

ASSESSMENT OF PSYCHOLOGICAL STATES OF CHILDREN WITH CANCER IN A TURKISH SAMPLE

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SUMMARY

To assess the psychological states of the children with cancer, 18 children with cancer and 24 healthy children were selected. The Children's Depression Inventory (Parent Form) and Hacettepe Emotional Adjustment Scale were administered to their mothers. Scores on both Children's Depression Inventory (Parent Form) and Hacettepe Emotional Adjustment Scale were higher in children with cancer compared to healthy children, but the differences were not statistically significant. Despite having so much stress, the scores indicated no psychological difficulty, which led us to conclude that children with cancer probably used the denial as a healthy defence or that due to their young ages they did not realise the severity of their condition.

Key Words: Depression; Children's Depression Inventory, Adjustment, Childhood Cancer
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ÖZET

Bir Türk Örnekleme Kanseri Çocukların Psikolojik Durumlarının Belirlenmesi

Çocuklarında kronik ve ölümcül hastalık olan ebeveynlerin psikolojik durumlarını değerlendirmek için, çeşitli tipdeki kanserli çocukların 20 ebeveyni ve sağlıklı çocukların 25 ebeveyni seçildi. Tüm anne ve babalarına Ruhsal Belirti Tarama Listesi 90 (SCL-90) ve Stres kaynakları ve ölçeği uygulandı. Kronik hastalıklı çocukları olan ebeveynlerin depresyon ve anksiyete skorları, sağlıklı çocukların ebeveynleriyle kıyaslandığında daha yüksek bulundu. Bulgular bu ebeveynlerin mali problemlere maruz kaldığı, aile fırsatlarının kısıtlandığı ve yaşam çocuk bakımına harcadığını göstermektedir.

Anahtar Kelimeler: Ruhsal Belirti Tarama Listesi 90, Ebeveyn, kronik hastalık
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Acute diseases can affect children in a certain time of their lives and prohibit them from certain activities. But generally acute diseases dissipate in a relatively short time and let the children regain their daily activities. Chronic diseases, however, may be progressive and lethal or result in life-long disabilities. For this reason chronic disease may affect the psychological balance of the children (1). Moreover, because of recent improvements in medicine many chronic diseases have become nonfatal and the life expectancy has increased (1). While in the past treatment of children with cancer was the only important concern, recently as cure of cancer becomes increasingly successful, interest has turned to psychosocial problems (2,3).

There are a number of childhood cancers of which acute lymphocytic leukemia is the most common (4). Advances in the treatment of cancer have increased the survival rate year to over 60% (5). It is estimated that by the year 2000, that one in 1000 adults will have survived cancer in childhood (6). In the literature, there are studies of childhood

depression including only children with leukemia (3) as well as studies including children with any cancer (6). There are also studies focusing on adjustment of survivors, psychological changes in parents of children with cancer, and marital and family functioning. Surprisingly, on self-report measures, survivors and children undergoing treatment report low rates of depression (6,7,8,9). Some researchers report overall good adjustment and few differences between cancer survivors and controls (6,7,8). However, difficulties with adjustment have also been documented (10)

The current study was designated to examine the psychological states of children with cancer through mothers' eyes. It was hypothesised children with cancer would show more depressive symptoms and emotional maladjustment than controls. However, in this study psychological states of children were assessed based on the perception of mothers by administering two different self-report scales.

METHOD

Subjects

Eligible subjects included all of the children hospitalised between March 1993 and March 1994 with a diagnosis of any paediatric cancer and receiving treatment at the Department of Paediatrics of Gülhane Military Medical Academy. Ages of subjects were between 5 and 12 yr. with the mean of 7.8. Of 18 subjects, 7 were girls and 11 were boys. Controls were selected among children with no physical and psychological problems. Of 24 controls, 12 were girls and 12 were boys. Controls

were also aged 5-12 years with mean age of 8.0. Age and sex matched subjects and controls.

Gülhane Military Medical Academy is the largest medical hospital of the Turkish General Staff and located in Ankara. Only military personnel and their families are eligible to use this hospital. So fathers of both groups are officers, noncommissioned officers or clerks with middle socioeconomic class.

Measures

The Parent Form of Children's Depression Index (11) is an adaptation of the Children Depression Inventory. It is a 27-item questionnaire, which is rated by parents on a 3-point scale. Öy carried the cross-cultural application of this inventory for the Turkish people in 1990 (12).

Hacettepe emotional Adjustment Scale was developed by Gökler and Öktem (13) from the Child Psychiatry Department of Hacettepe University by based on the items from existing scales. This scale measures the children's adjustment with 32 items administered to one of the parents and. A cutting point of 12 was used to indicate problems

Procedure

Both scales were administered to the mothers of subjects and controls and t-tests were employed to

compare groups by using SPSS.

RESULTS

The distribution of diseases of the subjects is shown in Table 1.

Table I. The distribution of subjects by diseases

Diseases	number	%
acute lymphocytic leukemia	12	66.7
acute myelocytic leukemia	2	11.1
Hodgkin's disease	1	5.5
neuroblastoma	1	5.5
cerebral tumor	1	5.5
Ewing's sarcoma	1	5.5
Total	18	100

Acute lymphocytic leukemia was the most common cancer (67.7%) in the study group. As seen in Table 2, children with cancer had higher depression scores

on the parent's form of Children's depression scale than the controls.

Table II. Mean scores and standard deviations on Children's Depression Inventory and Hacettepe Emotional Adjustment Scale

	subjects 18		Controls 24		t- value
	M	SD	M	SD	
Children's Depression Inventory	6.83	3.69	4.66	3.41	1.97
Hacettepe Emotional adjustment scale	13.92	7.46	10.95	5.71	1.35

However, this difference was not statistically significant ($t=1.97$; $P>.05$). Children with cancer also had higher scores on the Hacettepe Emotional Adjustment scale than controls (Table 2). Their

mean score also exceeded the cutting point of 12. Again, the difference between the groups was not statistically significant ($t=1.35$, $p>.05$).

DISCUSSION

It was observed that children with cancer were in a stressful condition. Even in the remission period they live in a way limited by their illness. Bone marrow aspiration, x-rays, blood-tests, chemotherapy, and side effects of treatment are sources of chronic stress (2). Classmates could perceive physical appearance such as hair loss, and facial distortions as strange. Despite these stress factors, it was found that although the children with cancer had higher scores on both the Children's Depression Inventory and the Hacettepe Emotional Adjustment Scale than the healthy children, these differences were not statistically significant. These findings were consistent with result of several previous studies (6,7,8,9).

Reports related to depression have been interpreted as a realistic reflection of limited depression due to

good coping skill and/ or social support. It could also be considered as indicative of the methodological problems of self-report measures in some of the previous work (9). According to Brown, Kaslow, Hazzard, Swain, Sexson, Lambert and Baldwin (4), the concept of denial bridges these two view points: are children using denial as a healthy defence to successfully ward off depression, or are they denying genuinely experienced depression on self-report measures? Kashani and Hakami (14) found that 17% of children with cancer met DSM-III criteria for a major depressive episode using clinical interviews. This seems to support the latter hypothesis.

Gökler (1986) has noted that illness is the most common source of stress in the life of a developing child (15). Every child has a psychological reaction

when he or she has an illness. Certain factors influence this reaction. Emotional and cognitive development is one of these factors (15). Our subjects were firstly diagnosed with cancer before six years of age similar to the study of Greenberg, Kazak and Meadows (1989) (6). Their young ages may have served a protective function so they may have relatively few memories of being sick. Even at later ages many will not yet have acquired the cognitive capabilities needed to understand death and their earlier experiences fully. Thus, many may not have any reason to see themselves as different from other children. Many of them have adapted to life with cancer.

While all these previous studies used ratings by children with cancer, we used ratings given by parents. According to Worchei, Nolan, Willson, Purser, Copeland, and Pfefferbaum (1988) (9) Children with cancer had non significantly depression scores ($M=7.15$, $SD=5.69$) than healthy children ($M=8.69$, $SD=9.67$), while in our study the scores of children with cancer ($M=6.83$, $SD 3.69$) exceeded those of healthy children ($M=4.67$, $SD=3.41$). In their study also parent's ratings of depression in children were higher than children's

self ratings. This might explain the higher scores of children with cancer in our study. If so, then not realising the outcomes of their disease because of their young age may be an explanation for not finding psychological disturbances in our study. Insignificant differences might also be explained by use of the Parent form of the Children's Depression Inventory. However, the sample studied by Worchei, Nolan, Willson, Purser, Copeland, and Pfefferbaum (1988) (9) was different from our sample in terms of mean age and cultural background. On the other hand Brown, Kaslow, Hazzard, Swain, Sexson, Lambert and Baldwin (1992) (4) found few between-group differences in reports of psychiatric status across respondents (self, parents, teacher). Another study carried of 14 children older than 5 years with a lethal disease has showed that the children were aware that they would die despite not having any knowledge about their disease (16). Although children have not acquired the cognitive level of an adult, they can understand surprisingly the events going on in their environment. For that reason further research is needed to understand how the different stages of development affect psychological outcomes in children.

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