

Assessing anxiety level among cancer patients

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Abstract

Background: anxiety is the most psychological distress experienced by patients with cancer and are associated with poorer treatment outcome, increased periods of hospitalization and higher mortality rates.

Objective: To assess the level of anxiety in patients with different types of cancer and identify the relationship between anxiety level with some Sociodemographic and Clinical characteristics.

Methodology: non- probability (purposive) sample of 100 cases selected from cancer patients in Merjan medical city /Babylon oncology center. The data collected from 2ed January 2020 to 28th February 2020. A structured interviewing constructed with cancer patients who were attended Merjan medical city /Babylon oncology center by questionnaire through using the anxiety scales. The data analyzed by using descriptive statistical measures and inferential statistical measures.

Results: Most of cancer patients have severe level of anxiety (65%). Most of them were (46-60) age group, females, married, illiterate, lived in the urban and they were housewives. Most of the sample complaining from breast cancer, all of them under surgical and chemotherapy and other types of treatment. Severe anxiety level effected cancer patients significantly especially illiterate patients, patients lived in rural area, housewives, Government employee and surgical and

chemotherapy treatment. Results indicated that there were no differences between anxiety level and patient's gender, age, marital status, cancer type and cancer stages.

Recommendations: Improving the psychological and emotional status for cancer patients of all types by nursing staff, especially after taking chemotherapy treatment. Coordination between oncology center and the Department of Psychiatry in the hospital to reduce anxiety level. Educate all government institutions to conduct periodic tests for early detection of cancer, especially breast cancer to reduce spread.

Keywords: anxiety; Cancer patient

Introduction

cancer affects people; younger and older, richer and poorer, and has the same effect on men and women. It represents a large burden on patients that increases families and societies worried. Cancer is one of the leading causes of death in the world, particularly in developing countries ⁽²⁾. Cancer is realizing a dangerous and chronic disease that contains despair and ambiguities, a painful death, and anxiety, and establish frighten and embarrassment. In this sense, cancer cause a disastrous and a dramatically breakdown in the psychic balance of the individual (Ogce et al., 2007).

The first reaction of an individual shock and denial. In this stage, non-acceptance of the fact is a defense against the feelings of anxiety and despair rising from a truth, which is very hard to believe. In the second stage the reaction is increase the many responses in this stage in anxiety. Feelings of threat, loss of cognition, separation and thoughts of death and isolation are the fundamental elements of this anxiety (Atesci et al., 2004). Anxiety is annoying emotion expressed by words such as apprehension, Worry, horror and fear. Process hospitalization and the hospital environments are important reasons of anxiety. Besides, when patients are hospitalized for diagnosis purpose, the anxiety increases (Roose, 2001). Stress is often a cause for anxiety and cancer is one of the most stressful events that a person may experience. These conditions may interfere with cancer treatment (Nikbakhsh et al., 2014).

Emotional distress is often a multi-factorial unpleasant experience regarding emotional, cognitive, behavioral & spiritual nature that interfere with the chance to cope effectively with cancer. It extends in continuum ranging from normal feeling regarding sadness and fear to issues that can become disabling like anxiety, panic, social isolation along with anxiety. (Santre et al., 2014).

It is only recently that oncologists in general have begun to recognize the emotional impact of these ordeals and the fact that emotional states play a role in the tolerability of the treatment, the quality of life, and the outcome of cancer as well (Mohite et al., 2012). Despite

Objective of the Study:

- Assess anxiety level in patients with different types of cancer.
- Identify the relationship between anxiety level with Sociodemographic data.
- Identify the relationship between anxiety level with clinical data.

Methodology

A descriptive analytical study was conducted throughout the period of 5th November 2020 to 30th November 2020 to assessing anxiety among cancer patients in Babylon city. Purposive sample of 100 cases selected from cancer patients in Babylon oncology center / Merjan medical city that provides daily management for different type of cancer. Collected data through the use of interview technique. Analyzed data through using the Statistical Package of Social Sciences (SPSS, Version 24) performed through the use of descriptive statistical data analysis approach; such as frequencies, percentages, graphical presentation by bar-chart and inferential statistical data analysis approach which is presented as analysis of variance Chi-Square test.

The Study Instrument:

The researchers reviewed the literature and previous studies to derived questionnaire to measure anxiety among cancer patients in Babylon oncology center. The researcher depended also on Taylor Anxiety Scale, the Arabic version, with reliability ($\alpha = 0.86$) (Al-Haj, 1997) and ($\alpha = 0.84$) (Mikhail, 2003), the questionnaire is comprise of two parts, part-I- Sociodemographic characteristics include age, gender, marital status, level of education, residence, occupation and occupation type and Clinical characteristics include cancer type, treatment type and cancer stages and part II anxiety scale assesses emotional responses and feeling at the Beginning of the disease. It consists of 50 items, answering by yes or no (no = zero and yes=one), the final degrees of scale were between 0-50 degrees, the levels of anxiety, were divided to four levels according to this scale and as follow.

1. 0 - 16: normal anxiety
2. 17 - 24: mild anxiety.
3. 25 - 35: moderate anxiety.
4. 36 - 50: severe anxiety.

Reliability of the questionnaire is determined through a reliability test and the validity is achieved through a panel of (20) experts.

Results

Table 1: Distribution of cancer patient by Socio- Demographic data.

Socio- Demographic Variable			Socio- Demographic Variable		
Gender	F	%	Level of education	F	%

male	25	25%	illiterate	33	33%
female	75	75%	Primary	28	28%
Total	100	100%	Secondary	18	18%
age (year)	F	%	academic	21	21%
15-30	11	11%	Total	100	100%
31-45	27	27%	residence	F	%
46-60	32	32%	Urban	52	52%
61-75	27	27%	Rural	48	48%
76-90	3	3%	Total	100	100%
Total	100	100%	Occupation	F	%
marital status	F	%	Employee	25	25%
single	8	8%	un employee	22	22%
married	80	80%	Housewife	53	53%
widowed	9	9%	Total	100	100%
divorced	3	3%	occupation type	F	%
Total	100	100%	government employee	22	22%
			free works	3	3%

The table show that the highest percentage of cancer patients were females (75%) ;(32%) (45-60) years old; married (80%); illiterate (33%); (52%) Urban, (53%) Housewife and (22%) Government employee.

Cancer type	Breast cancer	Breast and lymph node cancer	leukemia	uterus cancer	lung cancer	stomach cancer	colon cancer	stomach and liver	prostate cancer	lymph node	liver and ovary	bladder cancer	pancreas cancer	pharynx cancer	bone cancer	lung and brain
F.	35	14	13	5	5	4	4	4	3	2	2	2	2	2	2	1
%	35 %	14 %	13 %	5 %	5 %	4 %	4 %	4 %	3 %	2 %	2 %	2 %	2 %	2 %	2 %	1 %
total f. = 100 total % = 100%																

Cancer stag	local stage	organic stage	metastasis stage	Treatment	surgical and chemotherapy	chemotherapy treatment	hormonal treatment	surgical, radiotherapy and	radiotherapy, hormonal, and surgical	radiotherapy and	hormonal, surgical and chemotherapy
F.	2	53	45	F.	30	23	22	10	10	4	1
%	2%	53%	45%	%	30%	23%	22%	10%	10%	4%	1%
total f. = 100 total % = 100% total f. = 100 total % = 100%											

Table 2: Distribution of the patients sample according to clinical data.

The table show that the highest percentage of the patients sample with regard to type of cancer were Breast cancer (35%) breast cancer. highest percentage of the cancer stages organic stage (53%). highest percentage of the type of treatment surgical and chemotherapy treatment (30%).

Table (3) Distribution of anxiety patients according to their Level of anxiety.

Level of anxiety	Score of anxiety	frequency	percentage
Normal anxiety	0-16	3	3%
Mild anxiety	17-24	6	6%
Moderate anxiety	25-35	26	26%
Severe anxiety	36-50	65	65%
Total	50	100	100%

The finding indicated that there was (65) of the cases have Severe level of anxiety and (26) of the cases have Moderate level of anxiety (6) have mild level of anxiety (3) whereas not found according scale of anxiety

5.Residence							
Urban	3	4	17	28	7.226	3	.065 N.S.
Rural	0	2	9	37			
6.Occupation							

Table (4): Chi-Square tests for anxiety Level and patients Socio- Demographic Characteristics.

Variable	Anxiety levels				Chi-Square tests		
1.Gender	Normal	Mild	Moderate	Severe	Value	df	Sig.
Male	1	1	4	19	2.236	3	.525
Female	2	5	22	46			N.S.
2.Age							

15-30	0	0	3	8	8.653	12	.732 N.S.
31-45	1	3	10	13			
46-60	1	1	9	21			
61-75	1	2	4	20			
76-90	0	0	0	3			
3.Marital Status							
Single	0	0	1	7	6.133	9	.727 N.S.
Married	3	5	24	48			
Widowed	0	0	0	3			
Divorced	0	1	1	7			
4.Education Level							
Illiterate	0	2	6	25	16.623	9	.050 S.
Primary	0	3	7	18			
Secondary	0	0	6	12			
Academic	3	1	7	10			
Employee	3	2	11	9	27.028	6	.000 H.S.
Un employee	0	0	0	22			
Housewife	0	4	15	34			
7.Occupation type							
Government employee	3	2	10	7	20.331	3	.002 H.S.
Worker	0	0	1	2			

HS: Highly significant, Sig.: significance, NS. : Non-significant

It appears from this table that there was a significant difference in the anxiety levels in cases with respect to their education level, occupation and type of occupation at $p > 0.05$.

It appears from this table that there was no significant difference in the anxiety levels in cases with respect to their gender, age, marital status and residence at $p > 0.05$.

Table (5): Chi-Square tests for anxiety Level and patient's clinical data.

Cancer types													
anxiety Level	Breast cancer	lymph node cancer	breast and lymph node cancer	leukemia	uterus cancer	lung cancer	cancer	stomach cancer	colon cancer	prostate cancer	cancer	stomach and intestines	lymph node cancer

0	0	0	1	Value=63.361 DF = 54 Sig.= .180	Types of treatment	hormonal, surgical and chemotherapy treatment	0	0	3	1	Value=52.208 DF=18 Sig.=.000	
0	0	0	1			radiotherapy and chemotherapy treatment	0	0	3	7		
0	0	1	1			radiotherapy, hormonal, and surgical chemotherapy treatment	2	2	7	12		
0	0	0	2			radiotherapy and chemotherapy treatment	0	0	4	6		
0	0	0	1			radiotherapy and chemotherapy treatment	0	0	0	0		
0	1	0	2			hormonal treatment	1	0	0	20		
0	0	1	3			chemotherapy treatment	0	1	1	19		
0	0	0	5			surgical and chemotherapy treatment	0	3	8	36		
0	0	2	11			metastasis stage	1	0	8	27		
2	0	3	9			organic stage	2	6	18	2		
0	5	14	16	local stage	0	0	0					
Normal	Mild	Moderated	Severe			anxiety Level	Normal	Mild	Moderated	Severe		

HS: Highly significant, Sig.: significance, NS. : Non-significant

It appears from this table that there was a significant difference in the anxiety levels in cases with respect to their treatment type at $p > 0.05$. It appears from this table that there was no significant difference in the anxiety levels in cases with respect to their cancer type and cancer stages at $p > 0.05$.

Discussion

Result of the study show anxiety in cancer patients were evaluated by using anxiety scale and result indicate that 65% of the studies sample feeling severe anxiety and moderated anxiety level, they feel sadness, pessimism, loss of pleasure and something in their body changed, which affected their sleep and appetite and may cause a significant disturbance in patients quality of life. The findings of study indicate that majority of the studied patients were females married almost all of them. ⁽¹⁴⁾ And ⁽¹⁰⁾ found seam result that majority of cancer patients were female complaining from breast cancer. ⁽¹⁹⁾ found that the incidence of breast cancer among Iraq women was (4,542 women). Regarding to the age the findings of the present study show that the majority of the studied patients in the age groups (46-60) years, in Iran ⁽⁷⁾ findings indicate that majority of the studied subjects age were (40-59) years. In addition, in Greece ⁽¹⁰⁾ who found that majority of the study subjects were (< 50-60) years. One of the causes of cancer, especially breast cancer and ovarian cancer is a hormone changing especially after 40 years of age, this explanation was indicated our result. More than the half of the cancer patients were in the organic stage. ⁽¹⁶⁾ Their result indicated that majority of study organic stage, this may be because there were an early diagnosis of cancer and patient received treatment to reduce metastasis stage. That majority of study cancer patients had two type of treatment (Surgical and chemotherapy treatment) used in our hospitals in Iraq, cancer patients given chemotherapy after operation. ⁽¹⁾ And ⁽¹⁶⁾ supported study result. The finding of study indicated that there is significant variance in anxiety level with regard to the educational level of cancer patients. Educational level effect patient's anxiety level the illiterate patients have high anxiety level than the education patients. The finding of study indicated that there is significant variance in anxiety level with regard to the occupation of cancer patients, patients who are not working reported significantly more anxiety level than worker patients, the reason for this result is workers patients are busy and the have a little time for thinking about disease. The finding of study indicated that there is significant variance in anxiety level with regard to the occupation type of cancer patients. This patient who are working in government offices have higher anxiety level than others this is may because of the restricted working hours in government which a disease like cancer need a lot of free days for treatment.

The finding of study indicated there is significant variance in anxiety level with regard to the treatment type of cancer patients. The reason for this result is that side effect of chemotherapy treatment and change in body image by surgical intervention. The finding of study indicated that there is significant variance in anxiety level with regard to the residence of cancer patients. Cancer patients lived in rural areas have a high level of anxiety than cancer patients lived in urban areas. This result may be because of most of our sample are illiterate, little information they have about cancer and the distance between the rural areas and the hospital was too far. All these reasons lead to higher level of anxiety.

Recommendation: The researchers recommended improving the psychological and emotional status for cancer patients of all types, especially by nursing staff after taking chemotherapy treatment. Coordinate between oncology center and the Department of Psychiatry in the hospital for give treatment to reduce anxiety level

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