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Research Article

### THE SURVEY QUALITY OF LIFE AND ITS RELATED FACTORS AMONG PATIENTS WITH BREAST CANCER WHO REFERRED TO GOLESTAN & SHEFA HOSPITALS IN AHVAZ 2014

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**Abstract:**

*Introduction: The quality of life is an important topic in study of chronic diseases, especially cancer. Breast cancer is the most common cancer among women. Breast cancer survival rates is long and as a result patients are affected by cancer and its complications and consequences a longer time. It is therefore seems necessary to determine the quality of life and its related factors in these patients.*

*Objective: This study aimed to determine The quality of life and its related factors in patients with breast cancer.*

*Materials and Methods: This is a descriptive-analytical study to evaluate the quality of life and its influencing factors in patients with breast cancer receiving chemotherapy was conducted on 100 patients referring to Ahvaz city Golestan and Shefa hospitals. The data were collected by demographic variables questionnaire and information on the quality of life related to health were collected using a questionnaire (WHOQOL-BREF) within 3 months and were analyzed using SPSS19 software and descriptive statistics and t-test Pearson correlation coefficient and linear regression.*

*Results: The study results showed that the mean age of the studied components is 46/85 (Standard deviation 11/55) and the average score of the quality of life in physical health is 0.558 ± 23.867. Mental health 0.359 ± 14.085, social communication 14.56 ± 0.48, environmental health 0.554 ± 19.945. and the total life quality score is 87.952 ± 2.154. Investigating the factors related to the quality of life showed that there is a significant relationship based on multivariate linear regression between education, income, type of health insurance, patient history and quality of life. There was no significant association between socio-demographic and clinical factors with quality of life.*

*Conclusion: The quality of life in the area of mental health was low from other areas. Therefore it will be effective considering factors related to quality of life and measure to assess psychologically and conducting psychiatric consulting in improving the patients quality of life.*

**Keywords:** breast cancer, quality of life, patients.

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**INTRODUCTION:**

Cancer is considered as one of the most important diseases of the century and the third leading cause of death after cardiovascular diseases and accidents and incidents (1). More than 70 thousand new cases of cancer is estimated annually in Iran (2-3). Breast cancer is now the most important and alarming factor in women's health, because it is the most common type of cancer after lung cancer and the second leading cause of death from cancer among women (4). More than 1.1 million new cases of breast cancer are recognized every year among women worldwide according to American Health Organisation statistics. The figure is equivalent to 10% of all new cancer cases and 23% of all cancers in women. It is estimated that about 4.4 million women live in the world currently and Breast cancer has been diagnosed during the past 5 years (5). Age-specific incidence rate of breast cancer in 100 thousand women population is 67/8 in developed countries, 23/8 in less developed countries and 37/5 in the world (6). Cancer international statistics show a significant difference in breast cancer incidence and mortality rates caused by it between different countries (4). Iran breast cancer makes 22/26% of cancer cases in women and is the most common form of cancer among Iranian women (6). Studies show that breast cancer patients in Iran are 10 years younger than patients with the disease in Western countries (7). As only 5% of women under 40 years are at risk of developing breast cancer in America. But women in Iran unlike in western countries are at greater risk for developing the disease at a younger age and this shows the importance of the investigation, diagnosing and control of the disease in the country (8).

Due to a serious problem in the area of women's health control and prevention of breast cancer, being a woman and increasing age are two important and unchangeable factors in breast cancer disease (9). Diagnosis and treatment of breast cancer is an experience with stress and anxiety. Affected women encountered with treatments such as chemotherapy, radiation therapy, surgery and unpleasant side-effects such as hair loss, nausea, sexual problems. Long term treatments threaten the ability of women to make their social role as a housewife or working person. High levels of stress has long-term negative impact on women's self-esteem, which ultimately has a negative impact on family functioning and marital role as well as the quality of them (10).

Cancer affects the quality of life (QOL) in patients to different degrees, patients with breast cancer also experience many problems in different aspects of quality of life, including emotional and social

functioning during and after treatment (11). The concept of quality of life were used in medical researches such as oncology in 1940, to measure the quality of life of patients (12). The quality of life is the degree to which individuals feel about their abilities in physically, emotionally and socially functions. Evaluate the quality of life for people with cancer have special significance in recent years. Issues and problems that typically affect the quality of life in patients with cancer includes the mental, emotional, physical, social and economic effects resulting from a cancer diagnosis and treatment measures (13).

Given the importance of quality of life in patients with breast cancer, due to the increased number of survivors, and the important role of women as mothers and wives in the family (14). Control consequences from disease not only improves their survival, but also improves quality of life and makes the family more coherent (15). Hence taking into account the relevant factors is considered to be important in evaluating and effectiveness of treatment and the disease process in these patients. The most common factors associated with quality of life are examined in several studies. The most common demographic variables such as age, social factors, issues related to treatment, like surgery. Adjuvant treatment and during follow-up services. Different results have been obtained in different studies on cancer patients' quality of life as well as the impact of the mentioned factors (16). Most studies have shown that genetic factors are considered the predisposing factor for the disease in less than 5% of women with breast cancer. Early menstruation, infertility, high age at first childbirth, late menopause, diet, physical activity and endogenous hormonal factors (high levels of free estrogen to estrogen binds to serum proteins) or exogenous (eg, long-term use of birth control pills) or replacement hormones in postmenopausal women have been recognized as breast cancer risk factors (17). Methods of prevention to today treatment has a priority, so identifying the lives of cancer patients and its risk factors could be an effective step in improving quality of life of patients and reduce economic and social costs (18). The emphasis is on the role of nurses because nurses play an important role in taking care of cancer patients under treatment and have a good position to educate the patient and their family and support emotionally (19). Since different results has been reported from studying quality of life in different parts of the world which can reflect the impact of various environmental, cultural, ethnic, racial factors and personal understanding from life on the quality of life. For this reason this study is done in order to evaluate the relationship between quality

of life and factors affecting it in women with breast cancer receiving chemotherapy that refer to therapeutic educational centers of Shefa and Golestan to take a step to more effective and more informed in planning for taking care of them based on these findings.

#### METHOD:

This research is a descriptive analytical study that was conducted to determine the quality of life associated with health of women with breast cancer referred to Ahvaz Golestan and Shefa therapeutic educational centers in 2012. The research population included all women with breast cancer who were referred to Shefa and Golestan hospital that were censused.

The samples will be based on inclusion criteria including age above 18 years, no history of mental health problems based on patients' statement, no history of other cancers, lack of recurrence, a history of chemotherapy that will be studied gradually and randomly.

Questionnaire data collecting tool was consisted of two parts: The first part includes age, marital status, educational level, place of residence, occupation, family income, health insurance, family history of breast cancer, history and number of chronic diseases, duration of breast cancer diagnosis, type of breast surgery, duration after surgery, the type and amount and method of administration of chemotherapy drugs, the number of chemotherapy courses, duration after the last chemotherapy, menarche age, age at first pregnancy, number of children, number of deliveries and child-delivery and the second part: is a health-related life standard questionnaire. The general questionnaire of quality of life (WHOQOL- EREF26 items) that measures four areas of physical health, mental health, social relationships and environmental health with (24 items). The first two questions do not belong to none of the areas and the quality of life status and health is evaluated in general, so the questionnaire consists of 26 questions in total which scale from 1 to 5 will be given to each question that these scores will be reversed for three questions (3, 4 and 26). a score of 0 to 100 is given in each area, where 0 is a sign of worst and 100 is a sign of the best area situation. The reliability and validity of the questionnaire in Iran were evaluated by a doctor Nejat et al that the

coefficient of  $\alpha$  was achieved 7% in all areas except for social arena that was 55%. Two questions of 27 and 28 were added to the areas of social relationships for this reason to achieve good reliability, so the questionnaire has been standard in Iran. But its reliability will be calculated again in this study by Cronbach's alpha.

Data collection was done after obtaining permission from the departments of research and treatment of Ahvaz University of Medical Sciences and providing it to the Shefa and Golestan therapeutic educational centers of Ahvaz. Data processing was performed using SPSS software. Mean and standard deviation were used to determine patients' quality of life score in different aspects. Linear regression was also used to determine demographic factors.

#### Findings:

This study was conducted on 100 women with breast cancer receiving chemotherapy that are censused based on inclusion criteria. The results showed that the mean age of the studied subjects is 35/46 (SD 11/55) and the majority of patients (73%) are married. A greater percentage of them 46% were illiterate. 88% were housewives, the economic situation of 54.5% was medium. An average age of menarche for affected women was, the average gestational age was  $0.304 \pm 20.37$  and the average number of chemotherapy courses was 58%. 58% of the samples were studied under mastectomy and 31% under breast conservative surgery, while 11% have not been under any type of surgery. The average score of quality of life in physical health was  $0.558 \pm 23.867$ , mental health  $0.359 \pm 14.085$ ,  $14.56 \pm 0.48$  social communications, environmental health  $19.945 \pm 0.554$  and the total life quality score was  $2.154 \pm 87.952$ , the results also showed that the quality of life score was lower in the psychological area to other aspects of quality of life (Table 1-2). There is a significant relationship between quality of life and age, education, income, type of health insurance, history of chronic diseases and cancer, type of breast surgery, duration of diagnosis, according to the research findings but there is no significant relationship between demographic variables and quality of life.

**Table I: average quality of life with 5 levels in the breast cancer patients with chemotherapy**

Levels Quality of life	Likert scale	Number	Percent
somatic	Very Dissatisfied	3	3.1
	Dissatisfied	22	22.45
	Neither satisfied nor dissatisfied	56	56.12
	Satisfied- very satisfied	19	19.36
psychological	Very Dissatisfied-dissatisfied	33	32.96
	Neither satisfied nor dissatisfied	49	48.94
	Satisfied- Very satisfied	18	18.1
Environmental	Very Dissatisfied-dissatisfied	22	21.92
	Neither satisfied nor dissatisfied	40	39.73
	Satisfied- Very satisfied	38	38.35
social	Very Dissatisfied-dissatisfied	31	31.24
	Neither satisfied nor dissatisfied	42	41.67
	Satisfied- Very satisfied	27	27.09
experimental	Very Dissatisfied-dissatisfied	12	12
	Neither satisfied nor dissatisfied	22	22
	Satisfied- Very satisfied	66	66

**Table2: total quality of life in the breast cancer patient with chemotherapy**

Total quality of life	good	Neither good nor bad	Bad
number	16	55	29
Percent	15.87	55.56	28.57

**DISCUSSION AND CONCLUSION:**

Quality of life in women with breast cancer receiving chemotherapy in this study was medium at 55.56%, according to the findings of this study. On the other hand, the quality of life in other aspects showed that a majority of the studied subjects in physical aspect was 56.12%, social aspect 41.67%, environmental health 39.73% and in mental aspect was 48.94% higher than the average level, While the quality of life in the majority of women 51.8% was also medium in Ahmadi and et al study(15). Samarkushowed in his study in New York City that

the quality of life in women with breast cancer under 50 years is good on average (20). That the difference can be attributed to the differences in cultural background, age of the studied subjects, instruments Used in the Assessment the quality of life and heterogeneous of the studied subjects for the stage and type of treatment. The findings of this study also showed that the quality of life in the area of mental health was lower than other areas. The findings of Van Esch and et al are consistent in this respect with Karami and et al in Qazvin (2-21). While Robin and et al demonstrated that the physical area score

was lower than other areas of the quality of life (22). Perhaps this difference in results is due to the average time of diagnosis was different in two articles and this shows that it is not a long time from surgical and chemotherapy and adjuvant diagnosis and treatment in these patients and still some patients suffer from the psychological damaging effects resulting from their disease diagnosis and treatment (16). There was a significant relationship between the quality of life and age, education, income, type of health insurance, history of chronic diseases and cancer, type of breast surgery, duration of diagnosis, based on research findings. But there is no significant relationship between demographic variables and quality of life. The results in case of age showed that the quality of life decreases with increasing age. In other words, there is a significant and diverse relationship between age and quality of life. The results were consistent with other studies such as Monfared and et al (16). But Smith et al. and Radwan et al. studies showed that increasing age had led to improving the quality of life, but Robin et al. Karami et al found no significant relationship in this field. Perhaps the difference in the results is cultural differences and the number of the samples in the study (2-22-23-24). Older women have more health problems and also widowed or marriage of children makes them lonely and affect their social relations, according to Monfared and et al; as a result, these problems affect the quality of life in older women adversely (16).

The results of this study showed that there is not a significant relationship between the variable of marital status and quality of life, results of other studies such as Avzarar et al., Karami and et al, Ahmad and et al confirmed these findings. While the study of Monfared and et al showed that there is a significant relationship between it and quality of life (2-25), it may be said in general that the impact of matrimony on individuals quality of life affected by their social and cultural differences (16).

The findings also showed that there is a direct relationship between education level and score of quality of life. Findings of Avzarar and et al, Smith and et al Monfared and et al was also collinear with the present study (23-25-26). While Cohen and et al study results showed that no significant relationship between level of education and quality of life (27). Low education is associated with lower social support, lack of awareness of health care, according to Monfared et al that can lead to reduced quality of life in patients. As a result, higher education improves their quality of life with the impact on health status and consciousness of individuals (16).

Results in respect to the average variable of monthly income also showed that higher income is associated

with the better quality of life. Ghafari et al, Rezai and et al, Monfared and et al found similar results, in this regard (28-29). But results of Taira and et al showed that the economic situation does not have a statistically significant correlation with quality of life (30). This difference may be due to differences in research time and supporting insurance systems in different countries and regions. The desirable economic situation of patients facilitates their access to healthcare services and better care possibility. Thus patients with higher incomes will have less financial concerns and less spiritual-psychological and physical conflicts for monetization and provide their heavy treatment costs (16). Results of this study showed that the score of quality of life in patients under breast conservative surgery is higher than mastectomized patients. The findings of Radwan and et al, Ganzet al and Monfared and et al also confirmed these results (16-24-31). But Osumi and et al and Erb and et al study showed that there was no significant relationship between the type of surgery and quality of life in patients with breast cancer (32-33). We can say breast is the symbol of gender, feminine identity and aspects of motherly, according to Monfared and et al. Hence the removal of this organ, especially in younger women leads to reduced sexual, appearance attractiveness and negative impact on mental health and their quality of life (16).

The results of this study showed that the score of quality of life goes higher with increasing duration of disease diagnosis. Karami and et al, Hartle et al and Monfared et al also reaches the same conclusion in their studies (2-16-34). While the results of Smith et al., Rob and et al, Aqabarary and et al showed that there is not a significant relationship between the passed time since diagnosis and quality of life (15-23-32). Perhaps difference at the time of performing researches causes differences in results, so that an average of more than two years were passed from the time of diagnosis in some studies. While it was performed during adjuvant treatments or initial time of diagnosis in others. Breast cancer diagnosis is a frightening incident with the fear of death, lack of awareness and fear of treatment and its complications for many women, according to Monfared et al. which greatly affects their quality of life. But the intensity of negative impacts on quality of life decreases following treatment with passing of time and adapting to these events and stabilization the patient's condition (16). Also there is no significant relationship between distance of chemotherapy and surgery and quality of life. Osumy and et al study also found similar results (33). But findings of Taira and et al, Monfared and et al showed that there is a significant relationship between them, it means that women's quality of life gets better over time. Women

breast surgery would have a significant impact on their quality of life on their appearance and physical and sexual beauty, according to him. This creates severe psychological and emotional problems for the patients at the time of surgery and especially in the early days after breast removal. The patients quality of life will improve with time passes after breast surgery and the recovery of incision in women under breast conservation surgery and increasing compatibility of mastectomized individuals and acceptance of their current appearance (16-30). The present study also showed that there is no significant relationship between type of delivery, duration of lactation and breastfeeding frequency and quality of life.

Staying alive is not only into consideration today and people seeking desirable quality of life. With an overview of current research it can be concluded that quality of life is affected especially mental health in cancer patients during the treatment and decreases. Implementing psychological interventions seems necessary for the admission of the disease by the person and overcome the problem due to the fact that patients had lower quality of life in the early days of diagnosis. Since only patients with breast cancer receiving chemotherapy were examined in the study, interpreting the results of this study should be done with caution. Conducting more studies in patients with different kinds of cancer seems necessary in order to confirm the findings of this study and extend the results. By having positive relationships, use of psychological and psycho-social supports and above all communicating along with mutual understanding and respect for the patient, healthcare personnel can also have a key role in the clinical settings in control and treatment of the disease and consequently improve the quality of life for these patients (16-35).

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