Original article:

Spectrum of Psychiatric Illness among Cancer Patients: A Prospective Analysis
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Abstract
Background: Cancer is a leading cause of death. The most common psychiatric disorder observed in cancer patients is adjustment disorder with depression, anxiety, or both. Hence; the present study was undertaken for assessing the psychiatric illness among cancer patients.

Materials & methods: 120 cancer patients were included in the present study. A master chart was prepared and complete demographic, clinical and medical details of all the patients were obtained. Experienced and skilled psychiatrist was employed for assessing the prevalence and spectrum of psychiatric illness among cancer patients. All the results were recorded in Microsoft excel sheet.

Results: Among these cancer patients, overall prevalence of psychiatric illness was found to be 40 percent (48 patients). Anxiety was found to be present in 24 patients, depression was found to be present in 19 patients and delirium was found to be present in 3 patients.

Conclusion: Psychiatric illness is common finding among cancer patients, with anxiety and depression being the most common ones.

Keywords: Cancer, Psychiatric Illness.

INTRODUCTION
Cancer is a leading cause of death. It accounted for eight million deaths worldwide (around 15% of all deaths) in 2010 (38% more than in 1990). According to the World Bank classification of countries by income, rates for all cancers combined (excluding non-melanoma skin cancers) rise as the country income rises. The age-adjusted incidence rate in high income countries in 2008 was 255.8 per 100,000 population for all cancers combined, compared with the rate in low-middle income countries, 146.8 per 100,000 population. The most common psychiatric disorder observed in cancer patients is adjustment disorder with depression, anxiety, or both. A patient with cancer is expected to have a certain level of psychological distress, which is considered a natural reaction, more often than should be. However, there is definitely an underreporting of psychological morbidity among cancer patients. Hence; the present study was undertaken for assessing the psychiatric illness among cancer patients.

MATERIALS & METHODS
The present study was planned in the Department of Psychiatry, Pacific Medical College & Hospital, Girwa, Udaipur, Rajasthan (India) with the aim of
assessment of spectrum of psychiatric illness among cancer patients. Ethical approval was obtained from institutional ethical committee and written consent was obtained from all the patients after explaining in detail the entire research protocol. 120 cancer patients were included in the present study. Only those cases were included in the present study in which confirmed diagnosis of cancer was based on histopathological examination.

A master chart was prepared and complete demographic, clinical and medical details of all the patients were obtained. Experienced and skilled psychiatrist was employed for assessing the prevalence and spectrum of psychiatric illness among cancer patients. All the results were recorded in Microsoft excel sheet and were analyzed by SPSS software. Chi-square test was used for assessment of level of significance.

Graph 1: Prevalence of psychiatric illness

Graph 2: Spectrum of psychiatric illness
Graph 3: Demographic data of cancer patients with psychiatric illness

Table 1: Spectrum of psychiatric illness

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Number of patients</th>
<th>Percentage of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>24</td>
<td>50</td>
</tr>
<tr>
<td>Depression</td>
<td>19</td>
<td>39.6</td>
</tr>
<tr>
<td>Delirium</td>
<td>3</td>
<td>6.3</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>4.1</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2: Demographic data of hypertensive patients with psychiatric illness

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>29</td>
</tr>
<tr>
<td>Females</td>
<td>19</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>38</td>
</tr>
<tr>
<td>Unmarried</td>
<td>10</td>
</tr>
</tbody>
</table>

RESULTS

In the present study, a total of 120 cancer patients were enrolled. Mean age of the cancer patients were 54.8 years. Among these cancer patients, overall prevalence of psychiatric illness was found to be 40 percent (48 patients). Among these 48 cancer patients with psychiatric illness, majority were males (29 patients), while the remaining 19 were females. Anxiety was found to be present in 24 patients, depression was found to be present in 19 patients and delirium was found to be present in 3 patients. Among these 48 patients, 38 patients were married while the remaining 10 were unmarried.
DISCUSSION

The common psychological and emotional responses to cancer arise from knowledge of life-threatening diagnosis, its prognostic uncertainty, and fears about death and dying. The emotional responses are also due to physical symptoms—pain, nausea, lymphoedema, and other distressing symptoms of the disease and unwanted effects of medical, surgical, and radiation treatments. The stigma due to cancer and its consequences adds to the negative reactions to the disease.\textsuperscript{5–7}

Anxiety is a very prominent symptom of cancer patients and appears most frequently in connection with adjustment disorders. However, it can also be part of a normal adaptation to the disease, related to an anxiety disorder, or can be caused by variety of other reasons, including underlying somatic processes. The clinical presentation, etiology, diagnostic proceedings and the treatment of anxiety in patients with cancer is surveyed. Delirium (acute confusional states) is a neglected psychiatric syndrome in regard to diagnosis, treatment and research efforts. Especially in cancer patients, delirium is frequent and its incidence increases with advanced disease.\textsuperscript{8–10} Hence; the present study was undertaken for assessing the psychiatric illness among cancer patients.

In the present study, a total of 120 cancer patients were enrolled. Mean age of the cancer patients were 54.8 years. Among these cancer patients, overall prevalence of psychiatric illness was found to be 40 percent (48 patients). Among these 48 cancer patients with psychiatric illness, majority were males (29 patients), while the remaining 19 were females. Akechi T et al investigated the characteristics, reason for psychiatric consultation and psychiatric diagnosis of cancer patients by analyzing the database of patients referred to the Psychiatry Divisions. Among a total of 1721 referrals, most of the cancer patients (78\%) were inpatients. Patients with lung cancer (19\%) were the most common, followed by patients with breast cancer (13\%) and with head and neck cancer (10\%). More than half of the patients had recurrent and/or metastatic cancer and 60\% of the patients had pain. The most common reason for the consultation was psychiatric evaluation (35\%), followed by sleep disorders (19\%), anxiety or fear (18\%) and depression (18\%). Regarding the psychiatric diagnosis, adjustment disorders were the most common (34\%), followed by delirium (17\%) and major depression (14\%). The diagnosis of cancer had been disclosed to more than 99\% of the patients. The common psychiatric disorders observed in Japanese cancer patients were similar to those in the Western countries provided the cancer diagnosis is disclosed.\textsuperscript{11}

In the present study, anxiety was found to be present in 24 patients, depression was found to be present in 19 patients and delirium was found to be present in 3 patients. Among these 48 patients, 38 patients were married while the remaining 10 were unmarried. Ateşci FC et al investigated the prevalence of psychiatric morbidity among cancer patients and the factors that predict psychiatric morbidity. One hundred and fifty patients with the diagnosis of cancer who were treated in different departments of the Pamukkale University Hospital were included in this study. Psychiatric diagnoses were made according to the criteria of DSM-IV with the SCID-I interview. In addition, all patients were evaluated using the General Health Questionnaire (GHQ) and the Hospital and Anxiety Depression Scale (HADS). 28.7\% of cancer patients were found to have a DSM-IV Axis I diagnosis. The
most common diagnoses were adjustment disorder with depressed mood (14%) and major depressive disorder (11.3%). Female gender, awareness of the diagnosis of cancer, history of previous premorbid psychiatric disorders and stress factors were correlated with psychiatric morbidity. The most common diagnoses were adjustment disorder with depressed mood and major depressive disorder, suicidal ideations were also frequently found.12

CONCLUSION
Psychiatric illness is common finding among cancer patients, with anxiety and depression being the most common ones. However; further studies are recommended.

REFERENCES