Identification of psychological symptoms and associated factors in adolescents who have a parent with cancer in Turkey

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ABSTRACT

Purpose: This descriptive study was designed to identify the psychological symptoms and associated factors in the adolescent children of cancer patients.

Methods: The data were collected by a questionnaire developed by the researchers, "The Brief Symptom Inventory" and "The Scale of Social Support provided by the Family and Friends" and statistically compared.

Samples: The study involved adolescents of 13–18 years of age accompanying their parents who were receiving cancer treatment.

Results: According to the results of the study, the adolescents involved in the study generally showed high rates of psychological symptoms, and the score for the subdimension of depression, one of the psychological symptoms listed in the Brief Symptom Inventory, was the highest (20.22 ± 8.40). The mean anxiety, depression, negative identity, somatization, hostility and total psychological symptom scores of the boys were higher than those of the girls, and the difference between the mean scores of psychological symptoms in male and female genders was statistically significant ($p < 0.05$). The scores of perceived social support by the family and friends and psychological distress were not significantly associated ($p > 0.05$).

Conclusion: In light of these findings, the importance of caring for the adolescents along with their parents and providing them with professional support to overcome their psychological distress has become evident.

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Introduction

Cancer is a common and fatal disease that threatens health and the family structure of an individual. Among diseases that result in mortality, it is the second most common reason for death in many countries worldwide and in Turkey, following cardiovascular diseases (Bilge and Ünal, 2005; Senler, 1998). Changes in life style and social role, financial difficulties, increased demand for the care of a cancer patient, and experiencing fear and vagueness about their future constitute psychological problems in patients as well as the members of their family (Ateşçi et al., 2003).

For adolescents, cancer development in their parents is a highly traumatizing event. After an adolescent finds out about their parents' condition, they initially go into a state of shock, followed by problems such as intensive stress, anxiety, irritability, depression, somatic problems, lack of concentration, and disordered sleep (Küçükoğlu and Çelebioğlu, 2008; Compas et al., 1994; Nelson et al., 1994). In time, they develop age and gender specific reactions to the cancer development in their parents through psychological problems such as introversion and depression (Küçükoğlu and Çelebioğlu, 2008; Huizinga et al., 2005). In addition, with fear development of such a disease in themselves in the future, adolescent experience various psychological problems (Huizinga et al., 2005; Visser et al., 2004; Haris and Zakowski, 2003; Spira and Kenemore, 2000).

Various factors affect the strategies of adolescent to cope with negative effects of their parents' illness. Among these factors, developmental stages and gender of the adolescent, their awareness of the disease, social status of the family, prognosis of the disease, the gender of the parent with cancer, support received from the family and friends can be listed (Huizinga, 2006; Huizinga et al., 2005; Visser et al., 2005; Compas et al., 1994).

Literature reveals several studies on the psychosocial problems of cancer patients. However, psychological symptoms and

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associated factors in adolescent of cancer patients have not been studied extensively in Turkey.

Aim

The first aim of this study was to examine the level of psychological symptoms in adolescent who have a parent with cancer.

The second aim was to determine effects of various variables (socio-demographic factors of adolescent, adolescent's perception of the seriousness of the parent's illness, trait anxiety and cancer-related variables) on psychological symptoms reported by adolescent.

Methods

Design

This study used a cross-sectional descriptive design.

Population and sampling

The data were collected in the Radiation Oncology and Medical Oncology Clinics of a university hospital between December 6, 2006 and May 22, 2007. The adolescents (total number: 90) who met the criteria of the study were randomly selected for the study. Inclusion criteria included; having a parent who had been diagnosed with cancer within the last 6 months-5 years, being in the age range of 13–18, being literate, having no health problems, accompanying the parent(s) at the hospital and whose parents were hospitalized at the clinics where the study was conducted between the dates specified.

The study results provide findings on characteristics of the adolescent, their parents, and families as well as distribution of the mean scores for psychological symptoms. According to the data obtained, it was found that the adolescent's average age in this study was 15.64 ± 1.81 ($n = 90$, age range: 13–18), 52.2% of them were female ($n = 47$), and 75.6% of them ($n = 68$) were primary school-graduated. It established that the ill parents' average age was 48.62 ± 8.01, 66.7% of them were mothers ($n = 60$), 64.2% of them ($n = 58$) were housewives, and 51.1% of them ($n = 46$) were in a group of literate/primary school-graduated (Table 1).

Data collection tools

Data collection was undertaken using a questionnaire devised in the light of relevant literature (Huizinga, 2006; Visser et al., 2005, 2004; Compas et al., 1994). The "Brief Symptom Inventory" (BSI) (Şahin et al., 2002; Şahin and Durak, 1994) and the "Scale of Perceived Social Support from the Family and Friends" (Eskin, 1993) were used. The questionnaire and scales were applied in face-to-face interviews which lasted about 25–30 min.

The 'Brief Symptom Inventory', which is used to evaluate psychopathology in adolescents and adults, was developed by Derogatis (1992). This questionnaire is the shorter form of SCL-90-R developed in the light of the studies with mental scanning list (Symptom Distress Check List - SCL-90-R) (Şahin et al., 2002; Şahin and Durak, 1994). The Turkish version of BSI was developed by Şahin and Durak (Şahin and Durak, 1994; Savaşır and Şahin, 1997) and BSI items consist of anxiety (12 items), depression (13 items), negative identity (12 items), somatization (9 items) and hostility (7 items) subdimensions. In this study, Cronbach alpha coefficiency of anxiety subdimensions was determined as 0.87; of depression subdimension, 0.75; of negative identity subdimension, 0.74, of somatization subdimension, 0.68, and of

Table 1
The distribution of the characteristics of the adolescents, parents, and families.

Descriptive characteristics	Number	%
Age (year)		
13–18	90	X: 15.64 ± 1.81
Gender		
Female	47	52.2
Male	43	47.8
Educational level		
Literate	4	4.4
Primary school	68	75.6
High school	18	20.0
The parent with cancer		
Mother	60	66.7
Father	30	33.3
Healthy parent		
Mother	31	34.4
Father	59	65.6
The occupation of the cancer patient		
Homemaker	58	64.2
Government employee	13	14.4
Retired	10	11.1
Self-employed	9	10.3
The occupation of the healthy parent		
Homemaker	27	30.0
Government employee	19	21.1
Retired	4	4.4
Self-employed	40	44.5
The educational level of the cancer patient		
Illiterate	34	37.8
Literate/primary school grad.	46	51.1
Junior high sch/high school grad.	10	11.1
The educational level of the healthy parent		
Illiterate	26	28.9
Literate/primary school grad.	53	58.9
Junior high sch/high school grad.	11	12.2
The age of the parent	X:48.62 ± 8.01[a]	X: 49.48 ± 9.43[b]
Place of residence		
City	45	50.0
Town	14	15.6
Village	31	34.4
Type of family		
Nucleus	64	71.1
Extended	21	23.3
Broken	5	5.6
Social security		
Yes	82	91.1
No	8	8.9
The income level of the family		
High	25	27.8
Middle	52	57.8
Low	13	14.4
Total	90	100.0

[a] Patient.
[b] Healthy.

hostility subdimension, 0.63. BSI has been used in similar studies previously carried out in this subject (Brown et al., 2007; Baider et al., 2008).

The 'Scale of Perceived Social Support from Family and Friends', which is used to determine the level of support by the family to the children, was developed by Pracidona and Heler. Its reliability and validity have been evaluated by Eskin (1993). The scale is comprised of items that reflect the feelings and experiences of an individual related to his/her interactions with family and friends. In this study, Cronbach alpha coefficiency value of the scale of perceived social support from family was determined as 0.78, and Cronbach alpha value of the scale of perceived social support from friends was 0.83.