

# Effects of Difficulties Experienced by Adolescents Who Have a Parent with Cancer on Their Psychological Condition

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## ABSTRACT

*This descriptive study was designed to identify effects of difficulties experienced by adolescents who have a parent with cancer on their psychological condition. The study involved children of 13–18 years of age accompanying their parents who were receiving cancer treatment. The data were collected by a questionnaire prepared by the researchers, »Brief Symptom Inventory« and statistically compared. According to the results of the study, the children involved in the study generally showed high rates of psychological symptoms in the Brief Symptom Inventory. It was found that generally children who had to care for their ill parent and had not been allowed time for themselves in the study. It established that children who had to take on housework duties, income of family and couldn't spent time with their friends was found that a significant difference between the groups ( $p < 0.05$ ). Taking these results into account, it could be recommended that patients, as well as their children, should be taken into account. The responsibilities that children are forced to undertake should be reduced by increasing the at-home care duties for cancer patient.*

**Key words:** children, parental cancer, nursing

## Introduction

Cancer is a problem that occurs frequently, bringing with it many social aspects and threats to the fundamental family structure, including death. In Turkey, cancer as a cause of death is second after cardiovascular illnesses, and it is the same in many other countries in the world<sup>1,2</sup>. The term »cancer« itself is enough to invoke fear, which is rooted in the worry, illness, and stress which occurs when problems arise during the course of therapy. Cancer patients' children, relatives, and friends are almost always negatively affected, as cancer patients<sup>3</sup>.

It has been discovered that parental cancer and therapy courses have the potential to cause very different psychological effects on the children and people involved in caring for ill parents<sup>4</sup>. When a parent is diagnosed with cancer, it affects the physical and psychological health of the children. Parental cancer causes familial exhaustion by generating stress, anxiety, fear, guilt, and worry<sup>5</sup>. An established separate study found that children with ill parents experienced mental and behavioral

problems at high levels due to the added responsibility they face<sup>6,7</sup>.

After their parent has become ill, adolescents are usually obligated to take on a parental role. Some adolescents have to take on the responsibilities of the ill parent, so they experience psychological problems such as anxiety and depression<sup>7</sup>. Furthermore, they become responsible for their siblings and are also expected to do housework during the illness<sup>8–11</sup>. Research has established that people, including children, who care for cancer patients do not take enough time for themselves and their family members. Consequently, they experience health problems and complain of exhaustion<sup>12,13</sup>. Furthermore, qualitative studies have shown that children whose parents have cancer experience difficulty doing homework and thus suffer from impaired academic performance. Some adolescents leave school early or arrive late because they have to take care of their sibling(s), so they sometimes are not able to complete their lessons. Taking on the role of parent does not allow time for fun activities, which

should be a part of every child’s extracurricular behavior<sup>9,14</sup>.

Studies which have attempted to identify the difficult psychological conditions experienced by children of parents with cancer can serve as a guide to families and health care professionals. The responsibilities of nurses are important for attempting to establish the problems that are experienced by all the involved parties, and then attempting to remove them. The information that is obtained regarding the children can give nurses an opportunity to guide parents as to how they can support their children during their time of illness, and how to properly collaborate with family members.

### Material and Methods

This descriptive study was carried out to determine the effects of difficulties experienced by adolescents who have a parent with cancer affect their psychological condition. The study was carried out in a university hospital’s medical and radiation oncology clinics between December 2006 and May 2007.

In this study, the children of 90 parents who were undergoing therapy for cancer were asked to participate. The children were in the age range of 13–18 and had parents who had been diagnosed with cancer from six months to five years. The children involved all knew how to read and write, and were themselves without any health problems.

Data was collected by interviews which were conducted face-to-face with the parents and their children. The Brief Symptom Inventory (BSI) was used for conducting psychopathological assessments of the adolescents and adults, as was a questionnaire form prepared which considered related and relevant literature<sup>6,8,9</sup>. The BSI, which was developed in 1992 by Derogatis, is a short form of SCL-90-R that was based on studies of the Symptom Distress Check List (Symptom Distress Check List-SCL 90-R)<sup>15–17</sup>.

The Turkish adaptation of BSI has been realized through three studies done by Sahin and Durak et al.<sup>16</sup> In these studies, it has been established that the scale is to be composed of five factors: anxiety, depression, negative identity, somatization, and hostility. Cronbach’s alpha coefficients in this study established an anxiety sub-scale of 0.87, a depression sub-scale of 0.75, a negative identity sub-scale of 0.74, a somatization sub-scale of 0.68, and a hostility sub-scale of 0.63.

For the evaluation of data percentage distributions, means, t-test in independent groups, Mann Whitney U-test, and Kruskal Wallis variance analysis, Cronbach’s alpha coefficient was used.

### Results

The study examined the demographic features of adolescents and their ill parents to present findings about the effects of the difficulties that adolescents experienced on their psychological condition in conjunction with their parents’ illness.

According to the data obtained, it was found that the average age of the children in this study was 15.64±1.81. 52.2% of the children were female, and 75.6% of them had already graduated from primary school. It was established that the ill parents’ average age was 48.62±8.01. Of the parents, 66.7% of them were mothers, 64.2% of them were housewives, and 51.1% of them were in a group of literate/primary school-graduated.

When distributions owing to the descriptive properties of families within this study were searched, it was found that 71.1% of them were a nuclear family, 50.0% of them lived in city centers, 91.1% of them had a social assurance, and 57.8% of them stated their level of income as medium level.

Most (64.4%) of the children expressed that familial roles had changed, and the majority (58.6%) stated that they had taken on their mother’s role. The study found that the mean psychological symptom scores of children who said that their family’s roles had changed (in that

TABLE 1  
TAKING ON THE RESPONSIBILITIES AND COMPARISONS OF THE CHILDREN’S MEAN PSYCHOLOGICAL SYMPTOM SCORES

	Anxiety $\bar{X}\pm SD$	Depression $\bar{X}\pm SD$	Negative identity $\bar{X}\pm SD$	Somatization $\bar{X}\pm SD$	Hostility $\bar{X}\pm SD$	BSI $\bar{X}\pm SD$
Changing role						
Yes (64.4%)	14.91±10.35	19.19±9.25	13.63±8.62	8.38±5.86	8.03±4.38	64.13±31.40
No (35.6%)	13.24±8.31	20.79±7.92	10.38±7.48	6.59±5.31	6.90±4.29	57.90±28.79
Test and p	t: 0.833 p>0.05	t: 0.867 p>0.05	t: 1.867 p>0.05	t: 1.475 p>0.05	t: 1.192 p>0.05	t: 0.951 p>0.05
Loaded Roles						
Mother’s role (58.6%)	11.15±6.05	19.24±6.40	8.03±5.70	5.24±3.73	5.74±3.79	49.38±20.43
Father’s role (22.4%)	15.31±9.55	21.23±7.63	13.00±8.04	9.15±6.57	8.08±4.68	66.77±32.15
Care giving role (19.0%)	17.27±11.16	25.09±11.12	14.55±9.32	7.73±6.84	9.09±4.42	73.73±38.50
Test and p	KW: 3.421 p>0.05	KW: 3.998 p>0.05	KW: 6.411 p>0.05	KW: 4.188 p>0.05	KW: 5.017 p>0.05	KW: 5.418 p>0.05

they had to take on the role of caregiver). were higher than other children's mean psychological symptom scores ( $p > 0.05$ , Table 1). Children who had to take on housework duties after their parents had become ill had points averaging lower than children who did not have to take on housework. It was determined that the differences were important in terms of somatization, hostility,

and psychological sign points ( $p < 0.05$ ). It was established that children who had to take on the income-generation role of their families had significantly higher scale point averages. The study found that the difference among the groups studied, with the exception of negative ego, was significant ( $p < 0.05$ ). Although the mean psychological symptom scores of children who had to take on the re-

**TABLE 2**  
THINGS CHILDREN HAD TO DO AND COMPARISONS OF THE CHILDREN'S MEAN PSYCHOLOGICAL SYMPTOM SCORES

	Anxiety $\bar{X} \pm SD$	Depression $\bar{X} \pm SD$	Negative identity $\bar{X} \pm SD$	Somatization $\bar{X} \pm SD$	Hostility $\bar{X} \pm SD$	BSI $\bar{X} \pm SD$
I had to care of my ill parent						
Yes (94.4%)	14.00±9.01	20.45±8.45	11.49±7.87	7.01±5.11	7.34±4.30	60.29±29.14
No (5.6%)	11.00±10.65	16.40±7.06	12.20±11.19	10.80±10.85	6.60±5.32	57.00±42.62
Test and p	U: 177.000 $p > 0.05$	U: 152.500 $p > 0.05$	U: 210.500 $p > 0.05$	U: 193.500 $p > 0.05$	U: 205.500 $p > 0.05$	U: 193.000 $p > 0.05$
I had to take on housework						
Yes (38.9%)	12.65±8.31	19.55±8.37	10.27±7.11	6.25±4.89	6.45±4.03	55.18±27.44
No (61.1%)	15.69±9.98	21.29±8.46	13.51±9.00	8.74±6.21	8.63±4.51	67.86±31.87
Test and p	t=-1.497 $p > 0.05$	t=-0.955 $p > 0.05$	t=-1.900 $p > 0.05$	t=-2.116 $p < 0.05$	t=-2.321 $p < 0.05$	t=-1.940 $p < 0.05$
I had to take on income of my family						
Yes (23.3%)	17.05±8.43	23.67±8.08	14.00±8.42	8.48±4.20	8.81±2.89	72.00±26.56
No (76.7%)	12.86±9.08	19.17±8.27	10.78±7.78	6.84±5.87	6.84±4.60	56.49±29.86
Test and p	U: 504.000 $p < 0.05$	U: 465.000 $p < 0.05$	U: 553.500 $p > 0.05$	U: 472.500 $p < 0.05$	U: 470.500 $p < 0.05$	U: 458.000 $p < 0.05$
I had to take on my siblings						
Yes (74.4%)	13.96±8.63	21.01±8.25	11.73±7.68	7.09±5.36	7.66±4.43	61.45±29.35
No (25.6%)	13.48±10.42	17.91±8.58	10.96±9.04	7.61±6.16	6.26±3.95	56.22±31.11
Test and p	U: 742.000 $p > 0.05$	U: 624.000 $p > 0.05$	U: 700.000 $p > 0.05$	U: 765.500 $p > 0.05$	U: 623.500 $p > 0.05$	U: 685.000 $p > 0.05$

**TABLE 3**  
DIFFICULTIES EXPERIENCED AND COMPARISONS OF THE CHILDREN'S MEAN PSYCHOLOGICAL SYMPTOM SCORES

	Anxiety $\bar{X} \pm SD$	Depression $\bar{X} \pm SD$	Negative identity $\bar{X} \pm SD$	Somatization $\bar{X} \pm SD$	Hostility $\bar{X} \pm SD$	BSI $\bar{X} \pm SD$
I couldn't study my lesson sufficiently						
Yes (55.6%)	14.96±8.90	20.84±7.88	12.16±8.43	6.88±5.47	7.84±4.43	62.68±29.93
No (44.4)	12.43±9.18	19.45±9.05	10.75±7.47	7.65±5.68	6.63±4.17	56.90±29.52
Test and p	t=1.324 $p > 0.05$	t=0.778 $p > 0.05$	t=0.829 $p > 0.05$	t=0.653 $p > 0.05$	t=1.328 $p > 0.05$	t=0.916 $p > 0.05$
I couldn't allow time for myself						
Yes (88.9%)	13.89±9.32	20.91±8.26	11.75±8.17	7.21±5.45	7.39±4.54	61.15±30.40
No (11.1%)	13.40±7.01	14.70±7.82	9.80±6.70	7.30±6.60	6.60±2.07	51.80±23.22
Test and p	U: 365.500 $p > 0.05$	U: 237.500 $p < 0.05$	U: 350.500 $p > 0.05$	U: 368.500 $p > 0.05$	U: 369.500 $p > 0.05$	U: 321.500 $p > 0.05$
I couldn't spend time with my friends						
Yes (86.7%)	14.06±9.44	20.96±8.38	12.10±8.04	7.55±5.43	7.49±4.52	62.17±30.29
No (13.3%)	12.33±6.17	15.42±7.06	7.83±7.02	5.08±6.07	6.08±2.61	46.75±22.33
Test and p	U: 451.500 $p > 0.05$	U: 285.000 $p < 0.05$	U: 298.500 $p < 0.05$	U: 312.000 $p > 0.05$	U: 395.000 $p > 0.05$	U: 297.000 $p < 0.05$

sponsibility of caring for their sibling(s) were higher than other children's scores, the difference was statistically insignificant ( $p > 0.05$ , Table 2).

Even children who had expressed that they could not study their lessons sufficiently had high scale point averages, except in regards to somatization. Results showed that the difference among the groups studied was not important ( $p > 0.05$ ). It was found that children who expressed that they could not allow time for themselves had higher depression point averages ( $20.91 \pm 8.26$ ) than other sub-groups, and that the difference among groups studied was important in depression related aspects ( $p < 0.05$ ). Children who expressed that they could not spend time with their friends had higher scale point averages, and it was found that the difference among the groups studied was significant in regards to depression, negative ego, and total psychological distress ( $p < 0.05$ , Table 3).

## Discussion

When a member of a family is diagnosed with cancer, the entire family has to cope with a difficult situation, including the parents and their close friends and family members. Research has established that parental cancer and treatment cause different psychological effects in children and any other people who have to take care of an ill parent<sup>4</sup>. Another study has emphasized that parental cancer affects children's psychological status<sup>6</sup>. Studies that examine children who have parents with cancer have established that those children experience high levels of mental and behavioral problems<sup>7,18</sup>. When people had to take responsibility for caring for their family an ill parent and other family members, they experienced many severe difficulties<sup>11</sup>.

The literature reveals that a diagnosis of cancer can change familial roles and disrupt familial balance<sup>11,19</sup>. When this study examined children's mean psychological symptom scores in response to their changing roles within their family, it found that the group scores did not differ. On the other hand, the mean psychological symptom scores of children who took on a caregiver role and experienced a change in their family's roles were higher than other children's scores (Table 1). Qualitative studies have discovered that parents may strive to maintain their family's daily life as much as possible, but cancer inevitably changes familial roles<sup>10,20</sup>. Studies on this subject have found that taking on a parental role makes adolescents experience psychological problems such as anxiety and depression<sup>7,10</sup>.

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Because of the difficulties children face after their parents become ill, the mean psychological symptom scores of adolescents who have to care for an ill parent and/or take on responsibilities for their family and sibling(s) were higher than other children's scores (Table 2). The literature states that adolescents are put in a situation in which they may have to do more housework than they did before their parent's illness, in addition to caring for their ill parent, and taking on responsibility for their sibling(s) during their parent's treatment<sup>6,9,21</sup>. Findings have emphasized that these increased responsibilities cause many psychological problems, especially in girls<sup>1</sup>.

Research has found that after their parents become ill, children who could not study enough, or spend enough time alone or with their friends have high mean psychological symptom scores. The results of the group who expressed that they could not spend time with their friends were statistically significant ( $p < 0.05$ , Table 3). Findings have established that people who had to care for a cancer patient could not spend enough time either alone or with their friends and family members experienced health problems and complained of exhaustion<sup>12</sup>. Some qualitative studies have established that children whose parents had cancer had difficulty doing their schoolwork and suffered decreased academic performance<sup>9,14</sup>.

It is well-known that relationships with friends are very important to adolescents. Spending time with groups of friends allows children to get away from the negativities they experience and they can try to find solutions to their problems by sharing them with their friends<sup>22</sup>. Children 13–18 years old who expressed that they could not spend time with their friends had high mean psychological symptom scores, consistent with the literature<sup>23</sup>.

Taking these results into account, it could be recommended that their children, as well as the ill parent, should be taken into account. Professional support and education should be provided to help patients and their families cope with the psychological conditions to which they are subjected. The responsibilities that children are forced to undertake should be reduced by increasing the at-home care duties for cancer patient. Parents who have fallen ill should consciously support their children and keep an eye out for their psychological well-being. Studies for determining psychological status, which are done mostly for patients, should include children from different age groups. Furthermore, these children and their families should use social support mechanisms to effectively cope with the difficulties they experience.

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## **UČINCI POTEŠKOĆA DOŽIVLJENIH MEĐU ADOLESCENTIMA KOJI IMAJU RODITELJA S KARCINOMOM NA NJIHOVO FIZIOLOŠKO STANJE**

### **SAŽETAK**

Ova opisna studija napravljena je kako bi se identificirali učinci poteškoća doživljenih među adolescentima koji imaju roditelja s rakom na njihovo fiziološko stanje. Studija je uključivala djecu od 13 do 18 godina zajedno s njihovim roditeljima koji su na terapiji zbog karcinoma. Podaci su sakupljeni pomoću upitnika pripremljenih od istraživača, »Kratki inventar simptoma« (»Brief Symptom Inventory«), i statistički obrađeni. Prema rezultatima studije, djeca koja su uključena u istraživanje općenito su pokazala visoku stopu fizioloških simptoma u upitniku. Općenito, djeca koja su morala brinuti za svoje bolesne roditelje nisu imala vremena sudjelovati u istraživanju. Djeca koja su preuzela kućanske poslove, izrađivanje za obitelj i nisu stizala družiti se s vršnjacima pokazala su značajnu razliku među grupama ( $p < 0,05$ ). Uzimajući ove rezultate u obzir, možemo preporučiti da se pacijenti, kao i njihova djeca, uključe u terapiju. Odgovornosti koje su djeca prisiljena preuzeti trebala bi se smanjiti pomoću kućnog liječenja pacijenata.