

PSYCHIATRIC MORBIDITY AMONG LUNG & BLOOD CANCER PATIENTS

Fazaila Sabih, Wahid Bakhsh Sajid

Islamic International Medical College, Rawalpindi

ABSTRACT

Objective: To investigate the relationship of psychological well-being with depression in cancer patients.

Study Design: This was a prospective study using purposive convenient sampling technique.

Place and Duration of the study: The study was carried out in the Combined Military Hospital, Rawalpindi and the National Oncology radiology Institute (NORI) Islamabad from 2003 to 2004.

Patients and Methods: Forty-eight cancer patients were assessed using Beck Depression Inventory for assessing depressive symptoms and Affectometer-2. The patients were taken from two hospitals located in Rawalpindi and Islamabad from 2003-2004.

Results: The findings indicate a significantly high negative relationship between depression and psychological well being and the level of depression in these two types of cancer patients. Blood cancer patients were found high on depression and low on psychological well being than the lung cancer patients. Women and the young individuals scored high on depression and low on psychological well being as compared to men and elderly cancer patients respectively.

Conclusion: The findings of the present research support that depression has great influence on the psychological well being of cancer patients.

Keywords: Cancer, Depression, Psychological well being

INTRODUCTION

Cancer is one of the deadliest diseases ever known to man. Cancer is amongst those diseases whose life threatening diagnosis and long uncertain treatment course is a source of extreme discomfort, leading to the several associated psychological problems including depression, learned helplessness and anxiety. It seriously threatens life as well as the psychological well being of patient in many ways [1]. Substantial amount of data supports the relationship between psychological well being and physical health as well as different psychological risk factors for different types of ailments and diseases [2-6].

Cancer patients experience several stressors and emotional upheavals. Fear of death, interruption of life plans, changes in body image and self-esteem, changes in social

role and lifestyle are all important issues to be faced. Depression is the major concern that many cancer patients experience. In a recent review, reported prevalence rates of depression for solid tumours were found ranging from 20 to 50% [7]. It is important to make an accurate and complete assessment of depressive symptoms. Moreover, depressive disorder may interfere with the course of the disease and compliance. Some preliminary Pakistani researches have explored the psychological aspects of cancer [8-11]. Adjustment disorder was the most common type of mental disorder (20.8%), followed by depression and anxiety 17.8% and 16.8% respectively in cancer patients [12]. However, present study is different in its scope and outlook in respect of therapy and follow-up. It focuses on exploring relationship between depression and psychological well being among cancer patients. The comparison is also made on the analysis of the demographic variables, like age, gender, and biological variables, like type of cancer.

Correspondence: Brig ® Wahid Bakhsh Sajid, Prof of Psychiatry & Behavioral Sciences, Islamic International Medical College, Rawalpindi
Email: WBSajid@riphah.edu.pk

Received: 03 Mar 2008; Accepted 14 Nov 2008

Depression affects quality of life, lack of compliance with anti-cancer treatment, and even increases the risk of suicide. Researchers at the National Cancer Center in Kashiwa, Japan [13] asked a group of 220 cancer patients with depression about their symptoms. They learnt that weight loss and appetite changes were linked to lack of interest and pleasure in life, which is a major indicator of depression. The study suggests that doctors should keep these things in mind while diagnosing depression in people who suffer from any type of malignancy.

Isikhan et al [14] in their study with cancer patients found that several disease features, including treatment, early diagnosis, disease acceptance, pain, psychological distress have effect on patient's quality of life. The major changes in quality of life of these patients pertain to feeling of ever increasing emotional and physical distress, social intercourse, marital and family relationships as well as the job continuity and competence.

To investigate the relationship of psychological well-being with depression in cancer patients.

PATIENTS AND METHOD

The sample consisted of 48 lung (n=24) and blood (n=24) cancer patients selected on the basis of purposive convenient sampling technique. The research was carried out in hospital setting. The sample was taken from the Out Patient Department of the CMH (Combined Military Hospital) Rawalpindi (n=24) and NORI (National Oncology Radiology Institute) Islamabad (n=24) with the cooperation of the consultant oncologists. The patients having prior history of any psychiatric ailment and those taking drugs causing depression were not included in the study.

Instruments

Main instruments used in the study were: Urdu version of Beck Depression Inventory (BDI-U), and Urdu version of Affectometer 2 [15].

BDI-U comprises of 20 items as one item having sexual connotation was dropped. Score range of BDI-U is 0-60. Affectometer 2

was used to assess psychological well being. High scores show high psychological well being and vice versa. Affectometer 2 Urdu version consists of 39 item divided in two parts A and B. It is a five point rating scale and scoring is reverse for the negative items of both the parts A & B. The score range is 39-195. Cut off score is 117, which indicates a moderate level of psychological well being.

Along with these instruments a semi-structured interview proforma for demographic variables was used for recording and assessing other important variables.

RESULTS

The sample consisted of equal numbers of men and women (24 men and 24 women) with the age range of 19-70. Among the 48 patients, 29 were between the ages of 19-40 and 19 (40%) were between 41-70 years of age. The newly diagnosed cancer patients who had not yet received cancer treatment were selected.

To find out the relationship between depression and psychological well being Pearson Product Moment Correlation was performed. Results are shown in (table-1).

The correlation coefficient between depression and psychological well being was $r=0.890$ ($p=0.001$).

It showed that depression is significantly inversely correlated with patients' psychological well-being. The relationship of depression and psychological well being was given in table 1. It was observed that as compared to male patients, female patients has significantly low psychological well being ($p<0.01$) and high depression ($p<0.05$).

In order to see the effect of age on main variables of study, patients were divided into two groups. Group 1 comprised of patients aged 19-40, whereas, Group II comprised of patients between the age range of 41-70. Group I had 29 patients, whereas Group II included 19 patients.

It was observed that young cancer patients have significantly higher level of depression as compared to elderly cancer

patients ($P<0.01$) and low sense of psychological well being as compared to elderly ($P<0.01$) (table-2).

Blood cancer patients had significantly high mean scores on BDI-U as compared to lung cancer patients ($P<0.001$). Blood cancer patients has low sense of psychological well being than the patients who have lung cancer ($P<0.001$) (table-3).

However, some research workers could not replicate these findings [18, 19]. The possible reasons for high depression and low psychological well being in females may be that in our society females bear more household responsibilities, face domestic conflicts and enjoy fewer privileges, less social support from others, less rights, less social and economic freedom, which make

Table-2: Gender-wise description of BDI-U and Affectometer

Scale	Gender	N	M	SD	P-value
BDI-U	Men	24	20.38	7.45	<0.001
	Women	24	27.38	7.51	"
Affectometer 2	Men	24	110.92	30.06	<0.05
	Women	24	89.46	26.88	"

Table-2: Age-wise description of BDI-U and Affectometer

Scale	Age in Years	N	M	SD	P-value
BDI-U	19-40	29	26.79	6.75	<0.01
	41-70	19	19.42	8.35	"
Affectometer 2	19-40	29	91.03	26.33	<0.01
	41-70	19	114.16	31.06	"

Table-3: Description of BDI-U and Affectometer according to type of cancer

Scale	Type of Cancer	N	M	SD	P-value
BDI	Lung Ca	24	19.46	8.85	<0.001
	Blood Ca	24	28.29	4.27	"
Affectometer 2	Lung Ca	24	115.88	32.23	<0.001
	Blood Ca	24	84.50	17.71	"

DISCUSSION

The results of the study indicate a highly significant negative correlation between psychological well being and depression in the cancer patients. It showed that the higher the depression, the lower the sense of psychological well being. These findings are consistent with findings of several other authors on the importance of psychological well being and the relationship which exists in various populations including different cancer patients [16].

There is common realization that women are more vulnerable to psychological distress. The mean score on BDI-U shows highly significant gender difference between depression and psychological well being in cancer patients. Women cancer patients scored significantly low (26.88) on psychological well being and high on depression (27.38) as compared to men who are high (30.06) on psychological well being and low (20.38) on depression. The findings are supplemented by available research [17].

them more vulnerable to depression and other psychological problems as a stress reaction to disease of cancer.

In the present research, the relationship of psychological well being and depression has been studied with reference to age and it was found out that young cancer patients (aged 19-40) have higher level of depression and low sense of psychological well being as compared to the elderly (aged 41-70) cancer patients. Age has significant effect on depression and psychological well being of cancer patients. According to these findings the young cancer patients are in general at greater risk for adverse psychological outcomes than the old ones [20, 21]. A notion by some researchers states that young people become easily depressed and show more emotional disturbance than the elderly [22, 23]. Young patients feel more uncomfortable, hopeless and anxious. They take more time to adapt to the life and cope with disease. Also for young women the diagnosis of an illness like cancer is considered more of a

debilitating shock than for their older counterparts as they have yet to live their lives and for them, their physical appearance is more important and disfigurement means loss of femininity and so the self esteem.

Data was also analyzed for finding the variation in depression and psychological well being across two types of cancer (lung and blood). The findings of the study are in line with the previous research, which shows a highly significant association between the type of cancer and level of depression [24, 25]. Blood cancer patients have higher level of depression and low sense of psychological well being as compared to lung cancer patients.

Reason for increase in the level of depression in blood cancer patients however, could not be explored in this study. It may be due to the nature of therapy given to the blood cancer patients. Many researchers have studied the effects of chemotherapy. It is a disturbing mode of treatment and affects the psychological health of the patients and is described as terrible and awful by the patients. It is frequently accompanied by unpleasant side effects and precipitates nausea, depression and anxiety [26].

The therapeutic implications of this work can be disseminated to the team of therapists looking after cancer patients. They should either spot or treat depression at their own level or else refer the patients to the psychologist for assessment and or psychiatrist for appropriate and timely intervention. Evaluation protocol may be made available in oncology departments in order to uniformly assess and treat underlying psychological disorders in patients suffering from cancer.

However, further multicentric research on a larger sample is suggested in order to yield more useful and practical results.

CONCLUSION

Depression has great influence on the psychological well being of cancer patients. Women and young individuals have high depression and low psychological well being as compared to men and elderly.

REFERENCES

1. William LM. Is it appropriate to screen palliative care patients for depression. *Journal of Hospice and Palliative Care*. 2002; 19; 2: 112-4.
2. Beck, A. T. *Depression: Causes and treatment*. Philadelphia: University of Pennsylvania. 1998.
3. Kleman PR. Variables influencing psychological adjustment in lung cancer patients: A preliminary study. *Oncology Nursing Forum*. 1994; 21:6: 1059-62.
4. Chandra PS, Chaturvedi SK, Channabasavanna SM, Anantha N, Reddy BK, Sharma S et al. Psychological well-being among cancer patients receiving radiotherapy: A prospective study. *Quality of life research*. 1998; 7: 6: 405-500.
5. Keller M, Sommerfeldt S, Fischer C, Knight L, Riesbeck M, Lowe B. Recognition of distress and psychiatric morbidity in cancer patients: a multi-method approach. *Annual Oncology*. 2004; 15: 8: 1243-49.
6. Rodin GM, Jones J, Rydall A, Moore M & Gagliese L. Physical and psychological well-being in patients with stage-IV GI cancer. *Journal of Clinical Oncology*. 2004; 22: 8266.
7. Pasquini M & Biondi M. Depression in cancer patients: a critical review. *Clinical Practice and Epidemiology in Mental Health*. 2007; 3:2.
8. Anjum Q. Role of neuromodulation in the treatment of opined poorly responsive cancer pain, *JCPSP*. 2002; 12: 3: 189-94.
9. Ghumro AA., Khaskheli MN, Memon AA., Ansari GA. & Awan SM. Clinical profile of patients with breast cancer. *JCPSP*. 2002; 12: 1: 28-31.
10. Khan A. Cancer-should Pakistan worry. *Pakistan Journal of Health*. 2000; 37: 1-2: 1.
11. Qureshi WA, Chaudhary AI. Breast screening programme: importance in early detection of breast cancer in females. *Fauji Foundation Medical Journal*. 2001; 1: 1: 2-4.
12. Iqbal A. Common types of mental disorders in adult cancer patients seen at Shaukat Khanum Memorial Cancer Hospital and Research Centre. *Journal of Ayub Medical College Abbottabad*. 2004; 16: 4: 65-9.
13. Tatsuo Akechi T, Nakano T, Akizuki N, Okamura M, Sakuma K, Nakanishi T. Somatic Symptoms for Diagnosing Major Depression in Cancer Patients. *Psychosomatics*. 2003; 44: 244-8.
14. Isikhan V, Guner P, Komurcu S, Ozet A, Arpacı F & Ozturk B. The relationship between disease features and quality of life in patients with cancer. 2001.
15. Khan J. Validation and norm development of Beck Depression Inventory. Unpublished M.Phil Dissertation, National Institute of Psychology, Quaid-i-Azam University, Islamabad 1996.
16. Quinn ME, Fontana AE, Reznikoff M. Psychological distress in reaction to lung cancer as a function of well being. *Journal of Psychosocial oncology*. 1986; 4, 79-90.

17. Pollip CA. Assessment of depression among cancer patients: the role of pain, cancer type and treatment. *Psycho-oncology*. 2001; 10: 2: 156-65.
 18. Fife BL. Gender Differences and Adjustment to Cancer. *Research in the Sociology of Health Care*. 1994; 11: 107-25.
 19. Ganz PA., Lee J, Sim MS, Polinsky ML & Schag CAC. Exploring the influence of multiple variables on the relationship of age to quality of life in women with breast cancer. *Journal of Clinical Epidemiology*. 1992; 45: 473-85.
 20. Mor V, Allen S. Age differences in the psychosocial problems encountered by breast cancer patients. *Monographs of National Cancer Institute*. 1994; 16: 191-7.
 21. Larson R, Diener E, Cropanano RS. Cognitive operations associated with individual differences in affect intensity. *Journal of Personality and Social Psychology*. 1987; 53: 767-74.
 22. Burke KC, Burke JD, Darell A. Age at the onset of selected mental disorder in five community population. *Archives of General Psychology*. 1990; 47: 6: 511-18.
 23. Craig TJ, Abeloff MD. Psychiatric symptomatology among hospitalized cancer patients. *American Journal of Psychiatry*. 1974; 131: 1323-7.
 24. Zobra J, Brintzenhofe Szoc K, Curbow B, Hooker C & Paintadosi S. The prevalence of psychological distress by cancer site. *Psych-Oncology*. 2001; 10: 1: 19-28.
 25. Iqbal A, Intekhab K, Saeed K. Non-Medical factors associated with psychological disorders in cancer patients. *JCPSP*. 2002; 12: 5: 271-3.
 26. Burish TG, Carey MP, Krozely MG & Greco FA. Conditions side effects induced by cancer chemotherapy: prevention through behavioral treatment. *Journal of Consulting and Clinical Psychology*. 1987; 55: 42-8.
-