

Factors Affecting The Quality Of Life Of Cancer Patients

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ABSTRACT

Introduction: Nowadays we constantly hear the word "cancer" and we have probably heard many times that many people have lost their lives due to this disease. Cancer patients experience many physical and mental problems that significantly reduce their quality of life compared to other patients. The study of quality of life is currently an important topic in the research of chronic diseases, especially cancer. The aim of this study was to identify the factors affecting the quality of life of cancer patients in order to improve the quality of life of these patients.

Methods: In this descriptive study, the samples were 60 newly diagnosed patients with colon and lung cancer who were admitted for treatment for the first time and were selected by continuous sampling. A standardized Quality of Life Questionnaire for cancer patients (QLQ-C30) was used to data collection.

Results: The findings of the present study showed that some of the demographic variables, such as age, sex, marital status, education, job and child had a statistically significant relationship with quality of life ($p < 0.001$) but the relationship between economic status and quality of life was not statistically significant ($p = 0.592$).

Conclusion: The present study showed that the average quality of life in this study was 41.53, which according to the mean score of the instrument, which is 50, it is observed that the quality of life score of cancer patients was lower than average. Functional and symptom scores were 45.83 and 36.58, respectively, which are still lower than the median level. Therefore, the quality of life of cancer patients is lower than others.

Keywords: Cancer, Quality of life of cancer patients.

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INTRODUCTION

We hear the word "cancer" all the time nowadays, and we may have heard it said many times that many people have died from the disease. Cancer is now one of the most important health problems in the world. In our country, cancer is the third leading cause of death after cardiovascular disease and accidents (1). The study of quality of life is currently an important topic in the study of chronic diseases, especially cancer. In all cases, this disease affects the quality of life of patients with varying degrees and currently cancer is one of the most important issues in Iran and around the world which in our country it is increasing the importance of this disease (2). Cancer patients experience a variety of problems, both mental and physical, one of the most important of which is pain. Pain in a cancer patient is a multidimensional phenomenon that affects the quality and perhaps quantity of life by affecting various aspects of a person's life (3). Another common psychological complication of cancer is anxiety, especially death anxiety, which is considered as an important psychological diagnosis. As the disease progresses, patients become afraid of pain, loneliness, and loss of control, all of which have been identified as death anxiety. Death anxiety in this group of patients with mental and even emotional disorders can affect their quality of life (4). Death anxiety causes cancer patients to return to hospital with the slightest sign of treatment complications and incur the extra cost. One of the treatments for cancer is chemotherapy, which aims to kill cancer cells. Studies show that cancer treatments are associated with toxicity and side effects that reduce a patient's quality of life (5). Since people want to improve the quality of life, therefore governments around the world are increasingly paying attention to improving the quality of life of their people and trying to reduce disease and death and provide health services and physical well-being, as well as promote the psychological and social well-being of the

people (6). Quality of life is a set of physical, psychological and social welfare that is perceived by an individual or a group of people (7). Quality of life is a general term that is difficult to define, but the World Health Organization defines quality of life as each individual's understanding of life, values, goals, standards, and interests (8).

METHODS

Participant

This study was a descriptive study. The research environment of this study included the departments of Tehran University of Medical Sciences (Shariati and Imam Khomeini). The samples of the study were 60 men and women hospitalized in the mentioned wards who were diagnosed with cancer for the first time (clone or lung which was also confirmed by pathology) and were treated for the first time. They were selected from the research environment using continuous sampling.

Data collection tools The questionnaire used to collect data in this study consists of two parts. The first part includes demographic information (age, level of education, marital status and occupation) and the second part was a standardized Quality of Life Questionnaire for cancer patients (QLQ-C30), which was completed by the research units.

RESULTS

In this study, 60 patients with colorectal and lung cancers were studied. Thirty of them had colorectal cancer (50%) and another 30 had lung cancer (50%). Their mean age was 43.55 ± 8.62 years, of which 26 were female (43.3%) and 34 were male (56.7%) and 41 of them were married (68.3%) and 19 people were single (31.7%). The characteristics of the research units are given in Table 1. Table 1, also shows the numerical indicators of quality of life and its two domains. It is indicated that the average of overall quality of life is 41.53 with a standard deviation of 17.16. Among the demographic variables, age, sex,

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marital status, education, job and child had a statistically significant relationship with quality of life and economic status had no statistically significant relationship with quality of life. These results are shown in Table 2.

Table 1- Frequency distribution and percentage of its demographic characteristics in the studied patients-2015

Demographic characteristics		Frequency	Percentage	Mean ± SD	P-Value
Age	<40	-	-	43.42±20.74	0.015
	40-50	-	-	47.28±12.96	
	50<	-	-	31.32±12.34	
Gender	Female	26	43.3	33.26±15.61	<0.001
	Male	34	56.7	47.86±15.70	
Marital status	Single	19	31.7	37.00±15.74	<0.001
	Married	41	68.3	51.31±16.33	
Education level	Diploma and lower	26	43.3	32.89±14.29	<0.001
	Technician	5	8.3	42.85±13.98	
	Bachelor	24	40	47.37±17.22	
	Master and above	5	8.3	57.14±13.06	
Occupation	housewife	14	23.3	28.09±16.43	<0.001
	Employee	23	38.3	42.08±14.27	
	Free student	19	31.7	44.61±11.57	
Child	No	4	6.7	70.83±16.53	<0.001
	Yes	23	38.3	49.53±15.30	
Economic status	Weak	37	61.7	36.56±16.53	0.592
	Medium	19	31.7	38.15±18.40	
	Good	26	43.3	43.08±15.40	
		15	25	43.12±18.95	

Table 2 - Determining the quality of life according to demographic characteristics in the studied patients – 2015

Demographic characteristics	Coefficient	T	P-value
Age	-0.703	2.546	0.014
Gender	11.690	2.56	0.013
Marital status	1.516	0.209	0.836
Education level	3.098	1.673	0.100
Occupation	4.638	1.740	0.088
Child	0.753	0.104	0.917

In order to investigate the effect of demographic variables on quality of life, multiple linear regression model was used to determine which ones affect the quality of life in the presence of all variables. For this purpose, variables related to quality of life entered the regression model. Stepwise method was used to fit the regression model. The results, as shown in Table 3, showed that only the variables of gender and age affect quality of life. In this way, the quality of life of men is 11

units higher than women in the same situation. Meanwhile, age is inversely correlated with quality of life and with increasing average age, quality of life decreases or in other words, with increasing one year of age, the average quality of life decreases by 0.7. It should be noted that the coefficient of determination related to the regression model is 0.526, i.e. approximately 53% of the changes related to quality of life can be explained and justified by these variables.

Table 3 - Regression test results related to factors affecting the quality of life of patients under study – 2015

Scores	Min.	Max.	Mean ± SD
Functional	6.67	93.33	45.83±19.66
Symptom	7.69	79.49	36.58±15.57
Overall quality of life	8.33	82.14	41.53±17.16

DISCUSSION

The average quality of life in this study was 41.53, which according to the average score of the instrument which is 50, it is observed that the quality of life score of patients in this study was lower than average. The scores of functional domain and symptoms were obtained as 45.83 and 36.58, respectively, which are observed to be lower than the middle level. The Aaronson study also found that

quality of life declined during cancer and chemotherapy. Findings of this study have shown that side effects of the disease and treatment can endanger the quality of life in the short or long term (9). Also, in the study of Shaban et al. the quality of life in cancer patients undergoing chemotherapy was 66% on average and 11% in unfavorable condition (10). In order to examination the relationship between demographic characteristics and

quality of life, it was observed that age has a statistically significant relationship with quality of life, so that the quality of life score in at least one age group is different from the others. LSD diagnostic test showed that the quality of life score in patients over 50 years was statistically significantly different and was lower from other patients. Gender and marital status were also related to quality of life. In this way, the quality of life of men was higher than women and married patients had a higher quality of life than single people. The level of education was also significantly related to the quality of life, so that with the increase in the level of education, the quality of life of patients also improved. The results of analysis of variance also showed that the quality of life in at least one occupational group was statistically significantly different from the others. The results of LSD test showed that the quality of life of patients who are housewives is different from the others and it was less than other. Also, the quality of life of patients who are students is higher than others. Child also had a statistically significant relationship with quality of life and it was observed that the quality of life in patients without children is higher than patients with children. Economic status was the only variable that had no statistically significant relationship with quality of life. In the results of Sharifi et al.'s study, there was no statistically significant relationship between age, occupation, marital status and quality of life of cancer patients, while there was a statistically significant relationship between education level and quality of life (11). In a study in Turkey, Uzun et al. found that there was no statistically significant relationship between age, place of residence, marital status and monthly income with quality of life, but there was a relationship between education and quality of life (12). In the study of Shim et al., There was a relationship between educational status and job status with quality of life. While there was no statistically significant relationship between age and marital status with quality of life (13). In a study conducted by Hamouleh et al. the results showed that the context of cancer symptoms and its effect on quality of life have a significant relationship with the patient's sex and age, so age and sex have affected the quality of life (14). Which is consistent with the results of the present study. The results of a study by Tabari et al. showed a statistically significant relationship between the number of children, the number of dependents and economic status with the quality of life of cancer patients in the physical dimension. Also in the psychological dimension, the findings of this study have shown a statistically significant relationship between economic status and quality of life (15).

CONCLUSION

In order to investigate the factors affecting the quality of life, multiple linear regression model was used in this study. The results showed that in the presence of all variables, only age and sex affected the quality of life. It should be noted that age had an inverse correlation with quality of life. Also, the quality of life in men was 11 units higher than women.

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