

Cancer Related Fears in Iranian Patients, a Survey from South East of Iran

Arbabi F^{*1}, Shahbaksh B², Raghibi M³, Hemmati S⁴, Tajvidi M⁴

1. Department of Radiation Oncology, Zahedan University of Medical Sciences, Zahedan, Iran.

2. Clinical psychologist, Zahedan University of Medical Sciences, Zahedan, Iran.

3. Department of psychology, University of Sistan and Baluchistan, Zahedan, Iran.

4. Department of Radiation Oncology, Isfahan University of Medical Sciences, Isfahan, Iran.

*Corresponding Author: Arbabi F

Email: farshidarbabi@gmail.com

Abstract

Introduction: Cancer is a chronic disease with an increasing incidence. Other than common complications of chronic diseases, the vague prognosis and early threat of cancers may induce tension and fears among patients. Such fears are of the main destructive aspects of cancer that make it a physically and emotionally weakening disease.

Patients and methods: In this study, we evaluated 111 patients with cancer who had been treated in the specialized cancer treatment center of Zahedan. They were asked to fill a questionnaire containing 44 questions about their fears and anxieties. We categorized the fears into social, individual, sexual, and disease related groups and these groups were analyzed according to the patients' characteristics.

Results: 26.1% of the patients were men and 73.9% were women with the mean ages of 45.9 and 44.9 years respectively. The majority of patients (79.3%) were married. T test analysis revealed that women experienced more social ($P= 0.001$) and personal fears ($P= 0.015$) than men. Married patients had more sexual fears than other groups ($P= 0.001$).

One-way ANOVA for examining the effect of educational attainment, showed that the only variable with statistically significant difference among the means was the sexual fears ($F(3, 108) = 3.417, p=0.020$). The patients with higher education levels had lower scores in sexual fears than other groups, meanwhile such type of the fears were more in the group of middle school education.

Conclusion: Cancer is accompanied by different types of fears that affect the patients' quality of life and satisfaction with treatment. It sees that detecting these fears and trying to resolve them, may help patients to have less stress during their life with cancer.

Key words: cancer, fear, social, sexual, personal.

Introduction

Cancer is a chronic disease that, in spite of all the progress in its diagnosis and treatment, is still suggestive of pain, disfigurement, and death⁽¹⁾. Cancers is the cause of 9 percent of deaths in the world. Preceded by cardiovascular diseases, cancer is the second cause of death in developed countries, contributing to the loss of lives of 19 percent of people. In developing countries, however, it is the fourth reason, and accounts for 6 percent of deaths.

According to the statistics, there are annually about 50 million deaths, of which more than 5 million are attributed to cancers⁽²⁾. The unpredictable prognosis and early threat of cancers

tend to create tension and fear among patients. Such fears represent one of the main destructive aspects of cancer that make it a physically and emotionally weakening disease⁽³⁾.

In patients with cancer, a simple headache is never perceived as a headache. Fear of recurrence or progression of the disease is one of the worst dreads of cancer sufferers⁽⁴⁾. Worries about the future, physical pain, disfigurement, and death are also among the concerns of these patients. Furthermore, some side effects of chemotherapy and radiotherapy that result in loss of hair and alterations in appearance have significant effects

on the psychological state of patients. These fears in patients with cancer take over their lives, and even sometimes cause them to lose their jobs^(5, 6, 7).

A study by Spiegel showed that 80% of cancer patients suffer from distress and great fear, particularly at the beginning stages of their treatment⁽⁸⁾.

In a study by Herschbach and colleagues, conducted on 1,721 cancer patients, concern about recurrence was a substantial or very substantial problem for approximately 32.2% of them. Fear of the future was the most common concern of cancer survivors⁽⁹⁾.

Another study by Evan Jung Shim and colleagues in patients with cancer recurrence, showed they had a higher percentage of depression and anxiety compared to the control group⁽¹⁰⁾.

The present study aims at finding various types of fears and their relationship with patients' characteristics such as gender, marital status, and educational levels.

Patients and Methods

In this study, we evaluated 111 patients with cancer who had attended the specialized cancer treatment center of Zahedan, and were in their treatment course or in the follow up period after

treatment.

At first twenty patients were interviewed. It was a semi structured interview using some questions that were obtained from studying the various texts. The patients talked about their fears and anxieties during the interview.

After transcribing the records, we categorized the patients' concerns into social, individual, sexual, and disease related groups to create the first questionnaire.

We asked 15 patients to complete the preliminary questionnaire and provide comments about understandability and fluency of the questions. We considered their ideas in the development of a final questionnaire containing 44 questions (supp).

Results

26.1% of the patients were men and 73.9% were women, with the mean ages of 45.9 and 44.9 years respectively. The majority of patients (79.3%) were married.

In the case of educational attainment, almost half of the patients (47.7%) were illiterate. Cancer had led to disfigurement in 45% of the patients and there was no disfigurement in 54.9%. Main patient characteristics are summarized in table 1.

With respect to type of the cancer, most of the

Table1: Demographic characteristics of patients in the study

	Variable	Frequency	Percentage (%)	Average Age
Gender	Male	29	26.1	45.86
	Female	82	73.9	44.86
Marital Status	Single	3	2.7	21.66
	Married	88	79.3	43.57
	Other	20	18	55.05
Education	Illiterate	53	47.7	49.3
	Middle school	28	25.2	43.07
	High school and above	30	27	39.23
Disfigurement	Present	50	45	45.5
	Absent	61	54.9	44.73

Table2: T-test results of comparing variables according to patients' gender and marital status

Gender				
Index	T	Degree of Freedom	Significance Level	Means Difference
Disease-related fears	-1.898	109	0.060	-0.28344
Social fears	-3.592	109	0.000	-0.54748
Personal fears	-2.476	109	0.015	-0.34860
Sexual fears	1.930	107	0.056	0.43790
Marital status				
Disease-related fears	-0.850	109	0.397	-0.13928
Social fears	0.380	109	0.705	0.06634
Personal fears	-0.321	109	0.749	-0.05034
Sexual fears	4.970	107	0.000	1.15838

Table 3: Results of one-way ANOVA test for educational attainment

		Sum of Squares	Degree of Freedom	Mean Square	F	Sig.
Disease-related fears	Between groups	0.993	3	0.331	0.671	0.572
	Within groups	52.778	107	0.493		
	Total	53.771	110			
Social fears	Between groups	0.359	3	0.120	0.212	0.888
	Within groups	60.308	107	0.564		
	Total	60.667	110			
Personal fears	Between groups	0.751	3	0.250	0.556	0.645
	Within groups	48.157	107	0.450		
	Total	48.908	110			
Sexual fears	Between groups	10.791	3	3.597	3.417	0.020
	Within groups	110.516	105	1.053		
	Total	121.306	108			

patients (41.4%) had breast cancer, followed by lymphoma, gynecologic, and colorectal cancers in 12.6%, 11.7% and 7.2% respectively.

Comparing the patients' gender in terms of

social, personal, individual, and disease-related fears, mean scores were higher in women for all variables except for the sexual fears. With t-test analysis, only the social ($t(109) = -3.592, p = 0.001$)

and personal fears ($t(109) = -2.476, p=0.015$) had statistically significant differences. (Table 2)

In order to determine the effect of marital status (married patients compared to other circumstances) among the descriptive indices related to social, personal, individual, and disease-related fears, t-test was used to compare the means of independent samples. The results showed that the difference among the mean scores of patients based on their marital status was statistically significant only with respect to the sexual fears ($t(109)=1.16, p=0.001$); married patients had more sexual fears. (Table 2)

To examine the effect of educational attainment, one-way ANOVA was used. Results from the ANOVA showed that the only variable with a statistically significant difference among the means is the sexual fear ($F(3, 108) = 3.417, p=0.020$). Scheffe's follow up test showed that the mean score of illiterate patients for sexual fears ($M=2.28, SD=1.15$) was significantly lower than that of the patients with a middle school certificate ($M=2.98, SD=0.79$). On the other hand, these scores were lower for higher educated patients than for other groups. These results have been shown in table 3.

Discussion

Most of the studies about psychological aspects of patients with cancer have been conducted on breast cancer patients. In our study the majority were patients with breast cancer, consistent with the global findings of increased numbers of these patients and the survivors of this disease⁽¹¹⁾.

As we discussed before, in this study we have categorized the patients' fears into four groups according to different questions from the final questionnaire and we have compared these groups with respect to different variables. According to our findings; the social, personal, and cancer related fears were higher in women than men, whereas men revealed more sexual fears. These differences were significant only in the terms of social and personal fears. There have been some similar findings in other studies; for instance, Muhbs and colleagues, in their study on the fears of 100 breast cancer patients, revealed that the majority of patients expressed individual and social fears, which is in agreement with our study⁽¹²⁾. Another study by Thomas and colleagues also showed higher distress in women especially those with

breast cancer⁽¹³⁾.

Goldzweig and his colleagues, in a study on 339 patients with colorectal cancer, showed that psychological coping with cancer is better in married patients⁽¹⁴⁾. In our study, there were no differences between married and unmarried patients except in their sexual fears; it makes sense if we consider the culture of region under study, which to a great extent limits sexual activity only to marital relationships. As the findings of this study demonstrated, the mean scores of illiterate patients for sexual fears were lower than who had a middle school certificate. Lack of knowledge about complications of cancer and less conception of such problems could be the reasons for this difference. On the other hand, patients with higher levels of education experienced less fear, perhaps due to greater scientific awareness and access to information that helps them to cope better with the stressful event of cancer.

Conclusion

Generally, it seems that cancer is accompanied by different types of fears, thus cancer therapists should have be concerned with identification, discussion, and treatment of such fears concurrent with the treatment of pain and disease; because these fears affect the patient's quality of life and satisfaction with treatment.

We hope this study will encourage investigators to conduct additional organized studies of the psychological aspects of patients with cancer, ultimately helping patients to have less stress during their life with cancer.

References

1. Murrins, Beck with Mc. Prevention and management of chemotherapy induced nausea and vomiting. Education series oncology: 2001; 36: 281-283.
2. World Health Organization. Global health risks: mortality and burden of disease attributable to selected major risks. 2009.
3. Noghani F, Monjamed Z, Bohrani N, Ghodrati J v. Self-respect level among male and female cancer patients. Nursing and Midwifery Journal of Tehran University of Medical Sciences. 2006;12(2):33-41.
4. van den Beuken-van Everdingen MH, Peters ML, de Rijke JM, Schouten HC, van Kleef M, Patijn J. Concerns of former breast cancer patients about disease recurrence: a validation and prevalence study.

- Psychooncology. 2008;17(11):1137-45.
5. Elder R, Evans K N, izette D. psychiatric and Mental Nursing. Mosby Australia; 2005.
 6. Pelusi J. Sexuality and body image. Research on breast cancer survivors documents altered body image and sexuality. Am J Nurs. 2006;106(3 Suppl):32-8.
 7. Janz NK, Mujahid M, Chung LK, Lantz PM, Hawley ST, Morrow M, et al. Symptom experience and quality of life of women following breast cancer treatment. J Womens Health (Larchmt). 2007;16(9):1348-61.
 8. Spiegel D, Bloom JR. Group therapy and hypnosis reduce metastatic breast carcinoma pain. Psychosom Med. 1983;45:333-8.
 9. Herschbach P, Keller M, Knight L, Brandl T, Huber B, Henrich G, et al. Psychological problems of cancer patients: a cancer distress screening with a cancer-specific questionnaire. Br J Cancer. 2004;91(3):504-11.
 10. Shim EJ, Shin YW, Oh DY, Hahm BJ. Increased fear of progression in cancer patients with recurrence. Gen Hosp Psychiatry. 2010;32(2):169-75.
 11. National Cancer Institute. Surveillance, Epidemiology, and End Results. SEER Stat Fact Sheets: Breast Cancer. Available from <http://seer.cancer.gov/statfacts/html/breast.html>
 12. Muhbs F. Fears of patient with breast cancer. Am J Sci Ind Res. 2010; 1(1): 47-50.
 13. Thomas BC, NandaMohan V, Nair MK, Pandey M. Gender, age and surgery as a treatment modality leads to higher distress in patients with cancer. Support Care Cancer. 2010;19(2):239-50.
 14. Goldzweig G, Andritsch E, Hubert A, Walach N, Perry S, Brenner B, et al. How relevant is marital status and gender variables in coping with colorectal cancer? A sample of middle-aged and older cancer survivors. Psychooncology. 2009;18(8):866-74.

Supp: The final questionnaire

Dear Patients

This questionnaire has been designed to address your fears and anxieties that might be directly or indirectly related to your illness. Please answer the questions honestly. There are about 40 questions, each with 5 choices. Please choose if you “always”, “often”, “sometimes”, “seldom”, or “never” think about a certain fear. If you need any information or you have any questions - please feel free to ask

	Type of fear or anxiety	ALWAYS	OFTEN	SOMETIMES	SELDOM	NEVER
1	Unknown Future					
2	Becoming dependent on others					
3	Chemotherapy Injections					
4	Not affording the costs					
5	Criticism					
6	Fear of the unknown					
7	Disturbing thoughts that cause anxiety					
8	Fear of closed places					
9	Pain					
10	Sexual intercourse					
11	Sudden and uncontrolled anxiety attacks					
12	Being abandoned					
13	Fear that you disease is hereditary					
14	Inability to work					
15	Losing support of family members					
16	Marriage problems					
17	Other people’s advice					
18	TV programs about cancer					
19	Other people's sympathy					
20	Being unable to find a job					
21	Being alone at home/work					
22	Recurrence					
23	Drugs side effects					
24	Becoming ugly					
25	Ineffective treatment					
26	Surgery					
27	Being teased					
28	Infertility					
29	Inadequate Nursing Care					
30	Inability to give sexual pleasure to your husband					
31	Catch other diseases					
32	Fear that you disease is contagious					
33	Amputation					
34	Biopsy					
35	Lab results after treatment					
36	Death					
37	Inability to buy medication					
38	Prolongation of the disease					
Answer if you are a woman.						
39	Inability to do housework					
40	Pregnancy					
41	Dyspareunia					
42	Lack of femininity					
Answer if you have had breast surgery						
43	Losing the other breast					
44	Moving your arm					