ANXIETY AND DEPRESSION IN CANCER PATIENTS - A SURVEY IN MEDICAL ONCOLOGY DEPARTMENT OF A TERTIARY CARE HOSPITAL

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ABSTRACT

Objective: To find out frequency of anxiety and depression in cancer patients presenting to medical oncology department of a tertiary care hospital.

Methodology: This cross sectional study was conducted from January 2018 to June 2018 in medical oncology unit, Hayatabad Medical Complex (HMC), Peshawar. One hundred patients suffering from various neoplastic diseases were selected with consecutive sampling. Hospital Anxiety and Depression Scale (HADS-14-item) was administered. Those with score 8-10 on HADS were considered borderline for anxiety or depression and those with score ≥11 were considered to have anxiety or depression.

Results: Out of 100 patients, 45 (45%) participants were females and 55 (55%) were males. Mean age of patients was 47.57 years. Sixty five, (65%) patients showed predominant symptoms of anxiety and 61 (61%) patients had varying levels of depression.

Conclusion: There is a high prevalence of both anxiety and depression among cancer patients. Therefore careful attention must be paid towards diagnosis and treatment of these morbidities in cancer patients.

Key Words: Anxiety, Cancer patients, Depression, Tertiary care hospital.

INTRODUCTION

Cancer affects all aspects of a patient's life, including physical, mental and emotional aspects. It entails a combination of presentations, which may be associated with the disease or treatment. It can imply a high emotional impact on patient's life. Emotional disturbances can cause and worsen physical conditions with worsening of the symptoms like pain, fatigue and insomnia. These symptoms may be caused by underlying cancer and made worse by emotional impact[1,2]. There has been remarkable progress for diagnosis and treatment of cancer, but it has not been complemented by progress in providing good quality care for psychosocial effects of cancer[3]. Therefore it becomes important to devise protocols for psychological assessment of cancer patients which should be reliable and accurate[4-7]. Psychological effects may interfere with the patient's ability to cope with the burden of illness, it may decrease the acceptance of treatment, extend hospitalization, reduce quality of life and increase suicidal risk[8-10]. In the past, various studies have evaluated the prevalence of depression in cancer patients. However the overall prevalence remains unclear. It varies up to 58%[11,12]. Differences may be because of different instruments used to assess psychometric properties, different criteria used to define depression and differences in cancer patients with respect to cancer type, stage and treatment modality. There are studies that show association between critical moments of the disease like diagnosis, recurrence and terminal care and the emotional impact upon the patients. A study in USA on Latina cancer patients showed that the prevalence of depression was 27% and that of anxiety was 52%[13]. A study of over 10,000 cancer patients found that approximately 32% experienced at least subclinical symptoms of anxiety in the post diagnosis period; while the prevalence of depression was slightly lower at approximately 29%[14]. There is much more about anxiety and depression in the world on cancer patients, however the studies on Pakistani population are limited. The rationale of our study was that we face more patients in oncology department with anxiety and depression and there is little local data available on the said topic and it needs adequate data before establishing proper guidelines and final statement. This research will find out the frequency of anxiety and depression in cancer patients presenting to medical oncology department of a tertiary care hospital.

METHODOLOGY

This cross sectional study was conducted from January 2018 to June 2018 after obtaining ethical approval from the institutional Research and Ethics Board (IREB) of Post Graduate Medical Institute, Peshawar. The study was based on convenience sampling of patients reporting symptoms of anxiety and depression related to cancer. During this period, a total of 100 diagnosed cancer patients were included in the study. Criteria for inclusion were histologically confirmed malignancy, age >15 years, ability to communicate effectively with the health-care professionals, and informed consent. Exclusion criteria were drug abuse (including opioid usage), history of any psychiatric illness or cognitive impairment. HADS was translated and explained to the patients in local language. A face-to-face communication was made. Patients were seen individually in the outpatient department. The HADS is a 14 items screening instrument. It has 7 anxiety related and 7 depression related items. Each item carries 4 answer options scored from 0 to 3. The sum scores range from 0 to 21. Patients below score 8 are considered normal in terms of anxiety and depression, score 8 to 10 is considered borderline and a score of ≥ 11 is labelled as definite diagnosis. Education level, Tumor type and co morbidities were assessed. Performance status was also assessed. Any additional treatment modalities like surgery, radiotherapy hormonal or targeted therapies given to the patients were also noted. Data was collected using pre designed questionnaire having demographic details and HADS score and was analyzed using SPSS 20. Categorical variables were expressed in frequency and percentages while continuous as mean and standard deviation.

RESULTS

One hundred cancer patients were included in the study in which 55 (55%) were males and 45 (45%) were females. Minimum age was 15 years and maximum age was 80 years with mean age 47.57 years. Forty (40%) patients had no schooling, 25 (25%) had primary schooling, 20 (20%) had secondary schooling and 15 (15%) had university level education. Gender distribution of depression and anxiety is shown in figure 1 and 2. Age distribution of depression and anxiety is shown in figure 3 and 4. With regards to tumor type, highest number of patients were having acute lymphoblastic leukemia followed by breast cancer and then colorectal cancers and lymphomas as shown in figure 5. Considering the ECOG Performance status those with high scores of symptomatic group or bed bound were suffering from higher levels of depression as well as anxiety. (Figure 6 and 7).
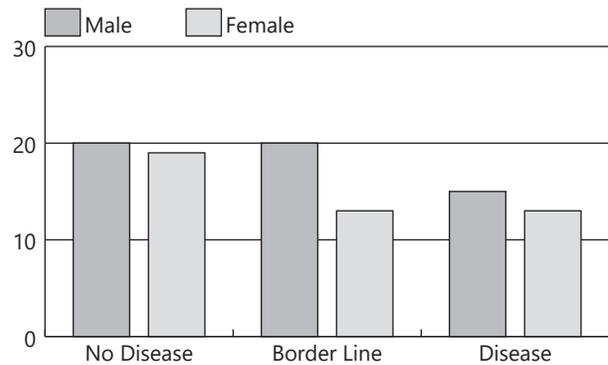
Figure 1: Gender wise depressive disorder
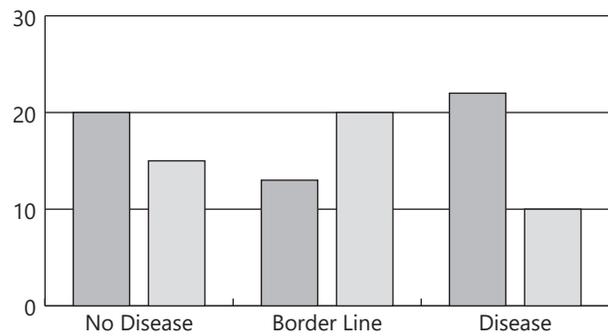

Figure 2: Gender wise anxiety disorder

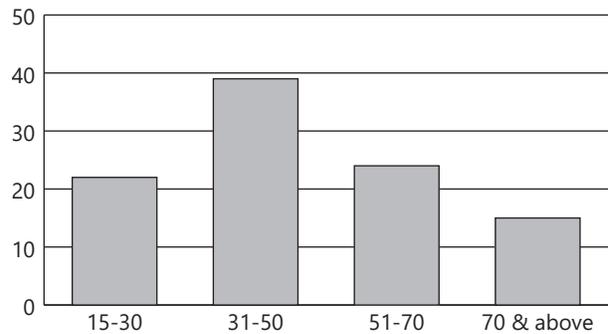**Figure 3: Age-wise distribution of anxiety disorder (Years)**

Figure 4: Age-wise distribution of depressive disorder (Years)
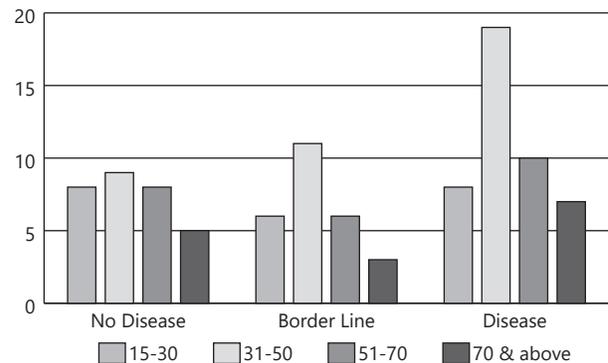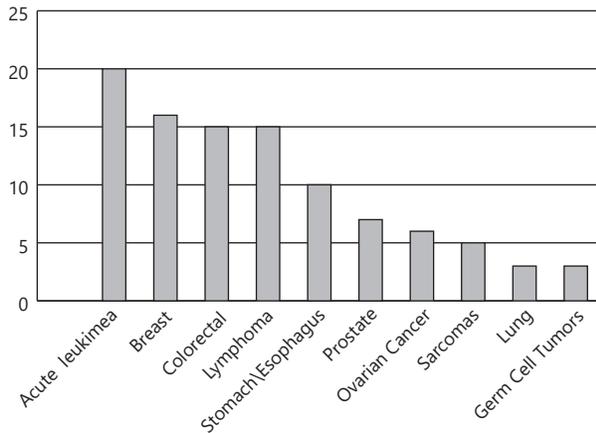
Figure 5: Anxiety and depression according to tumor type

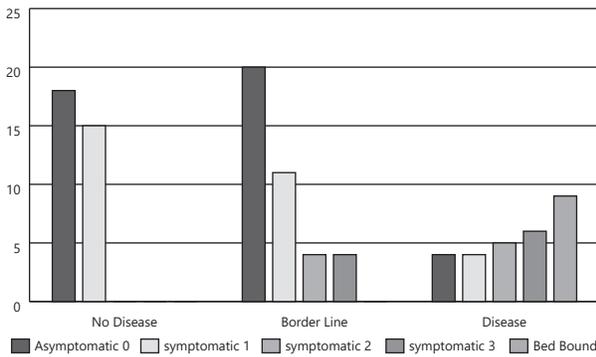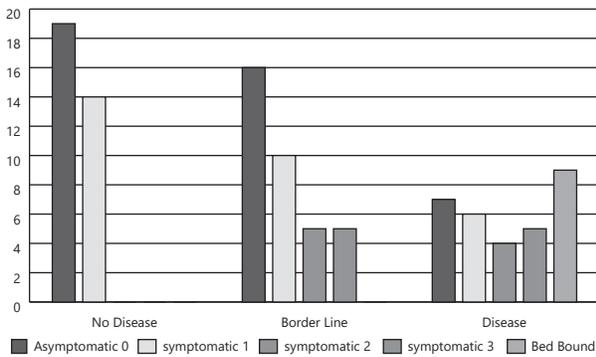**Figure 6: ECOG performance status related depressive disorder**

Figure 7: ECOG performance status and anxiety disorder

DISCUSSION

Depression and anxiety are common among cancer patients. Stress is a recognized trigger factor for anxiety and depression. Cancer is one of the most stressful events that a person may experience in life. If a patient with depression and anxiety is left untreated, he is less likely to continue with cancer treatment[15]. This may pre-cipitate social isolation in these patients with increasing feelings of stress and poor treatment adherence leading to poor prognosis. In our study we used the HAD scale for anxiety and depression among cancer patients of various ages, tumor types. Sixty one percent patients had varying levels of depression. They were mostly in the age group of 18-50 years. Sixty five percent patients were suffering from different levels of anxiety. Their age range was between 18-60 years. There was no statistically significant difference between genders. Considering the age factor, both anxiety and depression were found to be more prevalent (65%) in the age groups of 18-50 years. The frequencies of various types of cancers were noted. Our research showed a higher frequency of patients with acute lymphoblastic leukemia (20%) followed by lymphoma (15%) and colorectal cancers (15%) in both genders, while the frequency of breast cancer (16%) was highest among female patients. Depression was more common in female patients with breast, ovarian and colorectal cancers. Among male patients, depression was observed more in colorectal cancers followed by Lymphoma, Leukemia and lung cancer. Depression was more common with relapse, recurrence and advance stage of the disease in both genders. Eastern Co-operative Oncology Group (ECOG) performance status and the presence of co morbidities were noted. Poor performance status and the presence of co morbidities had a direct relationship with the level of anxiety as well as depression. We observed that with increasing age of the patients above 50 years, the prevalence of both anxiety and depression decreases. Similar trend was observed in another study conducted in Pakistan, which showed anxiety and depression to be more common among middle-aged patients[16]. The results are comparable to another study conducted in Pakistan which highlights high prevalence rates of depression and anxiety in cancer patients. This study showed that young to middle age group was associated with a higher likelihood of meeting the criteria for psychological morbidity. Overall 62% of cancer patients were found to have depression and anxiety. We also observed highest incidence of association of breast cancer with depression in females and gastrointestinal cancers in male patients as in other studies[17]. The high prevalence of breast cancer in female patients may be because of the fact that breast cancer is the commonest cancer among female cancer patients which adversely affects the gender identity as well[18]. The results are also comparable to another study conducted in Pakistan by Dogar et al which reports prevalence rates of psychological impact of 52% in cancer patients[19]. A study conducted in Iran shows prevalence rate of 47.2% and 57% for depression and anxiety respectively[20]. Another study in Netherlands showed that the prevalence of symptoms of depression varied from 9.4% to 66.1% and of anxiety from 17.9% to 33.3%[21]. In china the anxiety and depression prevalence rates were 6.49 and 66.72 %, respectively[22].

LIMITATIONS

We did not study whether patients were taking psychological treatments or not and any therapeutic effects of them. We conducted this study in a single centre and on small sample. We recommend well designed research on large sample and multicenter in order to explore the problem in detail.

CONCLUSION

The frequency of anxiety and depression amongst the cancer patients is significantly high. Our study shows the importance of screening for anxiety and depression among cancer patients. Effective detection and treatment of their psychological problems will improve the quality of life of these patients and it may lead to improved outcome of the primary disease due to good adherence to anti cancer therapy.

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