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## An Evaluation of Happiness and Factors affecting it in Patients Diagnosed with Breast Cancer

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### ABSTRACT

Happiness is of great importance in mental health and in dealing with the problems of today's world. Identifying the factors affecting the happiness is the main topic of positive psychology because this component, similar to a shield, can protect humans against stress and improve the immune system against some diseases such as cancer. Therefore, this study aims to determine the level of happiness and factors affecting it in patients diagnosed with breast cancer. A descriptive-correlational study was performed. A total of 50 breast cancer patients, referring to Neshat Park Day Clinic, Kerman, Iran, were enrolled using convenience sampling method and ensuring to meet the inclusion criteria. Data were collected using Demographic Questionnaire and Oxford Happiness Questionnaire (OHQ). Stata version11 was employed to analyze the data. Findings show that the happiness score is 37.68 in breast cancer patients, showing a medium level of happiness. The results also show that happiness has no significant relationship with all demographic characteristics including age, marital status, level of education, insurance, employment status, monthly income, history of other diseases, duration of breast cancer, the duration of treatment, development of breast cancer among another family member, and breast cancer-related training ( $P>0.05$ ). Different individual characteristics of breast cancer patients have no impact on their happiness. The impact resulting from cancer is likely to be more effective in patients' mental status. Conducting the study is recommended among more patients.

**Keywords:** Happiness, Demographic Characteristics, Effective Factors in Breast Cancer.

### INTRODUCTION

Happiness is one of the basic elements in positive psychology which is one of modern branches of psychology [1]. Vinhou offered the most comprehensive, yet the most operational definition of happiness. He believes that happiness is the degree to which one evaluates life positively. In other words, happiness means that to what extent one likes his life [2, 3]. Happy people think differently from sad ones. They have a positive attitude toward problems, have a real and objective life, pay attention to attractive side of topic, do not blame themselves, and can control negative events [4]. Schwarz and Strack also believe that happy people are those who have optimistic and happy attitude in processing information, meaning that they process information in a way that it leads to their happiness [4, 5]. Therefore, not only does happiness, as one of the most important psychological needs, play a key role in forming one's personality and life, but also it is of great importance in mental health and in dealing with the problems of today's world [3]. Evidence shows that happiness generates energy and vitality. Like a shield, happiness

can protect humans against psychological pressures and guarantee the health [6]. Conducted studies in the field of happiness indicate the direct relationship between happiness and immune system improvement. The reason why people need to increase their level of happiness is that a relatively strong relationship is found between the level of happiness and health so that happy people, compared to other ones, are believed to develop fewer occurrences of common diseases such as cold and the flu. The relationship of happiness with immune system improvement and resistance against cancer as well as the relationship of lack of happiness with early death, diseases, and heart attacks highlight the importance and value of the happiness in life [7]. The importance and usefulness of happiness is to the extent that some scholars including Miller believe that communities suffering from lack of high spirits are devoid of real vitality and energy. They also believe that the health of human society depends on the happiness of nations [8]. Vinhouin believes that lack of happiness is stressful itself and stress can cause dangerous diseases because happiness helps the one to cope with pressures and psychological harms. Han [2006] also showed that happy people, while dealing with stressful situations, apply effective strategies to cope with stress. This causes to experience less stress. In contrast, unhappy people who evaluate stressful events negatively and uncontrolledly apply ineffective and fast strategies to reduce stress which do not often leads to stress reduction [9]. Chapara [2002] also showed that happiness can reduce negative effects of stressful events [10] because it causes excitement, relaxation and warmth, consistency, coordination between the individual and the environment, excellence between body and spirit, and creation of the balance between individual's ideals and social, the psychological, and physical realities. Happiness also leads to the sense of success and hope to get rid of any physical and psychological diseases, concerns, and hardships; satisfy the status quo; and progress in the future [11]. Non-communicable diseases including cancer are increasing due to changing lifestyle. Among different types of cancer, breast cancer is the most common cancer and the most common cause of death among women [12] and it is one of the most important factors affecting women's physical, psychological, and patients' social life [13]. Since breast is considered an important part of woman's body image, any abnormalities can lead to negative body image. Describing personal feeling of someone who has lost one or both breasts is very difficult and this means the end of womanhood. A woman with breast cancer is likely to avoid intimacy with other people and might even avoid taking a shower due the defect in the body [14] because such patients experience situation similar to amputation. Breast is the symbol of sex, motherhood, and womanhood. Breast amputation makes women prone to some affective disorders such as stress, depression, anxiety, and low quality of life [15]. Therefore, such patients experience a severe psychological distress when informed the development of cancer and during the treatment period [16]. Breast cancer has experienced a high prevalence and it is the most common cause of death among women [12]. It also makes cancer patients prone to effective disorders and low quality of life. Happiness plays a key role in helping patients to cope with psychological trauma and pressure [9], protecting human against psychological pressure, improving immune system, resisting against cancer [6, 7], hoping to get rid of concerns and hardships, feeling pleased with the status quo, and hoping to progress in the future [11]. Researchers also believe that physical health of these patients is influenced by their psychological growth and their psychological health promotion depends on prevention and treatment of emotional stress [16]. This article aims to determine the level of happiness and factors affecting it in patients diagnosed with breast cancer referring to Neshat Park Day Clinic, Kerman, Iran in order to identify breast cancer patients who need happiness intervention.

## MATERIALS AND METHODS

A descriptive-analytical study was performed. The statistical population consisted of all breast cancer patients referring to Neshat Park Day Clinic, Kerman, Iran and they met the inclusion criteria. The inclusion criteria are as follow: being female, development of breast cancer, willingness to participate in the study, being literate, 30-65 years old, no problem in visual and auditory communication, lack of underlying diseases (diabetes, kidney failure, liver failure, and heart-pulmonary failure), no psychological disease, No history of cancer, lack of severe and very severe depression, anxiety, and stress (based upon the scores of Dass Questionnaire), the ability to comprehend Persian language, and no pregnancy. The exclusion criteria are intensive care, participation in other studies, migration or death, and no willingness to continue to participate. Data were collected using two questionnaires: 1. Demographic Questionnaire which is verified by 10 professors working in Zabol University of Medical Science. Test-retest was employed to evaluate the repeatability and reliability. The questionnaire consists of two sections: The first section consists of 10 items related to age, residential location, marital status, number of children, level of education, insurance status, employment status, monthly income, and whom to live with. The second section consists of 6 items related to the history of other diseases, the duration of breast cancer, duration of treatment, development of breast cancer among another family member, and postoperative breast cancer-related self-management training. 2. Oxford Happiness Questionnaire (OHQ). OHQ comprises 5 items including A) life satisfaction (8 items), B) self-esteem (7 items), C) Subjective well-being (5 items), D) satisfaction (4 items), and E) positive mood (3 items). The questionnaire comprises 29 items, each involving the selection of one of four options ranging from zero to 3. The final individual's score ranges between 0 and 87. Interpreting the scores is as follows:

Below 22: Low happiness  
 22-44: Medium happiness  
 44-68: High happiness  
 68-87: Very high happiness

Internal consistency showed that all 29 items in OHQ have high correlation. Cronbach's alpha was 0.91. Pearson correlation between OHI was -0.48, -0.45, and -0.39, respectively in which the validity verified convergent and divergent validity of Beck's Depression Inventory and EPQ (17). The sample size was estimated around 50 using the results of pilot study and Stata version 11. Convenience sampling method was employed. Oral and written consent was taken after ensuring to meet the inclusion criteria. Oxford Happiness Inventory and Demographic Questionnaires were forwarded. Qualitative and quantitative variables were interpreted by mean (standard deviation) and frequency (percentage). Independent t-test or Mann-Whitney test were performed to study the relationship between the qualitative variables and happiness. Correlation test was also employed to study the relationship between quantitative variables and happiness. Stata version 11 was used to analyze the data.  $P < 0.05$  was considered significant. Ethical considerations were taken into account such as patient confidentiality and the right to opt out at any stage of the research.

### Findings:

A total of 50 patients were enrolled in this study. According to the results, the mean age was 49.12 with standard deviation of 13.31 as follows in different age groups: 50-65 (61%), 40-50 (24%), and 30-40 (15%). The mean duration of breast cancer (standard deviation) was 4.42 (2.65) years. The mean duration of treatment (standard deviation) was 3.54 (2.33) years. The mean score of following three items are: anxiety (standard deviation), 7.56 (4.54); Depression 12.2 (5.58); and Stress 14.96 (6.81). 76% of patients were married. 42% of patients had diploma and higher level of education. The history of underlying diseases and similar history in the family were 16% and 28%, respectively. 48% of patients received breast cancer-related training. As table 1 shows, the correlations were not statistically significant between happiness and each of characteristics including age ( $p=0.8$ ), the treatment duration ( $p=0.4$ ), and duration of breast cancer development ( $p=0.6$ ) (Table 1).

**Table 1: the relationship between quantitative variables and happiness**

Variable	Correlation Coefficient (Significance)	P-Value
Age	-0.03 (0.8)	0.8
Duration of Breast Cancer	0.09(0.5)	0.5
Duration of Treatment	0.12(0.4)	0.4

**Table 2: The relationship between qualitative features and happiness**

Variable	Happiness		
	Mean	Standard Deviation	p-value
Marital Status	Single	34.5	9.19
	Married	38	15.36
	Divorced	57	0
	Widow	34.88	8.38
Level of Education	Literate	31.9	10.98
	Elementary School	32.08	7.15
	Junior High School	44.14	22.12
	Diploma and Higher	41.47	14.06
Insurance Status	Health Service <sup>i</sup>	35.31	16.45
	Rural Health Service <sup>ii</sup>	17	0
	Social Security <sup>iii</sup>	40.31	10.47
	Armed Forces <sup>iv</sup>	38.66	18.17
	Steel Organization	29	0
Employment Status	Complementary Insurance	58	0
	Employee	44	10.96
	Retired	37.6	15.04
	Disabled	57	0
	Self-employed	33	0
Income	Housewife	35.83	14.61
	Less than 10 million Rials <sup>v</sup>	37	14.78
	10 million Rials	35.37	12.89
	More than 10 Million Rials	44.83	11.56
History of other diseases	Yes	38	13.40
	No	37.61	14.47
development of breast cancer among another family member	Yes	33.78	10.74
	No	39.19	15.16
Breast Cancer-related training	Yes	37.70	11.68
	No	37.65	16.37

According to the findings in table 2, the average score of happiness was not statistically significant in marital status ( $p=0.5$ ), level of education ( $p=0.08$ ), insurance status ( $p=0.3$ ), employment status ( $p=0.6$ ), level of income ( $p=0.4$ ), underlying disease ( $p=0.9$ ), family history ( $p=0.2$ ), and breast cancer-related training ( $p=0.9$ ) (Table 2).

Findings also show that the average score of happiness is 37.68 (14.17) which is medium. One person (2%) was very happy. 14 individuals (28%) were happy. 30 (60%) and 5 (10%) patients had low level of happiness (Table 3)

**Table 3: Degrees of Happiness**

Degree	Number (Percentage)
Low	5 (10%)
Medium	30 (60%)
High	14(28%)
Very High	1 (2%)

## DISCUSSION

The results showed that the majority of breast cancer patients had medium level of happiness. Other factors including age, duration of breast cancer, duration of treatment, marital status, level of education, insurance status, employment status, income, history of other underlying diseases, development of breast cancer among another family member, and breast cancer-related training had no effect on happiness in breast cancer patients. Since the researcher did not find studies in this field, similar studies were taken into account as literature review. Some studies were conducted in non-cancer patients but they were pointed out here due to lack of similar studies.

As stated in result section, the mean score of happiness was 37.68 out of 87 among breast cancer patients. This level of happiness was less than the average in Iranian cases that used Oxford Happiness test. Like for instance, the study conducted by Neshat Dust et al. [2009] [18]. Taghi Zadeh et al. [2004] [19], and Jafari et al. [2002] showed that the mean score of happiness in 48.73, 42.84, 42.92, 45.83, and 44.83, respectively which is greater than the average [20]. Lower average score of happiness was expected because the sample size is different. On the other hand, breast cancer patients are faced with multiple problems and cancer has affected their physical and psychological health. Despite growing interest in recent years regarding happiness and its correlated factors, the average score of happiness has not been offered based on neither standard form nor other topics such as gender, socioeconomic class, occupational groups, age groups, etc. Therefore, there are some limitations concerning the comparison of happiness scores in breast cancer patients and other groups [18]. In this study, only 2% of breast cancer patients had high level of happiness, showing multiple cancer-related problems. Rahnama et al. [2015] wrote that the diagnosis of cancer can affect all aspects of one's life so that the life style in faced with changes, resulting in multiple physical, psychological, social, economic, and familial problems [22]. Soroush et al. [2014] showed that depression is a side effect of treatment in breast cancer patients [22]. The study conducted by Oliveira Pinto [2013], however, showed that most cancer patients [57.6%] were very happy [23]. The difference lies in the type of cancer, disease stage, and gender which covers both male and female. Cross-cultural differences were not taken into account in this study. Eqlima and Najaf Abadi [2011] showed that happiness is defined differently in various cultures based upon the indicators [11].

Our study showed that marital status has no relationship with happiness. Siamian et al. and Sheikh Munesi et al. [2012] concluded that married and single individuals have equal level of happiness which is consistent with our study. Many researchers, however, believe that marriage has the strongest effect on happiness and physical and psychological health [24]. This different result is associated with multiple problems specially those of marital ones. Based upon the results, job and income have no relationship with happiness in breast cancer patients. Rouhani and Aboutalebi [2009] showed that individuals with different jobs and level of income have different sense of happiness [25] which is inconsistent with our study. This is likely associated with different multiple problems faced by breast cancer patients. Csikszentmihalyi [1997] believe that 1. People quickly get used to their level of income, 2. Most people compare their level of income with that of others, and 3. Wealth is probably beneficial for life; however, humans require other needs which cannot be compared with money [26]. Easterlin [2001] showed in the USA and Western Europe that although the population has doubled since 1945, the level of happiness has not changed or had a slight change. The level of happiness even declined in some cases [27].

Based upon the results, age has no relationship with happiness in breast cancer patients. Keshavraz and Vafaian [2007], however, concluded that happiness rises as people get older. Argyle [2001] stated that as age rises, the level happiness increases because individual's ability increases to adapt with new conditions. They are less involved with the young-related problems [5]. Sheikh Munesi et al. [2012] stated that younger-than-22 individuals are happier than

older-than-22 ones [24]. It seems that the difference lies in different sample size and the fact that age is one of underlying factors for breast cancer.

The results also showed that level of education has no relationship with happiness. Diener et al. [1993] and Keshavraz and Vafaian found out that increasing level of education brings about rising happiness because level of education creates a wider range of interests and satisfaction which leads to more resources of happiness [15]. The difference lies in the fact that the study was conducted on healthy male and female individuals. Our study was, however, conducted among breast cancer women. Since breast is considered an important part of woman's body image, any abnormalities can lead to negative body image. Therefore, it is implied that women with different levels of happiness are equally happy.

Individual differences such as reaction toward breast cancer, postoperative side effects, chemotherapy, and radiation therapy are some of limitations of our study. Fixed individual differences were controlled by a self-controlling plan.

### CONCLUSION

The results showed that the problems faced by breast cancer patients have multiple effects on the patients' psychological situation to the extent that individual characteristics are not effective in this regard. Different cancer patients do not have an appropriate level of happiness. Considering time constraints, we were not able to conduct the study among more patients. Therefore, conducting the same study is recommended among more patients.

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### REFERENCES

- [1] Hashemi N, Ghayour Baghbbani SM, Khadivi Gh, Hashemian Nejad F, Ashoori J. *Journal of Clinical Nursing and Midwifery* **2016**; 5 (1) : 12 – 22.
- [2] Kamyab Z, Hossain pour M, Sudani M. A Survey of happiness education effective in Fordyce method on increasing of happiness of diabetes in behbahan city.3. **2009**; 0(42): 108-123.
- [3] Afshari Z, Dahmardeh L. *The Journal institute for humanities and cultural studies* **2014**;4(5).
- [4] Matin S. "The Relationship between attribution styles and happiness of girls 14-18 years old in yazd city". ". Masters Dissertation, University of Allameh Tabatabaei, faculty of psychology and educational sciences **2011**, 2-9.
- [5] Keshavarz A, Vafaiean M. *Applied Psychology* **2008**; 2(5): 51-61.
- [6] Shirkavand N, Gholami heydari S, Arab salari Z. *Journal of Diabetes Nursing* **2015**; 3(3): 8-19
- [7] Abdolahi S, Merabizadeh Honarmand M, Sodani M. *Journal New Finding in Psychology* **2012**; 7 (23) ; 61 – 79.
- [8] Myler jan P (2000).Educationalspirit: towards a spiritualcurriculum. Raretranslationscampaigns(**2001**). Tehran:cognitivethought.
- [9] Gholamali Lavasani M, Rastghoo L, Azarniad A, Ahmadi T. *Biquarterly Journal of Cognitive Strategies in Learning* **2015**; 2(3): 1-18
- [10] Kajbaf M.B, Aghaei A, Mahmodi E. *The Journal family research* **2011**; 7(1): 69-81.
- [11] Aqlima M, Ebrahim Najaf Abadi A. *Community Cultural Studies* **2011**; 2(1): 1-24.
- [12] Mazloumi Rad. M, Zalkani , F. Investigate the relationship between happiness and hope for life and death anxiety in patients with breast cancer. Ministry of rehabilitation. **2013**.
- [13] Karimoi H M, Pourdehghan M, Faghihzadeh S, Montazeri A, Milani J M. *Journal of University Medical Sciences Kermanshah* **2006** ; 10 (1) : 10 – 22.
- [14] Naghipour L, Bahramabadi M.Z, Taghilu S, Heidari H. *Journal of Social and Psychological studies women* **2012** ; 10 (4) : 41 – 62.
- [15] Fazel A, Tirgeri B, Mokhber N, Koushyar M, Esmaily H. *The Journal of Shahid Sadoughi University of Medical Scinces* **2008**; 16 (3) : 28 - 36
- [16] Karamoozan M, Bagheri M, Dehkordi A, Khodayi A. *Quarterly Journal of Personality & Individual Differences* **2013**; 1(2): 32-47.
- [17] Ali pour A, Nourbala AA. *Journal of Thought and Behavior* **2008** ; 5 (2) : 55 – 65.
- [18] Neshat Doost H.T, Mehrabi H.A, Nouri N, Kalantari M, Palahang H, Soltani I. *The Journal of applied sociology* **2009**; 20 (33) : 105 – 118.
- [19] Taghizadeh K, Sieadat A, Abedi M.R. The Relationship between job satisfaction with happiness among faculty members university Isfahan **2006**

- [20] Jafari E, Abedi M.R, Liaghatdar M.J. *The Journal of medicine and cultivation* **2004**; 54: 15-23.
- [21] Rahnama M, Fallahi Khoshknab M, Seyed Bagher Maddah S, Ahmadi F, Arbabisarjou A. *Asian Pacific of Cancer Prevention* **2015**; 16(18): 8519-8524
- [22] Soroush M, Hejabi E, Shoakazemi M. *Iranian Journal of Breast Cancer* **2015**; 7(4): 52-63.
- [23] Oliveira Pinto S M, Caldeira Berenguer S M A, Amado Martins J C. *Nursing Research and practice* **2013**: 1-8.
- [24] Shiekhmoonesi F, Zarghamlo M, Alimohammadi M.M. *The Journal mazandaran university of medical sciences* **2013**; 22(97) : 132-137.
- [25] Rohani A, Aboutalebi H. *The Journal of industrial / organizational psychology* **2009**; 1(1) : 55-62.
- [26] Keshavarz A, Molavi H, Kalantari M. *The Journal of psychological studies* **2008**; 4(4): 45-64.
- [27] Easterlin R.A. *The Journal Economic* **2001**; 111: 465 – 484.

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<sup>i</sup> This type of insurance is dedicated to governmental and public agencies.

<sup>ii</sup> This type of insurance is dedicated to villagers.

<sup>iii</sup> This type of insurance is dedicated to non-governmental employees.

<sup>iv</sup> This type of insurance is dedicated to army forces.

<sup>v</sup> Rial is the official Iranian currency.