



Research Article

A Survey of social support and psychosocial compliance in patients with breast cancer

Gülsüm Nihal Çürük^{1*}, Pınar Tekinsoy Kartin² and Arzu Şentürk³

¹PhD, Associated Professor, Department of Internal Diseases Nursing, Faculty of Health Sciences, İzmir Economy University, Balçova, İzmir / Turkey

²PhD, Associated Professor, Department of Internal Diseases Nursing, Faculty of Health Sciences, Erciyes University, Kayseri, Turkey

³Research Fellow, Department of Internal Diseases Nursing, Zübeyde Hanım School of Health, Niğde Ömer Halisdemir University, Niğde, Turkey

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***Corresponding author:** Gülsüm Nihal Çürük, PhD, Associated Professor, Faculty of Health Sciences, Department of Internal Diseases Nursing, İzmir Economy University, Turkey, Tel: +905309777083; E-mail: guleser38@gmail.com

ORCID: orcid.org/0000-0003-1862-7445

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Abstract

Objective: The aim of the study was to investigate social support and psychosocial compliance in patients with breast cancer.

Methods: The research was carried out on 131 patients diagnosed with breast cancer. The forms containing patients' demographic information were prepared by the researcher and Multidimensional Scale of Perceived Social Support (MSPSS) and Psychosocial Adjustment of Illness Scale-Self Report Scale (PAIS-SR) were used as the data tools. Data were collected during personal interviews with patients, and were evaluated on computer using SPSS packet program. Mean, standard deviation, t-test and Mann-Whitney U-Test, one way variance, Kruskal Wallis test Kolmogorov-Smirnov test, Spearman correlation analysis were used in the statistical analysis.

Results: The mean score of MSPSS was 60.9±8.2 and the mean score of PAIS-SR scale was 56.0±9.5. It was found out that level of psychosocial adjustment of 3.8% of the patients was "good", level of psychosocial adjustment of 22.2% of them was "fair" and level of psychosocial adjustment of 74.0% of them was "poor". It was found that there was a negative and significant correlations between MSPSS and PAIS-SR.

Conclusions: Perceived social support levels of breast cancers patients were found to be above the average and perceived of psychosocial adjustment were found to be below the average. It was concluded that social support for patients with breast cancer had an influence on their psychosocial adjustment to illness.

Introduction

Breast cancer is one of the most prevalent cancers in both developing and developed countries. The World Health Organization (WHO) reported that an estimated 627.000 women died from breast cancer in 2018, representing approximately 15% of all cancer deaths among women [1]. In Turkey, breast cancer presents in 43.0 cases per one hundred thousand cancer patients. This translates to one out of every four female cancers diagnosed [2].

In addition to being a common bodily health problem, cancer is also associated with psychosocial problems such as adjustment disorders, depression, anxiety, diminished life

satisfaction or loss of self-esteem. Because getting a cancer diagnosis causes the patient to try to cope with physical problems on the one hand and uncertainty about the future on the other [3,4]. Moreover, getting a cancer diagnosis causes the patients to experience feelings such as fear, hopelessness, helplessness, guilt, and while the individual becomes psychologically aggravated, getting a breast cancer diagnosis is considered as an additional stressor that seriously shakes the individual psychosocially [4-6]. Because the individual who is diagnosed with breast cancer is faced with a threat to an organ that symbolized by femininity, aesthetics, motherhood and sexuality. For this reason, women often perceive loss of attraction, fertility, sexuality and femininity [5].



When psychological problems are experienced and psychosocial adjustment is impaired, the course of the illness and the individual's response to the treatment are negatively affected. For this reason, health professionals should consider psychosocial support as an integral part of treatment for the patient in a holistic approach and should constitute a treatment plan that includes psychosocial dimensions [4,7].

Cancer diagnosis has deep effects not only on psychological state but also on the cognitive, emotional, spiritual and social features of the individual. Both the cancer diagnosis and the treatment process changes self-esteem, the perception of the body, the quality of life, the daily life activities, the sexual life, personal and social roles, the family and the environment of the patient and in response to that the need for social support is increased [3,4]. In general, social support, perceived as a physical and psychological help provided to an individual in a difficult situation, is one of the most important sources that can help coping with the psychological stresses experienced by cancer patients. Individuals with social support are able to adapt more easily, heal more easily, improve their quality of life and increase their ability to cope with illnesses [8]. As it has been reported before by many researchers, social support provided by health professionals, health care institutions and society has positive effects on wellness of the cancer patients and strengthening of the coping strategies [9,10].

Since breast cancer diagnosis and treatment brings multiple problems in women, nurses should take a holistic approach to breast cancer patients, thoroughly evaluate the psychosocial needs and adjustment of patients, identify psychosocial problems, and exercise counseling in the mobilization of appropriate social support systems [6,11].

Aim of this study is to investigate the level of social support and psychosocial adjustment in patients with breast cancer.

Methods

Study design

A descriptive research design was used in the current study.

Subjects

The study sample was 131 patients with breast cancer receiving chemotherapy between July 2013 and December 2013 at Mehmet Kemal Dedeman Oncology Hospital.

Inclusion criteria

Patients who received chemotherapy, had no psychiatric disorders, no communication problem, and be able to speak and understand Turkish are included in the study.

Tools for data collection

The data were collected by using Personal Description Form, Multidimensional Scale of Perceived Social Support (MSPSS) and Psychosocial Adjustment of Illness Scale-Self Report Scale (PAIS-SR) in the study. Data were collected through individual interviews.

Personal description form

There are a total of 17 questions in the form containing socio-demographic characteristics of the patients, and information about the disease. The questions of the form were prepared by the researcher by revising the literature.

Multidimensional scale of perceived social support

MSPSS was used as a measure of the patients' perceived social support. The scale yields three subscale scores for family, friends and significant other. The perceived social support is graded on a 7-point likert-type scale (from "1-very strongly disagree" to "7-very strongly agree") as follows: respondents are required to circle 1, very strongly disagree; 2 strongly disagree; 3 mildly disagree; 4 neutral; 5 mildly agree; 6 strongly agree; 7 very strongly agree. The complete scale ranges from 12 to 84. Higher scores indicate higher social support. Eker, Arkar, and Yaldız [12] translated the measure to Turkish and provided validity and reliability information. For the validity and reliability of the inventory, Cronbach alpha coefficient was determined as 0.80-0.95 [12].

Psychosocial adjustment of illness scale-self report scale

The PAIS-SR was used to evaluate the psychological and social adjustment of patients. This multidimensional scale is a 46-item four-point scale (0-3) consisting of 7 domains: health care orientation (8 items), vocational environment (6 items), domestic environment (8 items), sexual relationships (6 items), extended family relationships (5 items), social environment (6 items), and psychological distress (7 items). Higher scores indicate a weaker adjustment. Scores lower than 35 represents well psychosocial adjustment, scores between 35 and 51 represents medium-level psychosocial adjustment, and higher than 51 represents poor psychosocial adjustment. The Turkish version of the PAIS-SR was prepared by Adaylar [13]. For the validity and reliability of the inventory, Cronbach alpha coefficient was determined as 0.80-0.95 [13].

Ethical considerations

Ethical approval for this study was obtained through a Erciyes University Clinical Trials Ethics Committee. All participants provided written informed consent.

Data analysis

Statistical analyses were performed with SPSS. In the evaluation of the data obtained from the research, independent samples *t*-test and Mann-Whitney U-Test were used for the comparison of two groups and analysis of variance and Kruskal Wallis test were used for comparing more than two groups. Since the relationship between two numerical variables was not distributed normally, it was examined by Spearman Correlation Analysis.

Results

In total, 131 cancer patients participated in this study; the mean age of the subjects was 52.0 years old (SD = 10.9), 49.6% had graduated from primary school and 57.2% lived in a town.



The majority of participants were married (87.0%) and had child (90.0%). It was found that 45.0% of the patients had metastases, 55.0% had surgery and 65.0% had cancer for 1 years.

Patients with breast cancer had a PAIS-SR score of 29-78, with a mean score of 56.0 ± 9.5 (Table 1). It was found that 3.8% of the patients had good adjustment, 22.2% had moderate adjustment and 74.0% had poor adjustment (Table 2). The best adjustment of the patients on the PAIS-SR scale was found to be broad family associations (1.6±1.5) and family environment (4.6±2.8), however the worst adjustment was to the health care (17.5±2.8) and sexual life adjustments (11.51 ± 4.3) (Table 1).

The mean score of MSPSS was 60.9±8.2, significant others subscale was 20.2±3.7, family subscale was 23.7±2.4 and friends subscale was 16.9±4.2 (Table 3).

It was found that the psychosocial adjustment of the patients who were single ($p= 0.010$), who lived in the village ($p=0.011$) and who had metastasis ($p=0.005$) were significantly worse in our study. The mean score of the social support scale of the patients with high income level was found to be significantly higher than the other patients ($p=0.002$). It was determined that the variables such as age, education level, family type, number of children, duration of diagnosis and surgery had no significant effect on the score obtained from both psychosocial adjustment and social support scale ($p>0.05$) (Table 4).

In our study, it was determined that there was a statistically significant negative correlation between the average total scores of perceived social support and psychosocial adjustment of the patients (Table 5).

Discussion

New treatment options have provided prolongation of survival of the cancer patients, as well as the need for good psychosocial adjustment to increase patients' quality of life

Table 1: The Score Averages of the Cancer Patients on the Psychosocial Adjustment to the Illness Scale-Self-Report and on Its Subscales.

PAIS-SR* Subscales	Min.-Max.	Mean±SD**
Health care orientation	10-23	17.5±2.8
Vocational environment	4-12	7.8±1.7
Domestic environment	0-15	4.6±2.8
Sexual relationships	0-18	11.51±4.3
Extended family relationships	0-8	1.6±1.5
Social environment	0-18	6.1±4.0
Psychological distress	0-15	6.6±3.1
PAIS-SR total	29-78	56.0±9.5

*Psychosocial Adjustment to the Illness Scale-Self-Report, **Standard deviation.

Table 2: Psychosocial adjustment levels of cancer patients.

Psychosocial Adjustment Level	n	%
Well adjusted (score of <35)	5	3.8
Moderately adjusted (score between 35 and 51)	29	22.2
Poorly adjusted (score of >51)	97	74.0

Table 3: Multidimensional Scale of Perceived Social Support Scores levels of cancer patients.

MSPSS* Subscales	Min. -Max.	Mean±SD
Family Subscale	15-28	23.7±2.4
Friends Subscale	7-25	16.9±4.2
Significant Other Subscale	8-28	20.2±3.7
MSPSS total score	35-81	60.9±8.2

* Multidimensional Scale of Perceived Social Support.

Table 4: The PAIS-SR and MSPSS Total Score of the Patients According to the Demographic Variables and the Characteristics Regarding Cancer.

Demographic variables and the characteristics regarding cancer	PAIS-SR* total score	Test value	MSPSS** total score	Test value
Age				
28-37 age	53.1±10.4	F=1.730 p=0.147	61.25±9.59	F=1.097 p=0.361
38-47 age	56.9±8.7		59.78±6.57	
48-57 age	54.3±10.8		59.76±9.53	
58-67 age	57.0±8.3		63.43±7.16	
68-77 age	61.0±6.6		61.08±7.31	
Education level				
Illiterate	58.6±8.3	F=2.203 p=0.091	59.50±8.60	F=1.786 p=0.153
Primary school	56.7±9.7		60.52±7.87	
Secondary school	53.7±9.1		61.47±7.39	
High school/University	51.6±11.7		66.20±10.88	
Income level				
Good	64.87±7.24	F=2.850 p=0.062	64.87±7.24	F=6.492 p=0.002
Low	60.38±7.95		60.38±7.95	
Medium	57.19±8.74		57.19±8.74	
Marital Status				
Married	55.2±9.6	Z=-2.617	60.98±8.08	Z=0.049
Single	61.7±7.0	p=0.010	60.87±9.61	p=0.961
Having Children				
No	57.4±8.8	F=1.119 p=0.350	57.50±6.40	F=1.570 p=0.186
1	55.8±9.9		59.70±12.14	
2	53.7±9.0		62.40±7.61	
3	56.4±8.8		59.10±9.31	
4 and above	58.1±10.9		62.32±6.92	
Family Type				
Nuclear Family	55.3±10.1	t=-1.365	60.89±8.64	t=-0.200
Large Family	58.1±6.9	p=0.175	61.24±6.79	p=0.841
Place of Living				
City	52.2±12.1	t=4.651 p=0.011	61.90±8.43	t=0.919 p=0.402
Town	56.5±7.9		61.15±7.79	
Village	59.7±8.9		58.90±9.47	
Metastasis				
Yes	58.5±8.5	t=2.839	60.15±9.32	t=-1.026
No	53.9±9.9	p=0.005	61.63±7.25	p=0.307
Surgery				
Yes	53.0±13.3	t=-1.482	61.89±10.04	t=0.527
No	56.5±8.7	p=0.141	60.81±7.94	p=0.599
Duration of the Illness				
<1 year	58.0(31-78)	X=0.578 p=0.749	62.0(35-81)	X=0.912 p=0.634
1-2 years	56.5(29-77)		59.5(44-79)	
>2 years	56.0(39-72)		63.0(43-74)	

*Psychosocial Adjustment of Illness Scale-Self Report Scale, **Multidimensional Scale of Perceived Social Support

[14]. In our study, the mean score of PAIS-SR on patients with breast cancer was 56.0 ± 9.5. Similarly, in other studies conducted with breast cancer patients, the PAIS-SR scale score average of the patients was similar; 56.15 ± 14.02 in the

**Table 5:** The relationship between the Multidimensional Scale of Perceived Social Support Scores and the PAIS-SR Adjustment Scores.

	PAIS-SR**** Subscales								
	Health care orientation	Vocational environment	Domestic environment	Sexual relationships	Extended family relationships	Social environment	Psychological distress	PAIS-SR total	
MSPSS***	<i>r</i>	0.141	0.1058	-0.300**	0.129	-0.237**	0.117	0.158	-0.193*
	<i>p</i>	0.109	0.232	0.000	0.142	0.006	0.183	0.072	0.027

* $p < 0.05$, ** $p < 0.001$, *** Multidimensional Scale of Perceived Social Support, **** Psychosocial Adjustment of Illness Scale-Self Report Scale

study conducted by Rizalar Ozbas, Akyolcu, and Gungor [15], 57.26 ± 8.78 in the study conducted by Schonholtz [14] and 51.46 ± 9.97 in the study conducted by Swain, et al. [16]. As in other studies, we found that psychosocial adjustment of patients with breast cancer are below average.

In our study, patients' best adjustment were defined as wide family relationships and family environment, and the area of worst adjustment was defined as health care and sexual life adjustments. In a similar studies conducted by Rizalar Ozbas, Akyolcu, and Gungor [15] and Çam, Gümüş, and Saka [11] in patients with breast cancer, wide family relationships were found to be best adjustment and sexual life was worst adjustment sub-dimensions. In studies focused on other chronic diseases, the health care adjustment [17] and sexual life [17,18] were the most negatively affected subscale and the large family associations [17,18] was the subscale exhibiting the best adjustment. It is a social institution that affects the individual and the society at the same time as it is affected by the family, individual and society. In our study, it is possible to explain the good adjustment of the patients in the broad family and family environment sub-dimension, in accordance with other studies, with the strong ties of relatives due to cultural values in our country, paying respect to values such as family protection, solidarity and cooperation traditions in Turkish family structure, and patient visits.

PAIS-SR scale scores lower than 35 indicates good psychosocial adjustment, between 35 and 51 indicates medium psychosocial adjustment and score higher than 51 indicates poor psychosocial adjustment [13]. 3.8 % of our patients participated in our study had good, 22.2% moderate and 74.0% had poor psychosocial adjustment. In studies conducted with patients with breast cancer; Rizalar Ozbas, Akyolcu, & Gungor [15] found that 5% of participants had good psychosocial adjustment, 30% had moderate and 65% poor; it was reported by Çam, Gümüş, & Saka [11] that 26.3% of patients had good psychosocial adjustment, 40.7% had moderate and 26.3% had poor. Psychosocial processes are important in the etiology of all diseases, especially in chronic diseases, and chronic diseases and treatment can affect psychosocial processes in adverse ways [19]. Cancer is not only a physical illness, but also the leading cause of psychosocial problems and psychosocial discomforts at the highest level [3,4]. Results of our study is not surprising since our study group consists of breast cancer patients. As a matter of fact, women with breast cancers feel that their life and womanhood is under threat. Cancer is a disorder that effects patients' body, sprite and social life, quality of life, lowers self-esteem, causes deterioration both in physical and in body image, and psychosocial problems such as loss of womanhood, sexual dysfunction, anxiety, depression,

hopelessness, guilt and shame [5,20]. It is therefore important that nurses working with patients with breast cancer should evaluate psychosocial adjustment of their patients and undertake initiatives to strengthen adjustment.

Social support, often referred to as help provided by people around the stressed or individual in difficult situation, aids to protect the wellbeing by alleviating or compensating for the damages caused by stress. It is stated that the social support provided by family and friends is very important in the psychosocial adjustment of the patients [8]. In accordance with this information, we found that the social support scores of the patients were above the average, and the patients stated that they receive adequate social support from the family. In cancer patients, families constitute a large proportion of social support [9,21]. Particularly support originated from family has been found to be helpful for the patients with their psychological problems [9]. In our study, patients also had the highest score from family support, which is the subscale of the social support scale. This can be interpreted as a sign of strong family ties.

Cancer patients who are married or have an emotional relationship during the studies are reported to be more positive about their views on life because of the support they receive from life-partners [22,23]. In our study, the psychosocial adjustment of married patients was significantly better than that of single patients because of the positive effect of support provided by the patient's spouse on psychosocial adjustment.

Cancer patients have three periods of crisis that can disrupt their adjustment with their disease and treatments, including the period they were first diagnosed, the period of recurrence or metastases, and the beginning of new treatments (Hoskins & Haber 2000; Sherman et al., 2012). We have also found that psychosocial adjustment of patients with metastasis are statistically significantly worse in our study coherent to literature. This can be explained by the anxiety caused by metastasis in patients.

Inadequate services such as education, transportation and health in rural areas affect adjustment in chronic diseases. In particular, the inability of people living in rural areas to share their worries about illnesses and to reach specialists to address them, bring up the problems of having limited knowledge in coping with illness and disease [24]. In our study, the psychosocial adjustments of the patients living in rural areas were significantly worse, and logistical difficulties may be the result of social and cultural barriers. Thus, we can conclude that it is important for nurses, especially those living in the rural areas, to know that there is a need for more information and counseling on this subject, and proper counseling for these individuals is necessary.



In the literature, it is emphasized that as the education level of the individual increases, the understanding of health will improve, individuals will take more responsibility for matters related to their health, they will learn more and use more efficient strategies to manage disease symptoms, so that they will deal with the problems caused by the disease more easily, and that their adjustment will be better [25]. In our study, it was determined that patients with higher educational level, although not statistically significant, had higher psychosocial adjustment.

Low-income families spend a large part of their income, even entirely, only on minimum living needs, and cannot afford to spend money for their health, education and cultural needs. This causes low-income individuals to have a weaker link with society. In addition, low-income individuals are at risk of social exclusion. The increase in the level of income brings with it the possibility of establishing relationships with other people, new friendships, feeling useful to society and social cohesion [26]. In our study, the mean score of the social support scale of the individuals with high income level was found significantly higher than the other patients.

While the high score of Multidimensional Scale of Perceived Social Support (MSPSS) indicates a high level of perceived social support [13], the high score obtained from the psychosocial adjustment-self report scale indicates poor psychosocial adjustment. It was determined that the average level of psychosocial adjustment scores decreased as the social support level of the patients increased because of the negative correlation between the perceived social support total score average and the psychosocial adjustment total score average in our study, in other words, it was determined that the level of psychosocial adjustment was increased and the relationship between them was statistically significant. Social support affects the health both directly and by protecting them from the negative consequences of stressful events [7,8]. It is emphasized that the social family support, conceptualized as the support provided by family members, relatives and / or other social relations, has an impact on both physical health and psychological well-being of the individual in difficult situation or the distressed. The function of social support, so called "positive social interaction" or "socialization", has a positive effect on the psychological adjustment of individuals through sharing a common interest or entertainment with a group of people, such as having a dinner and going to a movie [8]. Similar to Rizalar Ozbas, Akyolcu and Gungor [15], we also found that the psychosocial adjustment of patients with breast cancer was found to be better as the social support level of the patients increases. In studies conducted by Turten Kaymaz and Akdemir [27] in patients with diabetes, it was found that social support was effective in psychosocial adjustment and the presence of social support positively influenced adherence to the disease. In the study conducted by Babacan Gümüş and Çam [28], it was determined that nursing interventions focused on emotional support increased psychosocial adjustment in cancer patients.

Conclusions

In our study, it was determined that the psychosocial adjustment of the patients with breast cancer was below the average and the social support levels were above the average. Psychosocial adjustment of the majority of the patients was found to be at a "poor level" and it was determined that the patients' best adjustment area in the psychosocial adjustment subscale was extended family relationships and in the social support subscale, the most supported area was family support. In addition, as the social support level of the patients increases, it has seen that the psychosocial adjustment also improve.

In line with the results from our study it has been recommended that;

- ✓ Regular evaluation of psychosocial adjustment of patients with breast cancer and planning of initiatives to increase psychosocial adjustment should be made,
- ✓ Since family-provided social support is an important factor in the psychosocial adjustment of patients, awareness of the families should be expanded and adequate family support should be provided in cooperation with the family in the care and treatment of the patient.
- ✓ Having adequate social support resources affects psychosocial adjustment positively, it is recommended that appropriate social support resources should be identified to increase psychosocial adjustment of breast cancer patients.

Limitations

The limitation of this study was the relatively small sample size.

Author contribution

Study conception and design: GNÇ, PTK

Data collection: AŞ, PTK

Data analysis and interpretation: GNÇ, PTK, AŞ

Drafting of the article: GNÇ

Critical revision of the article: GNÇ, PTK

References

1. World Health Organization (2019) Breast cancer: Early diagnosis and screening. [Link: https://bit.ly/2NE6pQL](https://bit.ly/2NE6pQL)
2. Şencan İ, Keskinçilic B (2017) Cancer statistics Turkey, T.C. Ministry of Health Public Health Agency of Turkey.
3. Bag B (2013) Long-term psychosocial problems in cancer patients. *Current Approaches in Psychiatry* 5: 109-126.
4. Ülger E, Alacacioğlu A, Gülseren AŞ, Zencir G, Demir L, et al. (2014) Psychosocial problems in cancer and the importance of psychosocial oncology. *Journal of Dokuz Eylül University Faculty of Medicine* 28: 85-92.
5. İzci F, İlgün AS, Fındıklı E, Özmen V (2016) Psychiatric symptoms and psychosocial problems in patients with breast cancer. *J Breast Health* 12: 94-101. [Link: https://bit.ly/3ga0GhW](https://bit.ly/3ga0GhW)



6. Hoskins CN, Haber J (2000) Adjusting to breast cancer. *Am J Nurs* 100: 26-33. [Link: https://bit.ly/2YHQuXV](https://bit.ly/2YHQuXV)
7. Erci B, Karabulut N (2007) Appraising the self-assessed support needs of Turkish women with breast cancer. *European Journal of Cancer Care* 16: 137-143. [Link: https://bit.ly/3eJxqOE](https://bit.ly/3eJxqOE)
8. Ardahan M (2006) Social support and the nursing. *Journal of Atatürk University School of Nursing* 9: 68-75. [Link: https://bit.ly/31sml0o](https://bit.ly/31sml0o)
9. Landmark BT, Strandmark M, Wahl A (2002) Breast cancer and experiences of social support. *Scandinavian Journal of Caring Sciences* 16: 216-223. [Link: https://bit.ly/3g6VafS](https://bit.ly/3g6VafS)
10. Sherman DW, Haber J, Hoskins CN, Budin WC, Maislin G, et al. (2012) The effects of psychoeducation and telephone counseling on the adjustment of women with early-stage breast cancer. *Appl Nurs Res* 25: 3-16. [Link: https://bit.ly/2ZiYPAu](https://bit.ly/2ZiYPAu)
11. Çam O, Gümüş AB, Saka Ş (2009) Investigation of factors affecting psychosocial adjustment of patients with breast cancer. *Journal of Breast Health* 5: 73-81. [Link: https://bit.ly/38cZyr6](https://bit.ly/38cZyr6)
12. Eker D, Arkar H, Yaldız H (2001) Factorial structure, validity, and reliability of revised form of the multidimensional scale of perceived social support. *Turkish Journal of Psychiatry* 12: 17-25. [Link: https://bit.ly/2NHT35O](https://bit.ly/2NHT35O)
13. Adaylar M (1995) Attitude, adaptation, perception and selfcare tendencies in people who are chronically ill. Unpublished Master's Theses, Istanbul University Institute of Health Science: Istanbul, Turkey.
14. Schonholtz JK (2000) Psychosocial adjustment to breast cancer: the role of marital support and approach coping. (doctoral dissertation). Walden University, Minneapolis. [Link: https://bit.ly/2BIYwN9](https://bit.ly/2BIYwN9)
15. Rizalar S, Ozbas A, Akyolcu N, Gungor B (2014) Effect of perceived social support on psychosocial adjustment of Turkish patients with breast cancer. *Asian Pacific Journal of Cancer Prevention* 15: 3429-3434. [Link: https://bit.ly/2VvUbhv](https://bit.ly/2VvUbhv)
16. Swain SM, Rowland J, Weinfurt K, Berg C, Lippman ME, et al. (1996) Intensive outpatient adjuvant therapy for breast cancer: results of dose escalation and quality of life. *Journal of Clinical Oncology* 14: 1565-1572. [Link: https://bit.ly/3eIIYTF](https://bit.ly/3eIIYTF)
17. Gündüz F, Yılmaz Karabulutlu E (2016) The assess of illness perception, psychosocial adjustment and glycemic control in type II diabetic mellitus patients. *Journal of Anatolia Nursing and Health Sciences* 19: 1006-1015.
18. Akça Talaz A, Çınar S (2008) Comparison of psychosocial adjustment in people with and without diabetic foot ulceration. *Australian J Adv Nurs* 25: 87-96. [Link: https://bit.ly/3gbA9jY](https://bit.ly/3gbA9jY)
19. Macleod J, Davey Smith G (2003) Psychosocial factors and public health: a suitable case for treatment? *J Epidemiol Community Health* 57: 565-570. [Link: https://bit.ly/2YHK3nP](https://bit.ly/2YHK3nP)
20. Compas BE, Luecken L (2002) Psychological adjustment to breast cancer. *Curr Dir Psychol Sci* 11: 111-114. [Link: https://bit.ly/3dKfKR8](https://bit.ly/3dKfKR8)
21. Dedeli Ö, Fadiloğlu Ç, Uslu R (2008) A survey of functional living and social support in patients with cancer. *Turkish Journal of Oncology* 23: 132-139. [Link: https://bit.ly/3dls58X](https://bit.ly/3dls58X)
22. Vickberg SM, Duhamel KN, Smith MY, Manne SL, Winkel G, et al. (2001) Global meaning and psychological adjustment among survivors of bone marrow transplant. *Psycho-Oncology* 10: 29-39. [Link: https://bit.ly/3eK17z8](https://bit.ly/3eK17z8)
23. Fler J, Hoekstra HJ, Sleijfer DT, Tuinman MA, Hoekstra-Weebers JE (2006) The role of meaning in the prediction of psychosocial well-being of testicular cancer survivors. *Qual Life Res* 15: 705-717. [Link: https://bit.ly/31szg2s](https://bit.ly/31szg2s)
24. Koçoğlu D, Gedik S (2016) The assessment of disease management of individuals with hypertension and living rural area. *The Journal of Academic Social Science* 4: 207-218.
25. Akman N (2016) Identifying the psychosocial adjustment of patients with chronic obstructive pulmonary disease and the difficulties experienced by the caregivers, Bülent Ecevit University, Public Health Department, Master Thesis, Turkey.
26. Çakır Ö (2002) Social Exclusion. *Dokuz Eylül University The Journal of Graduate School of Social Sciences* 4: 83-104.
27. Türten Kaymaz T, Akdemir N (2016) Psychosocial adjustment of diabetic patients to their disease. *Journal of Psychiatric Nursing* 7: 61-67. [Link: https://bit.ly/2YGiXNK](https://bit.ly/2YGiXNK)
28. Babacan Gümüş A, Çam O (2008) Effects of emotional support-focused nursing interventions on the psychosocial adjustment of breast cancer patients. *Asian Pac J Cancer Prev* 9: 691-697. [Link: https://bit.ly/3eJAKD2](https://bit.ly/3eJAKD2)

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