DEPRESSION AND ANXIETY IN CANCER PATIENTS IN OUTPATIENT DEPARTMENT OF A TERTIARY CARE HOSPITAL IN PAKISTAN

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ABSTRACT

Objective: To examine the prevalence of depression and anxiety in patients with cancer in an outpatient department of a tertiary care hospital in Pakistan.

Methodology: This study was conducted between May 2006 and January 2007. The sample consisted of 60 diagnosed cancer patients (30 males/30 females). DSM-IV criteria and Hospital Anxiety and Depression Scale (HADS) were used to diagnose and assess anxiety and depression.

Results: Fifty two percent (31 patients, 10 males/21 females) of the subjects reported having symptoms of anxiety, depression or both according to DSM IV Criteria, (anxiety =14, males six / females eight, depression = 6, males two / females four , and depression + anxiety both = 11, males two / females nine). A total of 70% (21/30) of the entire female sample met the criteria for depression, anxiety or both. A total of 33% (10/30) of the entire male sample met the criteria for depression, anxiety or both.

Conclusion: This study shows high prevalence rates of depression and anxiety in cancer patients in Pakistan. The oncologists and internists treating cancer patients should screen their patients for symptoms of depression and anxiety.

KEY WORDS: Cancer, Depression, Anxiety, Oncology.

INTRODUCTION

Cancer patients often experience emotional stress during the course of their illness. Depression and anxiety symptoms are common in these patients and often impairs the patient’s quality of life, comfort level and treatment compliance, which ultimately can affect the patient’s survival.¹⁻³

Cancer is associated with significant psychosocial morbidity.⁴ Most cancer patients experience psychosocial problems. In one study about 50% of all cancer patients were found to be suffering from a mental disorder.⁵ Depression, anxiety and delirium occur commonly in adult cancer patients, particularly as disease advances and as cancer therapies become more aggressive.⁶ Adjustment disorders, major depression and delirium are often directly related with illness itself and in some situations anxiety disorders, personality disorders and major depressive illness are pre-existing conditions often exacerbated by the cancer illness.⁷ Preconceived ideas and knowledge of disease and outcome of a patient depend on the patients coping skills;
attitude towards illness; support system; previous psychiatric history; social history and goals.6 High rates of depression and anxiety has been reported in oncology patients.8-12 Patients most at risk for depression and other psychiatric illnesses have advanced disease, a prior psychiatric history, poorly controlled pain, and other life stressors or losses.

Most people experience some anxiety and fear as a normal part of life. A cancer diagnosis often causes anxiety symptoms which can be acute or chronic. Anxiety in people with cancer and their family members is usually caused by fears about cancer progression or the impact of the illness. Some cancer treatments are associated with anxiety, but this is highly dependent on the specific circumstances.13 In addition depression, anxiety and panic symptoms can complicate cancer treatment and affect patient’s quality of life. Although physicians may expect anxiety in cancer patients, they may underestimate its severity.14 Anxiety in oncology patients may be considered a reaction to the stress of cancer or a manifestation of a medical or physiological response related to the cancer rather than recognized as a psychiatric disorder requiring treatment.15 The aim of the study was to examine the rates of anxiety and depression in cancer patients in an outpatient setting of a tertiary care hospital in Pakistan.

METHODOLOGY

To our knowledge this is the first study in Pakistan looking at anxiety and depression in cancer patients. The Institution Research Committee approved the study. This study was conducted between May 2006 and January 2007. The sample consisted of 60 diagnosed cancer patients (30 males/30 females). All patients were receiving chemotherapy. Cross sectional sampling technique was used. Consent was obtained from patients who were enrolled in the study. Patients with delirium and confusional states were excluded from the study.

DSM-IV criteria and Hospital Anxiety and Depression Scale (HADS) were used to diagnose and assess anxiety and depression. HADS is a 14 item assessment scale which is a reliable instrument for detecting depression and anxiety in the patients with medical illnesses. It contains two sub-scales: Anxiety & Depression. The scale is a 4-point rating scale with fourteen items. The Urdu version of the tool was used which has been validated and has been used in other studies in Pakistan. The HADS also has been effectively used in various studies to assess for depression and anxiety in oncology patients.16,17

Demographics and medical history including age, gender, education, occupation, marital status, income, type of family, residence, date of admission, number of previous admissions, level of severity, duration of illness, treatment history, past medical and psychiatric history, family medical and psychiatric history, drug history, availability of social support, and patients already treated for depression and/or anxiety were collected. Data analysis was completed using SPSS 13.0.

RESULTS

Over the 6-month period, 60 eligible patients were enrolled in the study. The mean age was 37.5 years, 50% were males, and 50% were females. We also conducted clinical interview to assess psychiatric illness following the DSM-IV criteria for depression and anxiety.

Twenty six subjects (43.3%) reported HADS-Anxiety (HADS-A) scores over seven, fourteen (23.3%) fulfilled DSM-IV criteria at clinical interview for anxiety disorder and thirty seven (61.6%) reported HADS-Depression (HADS-D) scores over seven, six (10%) fulfilled criteria for depression, eleven (18.3%) fulfilled DSM-IV criteria at clinical interview for anxiety and depression both.

Total of thirty one patients (10 males / 21 females) met the DSM IV criteria for major depression, anxiety disorder or both (anxiety =14, males six / females eight, depression = 6, males two / females four, and depression + anxiety = 11, males two / females nine). Out of these 31 patients only four patients were taking psychotropic medications. Among the four patients taking psychotropic medications, three met the criteria for anxiety and one for both anxiety and depression.
Mean age for patients meeting criteria for depression and anxiety was 40.12 with standard deviation of 11.04, mean HADS-A score of 9.77 with standard deviation of 3.95, HADS-D mean score of 10.26 with standard deviation of 2.52. 32% patients meeting criteria for depression, anxiety or both were males with the mean age of 41.30, mean HADS-A score of 10.90, & mean HADS-D score of 11.20, and 68% were females with the mean age of 39.57, mean HADS-A score of 9.24 and HADS-D mean score of 9.67.

Eighty four percent patients meeting criteria for depression and anxiety were married, 10% single and 6% widowed. Forty two percent patients meeting criteria for depression, anxiety or both were living in urban areas and 58% were living in rural areas. Forty five percent patients meeting criteria for depression and anxiety were living in joint family system and 55% were living in nuclear family system.

A total of 70% (21/30) of the entire female sample met the criteria for depression, anxiety or both. 38% (8/21) female from the sample met the criteria for depression, anxiety or both fall in the category of anxiety. 19% (4/21) have depression and 43% (9/21) fall in the category of depression and anxiety both. It shows that prevalence rate was extremely high among females as compared to males. The major types of cancers included in the study were breast cancer, lung carcinoma, renal cell carcinoma and leukemia. The various types of cancers and their corresponding HADS Anxiety and HADS Depression scores are described in Table-I.

### Table-I: Mean scores of HADS in different types of Cancers

<table>
<thead>
<tr>
<th>Diagnoses (N)</th>
<th>HADS-Anxiety</th>
<th>HADS-Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Lymphoblastic Leukemia</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Acute Myeloid Leukemia</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Brain Tumor</td>
<td>2</td>
<td>7.5</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>17</td>
<td>8.2</td>
</tr>
<tr>
<td>Carcinoma Larynx</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Carcinoma Lung</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Carcinoma Ovary</td>
<td>2</td>
<td>7.5</td>
</tr>
<tr>
<td>Carcinoma Prostate</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Carcinoma Anal Canal</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Chorio Carcinoma</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Chronic Myeloid Leukemia</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Hodgkin Disease</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>Hepatoma</td>
<td>2</td>
<td>6.5</td>
</tr>
<tr>
<td>Metastatic Liver Disease</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Metastatic Adeno Carcinoma</td>
<td>2</td>
<td>8.5</td>
</tr>
<tr>
<td>Metastatic cancer</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Non Hodgkin Lymphoma</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Osteoblastoma</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Plasma Cell Dyscleria</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Renal Cell Carcinoma</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Spinal</td>
<td>2</td>
<td>6.5</td>
</tr>
</tbody>
</table>

so that the treating physicians might not recognize that the functional impairment is related to depression or anxiety. Patients should be referred to psychiatrists if they have any form of suicidal thoughts; past history of depression, bipolar disorder, or psychosis; or if they have functional impairment from severe depression or anxiety.

In this study, being female and having cancer are high risk factors for developing depression and/or anxiety. In another study done by Aass N and colleagues including 716 oncology patients; female gender, impaired physical activity and impaired social role functioning were predictive of anxiety whereas fatigue predicted depression.1 Oncology patients should be monitored closely for depression and anxiety symptoms. There is evidence that providing psychosocial support reduce depression, anxiety and pain in this population.18 Early detection of anxi-
Cancer and depression in this population can help in making effective treatment interventions including education, support, psychotherapy and psychopharmacology which can have a huge impact in improving the quality of life.

Limitation of the study: Major limitations of this study include lack of use of structured diagnostic clinical interview scales like SCID, small sample size and lack of comparison group. Prospective controlled studies are needed involving larger sample size, multiple sites and over longer period of time.

CONCLUSION

Since depression and anxiety disorders are common psychiatric disorders among oncology patients and can have a significant impact on functioning of these patients, it is important to screen them on a regular basis and to provide necessary clinical interventions, treatment and support. This is even more important in oncology patients in developing countries with limited resources.

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REFERENCES


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