Original Article

Prevalence and pattern of anxiety and depression in pain and palliative care patients

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Abstract

Background: Psychological problems and psychiatric co morbidities, particularly anxiety and depression are known to be the most commonly occurring mental health problems in palliative medicine and terminally ill patients. They are a source of significant distress for the patients and their caregivers. Studies report a prevalence of anxiety and depression between 15 to 25% to as high as 50 to 60 %. PURPOSE: To determine the pattern and prevalence of anxiety and depression in the patients under palliative care. **Materials and Method:** The study design was cross-sectional, conducted on inpatients referred to pain and palliative care department in a general hospital setting. A sample size of 150 patients of palliative care was taken. Tools used for screening were MMSE, Hospital Anxiety and Depression Scale (HADS).Those screened positive were interviewed using Mini International Neuropsychiatric Interview-PLUS. **Results:** 57(38%) subjects had Cancer, 57(38%) had HIV and 36 (24%) had chronic pain. We found that 137(91.7%) patients had symptoms of anxiety and depression. In the structured interview, 94(68.6%) patients had a current diagnosis of depressive disorder, 9 (6.56%) had dysthymia, 8 (5.83%) subjects had generalized anxiety disorder, 6(4.37%) had mixed anxiety and depression. **Conclusion:** This study has found that prevalence of anxiety and depression is significantly high in palliative care patients.

Key Word: Pain, Cancer, Palliative Care, Anxiety, Depression

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INTRODUCTION

Caring for persons nearing the end of their lives is not new. Different societies have adapted varying approaches to helping people at the end of their lives. Palliative care has its base on a model developed to attend to the needs of cancer patients by the hospice movement in the UK[1]. It is a multidisciplinary approach which focuses on pain relief irrespective of the diagnosis. It involves the collaboration of specialists, physicians, nurses and social workers to provide a comprehensive support system to the patient and the family which can be initiated at any stage of the illness.[2]

MATERIALS AND METHODS

Source of Study Sample

Patients referred from departments like medicine, surgery, medical or surgical oncology for the intervention of Pain and Palliative Care services in a tertiary care general hospital in Bangalore

Sample size: Total 150: 57 patients with advanced cancer, 57 patients with HIV and 36 patients with chronic pain.

Duration of study: 18 months

Type of the study: This is a cross sectional clinical study

Inclusion criteria: Cancer patients receiving pain and palliative care, patients with HIV- AIDS under palliative care, Patients with Chronic Intractable Pain receiving Palliative Care, Patients between 18-70 years of age who give consent

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Exclusion Criteria: Patients who have cancer metastasis in the brain, cognitive deficits, delirium, psychotic illness and those who cannot give consent or refuse consent
Ethical clearance was obtained prior to the study.
Tools used: Mini Mental Status Examination, Hospital Anxiety Depression Scale and Mini International Neuro-psychiatric Interview
Statistical Methods
Data was analyzed using SPSS (Version 17) software. Descriptive statistics were analysed using mean and Standard deviation or median, numbers and percentages. Chi-square test was used to find the association among the categorical variables. Mann Whitney U test and Kruskal Wallis test were employed to compare the median scores across various groups of depression category.

RESULTS

Totally 177 patients consented for the study of which 14 patients could not complete the study due to extreme fatigue and unplanned discharges.13 patients were excluded using MMSE.(Organic CNS pathology, either metastasis to the brain, AIDS dementia complex or meningo encephalitis or other CNS opportunistic infections) A total of 150 patients were included in the study. Though the initial plan was to take equal number of patients from all the sub-groups, we got only 24% (36) in chronic pain category due logistic reasons. Therefore 57 (38%) patients were taken from both cancer and HIV to meet the total number 150. In our study there was no major gender disparity noted though HIV subgroup had more male predominance. Majority of our sample belonged to lower socioeconomic urban background with low educational status with an almost equal gender distribution. The socio demographic variables did not show significant difference between the different subgroups. We found that 137(91.7%) patients had symptoms of anxiety and depression. In the structured interview, 94(68.6%) patients had a current diagnosis of depressive disorder, 9 (6.56%) had dysthymia, 8(5.83%) subjects had generalized anxiety disorder 7(5.10%) subjects had adjustment disorder, 6(4.37%) had mixed anxiety and depression, 3(2.18%) had alcohol dependence syndrome and 10 (7.30%) had no psychiatric diagnosis. Among the subjects with the current diagnosis of syndromal depression, 26(18.98%) had mild, 48(35.04%) had moderate and 20 (15.60%) had severe depression. The severity of depression was not associated with socio demographic variables or co morbid physical or psychiatric illness. This prevalence seen in our study could also be attributed due to the population being in advanced stages of illness. The most common life time diagnosis was recurrent depressive disorder followed by substance dependence and anxiety disorders. A very small percentage of subjects with a diagnosis were on low dose antidepressants mainly as an adjuvant for pain control.

DISCUSSION

The primary objective of this study was to establish the prevalence of anxiety and depression among the inpatients with cancer, HIV and chronic pain referred for palliative care. The study was designed on lines of clinical epidemiology to estimate a period prevalence in a tertiary care hospital.

Prevalence of symptoms of anxiety and depression – HADS

A heterogeneous population with three different subgroups was chosen for the study since these are the three subgroups forming the major bulk of referral for palliative care in the hospital. HADS was administered as a screening tool in all the subjects for the presence of anxiety and depressive symptoms. HADS as a screening tool had been found effective in a hospital based population in various studies done previously. Herrmann[20,] in an extended review, reported that the HADS has demonstrated reliability and validity when used to assess medical patients. The validity for HADS is studied and found effective also in HIV patients.[21] In our study sample, out of the total 150 subjects, 137(91.7%), were found to have either doubtful or definite depression and anxiety in HADS indicating that these patients have some symptoms of anxiety and depression warranting further intervention either in the form of detailed assessment or treatment. The subgroup with doubtful anxiety and depressive symptoms are likely to have trait or sub syndromal level of anxiety and depression rather than clear clinical syndromal diagnosis. In our study, HADS Anxiety subscale, 48% had doubtful anxiety and 17.3 % had definite anxiety. On HADS depression subscale, 32.7% and 56% of the patients had doubtful and definite depressive symptoms respectively. In a similar study 17 (25%) of patients were anxious [anxiety score = 11 HADS)], 15(22%) were depressed [HADS depression score =11][22] There is a high prevalence of anxiety and depressive symptoms in our study. The general medical debility, medications (e.g.sedatives) and few other treatment interventions could also have influenced the outcome. The self reported assessment having no flexibility to further clarify these factors will have a bearing in the assessment. Though the scale is found to be tested and effective it may need modification to suite this type of population in Indian culture and social situation. The issue whether HADS as a questionnaire is sensitive enough to tap the symptoms effectively and detect

anxiety traits in such a population or if it goes undetected, also needs further evaluation.

Prevalence of psychiatric disorder- MINIPLUS

Estimates of the incidence of depression in palliative care were found to vary in previous researches, but most studies are in the range of 20-60% [23]. In a study it was shown that 29% percent of palliative care patients are likely to suffer from depression and around 15% could experience a major depressive disorder[24]. Few studies have tried to assess the prevalence of psychiatric co-morbidity in a heterogeneous group of terminally ill patients in India[25]. The findings in our study are in keeping with the available literature from the West[8]. Comparing to the previous studies the present study shows higher prevalence rates for depressive disorder and lower rates for anxiety.

Syndromal diagnosis of depression

Among the patients who were diagnosed to have syndromal depression, 26(18.98%) had mild depression, 48(35.04%) had moderate depression and 20(15.60%) had severe depression. Moderate depression with somatic syndrome was found in 18(13.14) patients and 30(21.90) patients had moderate depression without somatic syndrome. RDD was seen in 14(10.21) of the patients out of this 10 patients were currently having an episode of depressive disorder.In our study there was no statistically significant association between mean age and depression (p value-0.946). Syndromal depression and anxiety were found to be associated to the various subgroups though statistical association was not significant. HIV subgroup had more syndromal depression with a p value of 0.038, whereas cancer and chronic pain groups had 0.052 and 0.08 respectively. There was no significant association with any other socio demographic variables or with the co morbid conditions. Previous studies show a higher prevalence of syndromal depression in younger, females, lower socio economic status, and urban population. The prevalence of MDD is between 10-25%, in studies done earlier[26]. .The disparity in our study could be due to the heterogeneous group in advanced stages of illness with various confounding factors. The typical referral pattern could be another reason for this finding. In cancer subgroup 7.29% had mild depression, 10.95% had moderate and 3.65% had severe depression. This finding is comparable to the previous study done by Shape et al[7] where the prevalence rates were found to be similar. There was no difference comparing the different socio demographic variables. The mean duration of diagnosis was 2.48 years. Majority of cancer patients were receiving palliative radiotherapy, chemotherapy or both. The longer duration of illness and treatment were found to be significantly associated with psychological distress in the previous studies directly by increasing the financial burden as a part of side effects to the treatment [27] In chronic pain subgroup 9.48% patients had mild depression, 8.76 % had moderate depression, and 3.65% had severe depression. This was comparable to the study done by Crue et al. where patients with non malignant pain were found to have a higher prevalence of major depressive disorder. All patients in this subgroup had a longstanding illness with history of multiple prior admissions and treatments. This is similar to various studies done previously which shows increased prevalence of pain and psychiatric co morbidity associated with neuropathic and arthritic pain [28] In HIV group there were 9.48% subjects with mild depression, 11.68% patients with moderate and 7.29% patients with severe depression. This subgroup had higher prevalence rates though statistically not significant.(p value 0.381) Laure et al[29] has estimated higher prevalence rate for both anxiety and depression in her studies which is similar to the present study.Life time diagnosis of a psychiatric illness was found to be there in 24 (17.52%) of the patients. Amongst this affective disorder predominantly recurrent depressive disorder was found to be present in 14 (10.21%) of the patients. This could be another reason for increased prevalence of syndromal depression in our population. Other life time diagnoses included alcohol dependence 7 (5.11%), GAD, panic disorder and somatoform disorders in 7(5.11%) of patients.

Strengths and limitations of the study

Our study differed from previous studies as we used both a screening measurement (HADS) and a structured clinical interview schedule (MINI PLUS) to assess anxiety and depression as symptoms and syndromes according to ICD 10 and DSMIV. Difficulties due to multilingual factors, recall bias and cognitive fatigue could have affected the study outcome. Current treatments including steroids, ATT, antiretroviral therapy and cancer treatments could be the confounding factors. Heterogeneous sample with varying presentations may be both strength and limitation of our study.

Implication

The way forward is to draw on the existing, successful care models that have been described, in order to develop usable and dynamic educational initiatives in our country itself. There should be also model palliative-care teaching centres associated with the inpatient or community care units which will bring attainable and relevant partnership between theory and practice[30] There is a need for timely recognition, measurement and management of anxiety and depression in palliative care patients.

CONCLUSION

We attempted to study the prevalence and patterns of anxiety and depressive symptoms and syndromes in

palliative care patients in a general hospital setting. We found a high prevalence of anxiety and depression in palliative care patients which complicates the clinical presentation worsens the morbidity status and reduces their quality of life. The role and efficacy of medications or other non-pharmacological interventions in this population needs further exploration. This study highlights the role of consultation- liaison psychiatry in discovering medically ill population with unmet mental health needs in Indian setting. The pattern of anxiety and depression once determined can be of great value for other interventions can be employed as complementary to the palliative care.[31]

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