısı Üzerine Etkisi: Sağlıklı Kardeşlerin Resimlerinin Projektif Değerlendirilmesi

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ABSTRACT

Objective: The aim of this study was to examine the family perception through a psychological drawing test in healthy children with siblings diagnosed with cancer.

Methods: This descriptive study, using qualitative data collection and evaluation methods, was conducted on 20 healthy children whose siblings were diagnosed with cancer and who were treated in the pediatric clinics of a university hospital in Turkey. Data were gathered with Descriptive Characteristics of Family Members Form, Kinetic Family Drawing Test and Semi-Structured Interview Form.

Results: In most of the paintings, the mother was the first to be drawn as the most cherished and desired family member. The energy of the movement was negative in most of the drawings. According to projective analysis, the majority of healthy siblings had a perception of isolation in the family.

Conclusion: Healthy children having siblings diagnosed as cancer were found to have negative family perceptions. They had negative perceptions, especially about their position/role in the family.

Keywords: Childhood cancer, healthy siblings, family perception, nursing, family drawing

ÖZ

Amaç: Bu çalışmanın amacı, kardeşi kanser tanısı almış sağlıklı çocuklarda aile algısının psikolojik çizim testi ile incelenmesidir.

Yöntem: Nitel veri toplama ve değerlendirme yöntemlerinin kullanıldığı bu tanımlayıcı araştırma, Türkiye'de bir üniversite hastanesinin çocuk kliniklerinde tedavi gören, kardeşi kanser tanısı almış sağlıklı 20 çocuk üzerinde yapıldı. Veriler Aile Bireylerinin Tanımlayıcı Özellikleri Formu, Kinetik Aile Çizim Testi ve Yarı Yapılandırılmış Görüşme Formu ile toplanmıştır.

Bulgular: Resimlerin çoğunda anne en önemsenen ve arzulanan aile üyesi olarak ilk çizilen kişiydi. Çizimlerin çoğunda hareketin enerjisi negatifti. Projektif analize göre sağlıklı kardeşlerin çoğunluğunun ailede izolasyon algısı vardı.

Sonuç: Kardeşi kanser tanısı almış sağlıklı çocukların aile algılarının olumsuz olduğu saptanmıştır. Özellikle aile içindeki konumları/rolleri ile ilgili olumsuz algıları vardı.

Anahtar Kelimeler: Çocukluk çağı kanseri, sağlıklı kardeşler, aile algısı, hemşirelik, aile çizimi

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Introduction

Diagnosis of cancer in children leads both these children and their families to have difficulties (Wijnberg-Williams et al., 2006). Members of the families may experience uncertainties during the diagnosis process. Their future life including their expectations changes depending on the children diagnosed with cancer as a chronic disease (Siden and Steele, 2015).

The bond between siblings is the strongest of all bonds between humans. The relationship between siblings considerably affects development of children and adolescents (Knecht et al., 2015). It is stated that a child in the family having a long-term illness has many emotional, social, developmental, physical and psychological effects on parents and healthy siblings (Arakelyan et al., 2019). Healthy children can feel as anxious as their parents and see their siblings suffer from emotional and physical pain. These difficulties can produce stress in healthy children especially when physical symptoms of ill siblings increase (Woodgate, 2006). Their roles are subject to change and they feel as if they are parents and believe they have to take responsibility caring for their siblings (Nolbris et al., 2007). It is reported that siblings describe the burden they perceive for care as “a huge responsibility” (Siminghalam et al., 2018; Ward, 2016). Siblings' responsibility increases, academic success decreases (Guggemos et al., 2015; Yang et al., 2016; Zegaczewski et al., 2016; Gan et al., 2017). They can become individuals potentially forgotten, neglected and not cared about (Knecht et al., 2015). It is possible for children who experience negligence to have problems with self-love and self-esteem formation (Sari et al., 2016). Various mental problems are also encountered in healthy siblings (Guggemos et al., 2015). In qualitative studies with children having siblings with cancer, themes representing intense feelings and fragility including anxiety, sadness, hopelessness and feeling of loss emerged (Alderfer et al., 2010). In a systematic review study, it was revealed that siblings of children with cancer experience great chaos in their family lives and this process has an effect on children's self-esteem (Yang et al., 2016). In a study conducted with children diagnosed with cancer and their siblings, it was determined that healthy siblings had worse family relationships than patients who received treatment (Erker et al., 2018). It has been reported that the greater the effect of cancer on healthy siblings, the greater the impact of the disease on family structure (Marques et al., 2018). On the other

hand, there are studies showing that siblings have highly positive characteristics such as identity development, sense of responsibility, empathy, compassion, tolerance, patience and appreciation of life (Kahraman and Karadayı, 2015; Hall and Rossetti, 2018). In another study, it was found that siblings used acceptance, active coping, emotion-oriented coping and religious belief methods more than avoidant coping methods (Turner-Sack et al., 2016).

There are many studies in the international literature examining the psychosocial effects of childhood cancer on family members. It is also noteworthy that psychosocial care standards have been developed in some countries (Woodgate et al., 2016; Jones et al., 2018; Long et al., 2018). However, studies evaluating family perception in healthy siblings of children with cancer are limited. The aim of the present study was to examine the family perceptions of children having a sibling diagnosed with cancer through a psychological drawing test.

Material and Method

Design

This research is descriptive research that adopts an art-based design in which qualitative data collection, collection and evaluation techniques are used. In addition, the data obtained from the picture analysis were converted into numerical values and quantitative data were also used.

Participants

Data were collected from healthy children with siblings diagnosed with cancer and receiving treatment in the pediatric clinics of a university hospital in Turkey between 1 October 2018 and 30 November 2018. The study sample included 20 healthy children aged 7-14 years and having a sibling diagnosed as cancer.

Data Collection

First, the aim and method of the study were explained to both the children and their parents and their informed consent was obtained. Then Descriptive Characteristics of Family Members Form was filled in by requesting information from the parents. Next, the healthy siblings were asked to draw a picture of their families. After they drew the pictures, they were requested to explain what they drew by using the semi-structured interview. The interviews were recorded with a voice recorder. It took 60-90 minutes to collect the data.

Instruments

Data collection was performed by using Descriptive Characteristics of Family Members

Form, Kinetic Family Drawing Test and a semi-structured interview form.

Descriptive Characteristics of Family Members Form

This form was created in light of the literature (Alderfer et al., 2010; Arakelyan et al., 2019; Eilertsen et al., 2018; Erker et al., 2018) by the researcher and composed of 21 questions about socio-demographic characteristics of healthy children aged 7-14 and their siblings with cancer, parents and families (age, gender, number of siblings, birth order, school performance, relationship with friends, ill children's attendance at school, duration of treatment, caregiver, marital status, employment and education of parents, whether parents were alive or dead, whether they are biological parents or stepparents, type of family, place of living, perceived income, type of housing and experiences of death of a family member). It was filled in by asking for information from the parents.

Kinetic Family Drawing Test

The Kinetic Family Drawing Test was developed by Burns and Kaufman in 1970 (Burns and Kaufman, 1970). The children were given an A4 sheet of paper and colored crayons and asked, "Draw a picture of the family while they were doing something." It is applied by giving the directive (Çankırlı, 2011). Observation is made while children are painting; verbal and nonverbal messages of children are noted. In addition, a report is kept by carefully following the body language in which order he draws the figures he draws, in which figures he spends more time. The child is not interfered with during the drawing. If he asks a question, the instruction is repeated. Another redirection is not done as it may change the result of the test. The child is expected to complete the drawing without being pressured about the time. When the child completes the picture, the interview is conducted and the child is asked to describe the picture he has drawn. "Why?", "Why?" such as questioning and judgmental questions are not asked. It focuses on what is drawn and what the characteristics of the drawn figures are. Incomprehensible symbols are clarified during the interview process. With this picture test, information can be obtained about the communication structure in the family, the roles in the family, the place of the child in the family, and family dynamics (Burns and Kaufman, 1970; Çankırlı, 2011).

In the projective analysis, the suitability of the drawing for the child's age, the emotional features it

reflects, the atmosphere created by the painting at first glance, the characteristics of the lines (such as zigzag, suppressed, thick, thin, faint), human figure details, the objects added to the picture, the reflection of family-related features on the picture, family It is interpreted psychologically in terms of features such as the order in which the members are drawn and their proximity to each other, missing family members or overdrawn persons, the order of family members from front to back, and the dimensions of the ones in the picture (Halmatov, 2020). In addition, in this test, interpretations are made on six main styles: separating partitions, enclosing, wrapping, underlaying, overlaying, and underlining individual shapes. In addition, the energy emerging from the interaction of the two figures in the test is analyzed and interpreted (Aslan and Üstün, 2013; Burns and Kaufman, 1970).

Semi-Structured Interview

A semi-structured interview was created by the researcher and included questions about who the family members are, what they are doing in the picture, how they feel, what type of personality they have and what the symbols in the picture mean. The healthy children, who had siblings with cancer, were asked to talk about the pictures they drew and interviewed by using the semi-structured interview. The information obtained here contributes to the interpretation process of the picture test.

Data Analysis

Family pictures, general features (drawing location, exaggerated figures, division into sections, underlay, overlay, drawing style, starting direction of drawing) and drawing features (missing drawings, first family member drawn, last family member drawn, energy of movement, child's family relationship status with its members) and analyzed projectively, using information about the child and family, and the interview with the child about the painting. In the projective analysis process, opinions were taken from 3 experts who have picture analysis certificate. After the data obtained from the pictures were analyzed and analyzed in terms of content, the distribution of the features in the picture was tabulated by showing numerical values (frequency and percentage).

Results

The introductory characteristics of healthy siblings included in the study for themselves, siblings diagnosed with cancer, and their families are given in Table 1. The mean age of the siblings in the study was determined as nine; Most of them are

girls, have two or three siblings and are the second child in their family. It was determined that the majority of healthy siblings had a good performance at school and the majority of them were very good in their relations with their friends. It was determined that the mean age of siblings of the children diagnosed with cancer was eight, the majority of them were girls and they could not go to school. It was determined that the highest rate of caregivers among the sick siblings was the mother. It has been determined that siblings diagnosed with cancer have lived with cancer for an average of two years. It was determined that the majority of the children included in the study had a nuclear family, their families lived in the city and in an apartment, had sufficient income to meet their needs, and experienced the death of a family member (Table 1).

Table 1. Descriptive characteristics of the children and their families

Descriptive characteristics of the healthy children		n	%
Gender	Female	15	75.0
	Male	5	25.0
Number of Siblings	2 siblings	7	35.0
	3 siblings	7	35.0
	4 siblings	5	25.0
	5 siblings	1	5.0
Birth Order	1 st child	7	35.0
	2 nd child	9	45.0
	3 rd child	1	5.0
	4 th child	2	10.0
	5 th child	1	5.0
School Performance	Very good	1	5.0
	Good	16	80.0
	Average	3	15.0
	Poor	-	-
	Very poor	-	-
Relationships with friends	Very good	11	55.0
	Good	9	45.0
	Moderate	-	-
	Poor	-	-
	Very poor	-	-
Mean age		9.87±2.51 years (Min. 7-Max. 14)	
Descriptive characteristics of children diagnosed as cancer		n	%
Gender	Female	12	60.0
	Male	8	40.0
Attending school	Yes	6	30.0
	No	14	70.0

Table 1. (continue) Descriptive characteristics of the children and their families

Descriptive characteristics of children diagnosed as cancer		n	%
The person regularly giving care to the children	Mother	18	90.0
	Father	-	-
	Relatives	1	5.0
	Caregiver paid	1	5.0
Mean age		8.6±5.12 years (Min. 1.5-Max. 17.0)	
Mean duration of treatment		24.95±20.91 months (Min. 6.00-Max. 24.95)	
Descriptive characteristics of the family		n	%
Type of family	Extended family	5	25.0
	Nuclear family	15	75.0
	Parents separated	-	-
Place of living	City	13	65.0
	Town	7	35.0
	Village	-	-
Perceived income	We can fulfill our needs	16	80.0
	We cannot fulfill our needs	4	20.0
Type of housing	Apartment building	17	85.0
	House	3	15.0
Experiencing death of a family member	Yes	15	75.0
	No	5	25.0

It was determined that the average age of the mothers of the children included in the study was 38, all of them were married, the majority of them were unemployed, and half of them were primary school graduates. It was determined that all of the mothers of the children were alive and were their biological mothers. The average age of the fathers of the children was determined as 41; It was determined that all of them were married, the majority of them were working and nearly half of them were primary school graduates. It was determined that most of the fathers were alive and all of them were biological fathers (Table 2).

Table 2. Descriptive characteristics of the parents

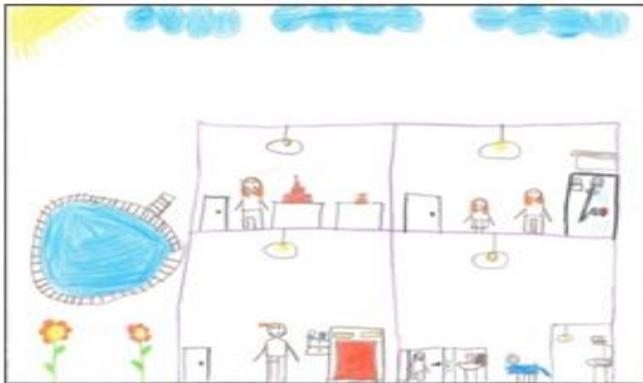
Characteristics	Descriptive characteristics of the mother		Descriptive characteristics of the father		
	n	%	n	%	
Employment	Employed	3	15.0	17	85.0
	Unemployed	17	85.0	3	15.0
Education	Only literate	1	5.0	-	-
	Primary school	10	50.0	8	40.0
	Secondary school	4	20.0	4	20.0
	High school	5	25.0	5	25.0
	University	-	-	3	15.0
Alive	Yes	20	100.0	19	95.0
	No	-	-	1	5.0
Mean age	38.15±7.23 (Min. 28.0-Max. 52.0)		41.10±6.52 (Min. 32.0-Max. 52.0)		

Healthy siblings whose sibling was diagnosed with cancer often drew a picture under the paper, made the overlay and started drawing from the right. Although exaggerated figures are not often drawn, there are rarely large figures and small figures in the drawings of the brothers. Although it is rare, in the drawings of the brothers, dividing the picture into sections, underlaying, drawing by pressing can be seen (Table 3; Picture 1; Picture 2).

It was determined that there was no missing family member in most of the pictures, the first family member was the mother and the last family member was the child himself. In the projective analysis, it was determined that the energy of the movement arising from the interaction with the family members in the drawings of the healthy sibling was mostly negative. In addition, a high rate of isolation/segregation was found in the child's relationship with family members (Table 4).

Table 3. The distribution of the general features of the pictures drawn by the children

Features	n	%	
Location	Bottom	7	35.0
	Top	3	15.0
	Right	4	20.0
	Left	3	15.0
	Equal distribution	3	15.0
Exaggerated figures	Large figures	2	10.0
	Small figures	3	15.0
	No exaggerated figures	15	75.0
Dividing the pictures into sections	Yes	6	30.0
	No	14	70.0
Drawing at the bottom	Yes	5	25.0
	No	15	75.0
Drawing at the top	Yes	11	55.0
	No	9	45.0
Type of strokes	Light	1	5.0
	Bold	7	35.0
	Normal	12	60.0
Starting point for drawing	Right	12	60.0
	Left	7	35.0
	Middle	1	5.0



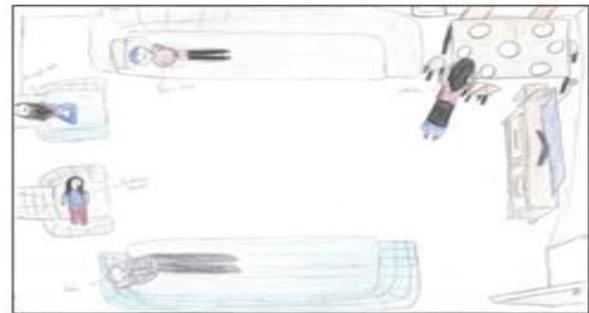
Picture 1. Picture of an eight year old female participant (Example of dividing the picture into sections)



Picture 2. Picture of an eight-year-old male participant (Example of drawing things at the top)



Picture 3. Picture of 14 year old girl participant (The child did not draw herself)



Picture 4. Picture of 14 year old girl participant (Example of lack of intimate relationships between family members)

Table 4. The distribution of some drawing features about the family in the pictures

Features		n	%
Missing members	Ill sibling	4	20.0
	Healthy sibling	1	5.0
	Children themselves	2	10.0
	No missing members	13	65.0
The family member first drawn	Mother	11	55.0
	Father	4	20.0
	Health sibling	3	15.0
	Children themselves	2	10.0
The family member last drawn	Mother	1	5.0
	Healthy other sibling	5	25.0
	Ill sibling	4	20.0
	Children themselves	7	35.0
	Other people	3	15.0
Movement energy	Positive energy	8	40.0
	Negative energy	12	60.0
Relationships of children with family members	Intimate relationship	9	45.0
	Isolation/separation	11	55.0

In the pictures they drew, healthy siblings often drew themselves, their sick siblings, their mothers and fathers with their eyes closed and narrow, their mouths closed, their arms open to both sides and their hands normal. In addition, it was determined that the children mostly did not draw ears to any of

their family members in their drawings. Although rare, children do not scratch their family members (Table 5).

In addition, house, sun, cloud, tree and flower were determined as the most common symbols in family pictures drawn by children.

Table 5. The distribution of individual physical characteristics of family members in the pictures

Characteristics		Healthy child		Ill child		Mother		Father	
		n	%	n	%	n	%	n	%
Eyes	Large-detailed	5	25.0	6	30.0	4	20.0	5	25.0
	Closed-narrow	9	45.0	11	55.0	11	55.0	12	60.0
	Normal	6	30.0	3	15.0	5	25.0	3	15.0
Mouth	Open	7	35.0	7	35.0	7	35.0	5	25.0
	Closed	13	65.0	13	65.0	13	65.0	25	75.0
Ears	Normal	3	15.0	3	15.0	1	5.0	2	10.0
	Larger than normal	-	-	-	-	-	-	1	5.0
	None	17	85.0	17	85.0	19	95.0	17	85.0
Arms	Stretched on both sides	10	50.0	8	40.0	9	45.0	13	65.0
	Attached to the trunk	2	10.0	2	10.0	1	5.0	1	5.0
	Arms extending to family members	2	10.0	6	30.0	4	20.0	-	-
	Arms contacting family members	3	15.0	3	15.0	3	15.0	3	15.0
	Normal	3	15.0	1	5.0	3	15.0	3	15.0
Hands	Fisted	1	5.0	2	10.0	4	20.0	3	15.0
	Hidden/Not drawn	8	40.0	6	30.0	6	30.0	5	25.0
	Bigger than normal	-	-	-	-	-	-	1	5.0
	Normal	11	55.0	12	60.0	10	50.0	11	55.0
Feet	Pointing two different sides	3	15.0	1	5.0	2	10.0	3	15.0
	Pointing to the right side	1	5.0	2	10.0	1	5.0	2	10.0
	Pointing to the left side	2	10.0	3	15.0	4	20.0	3	15.0
	Straight	4	20.0	7	35.0	6	30.0	7	35.0
	None	10	50.0	7	35.0	7	35.0	5	25.0

Discussion

In the pictures drawn by the healthy children included in this study, the ill sibling was mostly drawn at the bottom of the page and there was nothing at the top of the page. It has been reported in the literature that the figures drawn towards the bottom of the page are associated with insufficiency, lack of self-confidence, depression and introversion (Bahcivan-Saydam, 2004). Figures at the top shows severe anxiety, common anxiety or fear (Burns and Kaufman, 1970). When their siblings are diagnosed with cancer, the pattern of things or the life-style healthy children are accustomed suddenly changes. For this reason, they experience uncertainty, lack of confidence and loss of interest and status. In addition, losing friendship of the ill sibling leads to loneliness, sadness, sensitivity and anger (Murray, 1998). Children exposed to uncertainty have fear and anxiety (Sloper, 2000). It has been reported that psychiatric symptoms such as depressive symptoms and anxiety may occur in healthy siblings (Guggemos et al., 2015). In the present study, uncertainty, fear and anxiety in healthy children suggest that their parents might have diverted all their interest to their children with cancer and might

have neglected their healthy children. Siblings who think that they are often forgotten in the family may experience stagnation due to physical and mental problems (Eilertsen et al., 2018). In a qualitative study conducted with siblings of children diagnosed with cancer, siblings stated that despite their desire to maintain a relationship with the sick sibling and to be involved in their care, they felt excluded and being involved in care was a stressful experience (Toft et al., 2019). In a study in which mothers and siblings of children diagnosed with cancer were monitored, it was determined that both mothers and siblings had an increase in mental health care needs and continued for a long time when compared to the general population (Van Warmerdam et al., 2020). In addition, one of the parents accompanies their ill children during their hospital stays and the other parent spends most of his/her time with them. This leads healthy children to become separated from their parents. Lack of confidence, presence of depression signs, introversion, fear and anxiety detected in the pictures drawn by the healthy children can be explained by their separation from their parents.

In the current study, none of the family members was missing in most of the pictures. The missing member was the ill sibling in the highest rate of the remaining pictures. It has been noted in the literature that the missing family member in pictures drawn by children is usually a sibling with who they are jealous of and experience conflicts with (Bahcivan-Saydam, 2004). The exclusion of a sibling in a picture may suggest that the child wants to get rid of and reject that sibling (DiLeo, 2013). The family is the primary source of social support for children. Parents with children diagnosed with cancer spend most of their time and energy with their ill children and their healthy children are deprived of social support they need. This causes them to experience an adjustment disorder (Alderfer et al., 2010). In a study examining the experiences of siblings in the families of children diagnosed with blood cancer, it was determined that the general perceptions of healthy siblings, such as feeling the family as a source of support and communication, and perceiving love and compassion, continued to have positive characteristics. However, in the same study, healthy siblings stated that many things in the family changed significantly with the diagnosis of cancer, more focus was placed on the sibling diagnosed with the disease, everyone's responsibilities changed, and the family was fragmented (Van Schoors et al., 2019). In the present study, the most frequently missing family member in the pictures was the ill sibling. This can be explained by changes experienced in the family and negative feelings about the ill sibling.

The order of drawing the family members is of great importance. Family drawings reflect perceptions about family members and the structure of the family. The first person drawn by children can be either the most valued and loved one or the one with whom they experience conflicts or problems with developing intimacy (Çankırılı, 2011). In the current study, in most of the pictures, the family member first drawn was found to be the mother. This may show that the mother was the most important and loved family member. In the present study, the mother as a family member drawn first suggests that the children put the greatest importance on their mothers and missed them due to changes in their relationships.

The last family member most often drawn by healthy children was themselves. Children express their own value and their feeling of belongingness to their families through their location in the picture. The last drawn family member can be the one

disregarded or felt discomfort about (Bahcivan-Saydam, 2004). When mothers always stay with their ill children in hospital, family members staying at home change their routines and follow a different pattern of things at home (McGrath et al., 2005). Conflicts within the family in this process also cause healthy siblings to feel invisible and not accepted (Eilertsen et al., 2018). As a result of a systematic review study investigating psychosocial functionality in siblings of children diagnosed with cancer, it was stated that there is a strong need for support from siblings, especially those in risk groups (Long et al., 2018). In the current study, the healthy children drew themselves last. It may be that they have low self-respect or consider themselves less valued by other family members.

In the pictures, the children were found to experience isolation or separation in their relationships with their families. Pictures drawn by children can reveal social support from the family and feelings about attachment styles, changes in perceived belongingness to the family and communication and relationships between family members (Malchiodi and Yurtbay, 2005). In a study investigating the effect of cancer on family relationships between children aged 8-17 years with cancer and their siblings, it was determined that siblings had worse family relationships than children who were treated (Erker et al., 2018). After one of their siblings is diagnosed with cancer, healthy children may feel that they are neglected. This may result in fear, anger, anxiety or depression in these children (Labay and Walco, 2004). Consistent with the literature, the children in the present study were found to experience a feeling of worthlessness since they were neglected. It was evident in their pictures where they drew themselves last.

The energy of the movement in most of the pictures was found to be negative. Burns and Kaufman (1970) reported that energy born from two people could be internalized during a disease or threat and as a result, the energy of anxiety can appear (Burns and Kaufman, 1970). Disruption of the familial integrity and functioning during the treatment of the ill child, changes in parental roles, parents' blaming each other for the disease, inability to cope with anger and sadness, hopelessness and loneliness can cause some psychiatric symptoms to develop (McGrath et al., 2005). In addition, a study found that depressive symptoms in parents after cancer diagnosis were positively related to emotional/behavioral problems in siblings (Alba-

Suarez et al., 2021). Presence of a negative energy in most of the pictures drawn by the healthy children might have resulted from decreased libidinal energy due to inadequate positive feelings and enjoyment in the relationships between the family members.

When typical physical characteristics in the family drawings were examined, eyes were narrow and closed, the mouth was closed, arms were stretched on both sides, hands were normal and ears and feet were missing at highest rate in the pictures. The second most frequent feature of the hands in the pictures was that they were either hidden or not drawn at all. Small eyes, eyes in the shape of dots or eyes without pupils point to an insufficient connection with people around, disinterest in them and introversion. A closed, narrow mouth or a mouth in the shape of a line shows that an individual avoids establishing relationships with others. Pictures of ears can provide information about social relationships of children. The absence of ears in the picture may suggest problems with social relationships and weak relationships with others (Halmatov, 2020). Besides, when family members criticize each other, speak loudly or use a negative discourse, children may draw small ears or not draw them at all in their pictures (Çankırılı, 2011). Arms stretched out can appear in pictures drawn by friendly people establishing intimate relationships with others. However, they can also indicate a willingness to establish an intimate relationship (Halmatov, 2020). Since hands, arms, legs and feet symbolize some abilities and skills like power, support, movement, confidence and independence, absence or small sizes of one of these organs show that the organ does not function well and that the child does not have self-confidence, is not provided support and loved by his/her family and feels weak and worthless (Çankırılı, 2011). If a member of a family experiences a problem, that problem affects the other members. The presence of a chronic disease in a child does not only remain a difficult life experience for that child; it affects other members of the family under certain conditions as well (Karakavak and Cırak, 2006). Children with ill siblings may not receive sufficient interest and think they have become invisible to family members (Labay and Walco, 2004). In this process, it is stated that healthy siblings need honest and open communication and support their family members during the treatment process. In addition, another issue they specifically need is emotional support (Tasker and Stonebridge, 2016). On the other hand, as the priorities of parents change, their social and

work-related relationships also decrease. Together with other people in their social environment, parents forget even “themselves” (Moghaddasi et al., 2018). In the present study, according to characteristics of the body parts of the family members, the children perceived that they and members of their families were weak, introverted and inadequate in building relationships and needed intimate relationships and social support.

The children utilized some symbols in their pictures such as homes, the sun, clouds, trees, flowers, roofs and windows. Pictures of homes are effective tools to understand interpersonal relationships. They reflect impressions of children about their family lives and their opinions about their relationships with other people (Malchiodi and Yurtbay, 2005). Clouds mostly represent family members. If a cloud or clouds cover the sun, one family member has separated the child from his/her mother (Halmatov, 2020). Chronic diseases change lifestyles of families and relationships between family members. Mothers take more responsibility for the care of their children with chronic diseases than other family members. This causes them to spend less time with other family members and experience problems with fulfillment of their expectations (Karakavak and Cırak, 2006). The pictures in the current study also revealed that the healthy children needed affection and the sense of security.

Conclusion and Recommendations

In the study, as a result of the psychological evaluation of the pictures of healthy children aged 7-14 and their siblings diagnosed with cancer, it was determined that family perceptions were negative. It has been determined that siblings have negative perceptions especially about their position/role in the family, and they perceive themselves as less valuable and important for their families. It was determined that the perceptions of family integrity in siblings of the child diagnosed with cancer changed negatively and they perceived fragmentation. In addition, it was determined that the siblings had symptoms such a lack of self-confidence, introversion, fear and anxiety. Siblings reflected the family member they missed the most as "mother". In line with the results obtained from the pictures, the information that the siblings need a sense of love and trust was obtained.

In the light of these results, it is suggested that nurses should be aware of the psychosocial care needs of healthy siblings and parents as well as

children with cancer, make plans to maintain effective intra-familial communication, and engage in practices to reduce the burden of care for parents. In addition, it is thought that it is important for nurses to carry out awareness studies for the needs of healthy siblings and to plan activities to maintain the interaction between sick and healthy siblings. In addition, it is recommended that the family become aware of social support systems and provides counseling so that they can use these systems effectively. In addition to these, there is a need to increase the studies on the subject.

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What did the study add to the literature?

- Although studies on the experiences and psychosocial needs of healthy siblings of children diagnosed with cancer have increased in recent years, the need for information on the subject continues. Especially, the number of studies conducted in Turkey on the subject is very few.

- The results of this study, in which children's feelings and thoughts that they have difficulty in expressing verbally, are obtained through pictures and psychological evaluations of pictures for family perception are made, reveal important findings regarding the needs of healthy siblings.

- In addition, the results obtained in the research will be a guide in terms of the contents that should be addressed in studies to be carried out to protect the mental health of healthy siblings.

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