IJABBR- 2017- eISSN: 2322-4827

International Journal of Advanced Biological and Biomedical Research, 5(2) (2017) 92-97

Journal homepage: www.ijabbr.com

Research Article

The Compare of Perceived Stress and Feeling Lonely in Breast Cancer Patients and Normal Individuals

Farzaneh Ebrahimi*[1], Seyed Ebrahim Mousavi[1], Sevda Nezafat Takaleh[1], Ali Ebadian[2], Hassan Jafarzadeh Dashbolagh[3]

[1]*Department of Psychology, Ardabil branch, Islamic Azad University, Ardabil, Iran*
[2]*Department of Psychology, University of Mohaghegh Ardabili, Ardabil, Iran*
[3]*Department of Psychology, Young Researchers and Elite Club, Ardabil Branch, Islamic Azad university, Ardabil, Iran*

ARTICLE INFO

Article history:
Received: 19 Jan 2017
Revised:29 Feb 2017
Accepted: 13 Apr 2017
ePublished: 30 Jun 2017

Key words:
Perceived stress
Feeling lonely
Breast cancer patients

ABSTRACT

Objective: The purpose of this study was to examine the compare of perceived stress and feeling lonely in breast cancer patients and normal individuals. **Methods:** This research is causal-comparative. The population consist of all patients with breast cancer in hospitals of Ardebil. 60 patients and 60 normal individuals were selected with sampling method. The students answered the same questionnaire including social and emotional loneliness scale for adults (SELSA_S) and questionnaire of perceived stress scale. Data analysis included MANOVA analyses and SPSS software (package of Spss / pc + + ver18). **Results:** The results showed that there is a significant relationship between perceived stress positive, negative and feeling lonely in breast cancer patients and normal individuals. According the results the there is a significant relationship between loneliness in breast cancer patients and normal individuals and mean loneliness feeling in patients with breast cancer more than normal subjects.

Introduction

The impact of a breast cancer diagnosis and its treatment on quality of life (QoL) is well documented (e.g., Ganz et al., 1996; Holzner et al., 2001). Shapiro et al. (2001), in their reviewNof the relationship between QoL and psychosocial variables in breast cancer patients, noted that "the biomedical model of disease, though crucial, does not take into account all of the complex factors involved in cancer … a broader, more integrative framework, which includes psychosocial factors, is needed" (p. 502). The biobehavioral model of cancer stress and disease course offers such a framework (see Andersen, Kiecolt-Glaser, & Glaser, 1994, for a complete discussion). In this conceptual model, cancer diagnosis and cancer treatments are defined as objective, negative events. Although negative events do not always produce stress, data from many studies document severe acute stress at cancer diagnosis and treatment (Maunsell, Brisson, & Deschenes, 1992). Even when stress declines from the peak at diagnosis (Edgar, Rosberger, & Nowlis, 1992), many QoL difficulties remain and new ones may arise during treatment and/or recovery (e.g., psychological distress; relationship, social, and occupational disruption; loss of physical stamina and fatigue; financial problems; Bleiker, Pouwer, van der Ploeg, Leer, & Ader, 2000; Holzner et al., 2001). The biobehavioral model postulates that higher initial stress levels (i.e., stress at the time of cancer diagnosis and

***Corresponding Author:** Farzaneh Ebrahimi, Department of Psychology, Ardabil branch, Islamic Azad University, Ardabil, Iran

treatment) can, over time, contribute to lower QoL for cancer patients.

Rather than stress, psychosocial oncology researchers have emphasized a "quality of life" framework in their studies (Aaronson, 1988; Moinpour et al., 1989), with assessment focused on psychological (depression/anxiety, social support, body image/sexuality) and physical (fatigue/low energy, pain, general health) outcomes related to cancer diagnosis and treatment (Ganz et al., 1996; Maunsell, Brisson,&Deschenes, 1992). On the rare occasions the PSS has been used in adult cancer studies (de Moor et al., 2002; Sandgren, McCaul, King, O'Donnell, & Foreman, 2000), it has been as an outcome measure, much like measures of negative mood. Still, there has been interest in examining the cancer experience within a stress model (adult patients: Chernecky, 1999). In at least one model, cancer diagnosis/treatment has been conceptualized as a stressor (Andersen, Kiecolt-Glaser, &Glaser, 1994). The PSS offers one strategy to quantify stress responses among cancer patients.With it, investigators can, for example, test perceived stress as one explanatory mechanism for poorer quality of life outcomes in cancer patients. The aim of this study to was examine the compare of perceived stress and feeling lonely in breast cancer patients and normal individuals.

Research methods

This research is causal-comparative. The population consist of all patients with breast cancer in hospitals of Ardebil. 60 patients and 60 normal individuals were selected with sampling method. The students answered the same questionnaire including social and emotional loneliness scale for adults (SELSA_S) (DiTommasso Brannen & Best, 2004) (including 15 questions) and questionnaire of perceived stress scale (Cohen et al, 1983) (including 14 questions). The cronbach's alpha that obtained from the pilot data was 0.87 for SELSA_S and 0.85 for perceived stress scale. Data analysis included MANOVA analyses and SPSS software (package of Spss / pc + + ver18).

Results

The results showed that mean age of normal subjects was 32.74 (SD= 5.44) and patients subjects was 45.60 (SD= 9.36). Also in healthy subjects was most frequent education related to diploma and patients subjects was most frequent education related to under diploma.

The results of table 3 shows the there is a significant relationship at least in terms of the dependent variables (0.05≥p, F=26.71). Chi Eta shows the there is a significant relationship between groups with respect to the dependent variables and this difference is 0.58 based on Wilks Lambda test. That's mean 58% of the variance is related to the difference between the groups.

According the results the there is a significant relationship between perceived stress positive, perceived stress negative and feeling lonely in breast cancer patients and normal individuals (0.01≥p). So that these variables in patients breast cancer were more than normal individuals.

Table 1: The mean and standard deviation of the variables in the study groups

Variable		Group	Mean	Standard deviation
Perceived Stress	perceived stress of negative	Healthy	17.08	4.58
		Patient	18.98	3.54
	perceived stress of positive	Healthy	20.76	3.38
		Patient	15.14	4.72
Feeling lonely		Healthy	30.06	8.17
		Patient	43.86	8.68

Table 2: The results of Levine test to determine the equality of variances

Variable	F	Degrees of freedom 1	Degrees of freedom 2	Significance level
Perceived stress of negative	1.868	1	98	0.136
Perceived stress of positive	1.482	1	98	0.155
Feeling lonely	2.320	1	98	0.131

Table 3: The results of multivariate analysis of variance

	Test	**Value**	**F**	**df of hypothesis**	**df of error**	**P**	**Chi Eta**
Model	Pillai's Trace	0.993	2785.265	5.000	94.000	0.000	0.993
	wilks lambda test	0.007	2785.265	5.000	94.000	0.000	0.993
	Hotelling effect	148.152	2785.265	5.000	94.000	0.000	0.993
	The largest root of the error	148.152	2785.265	5.000	94.000	.000	0.993
Group	Pillai's Trace	0.587	26.713	5.000	94.000	0.000	0.993
	wilks lambda test	0.413	26.713	5.000	94.000	0.000	0.993
	Hotelling effect	1.421	26.713	5.000	94.000	0.000	0.993
	The largest root of the error	1.421	26.713	5.000	94.000	0.000	0.993

Table 4: The results of MANOVA (MANOVA) on the variables studied

Variable	Dependent variable	Sum of squares	df	Mean of squares	F	P	Chi Eta
Model	Perceived stress of positive	32508.090	1	32508.090	1939.411	0.000	0.952
	Perceived stress of negative	32220.250	1	32220.250	1905.442	0.000	0.951
	Feeling lonely	136604.160	1	136604.160	1921.009	0.000	0.951
Group	Perceived stress of positive	90.250	1	90.250	5.384	0.022	0.052
	Perceived stress of negative	789.610	1	789.610	46.696	0.000	0.323
	Feeling lonely	4761.000	1	4761.000	66.952	0.000	0.406

Discussion

The purpose of this study to was examine the compare of perceived stress and feeling lonely in breast cancer patients and normal individuals. The results showed that there is a significant relationship between perceived stress positive, and negative and feeling lonely in breast cancer patients and normal individuals. So that these variables in patients breast cancer were more than normal individuals. These results are in good agreement with result Bakhtiari et al (2003), Ebrahimi et al (2009) Haddad et al (2010), and Potagas et al (2013).

Haddad et al (2010) reports that number of high-risk events (Stressful and worrying) in patients with breast cancer was significantly higher than the healthy group. Ebrahimi et al (2009) showed that there is a significant relationship between disease history physical or mental of spouse or child, the number of adverse events (stressful and worrying) and unemployment children with breast cancer. The findings show that patients with breast cancer were suffering of psychological symptoms such as depression, anxiety, perceived stress, feelings of helplessness (Howlett et al, 2009). Most people who are diagnosed with cancer will experience a period of mental stress, which reduces the daily functioning (Molavi and Fattahi, 2010). There is a close relationship between psychological states and cancer. According to new research, stress is a major cause of cancer in humans (Howlett et al, 2009). Mental stress, anxiety and stress affects the immune system and this exacerbates the field of cancer in humans. The cancer patients due to worry and anxiety are negative assessment of stress. But unlike the negatively perceived stress, people who consider stress as an opportunity for challenge and proper planning (positive perceived stress) causing behaviors and physiological responses are appropriate, that cancer is a prevent perceptual and this factor causes that people cancer receive lower scores in perceived stress positive.

According the results the there is a significant relationship between loneliness in breast cancer patients and normal individuals and the mean loneliness feeling in patients with breast cancer more than normal subjects. These results are in good agreement with result Heiman & Margalit (2008), Mohammadi Fard (2012) Margaret et al (2012), and Rotenberg & Makdonald (2013).

Heiman & Margalit (2008) reports the people with cancer disease have little correlation to the relatives and acquaintances and these factors can lead to loneliness feeling in them. Mohammadi fard (2012) showed that cancer patients have high rates of depression, anxiety and loneliness, compared to normal subjects. Margaret et al (2012) reports the high levels of pessimism, introversion, solitary, withdrawn, expect too much from

others, lack of accept the responsibility are considered of the emotional states incurable illness (cancer, etc.). About explanation of the result can be expressed the patients consider diagnosis of cancer one of the most painful and most revolting events (Mohaghegh). Because the disease created too many problems in work, education or personal and social relations and generally leads to economic disability and social for patients and their family members. The factors causing the disease have little correlation to the relatives and acquaintances and this factor leads to loneliness feeling in them. In addition, people with cancer have fear and worry about themselves and this fear is more visible in women.

Finally it can be stated perceived stress and loneliness such negative factors affecting on breast cancer patients and requires the attention families, authorities and associations cancer patients to help increase the positive perception of stress, reducing stress negative and loneliness in these patients. Because the data is collected through a questionnaire and like other self-report research results may be making the possibility of abuse.

References

Hadad, M. Rasoolian, M. Dehghan, H. Rezaei, S. (2010). The relationship between breast cancer and personality characteristics of individuals with stressful events. Journal of Psychiatry and clinical psychology ,No (3), page 280-288.

Ebrahimi, M. Montazari, A. Mehrdad, A. (2009). The relationship between life events and breast cancer in patients with breast disease center. Journal of Breast Disease, Volume 2, Issue 1, pp. 29- 36.

Bakhtiari, A. Hajain, K.A. Faramarzi, M. (2003). Examine the relationship between demographic, social and lifestyle and breast cancer in women. Knowledge Horizon Journal, NO 9, Issue 2, pp. 55- 62.

Mohammadi Fard, S. (2012). Investigate levels of depression, anxiety and loneliness in patients with cancer, multiple sclerosis and compared it with normal people. Master's Thesis Psychology, Tabriz Azad University.

Cohen, S., Kamarck, T. & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health Soc Behav . 24(4): 385-96.

DiTommaso, E & Spinner, B. (1997). Social and emotional loneliness: A reexamination of Weiss' typology of loneliness. Pers Indiv Diff. 1997; 22:417-27.

DiTommasso, E., Brannen, C & Best, LA. (2004). Measurement and validity characteristics of the short version of the social and emotional loneliness scale for adults. Educ Psychol Meas. 64(1):99-119.

Ghorbani, N., Bing, MN., Watson, PJ., Davison, HK. & Mack, DA. (2002). Self-reported emotional intelligence: Construct similarity and functional dissimilarity of higher-order processing in Iran and the United States. International Journal of Psychology; 37(5): 297-308.

Hassanpour, A & Azari, E. (2006). Quality of life and related factors in cancer patients. Abstract Book of National congress of care in special diseases. Ahvaz; Ahvaz University of Medical Sciences. p. 42.

Heiman, T & Margalit, M. (2008). Loneliness, depression and social skills amoung students with mild mental retardationindifferent settings. The Journal of Especial Education, 32,154-163.

Howlett, R., Larsh, S., Dobi, L & Mai, V. (2009). promoting cancer screening among ontario chinese women. Canadian journal of public Heath;4:315-1

Lazarus, R. S & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer Publishing Company, Inc.

Margaret, W., Richard, C & Tompkins j. (2012). Fundamentals of special education: what very Teacher needs to know? 3rd ed. Boston: Houghton.

Mimura, C. M, & Griffitdis, P. (2004). A Japanese Version of the Perceived Stress scale. International Journal of Nursing Studies, 41 (4): 379-85

Movahedi, M. & Tohidifar M H. (2001). Pediatric Cancers in Nelson Text book of Pediatrics.Yazd. Yazd Publication. 2001: 89-93

Potagas, C. Mitsonis, C. Watier, L. Dellatolas, G. Retziou, A & Mitropoulos, PA. Influence of anxiety and reported stressful life events on relapses in multiple sclerosis: a prospective study. Int MS;2012; 14 (9): 1262–1268.

Reynart, C. Libert , Y. Jann, P. Psychogensis of cancer : between myths, misuses and reality.Service de psychopathologie et de medecine psychsomatique, Cliniques universitaires de mont–Godinne, universite catholique de Louvain, avenue du Docteur-G–Therasse ,1,5530 Godinne, Belgique. 2008.

Rotenberg, K.J & Makdonald, K. The relationship between lonliness and interpersonal trust during childhood. Journal Genetic psychology, 2013; 6, 16-20.

Aaronson, N. Quality of life: What is it? How should it be measured? Oncology, 1988; 2, 69-74.

Moinpour, C. M., Feigl, P., Metch, B., Hayden, K. A., Meyskens, F. L.,& Crowley, J. (1989). Quality of life end points in cancer clinical trials: Review and recommendations. Journal of the National Cancer Institute, 81, 485-495.

Ganz, P., Coscarelli, A., Fred, C., Kahn, B., Polinsky, M. L., & Petersen, L. (1996). Breast cancer survivors: Psychosocial concerns and quality of life. Breast Cancer Research and Treatment, 38, 183-199.

Maunsell, E. Brisson, J. &Deschenes, L. (1992). Psychological distress after initial treatment of breast cancer. Assessment of potential risk factors. Cancer, 70, 120-125.

de Moor, C. Sterner, J. Hall, M. Warneke, C. Gilani, Z. Amato, R., et al. (2002).A pilot study of the effects of expressive writing on psychological and behavioral adjustment in patients enrolled in a Phase II Trial of vaccine therapy for metastatic renal cell carcinoma. Health Psychology, 21, 615-619.

Sandgren, A. McCaul, K. King, B. O'Donnell, S. & Foreman, G. Telephone therapy for patients with breast cancer. Oncology Nursing Forum, 2000;27, 683-688.

Chernecky, C. Temporal differences in coping, mood, and stress with chemotherapy. Cancer Nursing,1999;22, 266-276.

Andersen, B. L., Kiecolt-Glaser, J. K., & Glaser, R. A biobehavioral model of cancer stress and disease course. American Psychologist, 1994; 49, 389-404.

Ganz P, Coscarelli A, Fred C, Kahn B, Polinsky ML, Petersen L. Breast cancer survivors: Psychosocial concerns and quality of life. Breast Cancer Research and Treatment 1996;38:183–199. [PubMed: 8861837].

Holzner, B. Kemmler, G. Kopp, M. Moschen, R. Schweigkofler, H. Dunser, M.et al. Quality of life in breast cancer patients—Not enough attention for long-term survivors? Psychosomatics 2001;42:117–123. [PubMed: 11239124].

Shapiro SL, Lopez AM, Schwartz GE, Bootzin R, Figueredo AJ, Braden CJ, et al. Quality of life and breast cancer: Relationship to psychosocial variables. Journal of Clinical Psychology 2001;57:501– 519. [PubMed: 11255204].

Maunsell E, Brisson J, Deschenes L. Psychological distress after initial treatment of breast cancer. Assessment of potential risk factors. Cancer 1992;70:120–125. [PubMed: 1606533].

Edgar L, Rosberger Z, Nowlis D. Coping with cancer during the first year after diagnosis. Assessment and intervention. Cancer 1992;69:817–828. [PubMed: 1730131].

Bleiker E, Pouwer F, van der Ploeg H, Leer JW, Ader H. Psychological distress two years after diagnosis of breast cancer: Frequency and prediction. Patient Education and Counseling 2000;40:209–217. [PubMed: 10838000].

How to cite this manuscript: Farzaneh Ebrahimi, Seyed Ebrahim Mousavi, Sevda Nezafat Takaleh, Ali Ebadian, Hassan Jafarzadeh Dashbolagh. The Compare of Perceived Stress and Feeling Lonely in Breast Cancer Patients and Normal Individuals. International Journal of Advanced Biological and Biomedical Research 5(2), 2017, 92-97.