



■ Research Article

Attitudes towards cancer of parents admitted to the emergency department with a sick child: A Cross-sectional study

Hasta bir çocukla acil servise başvuran ebeveynlerin kansere karşı tutumları: Kesitsel bir çalışma

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Abstract

Aim: Parents' perspectives change when it comes to illnesses such as cancer. Parents find it stressful, especially given what society thinks and believes. The aim of this study is to determine how parents with a sick child feel about cancer.

Material and Methods: The descriptive and cross-sectional study was completed with parents who presented to the pediatric emergency department of a hospital. The Measuring Attitudes Towards Cancer Questionnaire—Society Version and the Sociodemographic Information Form for parents and their children were used to gather the information. Scores of 2.5 and above indicate negative attitudes towards cancer. The statistical program was used to analyze the gathered information.

Results: The study was completed with 83 parents. There was no family history of cancer in 84.3% of them. The overall score for "the scale was found to be 3.2 points. In addition, 3.1 points were obtained from the impossibility of healing, 3.4 from the discrimination sub-dimension, and 3.1 from the cancer diagnosis and spread sub-dimension. A statistically significant difference was found between the total and all sub-dimensions of the scale and the number of previous hospitalizations, maternal age, paternal age, and maternal employment status ($p<0.05$). There was a significant difference between economic status and the sub-dimension of revealing or disseminating the cancer diagnosis ($p=0.04$). A significant difference was found between the way of perceiving religion and the impossibility of recovery sub-dimension ($p=0.02$) and the scale total score ($p=0.03$).

Conclusion: The findings indicate that parents have negative perceptions of cancer. Individual characteristics are proven to affect attitudes.

Keywords: Cancer, parents, social behavior, stigmatization.

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Öz

Amaç: Kanser gibi hastalıklara karşı ebeveynlerin bakış açısı değişmektedir. Özellikle toplumun düşünceleri ve inanışları göz önüne alındığında ebeveynler bunu stresli buluyor. Bu çalışmanın amacı hasta çocuğu olan ebeveynlerin kansere ilişkin neler hissettiklerini belirlemektir.

Gereç ve Yöntemler: Tanımlayıcı ve kesitsel nitelikteki çalışma bir hastanenin çocuk acil servisine başvuran ebeveynlerle tamamlandı. Bilgi toplamak için Kansere Yönelik Tutumları Ölçme Anketi - Toplum Versiyonu ve ebeveynler ve çocuklarına yönelik Sosyodemografik Bilgi Formu kullanıldı. 2,5 ve üzeri puanlar kansere yönelik olumsuz tutuma işaret etmektedir. Toplanan bilgileri analiz etmek için istatistik programı kullanıldı.

Bulgular: Araştırma 83 ebeveyn ile tamamlandı. Bunların %84,3'ünün ailesinde kanser öyküsü yoktu. Ölçeğin genel puanı 3,2 puan olarak belirlendi. Ayrıca iyileşmenin imkansızlığı alt boyutundan 3,1, ayırt etme alt boyutundan 3,4, kanser tanısı ve yayılması alt boyutundan ise 3,1 puan elde edildi. Ölçeğin toplam ve tüm alt boyutları ile daha önce hastaneye yatış sayısı, anne yaşı, baba yaşı ve annenin çalışma durumu arasında fark bulundu ($p<0,05$). ekonomik durum ile kanser tanısını açıklama veya yayma alt boyutu arasında anlamlı farklılık ($p=0,04$) ile dini algılama şekli ve iyileşmenin imkansızlığı alt boyutu ($p=0,02$) ile ölçek arasında anlamlı farklılık bulunmuştur. toplam puan ($p=0,03$).

Sonuç: Bulgular ebeveynlerin kansere ilişkin olumsuz algılara sahip olduğunu göstermektedir. Bireysel özelliklerin tutumları etkilediği kanıtlanmıştır.

Anahtar Kelimeler: Kanser, ebeveyn, sosyal davranış, damgalanma.

Introduction

Today, cancer is one of the most common chronic diseases, affecting people of all ages [1]. Described as a severe, chronic condition, its association with death induces hopelessness and uncertainty; pain; guilt and worry; and panic and bewilderment [2,3]. Cancer affects people not only physically but also psychosocially, emotionally, and socially in many ways [4,5], and its associated stigma causes exclusion and social isolation along with negative attitudes and behaviors. According to the definition of stigma, it is when a quality causes a person to be socially discredited and demoted [6,7]. In short, stigma is a set of behaviors in which society stands against and excludes some patient groups, such as those diagnosed with cancer [8]. When society encounters a frightening or disturbing person or individual, it often alienates him. In some cases, the stigma can be as dangerous as the disease itself [9]. The social identity of the ill child and his parents is harmed when stigma is experienced, which has a detrimental effect on the child's psychological well-being [4,10]. Stigma is experienced in at least two ways: as self-imposed and as socially imposed [11,12]. The effects of self-imposed stigma on children include humiliation, guilt, low self-esteem, social disengagement, fear of rejection, and social isolation [2]. There is even a decrease in quality of life and life expectancy because of decreased

compliance with the treatment, an increased frequency of symptoms, and the negative effects of the treatment. When it comes to socially imposed stigma, thoughts, and beliefs such as cancer being a terminal and incurable disease and those who recover from it being unsuitable on physical, mental, and social levels play a role. Cancer is viewed as a social problem because of the social and economic cost it imposes on society, which contributes to negative attitudes and perceptions regarding the condition. There are many studies in the literature examining the stigmatization of cancer or chronic diseases (such as autism spectrum disorder, epilepsy, and psychiatric disorders) in adults [2,11-13]. For this reason, every aspect of stigma should be evaluated and managed [6]. This study aims to determine how parents with a sick child feel about cancer.

1.1. Research questions

- What are the attitudes of parents whose children are sick (patient without cancer) toward cancer?
- What variables influence parents' perceptions of cancer?

Material and Methods

Participants and setting

This study is descriptive and cross-sectional. The study population consists of parents of children admitted to the



pediatric emergency department of a hospital. The sample consisted of parents who met the inclusion criteria between 01.07.2019-01.07.2021. In line with the relevant literature, it was aimed to have a minimum of 75 people in the sample with 5% Type 1 error and 95% confidence interval [8]. Within the specified period, 146 parents were reached. 56% of the parents agreed to participate in the study and then left the study. The reasons for this were that their children were discharged, their children's condition worsened, or they were bored to fill in the questions. The study was completed with 83 parents. Parents who did not have cancer in themselves or their children, were between the ages of 18-65, were willing to participate, and did not have any communication problems were included in the study. Individuals with psychiatric illness, speech or hearing problems were not included in the study.

Data Collection Tools

Data were collected using the "Sociodemographic Information Form" and the "Questionnaire for Measuring Attitudes Towards Cancer-Community Version".

The information form was prepared by the researchers by reviewing the literature [1,2,8]. The form includes 8 questions about descriptive information (age, gender, education, marital status, occupation, place of residence, perceived income level, social security, having a family member or relative diagnosed with cancer, etc.).

The Questionnaire for Measuring Attitudes Towards Cancer (Cancer Stigma)-Community Version (MATCQ) was developed by Cho et al. (2013). This scale measures negative social attitudes towards cancer [14]. The validity and reliability of the scale in Turkey was conducted by Yilmaz et al. (2017) [8]. The scale has 3 sub-dimensions (impossibility of recovery, discrimination, and disclosure or spread of cancer diagnosis) and four Likert-type items. There are no reverse scored items in the scale. The average score of the items is used in the scale evaluation; scores of 2.5 and above indicate negative attitudes towards cancer. The overall Cronbach alpha value of the scale is 0.89 [1,2,8].

Data collection

Prior to the study, written permission dated May 23, 2019 was obtained from the hospital in Istanbul, and permission dated June 13, 2019 and numbered 2019/7 was obtained from the ethics committee. In addition, permission was obtained from the authors for the scale used. After the conditions of the children admitted to the emergency department were

stabilized, the study was explained to their parents, and their written and verbal consents were obtained. The survey questions on the form were filled in by the researchers using face-to-face interview method in the hospital. It took an average of 10-15 minutes to complete the data collection form. The rules of the Helsinki Declaration of Human Rights were followed in the stud

Data analysis

A statistical analysis program (Statistical Package for the Social Sciences [SPSS], v25) on a computer was used to analyze the study data. Numbers, percentages, means, standard deviations, minimums, and maximums were calculated in the continuous data analysis of descriptive statistics, and numbers and percentages were calculated in the categorical data analysis. The Kolmogorov-Smirnov test determined the normality distributions of the variables, then parametric and non-parametric tests were applied. Significance was accepted as $p < 0.05$ in the 95% confidence interval.

Results

Eighty-three parents, with a median age of 34.4 for mothers and 36.8 for fathers, participated in the study. Most participants (37.3%) and their children (31.3%) complained of pain and fever when they presented to the hospital. Table 1 shows the general characteristics of the family and its children.

It was found that 84.3% of the participants did not have a family history of cancer, and the mean score of the MATCQ scale was found to be 3.2 points. It was determined that they got about 3 points from the sub-dimensions of the scale (Table 2). In our study, the scale's total Cronbach alpha value was calculated to be 0.88.

Table 3 compares the descriptive characteristics of the participants with the MATCQ scale totals and sub-dimensions. A statistically significant difference was found between the total and all sub-dimensions of the MATCQ scale and the number of previous hospitalizations, the mother's age, the father's age, and the mother's employment status ($p < 0.05$). There was a significant relationship between economic status and the sub-dimension of revealing or spreading cancer diagnoses ($p = 0.04$). Similarly, a statistically significant difference was found between the religious perception style and the impossibility of recovery sub-dimension ($p = 0.02$) and the scale total score ($p = 0.03$).

Table 1. Comparison of the sociodemographic characteristics of the families according to the scales

Characteristics	Mean±Sd	Min-max (med)	
Age of mother	34±7.37	21-58 (34)	
Age of father	36.8±7.22	24-60 (36)	
Number of children	2.13±1.14	1-5 (2)	
	n	%	
Gender of child	Girl	36	43.4
	Boy	47	56.6
Diagnosis (Child)	Acute gastroenteritis	4	4.8
	Pain	31	37.3
	Allergy	2	2.4
	Hyperthermia	26	31.3
	Bronchiolitis	7	8.4
	Convulsion	4	4.8
	Nasopharyngitis	5	6
Children's age	Pneumonia	4	4.8
	Newborn	4	4.8
	1 -11 months	16	19.3
	1 -3 age	19	22.9
	4-6 age	16	19.3
Mothers work status	7-12 age	18	21.7
	13 years and older	10	12.0
	Not working	63	75.9
	Working	20	24.1
	Mothers' education	Not literate	1
Literate		2	2.4
Primary school		21	25.3
Secondary school		15	18.1
High school		21	25.3
Fathers work status	University	23	27.7
	Not working	1	1.2
	Retired	1	1.2
	Worker	37	44.6
	Officer	13	15.7
Fathers' education	Self-employed	31	37.3
	Literate	1	1.2
	Primary school	20	24.1
	Secondary school	15	18.1
	High school	26	31.3
Family financial status	University	21	25.3
	Income less than expenses	24	28.9
	Income equal to expense	47	56.6
Family history of cancer	Income more than expenses	12	14.5
	Yes	13	15.7
TOTAL	70	84.3	
	83	100.0	

Sd: Standard deviation; min: minimum; max: maximum; med: median



Table 2. Distribution of scale scores

Scales and sub-dimensions		Mean ± Sd	Min-Max (Med)
MATCQ	Total score	3.20±0.55	1.83-4 (3.16)
	Impossibility of healing	3.14±0.57	1.8-4 (3)
	Discrimination	3.40±.68	1-4 (3.66)
	Revealing or spreading cancer diagnosis	3.14±.83	1-4 (3)

Sd: Standard deviation; min: minimum; max: maximum; med: median
 MATCQ: Measuring Attitudes Towards Cancer Questionnaire (Cancer Stigma) —Society Version

Discussion

Human attitudes and behaviors have been studied for a long time [15]. In the literature, there are documented observations and reviews of people's attitudes and behaviors towards cancer diagnosis, including sharing, concealment, curability, treatment, care, early detection, screening tests and stigma [1,16]. The emotional and psychological effects of cancer have recently received more attention than the physical effects. People's attitudes and behaviors towards cancer have become more important, and this is especially true for childhood cancers. Cancer is an individual and social problem that affects not only the child but also the parents [4]. Many attitudes and behaviors, especially stigmatization, cause stress, and the literature support this [8,14,17,18].

This study focused on parents whose children have no cancer or a chronic illness, with the goal of investigating the attitudes of these parents toward cancer. This section presents our findings along with related findings found in the literature. Our study found that the mean total score of the parents was 3.2 points from the MATCQ, 3.1 points from the sub-dimension of impossibility of improvement, 3.4 points from the sub-dimension of discrimination, and 3.1 points from the sub-dimension of revealing or spreading a cancer diagnosis. When the scale score is 2.5 and above, it can be said that there are negative attitudes towards cancer. An examination of the mean item scores of the individuals reveals that they have negative attitudes towards cancer. A study conducted with 301 participants with an average age of 32 years reported that the total scores on the scale were low, but the mean score of the sub-dimension of the impossibility of recovery was high [19]. Another study reported that participants defined cancer as incurable [14]. Yet another study reported participants scored an average of 3 points from the scale: 2.81 from the sub-dimension of impossible recovery, 3.46 from the sub-dimension of discrimination, and 2.98 from the sub-dimension

of revealing or spreading a cancer diagnosis [1]. The negative attitude toward cancer increases as age increases [15], and as the MATCQ score increases, so do negative attitudes about cancer. In line with this information, it was observed that the negative attitudes of the society towards cancer continue. This may be attributed to the difficulty in diagnosis and treatment of cancer. In addition, considering the current treatment methods, we can say that the fact that not every stage of every cancer type can be cured and rehabilitated has also affected this. Perhaps, at this stage, it may be important to raise awareness not only of the patients but also of other members of the society. Considering that the parents in our study presented to the emergency department with an acute problem, it may be necessary to reconsider the stages of "patient approach and information in emergency department conditions".

It is important to change people's attitudes and beliefs about cancer since they hamper the diagnostic, acceptance, and healing processes for cancer patients. In our study, a statistically significant difference was found between the number of hospitalizations and the total score and all subscales of MATCQ (impossibility of recovery, discrimination, and discovery or spread of cancer diagnosis). This may lead to negative thoughts in parents. For example, as the number of hospitalizations increases, they may have negative thoughts that their child cannot recover. Or they may worry that they may be subjected to discrimination and exclusion in their social community, thinking that "there are too many hospitalizations due to the presence of a serious illness like cancer in the child". In a study, no significant difference was reported between the individual characteristics of the participants and the scores they got from the total and sub-dimensions of the scale. However, a statistically significant difference was reported between the education and the impossibility of improvement sub-dimensions of the scale [2]. Based on these findings, we conclude that participants' sociodemographic characteristics may affect their perspectives and attitudes toward cancer. However, it is known that attitudes and behaviors differ between cultures according to belief systems, perceptions, and thoughts about health and disease, and these may effectively shape stigmatizing behaviors [16]. Based on this, it can be said that understanding human beings is the basis of attitude and behavior changes. Determining the internal and external factors that shape behaviors and planning and implementing the approach accordingly can be a facilitating factor in patient care for health professionals.

Table 3. Comparison of MATCQ and its sub-dimensions by participants' introductory characteristics according to item score averages

Characteristics	MATCQ			
	Impossibility of healing	Discrimination	Revealing or spreading cancer diagnosis	Total score
Number of hospitalizations of children	-7.052*	7.255*	6.933*	7.362*
	0.000	.000	0.000	0.000
Mother age	7.914*	7.916*	-7.916*	7.914*
	0.000	0.000	0.000	0.000
Father age	7.914*	7.915*	7.916*	7.914*
	0.000	0.000	0.000	0.000
Mothers work status	Not working	-2.338***	-2.627***	-2.186***
	Working	0.019	0.009	0.029
Mothers' education	Not literate			
	Literate			
	Primary school	3.655**	4.773**	7.562**
	Secondary school	0.600	0.444	0.182
	High school			
University				6.810**
Fathers work status	Not working			
	Retired			
	Worker	4.356**	2.567**	1.570**
	Officer	0.360	0.633	0.814
	Self-employed			
Fathers' education	Literate			
	Primary school			
	Secondary school	2.458**	1.864**	6.887**
	High school	0.652	0.761	0.142
	University			
Financial status	Income less than expenses	0.339**	1.053**	6.244**
	Income equal to expense	0.844	0.591	0.044
	Income more than expenses			
History of cancer in the family	Yes	-1.563***	-0.114***	-0.910***
	No	0.118	0.909	0.363
Perspective on religion	I fulfill all your requirements	5.142**	2.791**	2.982**
	I partially fulfill it	0.023	0.095	0.084
	TOTAL			83

*Related-Samples Wilcoxon Signed Rank Test Summary; ** Kruskal Wallis test; *** Mann Whitney U Test; p<0.05
 MATCQ: Measuring Attitudes Towards Cancer Questionnaire (Cancer Stigma) — Society Version

It has been reported in the literature that there is a relationship between attitudes and behaviors related to cancer and gender and that attitudes and behaviors are more positive in the female gender [2,19], but no relationship was found in our study. It is well known that the caregiving roles and responsibilities assigned to women in society are greater than those assigned to men, especially when the disease in question is cancer. It can be said that how women are viewed in society in terms of their responsibilities and duties affects how they perceive cancer.

Education is one of the external factors affecting behaviors and attitudes. While education level was thought to be related to scale scores and education level, our study showed no statistically significant relationship, a thought-provoking finding. Contrary to our study, a relationship was reported between educational status and the "impossible recovery" sub-dimension. And it has been shown that as the level of education increases, negative attitudes decrease [2]. In a study, it was reported that as education level increases, negative attitudes toward cancer significantly increase [1]. Cho et al.



(2013) found in their study that as the education level increased, negative attitudes toward cancer decreased [14]. In line with this information, it can be said that the idea that education is an item that shapes behavior is confirmed. The differences in the studies may be attributed to different populations or other factors affecting behavior. It is recommended that physicians who make the diagnosis, nurses who provide care, and health professionals who are together with patients should remember that people have different personalities and take into account the level of education.

Socioeconomic status can be an important factor in coping with most diseases. When it comes to cancer, it is undeniable that a costly diagnosis and treatment process awaits them. Knowing this may strengthen the attitude towards the impossibility of recovery. In our study, it was determined that negative thoughts about cancer were affected by income level even in our middle-income sample. Badihian et al. (2017) reported that those who are employed and have a good income level have more positive attitudes towards cancer [20]. However, in contrast, it was reported that income level did not affect thoughts towards cancer [21]. Based on these, it can be said that the social security and the scope of this security are effective on whether income status is an important factor or not. The fact that the scope of social security includes the diagnosis and treatment of serious diseases such as cancer may cause people not to think about their income status. Perhaps the inclusion of special plans for the management of serious diseases in the determination of health policies may slightly reduce people's negative attitudes towards cancer.

When cancer is considered, society may exhibit stigmatizing behaviors as well as feelings of mercy. The child and his/her family may experience stress, sadness, and social isolation. While medical advances in cancer and advances in science and technology may eventually change attitudes towards cancer, the disease currently continues to evoke negative emotions, attitudes, and behaviors in people [1,23,24]. It is important that doctors, nurses and other health professionals who are in contact with patients are informed about communication and empathy. It is important to inform not only the society but also health care providers about how to approach special groups such as children and serious diseases such as cancer.

Limitations of the study

The main limitation of the study is that the pandemic (coronavirus disease [Covid]-19) emerged while the study data was being collected, and the data could not be collected

sufficiently in the desired time. Another limitation is that the study was conducted in a single center. In addition, parents' concerns about the diagnosis and treatment process of their children may have affected their responses.

Strengths of the study

The fact that a study of attitudes towards a serious disease such as cancer was conducted with parents who presented with an acute problem in the emergency department and did not know the disease process of their child may be a strength of the study. In addition, the fact that the majority of the sample group did not have a cancer diagnosis in their families is a strong finding for the level of attitude investigated. The fact that no similar study was found in the literature is another strength of the study.

Conclusion

In our study, it was found that people continue to have negative attitudes toward cancer. Despite advanced medical technology and increasing survival rates in cancer, negative attitudes towards cancer and cancer patients, and stereotypes and discriminatory attitudes towards people affected by cancer and disease, continue. Following the public's awareness of cancer and its issues, as well as identifying desirable cancer outcomes, will point the way for public education. By considering attitudes toward cancer patients, programs can introduce arrangements that avoid stigmatization.

The child's illness affects the parenting role in different ways, especially anxiety. Studies examining the effect of parents' anxiety levels on their perspectives on cancer are also recommended.

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