# **Original Article**

# An Analysis of Marital Satisfaction and Perceived Social Support in Mothers with Cancer-Diagnosed Children

# Eda Ay

Research Assistant, Ataturk University, Faculty of Health Science, Psychiatric Nursing, Erzurum, Turkey, Turkish Nurses Association and Psychiatric Nursing Association

# Ayse Okanli, PhD

Professor Doctor, Medeniyet University, Faculty of Health Science, Psychiatric Nursing, Istanbul, Turkey, Turkish Nurses Association, Psychiatric Nursing Association, Oncology Nursing

**Correspondence:** Eda Ay, Research Assistant, Ataturk University, Faculty of Health Science, Psychiatric Nursing, Erzurum, Turkey E-mail: eda.ay@atauni.edu.tr

#### **Abstract**

**Purpose**: The purpose of this study was to assess patients' satisfaction with the provided health services at Private and Public Hospital. The objectives of the research were to evaluate the level of patients' satisfaction with healthcare services provided, to identify these factors that may influence the satisfaction of participants from the provided health services

**Methodology**: The subjects were patients hospitalized in the above hospitals and were discharged from the clinic during the period February to April, 2016. The sample consisted of 285 patients who were treated in these hospitals. The scale developed by Raftopoulos (2005) has been used.

**Results**: The majority of patients express considerable satisfaction regarding overall, nursing and medical care. Specifically, patients hospitalized in Private Hospitals seem to be more satisfied than those who were admitted to the Public Hospital. However, the differences that arise in most questions are limited. No statistically significant difference are observed in overall satisfaction between genders (p = .687). In contrast, the age and education factors demonstrated a statistically significant relationship (p < .001, p = .016) with satisfaction. Furthermore, the differences identified in the measurement of satisfaction and expectations of each hospital were mainly statistically significant as p < .05

**Conclusions:** In general, patient satisfaction is an important indicator of the healthcare quality provided by hospitals. The majority of authors recognize the high importance of patients' views regarding their preferences for healthcare services. It is shown that Patients can recognize and evaluate the quality of care they receive. They are also able to assess the value of healthcare services and capture results and impacts.

**Key words**: Patients' satisfaction, quality in healthcare, Public and Private Hospitals, Cyprus healthcare services, perceptions, expectations

## Introduction

Cancer is a universal problem that is increasing, and affects individuals of all ages in both developing and developed countries (Babaoglu and Oz, 2004). The annual expectation for new cancer cases in Turkey is approximately 3.000 in individuals younger than 19 with an incidence of 120-130 million; on the other hand, 160 thousand children are diagnosed with cancer every year throughout the world (Maurice Stam et al., 2008), and 90 thousand of them do not survive (Kutluk, 2006). Due to developments in oncology over the last three decades, the types of childhood cancer are not fatal but chronic

(Patterson et al., 2004), and their rate of treatability has increased from 30% to 70% (Robison, 2005). However, the course of the disease and the treatment processes have created many psycho-social problems for children, their families, and for the treatment team as well. The painful aspects of treatment and survival processes are common in all types of childhood cancer (Patterson et al., 2004; Kerimogli and Dikmeer, 2009).

Children are not the only ones to be affected by this long and painful process. Their parents are by their side during all stages of the illness. Mothers in particular are generally the primary care givers, and the parent that bears most of the burden of the illness (Knafl and Zoeller, 2000) as well as the parent most affected by the child's experience; they are involved in a long ordeal (Maurice Stam et al., 2008). Mothers identify with their children, and perceive them as extensions of themselves rather than separate individuals. They are also the children's primary care givers. These factors result in mothers experiencing more intense feelings (Er, 2006). Being the primary care giver can have different effects on mothers. Carrying this burden can restrict social life and daily activities, create difficulty in family and marital relationships, and bring economic challenges. Also, primary care givers may not find time for other members of their families (Stewart et al., 1994).

There are studies of the short- and long-term effects on cancer-diagnosed children and the adaptation of their parents to the disease and treatment process in different countries (Patterson et al., 2004; Hosoda, 2014). In Turkey, researchers have conducted studies on the problems experienced by cancer-diagnosed children, but there are few studies of the problems faced by families, particularly mothers. (Ozdemir et al., 2009) The study by Syse et al. (2010) focused on the changes in family functioning that are caused by a cancer diagnosis in a child, over both short and long periods. After a child is diagnosed with cancer, the marital relationship between parents may be affected negatively due to psycho-social challenges, and the burden of care placed on them. Researchers have reported that these factors cause problems in the family system, and that affected families experience more conflicts. When couples cannot solve these problems, this situation can lead to the termination of the marriage.

Marriage is a social institution that can improve the general health of the individuals and lead to a more satisfying life (Hayward and Zhang, 2006). Marriage is also described as a legal agreement of commitment between spouses (Cott, 2002), and an agreement between two persons (Rauch, 2004). Marital satisfaction includes the psychological satisfaction derived from personal dimensions (e.g. the type of affection that spouses show to each other, sexual satisfaction, type of communication) and environmental dimensions (e.g. equality in decision-making, financial earnings, sharing of work and problems) of the marriage institution

(Sokolski and Hendrick, 1999). Mutual help and support in the marital relationship is an important factor in coping with the problems caused by childhood cancer. However, childhood cancer can result in parents feeling guilty. They may spend a great deal of time at the hospital with their children, and become distant from the other members of the family. They experience increasing stress which results in increasing tension within the marriage. Parents of children with cancer have difficulty recognizing the needs of the other family members, as well as their own needs. This may cause pre-existing marital problems to surface again (Hentinen, 1998).

The social relationships that parents have within their environment are as important as their marital satisfaction when coping with the negative effects of the disease. Social support is described as the total support received from family members, friends, and other social relationships. It can help individuals maintain good physical health. Social support also helps patients and their families cope with the problems created by cancer; it can improve how individuals adapt to the disease and its treatment, and reduces the frequency of psychiatric symptoms. Social support also helps individuals deal with anxiety and loneliness after the death of a family member (Eilertsen et al., 2004). Relevant studies have found that mothers of children with cancer often feel lonely, and uncertain about the future (Dongen-Melman et al., 1995; Grootenhuis and Last, 1997). Norberg, Lindblad and Boman determined that mothers need much more social support than fathers, and accordingly the level of social support they receive is higher than that of fathers, although mothers and fathers experience very close levels of anxiety. It was also found that perceived social support improved coping behaviors in both mothers and fathers, and reduced their anxiety (Norberg et al., 2006).

The quality and influence of support services in helping mothers meet their psycho-social and emotional needs, in reducing the difficulties caused by cancer and its treatment, and in helping mothers cope are important for all family members, in order to ensure the continuity of the treatment process (Hoekstra-Weebers et al., 2001; Yamazaki et al., 2005).

This study was designed based on these needs. The researcher believes that it will contribute to the literature by providing a better understanding of the problems and difficulties experienced by mothers who provide care for their sick children, through demonstrating these problems and difficulties with scientific evidence, and through planning nursing initiations which can address these problems.

For this reason, this study aimed to analyze the marital satisfaction and perceived social support of the mothers that have children with cancer.

#### **Material and Methods**

# Study Design, Population, and Sampling

This is a descriptive study. The population of the study consisted of 71 participants who were to be the mothers of the children that were hospitalized between September 2013 and June 2014 in Atatürk University Yakutiye Research Hospital's Pediatric Hematology-Oncology Clinic, and received outpatient treatment in the Outpatient Clinic. No specific sample was selected because the aim was to include the entire population; the mothers of 71 patients that fit the research criteria were included in the study.

# **Data Analysis**

The data analysis was performed using SPSS (Statistical Package for Social Sciences) for Windows 16.0. Descriptive statistics, Pearson's correlation analysis, the Kruskal Wallis test, and the Mann Whitney U test.

Correlation analysis was used to analyze the relationships among the scales, the subscales, and some independent variables. The results were interpreted at a 95% confidence interval and the significance level was set at P , .05. Cronbach's a was used to assess the internal consistency of the scales.

#### **Ethical Considerations**

The study protocol was approved by the Ethics Committee of Ataturk University in accordance with the Declaration of Helsinki. Written approvals were received from the hospital and an informed consent form was obtained from each participants before initializing the study.

The participants were informed about the aim and methods of the study, as well as the amount of time they would have to allocate to participate.

The participates were also informed that the data obtained from this study would be kept confidential, their participation in the study did not pose any risk for them, they could leave the study whenever they wanted to, and participation in the study was totally on a voluntary basis.

#### **Inclusion Criteria**

- Being responsible for the primary care of the cancer-diagnosed child.
- Being open to communication and collaboration.
- Agreeing to participate in the study.
- Having a child who had been diagnosed for at least six months.

# **Data Collection Tools**

- **1. Question Form:** This form was created by the researcher, and it included 18 questions for the mothers, including age, residence, family type, social security, education levels of parents, employment status, perceptions of income level, number of children in the family, duration of disease, and perceptions of the social support received during the care-giving period.
- **2. Dyadic Adjustment Scale:** This scale was created by Spanier in 1976, and it was translated into Turkish in 2000 by Fisiloglu and Demir (Fisiloglu and Demir, 2000). It is a Likert-type scale, consisting of 32 questions. This scale assesses the four dimensions of the marital relationship between spouses. These four dimensions form the subdimensions of the scale (Spanier, 1976). These subdimensions are:
- 1. The Adjustment Between Spouses: It includes 13 questions (items 1-3, 5, 7-15) about the level of agreement regarding pivotal subjects of the marital relationship. The maximum score on this subdimension is 65.
- 2. Satisfaction of Being a Couple: It includes 10 questions (items 16-23, 31, 32) about the positive and negative characteristics of emotions and communication. The maximum score on this subdimension is 50.
- 3. Showing Affection: This subdimension consists of four questions (items 4, 6, 29, and 30) evaluating the adjustment regarding the ways of showing affection and the behaviors used in showing affection. The maximum score on this subdimension is 12.
- 4. Spouses' Commitment to Each Other: This subdimension includes five questions (items 24-28) about the time spent together. The maximum score on this subdimension is 24. In total, the scale includes 32 questions. The scores on questions 29 and 30 range between 0 and 1, questions 23 and 24 provide 0-4 points, questions

1-22, 25-28, and 32 provide 0-5 scores, and question 31 provides 0-6 points. Determining the assessment of the scale relies on the total score obtained from it. The minimum score on the scale is 0, and the maximum score is 151. The higher scores on the scale indicate that the individuals have better marital relationships or higher satisfaction.

3. Multidimensional Scale of Perceived Social **Support** (MSPSS): This scale was created by Zimet et al. (1988), and it was used in this study to collect data related to social support, one of the variables included in the study. It consists of 12 items, and each item is evaluated based on a seven-step scale. It is a 7-point Likert type scale, where 1 is "Strongly Disagree", and 7 is "Strongly Agree". The scale has three subdimensions: the social support received from family, from a friend, and from a special person. Questions 3, 4, 8, and 11 within the scale are about the social support received from family; questions 6, 7, 9, and 12 are about the social support received from a friend, and questions 1, 2, 5, and 10 are about the social support received from a special person. The scores obtained from the items for each source of support are added internally, and this provides three individual social support scores. These individual scores were also added, and this created a general social support score. The minimum score on the subdimensions is 4, and the maximum score is 28. The minimum total scale score, which is obtained by adding the subdimension scores, is 12, and the maximum scale score is 84. Higher scores on the entire scale show that the perceived social support is high.

# **Data Analysis**

The data collected in the study were analyzed using SPSS 16.0 statistical software. The collected data were assessed using percentage distributions, Pearson's correlation analysis, the Kruskal Wallis test, and the Mann Whitney U test.

### Results

The introductory characteristics of the parents in the study showed that 95.8% of the mothers were housewives, 39.4% of the fathers were self-employed, and 59.2% of the families had a moderate income. In addition, 57.7% of the mothers and 62% of the fathers graduated from middle school, while 45.1% of the parents had three or four children. (Table 1) The

characteristics related to the children's diseases showed that 38% of the children had been diagnosed with cancer for at least one year, 45.1% had been hospitalized for 1 to 10 days, 69% of the mothers had been receiving social support when providing care, 45.1% received this support from their spouses, and 38% of the children had been receiving care for at least one year. (Table 2) A comparison of the parents' total mean scores on the two scales by their introductory characteristics showed that the difference between the total scores on the MSPSS was statistically significant regarding father's occupation and family income level; the difference between the mean scores on the DAS was statistically significant regarding number of children and family income level (p<0.05). (Table 3) The mothers' total mean score on the DAS was 102.08±11.22, and the total mean score on the MSPSS was 34.43±7.99. The mothers' total mean scores on both scales (Table 4) indicated that they had high levels of marital satisfaction, but they had low mean scores on "showing affection" and "spouses' commitment to each other." The subdimensions of the DAS, were low, while their social support perceptions were moderate. An analysis of the correlation between mothers' scores on the subdimensions of scales indicated that there was a positively significant correlation between the scores on "the support received from family" and "the adjustment between spouses" and "showing affection" subdimensions at p<0.05 (Table 5). There was a positively significant correlation at p<0.05 level between the scores obtained on "social support taken from a friend" and the scores on all subdimensions of DAS and total DAS scores. The support received from a friend had an effect on the adjustment between spouses. The correlation between the mothers' DAS and the MSPSS subdimension and total mean scores showed that there was a positively significant correlation between the scales (r:.460 p<0.001). (Table 5)

## **Discussion**

The treatment of cancer takes a very long time, and requires frequent and lengthy hospital stays. This can cause emotional, social, and economic loss for parents and their sick children. For the mothers, having a sick child brings about different dimensions, including the restriction of social life and daily activities, difficulty in family and marital relationships, and lack of

spare time for other family members (Stewart et al., 1994).

The researcher discussed the results of this study, which was conducted with the purpose of examining the marital satisfaction and perceived

social support in mothers with cancer-diagnosed children, while considering all of the problems mentioned above and based on the relevant literature.

Table 1. The Distribution of Parents by Introductory Characteristics

| Introductory Characteristics (N: 71)         | Number | %    |
|--|--------|------|
| Mother's Age                                 |        |      |
| 20-30 years                                  | 21     | 29.6 |
| 31-40 years                                  | 29     | 40.8 |
| 41-50 years                                  | 21     | 29.6 |
| Family Residence                             |        |      |
| Village                                      | 9      | 12.7 |
| County                                       | 21     | 29.6 |
| Province                                     | 41     | 57.7 |
| Family Type                                  |        |      |
| Nuclear                                      | 51     | 71.8 |
| Extended                                     | 20     | 28.2 |
| Social Security                              |        |      |
| Yes  | 44     | 62.0 |
| No   | 27     | 38.0 |
| Mother's Occupation                          |        |      |
| Housewife                                    | 68     | 95.8 |
| Other  | 3      | 4.2  |
| Father's Occupation                          |        |      |
| Worker-Officer                               | 21     | 29.6 |
| Self-employed                                | 28     | 39.4 |
| Retired                                      | 2      | 2.8  |
| Other  | 20     | 28.2 |
| Mother's Perception of Income Level          |        |      |
| Poor   | 22     | 31.0 |
| Medium                                       | 42     | 59.2 |
| Good   | 7      | 9.9  |
| Mother's Education Level                     |        |      |
| Incomplete primary education (only literate) | 19     | 26.8 |
| Middle school                                | 41     | 57.7 |
| High school                                  | 8      | 11.3 |
| University degree or above                   | 3      | 4.2  |
| Father's education level                     |        |      |
| Incomplete primary education (only literate) | 2      | 2.8  |
| Middle school                                | 44     | 62.0 |
| High school                                  | 16     | 22.5 |
| University degree or above                   | 9      | 12.7 |
| Number of Children                           |        |      |
| 1-2 children                                 | 19     | 26.8 |
| 3-4 children                                 | 32     | 45.1 |
| 5 or more                                    | 20     | 28.2 |
| The Sequence of the Cancer-diagnosed Child   |        |      |
| among All Children in Family                 |        |      |
| Child  | 16     | 22.5 |
| Child  | 16     | 22.5 |
| Child  | 16     | 22.5 |
| 4 or more                                    | 23     | 32.5 |

Table 2. Disease Characteristics of the Children with Cancer

| Characteristics (N: 71)            | Number | %    |
|------------------------------------|--------|------|
| <b>Duration of Diagnosis</b>       |        |      |
| 1 Year                             | 27     | 38.0 |
| 2 Years                            | 25     | 35.2 |
| 4 Years or Longer                  | 6      | 8.5  |
| <b>Duration of Hospitalization</b> |        |      |
| 1-10 Days                          | 32     | 45.1 |
| 11-20 Days                         | 19     | 26.8 |
| 21-30 Days                         | 13     | 18.3 |
| 31 Days or Longer                  | 7      | 9.9  |
| Mothers' Social Support            |        |      |
| Reception Status                   |        |      |
| Yes                                | 49     | 69.0 |
| No                                 | 22     | 31.0 |
| The Person/People Providing        |        |      |
| Social Support                     |        |      |
| Spouse                             | 32     | 45.1 |
| Relative                           | 13     | 18.3 |
| Friend                             | 1      | 1.4  |
| Social support services            | 7      | 9.9  |
| Other                              | 18     | 25.4 |
| <b>Duration of Care Provision</b>  |        |      |
| 1 Year                             | 27     | 38.0 |
| 2 Years                            | 26     | 36.6 |
| 3 Years                            | 13     | 18.4 |
| 4 Years or Longer                  | 5      | 7.0  |

Table 3. A Comparison of Parents' Total Mean Scores on DAS and MSPSS By Introductory Characteristics

| <b>Introductory Characteristics</b> (N: 71) | DAS<br>TOTAL       | Test and P<br>Values | MSPSS<br>TOTAL   | Test and P<br>Values |
|---|--------------------|----------------------|------------------|----------------------|
| Mother's Age                                |                    |                      |                  |                      |
| 20-30 years                                 | $102.42\pm11.97$   | KW = 1.740           | $34.23 \pm 6.85$ | KW=1.786             |
| 31-40 years                                 | $103.82 \pm 11.81$ | p=0.480              | $35.82\pm9.25$   | p=0.409              |
| 41-50 years                                 | $99.33\pm9.49$     |                      | $32.71\pm7.14$   |                      |
| Family Residence                            |                    |                      |                  |                      |
| Village                                     | 105.77±11.33       | KW = 5.091           | $37.88\pm9.53$   | KW=1.762             |
| County                                      | 97.95±12.88        | p = 0.78             | $33.66\pm8.57$   | p=0.414              |
| Province                                    | $103.99\pm9.90$    |                      | $34.07 \pm 7.34$ |                      |
| Family Type                                 |                    |                      |                  |                      |
| Nuclear                                     | 100.78±11.65       | MU=383.500           | $33.96\pm8.48$   | MU=411.500           |
| Extended                                    | 10.40.9.55         | p=0.207              | $35.65\pm6.65$   | p=0.106              |
| Social Security                             |                    |                      |                  |                      |
| Yes   | $103.04\pm11.43$   | MU=513.500           | $35.06\pm7.62$   | MU=505.500           |
| No  | $100.51\pm10.92$   | p=0.340              | $33.40\pm8.63$   | p=0.294              |
| Mother's Occupation                         |                    |                      |                  |                      |
| Housewife                                   | $102.02\pm10.91$   | MU = 96.0            | $34.60\pm7.91$   | MU=7200              |
| Other                                       | $103.33\pm20.52$   | p=0.882              | 30.66±10.78      | p=0.418              |
| Father's Occupation                         |                    |                      |                  |                      |
| Worker-Officer                              | 105.38±12.79       |                      | $37.33\pm7.20$   |                      |
| Self-employed                               | 99.96±11.57        | KW = 3.049           | $34.85\pm7.36$   | KW=8.735             |
| Retired                                     | 103.50±0.70        | p=0.384              | 33.50±13.43      | p=0.033              |

| Other                        | $101.45 \pm 9.09$ |            | $30.90\pm8.46$  |            |
|------------------------------|-------------------|------------|-----------------|------------|
| Mothers' Perceptions of      |                   |            |                 |            |
| Family Income Level          |                   |            |                 |            |
| Poor                         | 96.68±8.18        | KW=9.979   | $30.36\pm6.29$  | KW=8.855   |
| Medium                       | 103.30±10.62      | p=0.007    | $35.80\pm7.94$  | p=0.012    |
| Good                         | 111.71±15.46      |            | 39.0±8.85       |            |
| Mother's Education Level     |                   |            |                 |            |
| Incomplete primary education | 102.21±9.28       |            | $32.15\pm7.53$  |            |
| (only literate)              |                   |            |                 |            |
| Middle school                | 99.85±11.09       | KW = 7.608 | $35.43\pm7.69$  | KW = 4.005 |
| High school                  | $108.00\pm12.15$  | p=0.055    | $32.62\pm10.01$ | p=0.261    |
| University degree or above   | 116.00±11.13      |            | $40.00\pm7.93$  |            |
| Father's education level     |                   |            |                 |            |
| Incomplete primary education | $101.50\pm10.60$  |            | $35.50\pm4.94$  |            |
| (only literate)              |                   |            |                 |            |
| Middle school                | 99.29±10.15       | KW=9.967   | 33.13±8.03      | KW=3.378   |
| High school                  | 104.50±12.59      | p=019      | $36.0\pm7.25$   | p=0.295    |
| University degree or above   | 111.55±9.08       |            | 37.77±9.18      |            |
| Number of Children           |                   |            |                 |            |
| 1-2 children                 | 104.26±13.73      | KW=6.090   | $33.68\pm8.02$  |            |
| 3-4 children                 | $104.06\pm10.52$  | p=0.048    | $36.09\pm8.13$  | KW=2.870   |
| 5 or More                    | 96.85±8.06        |            | 32.50±7.58      | p=0.238    |
| The Sequence of the Cancer-  |                   |            |                 |            |
| diagnosed Child among All    |                   |            |                 |            |
| Children in Family           |                   |            |                 |            |
| Child                        | 107.06±12.24      |            | $35.81\pm9.48$  |            |
| Child                        | $103.25\pm10.64$  | KW=5.863   | $33.93\pm6.63$  | KW = 0.484 |
| Child                        | $101.75\pm12.14$  | p=0.118    | $34.56\pm9.22$  | p=0.922    |
| 4. Child or More             | 98.04±9.22        |            | 33.73±7.22      |            |

**Table 4.** Mothers' Mean Scores on DAS and MSPSS

|       | Scales                            | Minimum and Maximum<br>Scores<br>On Scales | Mean Scores | Standard<br>Deviation |  |
|-------|-----------------------------------|--|-------------|-----------------------|--|
|       | Adjustment between Spouses        | 0 - 65                                     | 44.19       | 4.95                  |  |
| S     | Satisfaction of Being A Couple    | 0 - 50                                     | 37.19       | 4.05                  |  |
| DAS   | Showing Affection                 | 0 - 12                                     | 8.43        | 1.56                  |  |
|       | Spouses' Commitment to Each Other | 0 - 24                                     | 12.25       | 2.75                  |  |
|       | TOTAL                             | 0-151                                      | 102.08      | 11.22                 |  |
|       | Taken From Family                 | 4-28                                       | 17.29       | 4.30                  |  |
| 7.0   | Taken From Friend                 | 4-28                                       | 12.74       | 4.58                  |  |
| MSPSS | Taken From A Special<br>Person    | 4-28                                       | 4.39        | 1.17                  |  |
|       | TOTAL                             | 12-84                                      | 34.43       | 7.99                  |  |

Table 5. The Correlation Between the Subdimension and Total Scores on DAS and MSPSS

|       |                      |   | Dyadic Adjustment Scale (DAS)        |  |                      |                                    | )      |
|-------|----------------------|---|--------------------------------------|--|----------------------|------------------------------------|--------|
|       | Scales               |   | Adjustm<br>ent<br>Between<br>Spouses | Satisfactio<br>n of<br>Being A<br>Couple | Showing<br>Affection | Spouses' Commitm ent to Each Other | TOTAL  |
| MSPSS | Taken From Family    | r | .294*                                | .566**                                   | .254*                | .425**                             | .474** |
|       |                      | p | .013                                 | .000                                     | .032                 | .000                               | .000   |
|       | Taken From Friend    | r | .236*                                | .328*                                    | .324*                | .329*                              | .348*  |
|       |                      | p | .048                                 | .005                                     | .006                 | .005                               | .003   |
|       | Taken From A Special | r | .102                                 | 058                                      | .053                 | .035                               | .040   |
|       | Person               | p | .399                                 | .628                                     | .663                 | .773                               | .743   |
|       | TOTAL                | r | .308*                                | .484**                                   | .330*                | .422**                             | .460** |
|       |                      | p | .009                                 | .000                                     | .005                 | .000                               | .000   |

<sup>\*</sup>p<0.05 \*\*p<0.001

The introductory characteristics of the parents in this study demonstrated that a regular family income and the father's occupation have a remarkable effect on the perceived social support.

During the course of long-term chronic diseases in children, parents are in great need of financial and psychological support. This support influences their ability to adapt to the disease (Camfield et al.,2001) The relevant literature stresses the importance for families of receiving financial support (Cavusoglu, 2004; Van Dongen-Melman et al., 1995). The study by Coskun and Akkas made a comparison among perceived social support mean scores by family income, and found that the parents whose income was equal to or higher than their expenses had a perception of greater social support than the parents who stated that their income was lower than their expenses. (Coskun and Akkas; Selamet (2004) also found that social support perception scores of the mothers whose spouses were employed were higher than the scores of others. The results of this study are similar to the results of the above-mentioned studies. Furthermore, the professional and social lives of families, as well as their familial relationships, were affected by their children's illness. This shows that the husband's employment plays a major role in meeting the mothers' need for support. In this study, the social support scores of the fathers who are employed are higher than those of the other groups, the result of having a regular income and financial security. Having employment provides an even bigger relief for individuals in psycho-social terms. A steady income can eliminates stressors, and help in the struggle with cancer, which usually causes financial problems.

This study also found that the adjustment between spouses is affected by the number of children, as well as their perceptions of family income level. Previous studies have found different results related to the correlation between marital adjustment and having children, or the number of children that the couples have. According to some studies and opinions by researchers, having a child has negative effects on marital adjustment (Belsky and Kelly, 1994; Twenge et al., 2003). Some studies demonstrate that there is no difference between marital adjustment levels of individuals who do or do not have children (Callan, 1986; Hoffman et al. 1985). On the other hand, there are also studies which found that having a child has a positive effect on marital adjustment (Denga, 1982). However, the dominant finding is that having a child reduces marital adjustment. In this context,

the result of this study is consistent with the common result in the relevant literature. Tüfekçi and Ince found a similar result to this study, and determined that marital adjustment showed a significant difference depending on the number of children couples have, with marital satisfaction decreased in adverse proportion to the number of children. Having a child can help families stay together, but it can also increase the conflict between spouses, thereby reducing the adjustment between spouses. One of the most crucial reasons for this is that the decisions related to children are usually made by both parents, but each parent determines what action to take based on their own judgments. This might cause conflicts between spouses. Another supporting finding from a previous study indicated that having a child helps families make new regulations about the distribution of roles and taking responsibility; however, having a child can limit their freedom (Twenge, Campel ve Foster, 2003). This situation has a negative effect on marital adjustment. The scores on "adjustment between spouses" decreases as the number of children increases. The difficulties created by having a cancer-diagnosed child, and being unable to spare time for other children and for the other spouse due to these difficulties are the reasons that mothers with a larger number of children have reduced marital satisfaction.

In this study, there was a correlation between income level and marital adjustment, and those with lower incomes also had lower levels of marital adjustment. Kurdek (1993) and Bir Aktürk (2006) found a correlation between low income level and a reduction in marital adjustment and satisfaction. The studies by Cag and Yildirim (2013) and White and Keith (1990) concluded that income level is not a significant predictor of marital adjustment. This difference results from the fact that having a child with cancer, a chronic disease, is an economic challenge for families. It was also demonstrated that the care-givers of cancer patients have financial difficulties in the treatment and care of this disease (James et al., 2002; Altun, 1998; Scott-Findlay and Chalmer, 2001; Wells et al., 2002).

In families with cancer-diagnosed children, one of the parents usually has to leave his or her job to provide care for the child. The job loss creates a negative effect on families' economic status, and their financial problems become worse due to medical costs and other expenses (e.g.

transportation, special foods) incurred by the treatment and care needed for their children (Ozdemir et al., 2009). Karakavak et al. found that mothers further feel fear, worry, and anxiety during the treatment process because of the concern that the treatment might not be completed due to financial problems, the ambiguities regarding the prognosis, and repeated surgery. In families from lower socioeconomic levels, psychiatric problems, lack of confidence, and self-criticism is more common than in parents from higher socio-economic levels (Karakavak and Cirak, 2006; Grootenhuis, Last, 1997).

In this study, the mothers had a high marital adjustment total mean score, and their levels of couple satisfaction, showing affection, and commitment were moderate. In the study by Karpat (2012), the score on the "showing affection" subdimension was the lowest of all mean scores. On this point, the results of this study are consistent with the results of the previous studies (Donohue'o, 2009). In general, Turkish people show their love and affection less frequently than couples in other societies, due to cultural values.

The MSPSS total and subdimension mean scores of the mothers in this study showed that the mothers received support first from their families, second from their friends, and third from people that are special to them. The mean scores on the MSPSS also show that the mothers' social support perceptions are moderately well. The World Health Organization (WHO) explains the protective factors of psychological health in one of its reports. That report explained there was evidence that "social support from family and friends" was the protective factor which was the most beneficial (WHO, 2004). Although it has been proved that social support from the family is important, the families that provide care to cancer patients also need to be supported and strengthened. Relatives of patients may become depressed due to varying reasons, including the long duration of cancer and its effects on the family, the life-threatening aspect of the disease, loss of daily life routines, feeling bad about not being able to return to a job or social life, feeling grief for personal losses, feeling helpless regarding the patients, and general desperation and despair. Family members might also show symptoms of mourning due to these losses. Relevant studies have accepted the evidence that the support from informal groups including

family members, friends, neighbors, and family support groups is more effective in reducing the negative effects of stress than formal support (Boyd, 2002). The social support received from the immediate environment, including family, relatives, neighbors, and friends, as well as specialists and other groups in society, is one of the most important factors in helping families cope with the stress of having an impaired child, and in adapting to their situation (Minnes, 1998). Pejovic et al. also stated that support systems are important for the health of the family, and family members act as assistant therapists in the family system (Pejovic-Milovancevic et al., 2003). In another study (Ayaz et al.), the total and subdimension mean scores of the MSPSS showed that the subdimension mean score on "social support received from the family" is consistent with the findings of this study, while the "social support from friend" mean score was moderately higher, and the "social support from a special person" mean score was much higher than our findings. This result might have resulted from the cultural values which differed by region.

The results of this study showed that the marital satisfaction of the mothers increased in direct proportion with the social support they received. A permanent or temporary disease/disability of one or multiple family members influence the adjustment of all members of the family, and may impact the balance of even the strongest families (Yorukoglu, 1998). The social relationships within the parents' environment play a major role in helping parents cope with the negative effects of the burden created by the illness. Social support is described as a total of the support received from family members, friends, and other social relationships, and it has considerable effects on physical health and feelings of well-being. Cohen and Wills (1985) conducted a study with cancer-diagnosed children and their parents, and concluded that parents can better protect themselves from the physical and psychological problems resulting from the illness due to the support from the people around them. Another study indicated that there was a positive correlation between the marital adjustment of the families with children with special needs, and the social support which was provided to them. Those with strong social support systems also had increased marital satisfaction (Karpat, 2012). The reduction in social support and family satisfaction increases

communication problems, whereas financial challenges lead to organizational interruptions. Iovchuk (2003) said that a chronic disease in children causes deterioration in family relationships, high rates of divorce, and conflicting behaviors and attitudes in the family.

# **Conclusions and Suggestions**

This study was intended to examine the marital satisfaction and perceived social support of mothers with cancer-diagnosed children. The study results indicated that the mothers had moderate levels of marital satisfaction. Their mean scores on the support receive from family and friends were moderate, while mean scores on support from a special person and MSPSS total mean scores were low. The mothers' marital satisfaction increased as they received more social support.

Based on these results, this study suggests that the social support resources for mothers should be increased. This can help improve their marital satisfaction. Also, spousal support should be increased as it is the most important type of social support, and couples should be directed to family therapists. The families with cancerdiagnosed children should be provided with financial and psychological support to help them cope with the burden of cancer, and common spaces should be created for the families who have the same problems. There are few studies conducted in Turkey about how families with children who have a chronic disease are affected by the illness. The researcher suggests that the studies on this subject should be supported, and the quality and quantity of the services provided to families should be improved.

## Limitations

The limitations of the study include that the study was conducted with a small sample group and the study recruitment was in only one location. These outcomes may be generalized for the mothers population from which the sample group including the mothers who have a child with cancer-diagnosed children.

**Acknowledgment:** The researchers are grateful to the individuals who participated in this study.

## References

Ayaz,S., Efe, SY., Korukoglu.S. (2008). Level of Perceived Social Support of Patients with Gynaecological Cancer and Affecting Factors. Turkey Clinical J Med Sci, 28(6):880-5.

- Babaoglu, E., Oz, F. The Relationship Between Psychological And Social Problems of The Spouses Who Cared For The Terminal Cancer Patients. (2003). Journal of Research and Development in Nursing, 2, 24-33.
- Belsky, J., Kelly, J.(1994). The transition to arenthood: How a first child changes a marriage: Why some couples grow closer and others apart. New York: Delacoute Press.
- Bir- Akturk, E., Fisiloglu, H.( 2009). Marital satisfaction in Turkish remarried families: Marital status, step children, and contributing factors. Journal of Divorce and Remarriage, 50, 119-147.
- Boyd, BA.(2002). Examining the Relationship between Stress and Lack of Social Support in Mothers of Children with Autism. Focus on Autism and Other Developmental Disabilities, 17(4), 208-215.
- Cag, P., Yildirim, I. (2013). Relational and Personal Predictors of Marital Satisfaction. Turkish Psychological Counseling and Guidance Journal, 4(39), 13-23
- Callan, VJ.(1986). The impact of the first birth: Married and single women preferring childlessness, one child or two children. Journal of Marriage and the Family, 48 (2), 261-269
- Camfield, C., Breau, L., Camfield, P. (2001). Impact of pediatric epilepsy on the family: a new scale for clinical and research use. Epilepsia, 42 (1): 104-112
- Cavusoglu, H. (2004). Child Health Nursing. Ankara, System Ofset Printing House. (8<sup>th</sup> ed.)
- Cohen, S., Wills, TA.(1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98, 310-357.
- Coskun, Y., Akkas, G.(2009). The Relation Which between Anxiety Level Of the Mothers Who Have Disabled Children and Social Support. Journal of Kırsehir Education Faculty, 10;1,213-227.
- Cott, NF.(2002). Public vows: A history of marriage and the nation. Cambridge: Harvard University Press.
- Denga, DI. (1982). Childlessness and marital adjustment in Northern Nigeria. Journal of Marriage and The Family, 44 (3), 799-802.
- Dongen-Melman, V., Pruyn, JF., Groot, AD., Koot, HM.., Hahlen, K., Verhulst, FC.(1995). Late psychosocial consequences for parents of children who survived cancer. J Pediatr Psychol, 20: 567–586.
- Donohue'o, TW., Tolle, WL. (2009). Behavioral Approaches to Chronic Disease in Adolescence, 2; 197-212
- Eilertsen, MEB., Reinfjell, T., Vik, T. (2004). Value of professional collaboration in the care of children with cancer and their families. European Journal of Cancer Care, 13: 349–355
- Er, M.(2006). Child, illness, parent siblings. Journal of Pediatrics and Diseases, 49: 155-168.

- Ertan, AE., Sengelen, M., Vaizoglu, S. (2004). Preventable Childhood Cancers. Cumhuriyet University Medical Faculty Journal, 26; 48 54.
- Fisiloglu, H., Demir, A. (2000). Applicability of The Dyadic Adjustment Scale For Measurement of Marital Quality With Turkish Couples. European Journal of Psychological Assessment, 16: 214-218.
- Grootenhuis, MA., Last, B. (1997). Predictors of parental emotional adjustment to childhood cancer. Psycho-oncology, 6: 115–128.
- Hayward, M., Zhang, Z. (2006). Gender, the marital life course, and cardiovascular disease in late midlife. Journal of Marriage and Family, 68(3), 639 657.
- Hentinen, M., Kyngäs, H. (1998). Factors associated with the adaptation of parents with a chronically ill child, Journal of Clinical Nursing., 7, 316–324.
- Hoekstra-Weebers, JE., Jaspers, JP., Kamps, WA., Klip, EP. (2001). Psychological Adaptation and Social Support of Parents of Pediatric Cancer Patients: A Prospective Longitudinal Study. Journal of Pediatric Psychology, 26: 225-35. Kerimoglu, E., Dikmeer, İA. (2009). Psychotherapeutic Approaches to Children and Adolescents with Malignancy and to Their Families. Turkiye Klinikleri J Pediatr Sci, 5(4):179-82.
- Hoffman, SR., Levant, R.A. (1985). comparison of child-free and child-anticipated married couples. Family Relations, 34, 197-203.
- Hosoda, T. (2014) The impact of childhood cancer on family functioning: a review. Graduate Student Journal of Psychology, 15:18-30
- Iovchhuk, NM. (2003). The rehabilitative help for family with mentally ill Child. European Child & Psychiatry, 2, 12, 63.
- James, K., Keegan-Wells, D., Hinds, PS., Kelly, KP., Bond, D., Hall, B.(2002) The Care of My Child with Cancer: Parents' Perceptions of Caregiving Demands. Journal of Pediatric Oncology Nursing, 19: 218-28.
- Karakavak, G., Cirak, Y. (2006). Feelings Of The Mothers' Having Chronically Ill Children, Journal of the Faculty of Education, 7(12):95-112.
- Karpat, D., Girli, A. (2012). The Examine The Factors Effecting Grief, Marital Adjustment And Social Support And Relationship Between Grief, Marital Adjustment And Social Support of The Parents of Children With Pervasive Development Disorder. Ankara University Faculty of Education Sciences Journal of Special Education, 13(2):69-85.
- Knafl, K., Zoeller, L. (2006). Childhood chronic illness: a comparison of mothers' and fathers' experiences. J Fam Nurs, 6: 287-302.
- Kurdek, LA. (1993). Predicting marital dissolution: A 5 year prospective longitudinal study of newlyed couples. Journal of Personality and Social Psychology, 64, 221-242.

- Kutluk, T. (2006). Epidemiology of Childhood Cancers. Cerrahpasa Medical Faculty Continuous Medical Education Activities Symposium Series,11-16.
- Maurice Stam, H, Oort, FJ, Last, BF Grootenhuis, M. (2004). Emotional functioning of parents of children with cancer: the first five years of continuous remission after the end of treatment. Psycho-oncology, 17: 448-459.
- Minnes, PM.(1988). Family resources and stress associated with having a mentally retarded child. American Journal on Mental Retardation, 93 (2), 184-192.
- Norberg, AL., Lindblad, F., Boman, K. (2006). Support-seeking, perceived support, and anxiety in mothers and fathers after children's cancer treatment. Psycho- Oncology, 15, 335-343
- Ozdemir, FK., Sahin, ZA., Kücük, D. (2009). Determination of burden cares for mothers having children with cancer. New Medical Journal, 26:153-158
- Patterson, JM., Holm, KE., Gurney, JG.(2004). The impact of childhood cancer on the family: a qualitative analysis of strains, resources and coping behaviors. Psycho-Oncology, 13: 390-407.
- Pejovic-Milovancevic, M., Popovic-Deusic, S., Aleksic, O., Garibovic, E. (2003). Personality characteristics of parents in hospitalized children. European Child & Psychiatry, 2, 12, 125.
- Rauch, J. (2004). Gay marriage: Why it is good for gays,good for straights, and good for America. New York, NY: Times Books/Henry Holt and Co. LLC.
- Robison, LL. (2005). The Childhood Cancer Survivor Study: a resource for research of longterm outcomes among adult survivors of childhood cancer. Minn Med., 88: 45-49.
- Selamet G.( 2004). Examination of the Social Support and the Quality of Life Perceived by Children with Cancer Children Receiving Chemotherapy, Marmara University Institute of Health Sciences Unpublished Graduate Thesis, Istanbul.
- Scott-Findlay, S., Chalmers, K. (2001). Rural Families' Perspectives on Having a Child with Cancer. Journal of Pediatric Oncology Nursing, 18: 205-16.
- Sokolski, DM., Hendrick, SS. (1999). Marital satisfaction. American Journal of Family Therapy, 26(1), 39-49.

- Stewart, MJ., Ritchie, JA., McGrath, P., Thompson, D., Bruce, B. (1994). Mothers of Children with Chronic Conditions: Supportive and Stressful Interactions with Partners and Professionals Regarding Caregiving Burdens. Canadian Journal of Nursing Research, 26: 61-81.
- Syse, A., Loge, JH., Lyngstad, TH.(2010). Does childhood cancer affect parental divorce rates? A population based study. Journal of Clinical Oncology, 28(5):872-877
- Spanier, GB. (1976). Measuring Diyadic Adjusment: A new scale for assesting the quality of marriage and the similar dyads. Journal of Marriage and Family, 38: 15-28.
- Tufekci, FG., Ince, ZE.(2015). Evaluation of Marital Adjustment and Life Satisfaction In Parents With Children With Disabilities And Determination of The Affecting Factors. Gümüshane University Journal of Health Sciences, 4(1).
- Twenge, J.M., Campel, W.K., & Foster, C.A. (2003).
  Parenthood and marital satisfaction: A meta analytic review. Journal of Marriage and Family, 65, 574-583.
- Van Dongen-Melman, JE., Pruyn, JF., Groot, AD.(1995). Late psychosocial consequences for parents of children who survived cancer. J Pediatry Psychology, 20: 567–586..
- White, L., Keith, B.(1990). The effect of shift work on the quality and stability of marital relations.

  Journal of Marriage and the Family, 52, 453-462.
- Wells, DK., James, K., Stewart, JL., Moore, IM., Kelly, KP., Moore, B,. et al. (2002). The Care of My Child with Cancer: A New Instrument to Measure Caregiving Demand in Parents Of Children with Cancer. Journal of Pediatric Nursing, 17: 201-10
- World Health Organization. (2004). World Health Report, WHO.
- Yamazaki, S., Sokejima, S., Mizoue, T., Eboshida, A., Fukuhara, S. (2005). Health-Related Quality of Life.of Mothers of Children With Leukemia in Japan. Quality of Life Research, 14: 1079-85.
- Yorukoglu, A. (1998). Child Mental Health, Istanbul, Free Publications (22nd edt).
- Zimmet, GD., Powel, SS., Farley, GK. (1988). The multidimensional scale of perceived social support. Journal of Personality Assessment, 52:30-41.