

PSYCHIATRIC CO MORBIDITY IN MEDICAL PATIENTS

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ABSTRACT

Objective: To assess the rate of anxiety and depression in the patients suffering from various medical diseases.

Design: Cross sectional study.

Palace and Duration of Study: The study was conducted in District Headquarter Hospital and Allied Hospital, Faisalabad from 2005 to 2007.

Subjects and Methods: Participants were inducted in the study through purposive convenient sampling technique. 339 patients of cardiac, cancer, hepatic, and dermatological diseases from both the above mentioned hospitals participated in this study. Co morbidity of psychiatric disorders was screened out with the help of DSM IV TR's criteria for depression and generalized anxiety.

Results: Anxiety (n=32, 9.43%) was the major diagnosis in age group 40 – 49 and depression (n=31, 9.14%) in age group 50 – 59. All the diagnosis i.e., anxiety (n=30, 8.84%), depression (n=51, 15.04%) and both anxiety and depression (n=25, 7.37%) were common in illiterate patients. Anxiety (n=37, 10.91%) and depression (n=57, 16.81%) was found more in housewives. All the diagnosis i.e., anxiety (n=77, 22.71%), depression (n=93, 27.43%) and both anxiety and depression (n=45, 13.27%) were common in married patients. Anxiety (n=54, 15.92%) was common in hepatic patients and cardiac patients were having highest share of depression (n=51, 15.04%) and both anxiety and depression (n=32, 9.43%).

Conclusion: Most cardiac patients were depressed; most hepatic patients were anxious; almost half of cancer patients were both anxious and depressed; while majority of dermatological patients were having no psychiatric illness.

Key words: Anxiety, Depression, Cardiac, Cancer, Dermatology, Hepatic, Psychiatric co morbidity.

INTRODUCTION

Medical patients admitted to the general hospitals are not the sufferers of only medical problems; in majority of the cases, the long term illness, hospital stay, complications of the disease along with other such factors make them sufferers of psychiatric symptoms as well. Numerous studies have found an associa-

tion between physical and psychiatric disorders among general hospital inpatients^{1,2}. The rate of this sort of psychiatric morbidity has been estimated between 25% to 50 %^{3,4}.

In a study, ward staff assessed 31.1% of admissions as having emotional or psychological problems while 27% of medical emergency admissions were found to have diagnosable psychiatric disorders⁵. A high prevalence of psychiatric morbidity was found (36.4%) in the patients of intensive care unit; psychiatric morbidity was seen to be having no associations with age or gender⁶. Another research has found 51 out of the 100 patients suffered from psychiatric disorders. In only 5 cases was the disorder recognized. Psychiatric disorders were commoner in females⁷. A similar study of these researchers has found that psychiatrically co morbid medical patients reported more somatic symptoms as compared with non co morbid group on Bradford somatic inventory⁸. Psychiatric co morbidity with general medical conditions is quite high. Anxiety and depressive disorders are the most relevant co morbid psychiatric disorders in any clinical setting. A study found 50.9% patients of general medical conditions co morbid with anxiety and 28.1% with depression. As the severity of general medical con-

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dition increases, the rate of co morbidity also goes up. Co morbidity of depressive disorders was found 75.9% in moderate to severe cases. In psychiatric care the probability of having a psychiatric diagnosis doubles with each medical diagnosis⁹.

In another study, General Health Questionnaire 12 screened 89% of cases with psychiatric co-morbidity as compared to 11% non cases without psychiatric symptoms. Majority (51%) of the patients had diagnosis of depressive episode which ranged from mild to severe¹⁰.

Another study indicates that about 55% of all the liver cirrhosis patients developed diagnosable psychiatric co-morbidity including depressive episode, generalized anxiety disorder, delirium, and adjustment disorder. The same proportion (55%) of hemodialysis patients and a lesser proportion (30%) of COPD (chronic obstructive pulmonary disease) patients were found to have psychiatric morbidity. The rates were found higher than hypertensive and normal subjects. Poor medical conditions seem to be associated with psychiatric morbidity¹¹.

Among the high rate of psychiatric co morbid patients, few are referred to psychiatrists¹². Other studies also emphasized that knowledge of the overall prevalence of psychiatric morbidity was important for service planning and resource utilization in the general hospital since researches have found that psychiatric morbidity increases the consumption of medical resources^{13,14}. The co-morbidity not only complicates the medical treatment but can also result in poorer outcome^{15,16}. Surprisingly, as many as one third, and according to some estimates, up to one half of this psychiatric morbidity passes undetected¹⁷.

The purpose of current study is to see the frequency of co morbidity of generalized anxiety and depression with medical diseases. It is aimed at Examining the split up of co morbid patients as per gender, age, education, marital status, occupation, income, and type of medical diagnosis. This study is a cumulative project carried out at different departments by the same team using similar methodology and instruments. Some of the individual aspects as per medical department have been analyzed and published previously¹⁸⁻²¹.

SUBJECTS AND METHODS

Participants

Three hundred and thirty nine patients from District Headquarter Hospital/Allied hospitals of Faisalabad participated in this study through purposive convenient sampling technique. These patients were accessed from four departments i.e. cardiology, dermatology, oncology, and hepatology. One hundred patients participated from Cardiac center of District Headquarter Hospital (2005); Seventy seven patients were taken from Dermatology department of District Headquarter Hospital (2006); while sixty patients participated in the research from Oncol-

ogy department of Allied Hospital (2006); One hundred and two Liver disease patients were obtained from Liver center of District Headquarter Hospital (2007). Participants were approached with the help of liaison medical officers appointed by the head of the concerned units. The project was initiated with the permission of Institutional Ethical Research Committee.

Instruments

A clinical interview was conducted to diagnose anxiety and depression in the patients. To label the patients as having anxiety and depression, the diagnostic criteria of DSM IV TR²² was employed. Bio data form consisted of questions about personal and demographic variables.

Procedure

Researchers approached the participants in their concerning departments. Researchers obtained informed consent from the participants before booklets containing demographic variable Performa were handed them over to fill in. The team of raters was trained to help the illiterate patients to fill in the Performa and scrutinize the patients for anxiety and depression as per DSM IV TR criteria. The data was tabulated along with demographic information obtained from the participants. SPSS 13.0 was used to analyze the data.

RESULTS

The result of our study show that Depressive disorder made the biggest group of diagnosis in females (n=75, 22.12%) while anxiety and depression both in males (n=46, 13.56%). In age wise analysis, Anxiety (n=32, 9.43%) was the major diagnosis in age group 40 – 49, Depression (n=31, 9.14%) in age group 50 – 59 and anxiety and depression both in age group 40-49 and 50-59 (n=14, 4.12% each) (Table 1).

All the diagnosis i.e., anxiety (n=30, 8.84%), depression (n=51, 15.04%) and both anxiety and depression (n=25, 7.37%) were common in illiterate patients. Anxiety (n=46, 13.56%) and depression (n=68, 20.05%) was found more in an income range between 0-5500 Pakistani rupee while both anxiety and depression (n=24, 7.07%) was more in an income group of 5501-12500 Pakistani rupee (Table 2 and 3).

Anxiety (n=37, 10.91%) and depression (n=57, 16.81%) was found more in housewives while both anxiety and depression (n=24, 7.07%) was more in patients in service. All the diagnosis i.e., anxiety (n=77, 22.71%), depression (n=93, 27.43%) and both anxiety and depression (n=45, 13.27%) were common in married patients. Majority of the dermatological patients had no psychiatric illness while anxiety (n=54, 15.92%) was common in hepatic patients and cardiac patients were having highest share of depression (n=51, 15.04%) and both anxiety and depression (n=32, 9.43%) (Table 4, 5 and 6).

Table 1: Frequencies and Percentages of Age as per Psychiatric Diagnosis

Age (In years)	Psychiatric Diagnosis				Total
	Anxiety	Depression	Anxiety & Depression	None	
10-19	5 (1.47%)	3 (0.88%)	3 (0.88%)	10 (2.94%)	21 (6.19%)
20-29	21 (6.19%)	12 (3.53%)	10 (2.94%)	22 (6.48%)	65 (19.17%)
30-39	21 (6.19%)	24 (7.07%)	6 (1.76%)	10 (2.94%)	61 (17.99%)
40-49	32 (9.43%)	28 (8.5%)	14 (4.12%)	13 (3.83%)	87 (25.66%)
50-59	11 (3.24%)	31 (9.14%)	14 (4.12%)	8 (2.35%)	64 (18.87%)
60-69	7 (2.06%)	10 (2.94%)	11 (3.24%)	2 (0.58%)	30 (8.84%)
70-79	2 (0.58%)	5 (1.47%)	3 (0.88%)	0 (0%)	10 (2.94%)
80-89	0 (0%)	0 (0%)	1 (0.29%)	0 (0%)	1 (0.29%)
Total	99 (29.20%)	113 (33.33%)	62 (18.28%)	65 (19.17%)	339 (100%)

Table 2: Frequencies and Percentages of Education as per Psychiatric Diagnosis

Education (In years)	Psychiatric Diagnosis				Total
	Anxiety	Depression	Anxiety & Depression	None	
0	30 (8.84%)	51 (15.04%)	25 (7.37%)	12 (3.53%)	118 (34.80%)
5	11 (3.24%)	14 (4.12%)	3 (0.88%)	5 (1.47%)	33 (9.73%)
8	26 (7.66%)	15 (4.42%)	5 (1.47%)	16 (4.71%)	62 (18.28%)
10	13 (3.83%)	21 (6.19%)	17 (5.01%)	7 (2.06%)	58 (17.10%)
12	13 (3.83%)	5 (1.47%)	7 (2.06%)	8 (2.35%)	33 (9.73%)
14	4 (1.17%)	4 (1.17%)	3 (0.88%)	11 (3.24%)	22 (6.48%)
16	2 (0.58%)	3 (0.88%)	2 (0.58%)	4 (1.17%)	11 (3.24%)
18	0 (0%)	0 (0%)	0 (0%)	2 (0.58%)	2 (0.58%)
Total	99 (29.20%)	113 (33.33%)	62 (18.28%)	65 (19.17%)	339 (100%)

Table 3: Frequencies and Percentages of Income as per Psychiatric Diagnosis

Income (In rupees)	Psychiatric Diagnosis				Total
	Anxiety	Depression	Anxiety & Depression	None	
N/A	4 (1.17%)	5 (1.47%)	2 (0.58%)	4 (1.17%)	15 (4.42%)
0-5500	46 (13.56%)	68 (20.05%)	21 (6.19%)	20 (5.89%)	155 (45.72%)
5501-12500	39 (11.50%)	31 (9.14%)	24 (7.07%)	23 (6.78%)	117 (34.51%)
12501-20000	6 (1.76%)	8 (2.35%)	8 (2.35%)	15 (4.42%)	37 (10.91%)
20001-30000	2 (0.58%)	0 (0%)	6 (1.76%)	3 (0.88%)	11 (3.24%)
30001-40000	2 (0.58%)	1 (0.29%)	0 (0%)	0 (0%)	3 (0.88%)
40001-50000	0 (0%)	0 (0%)	1 (0.29%)	0 (0%)	1 (0.29%)
Total	99 (29.20%)	113 (33.33%)	62 (18.28%)	65 (19.17%)	339 (100%)

Table 4: Frequencies and Percentages of Occupation as per Psychiatric Diagnosis

Occupation	Psychiatric Diagnosis				Total
	Anxiety	Depression	Anxiety & Depression	None	
Student	5 (1.47%)	1 (0.29%)	3 (0.88%)	14 (4.12%)	23 (6.78%)
Business	14 (4.12%)	19 (5.40%)	9 (2.65%)	6 (1.76%)	48 (14.15%)
Service	18 (5.30%)	20 (5.89%)	24 (7.07%)	21 (6.19%)	83 (24.48%)
House wives	37 (10.91%)	57 (16.81%)	5 (1.47%)	7 (2.06%)	106 (31.26%)
Farming	5 (1.47%)	10 (.94%)	14 (4.12%)	7 (2.06%)	36 (10.61%)
Unemployed	13 (3.83%)	3 (0.88%)	2 (0.58%)	8 (2.35%)	26 (7.66%)
Laborer	3 (0.88%)	2 (0.58%)	2 (0.58%)	1 (0.29%)	8 (2.35%)
Student + job	1 (0.29%)	0 (0%)	0 (0%)	0 (0%)	1 (0.29%)
Any other	3 (0.88%)	1 (0.29%)	3 (0.88%)	1 (0.29%)	8 (.35%)
Total	99 (29.20%)	113 (33.33%)	62 (18.28%)	65 (19.17%)	339 (100%)

Table 5: Frequencies and Percentages of Marital status as per Psychiatric Diagnosis

Marital Status	Psychiatric Diagnosis				Total
	Anxiety	Depression	Anxiety & Depression	None	
Single	16 (4.71%)	12 (3.53%)	13 (3.83%)	28 (8.25%)	69 (20.35%)
Married	77 (22.71%)	93 (27.43%)	45 (13.27%)	34 (10.02%)	249 (73.45%)
Divorced	0 (0%)	1 (0.9%)	2 (0.58%)	1 (0.29%)	4 (1.17%)
Window	6 (1.76%)	7 (2.06%)	2 (0.58%)	2 (0.58%)	17 (5.01%)
Total	99 (29.20%)	113 (33.33%)	62 (18.28%)	65 (19.17%)	339 (100%)

Table 6: Frequencies and Percentages of Medical Department as per Psychiatric Diagnosis

Medical Department	Psychiatric Diagnosis				Total
	Anxiety	Depression	Anxiety & Depression	None	
Cardiology	15 (4.42%)	51 (15.04%)	32 (9.43%)	2 (0.58%)	100 (29.49%)
Hepatology	54 (15.92%)	36 (10.61%)	0 (0%)	12 (3.53%)	102 (30.08%)
Oncology	6 (1.76%)	11 (3.24%)	29 (8.55%)	14 (4.12%)	60 (17.69%)
Dermatology	24 (7.07%)	15 (4.42%)	1 (0.29%)	37 (10.91%)	77 (22.71%)
Total	99 (29.20%)	113 (33.33%)	62 (18.28%)	65 (19.17%)	339 (100%)

DISCUSSION

The results of our study show that females are associated with depression and males are associated with anxiety and depression both simultaneously. The statistics collected by gender studies shows that females are 100% more at risk of depression than males with a ratio of 2:1²³. Previous researches also confirm the findings that Psychiatric disorders were common in females^{7,24}. Young people are safe from psychiatric morbidity as compared with elder people. Patients between ages 40 to 49 were associated with anxiety. It is the age at which a person has to plan the future of his off springs and meet the growing financial needs of their careers. This responsibility may be threatened by the presence

of a chronic medical illness (since all four illnesses are long lasting) hence creating anxiety when the medical illness continues the anxiety may be transformed into depression at the between age 50 to 59. After this age life takes crucial turns and people have to face major life transitions like retirement, on coming marriages of children, struggles for own house etc. These crucial events may again generate anxiety along with previously present depression as results have shown that people of age between 60 to 69 are associated with anxiety and depression at the same time. This finding is in contrast with previous research⁶.

Illiterate patients are seen to be associated more with all the psychiatric diagnosis and it may be because

of the ignorance of chances of prognosis and treatment outcome options. As the patient's education reaches graduation and above they get well aware of the course of illness and the treatment facilities available that is why they are associated with no psychiatric diagnosis. Patients with no or very low (Rs 0-5500) current financial resources were associated with depression and anxiety more since they cannot afford the treatment expenditure.

House wives were seen to be associated more with anxiety as well as depression. This is also been confirmed by the association between females and depression^{7,24,25}. Service personals and farmers were associated with both anxiety and depression.

Married patients were associated more with anxiety, depression and anxiety and depression both. Married patients have to look after the family and meet the responsibilities as the head of the family along with suffering from the illness, the burden of these responsibilities make a patient prone to various psychiatric disorders.

The cardiac and cancer patients have anxiety and depression both. The stigma and the side effects of the treatment may make them depressed while the consequences and complications of the illness may make them anxious. The explanation fits well for the association between anxiety and hepatic illnesses. Cardiac patients are also associated with depression. The cardiac medications produce depression as a side effect too. Over all psychiatric morbidity has been found sufficiently alarming among medical patients; these findings are in agreement with other researches¹⁻⁵.

CONCLUSION

The psychiatric co morbidity of anxiety and depression is alarmingly high in medical diseases. The doctors working in these units should be better educated and trained in assessment and management of psychiatric disorders especially anxiety and depression. They should also be sensitized when to refer complicated cases to the psychiatrists. The results of this study give us an indication regarding establishment of proper consultation-liaison psychiatric services in all general hospitals.

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