Original Article

Anxiety and Depressive Disorders as Psychiatric Co-Morbidity in Hepatic Diseases

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ABSTRACT

Objective: The study was designed to assess the co morbidity of anxiety and depressive disorders in the patients suffering from various hepatic diseases and to examine the split up of patients as per age, gender, marital status, family type, residence, occupation, income and type of hepatic disease diagnosis. **Study Design:** Cross sectional study. **Duration and place of study:** The study was conduced from September 2007 to November 2007 in liver center DHQ hospital Faisalabad. **Patients and Methods:** 102 patients with different hepatic diseases participated in it through purposive convenient sampling technique. To diagnose the patients with anxiety and depression, the diagnostic criteria of DSM IV TR were employed while demographic variables were recorded on a demographic sheet. **Results:** Results showed that anxiety and depressive disorders were found 88.2 % co morbid in all hepatic patients. These psychiatric disorders were more frequently found in urban areas (57.63% anxiety & 37.3% depression) where as it was lesser in joint families (45.94% anxiety & 32.43% depression) and service personals (42.11% anxiety & 26.32% depression). The proportion of the patients diagnosed with depression was higher in females and elderly, while it was lower in educated class. **Conclusion:** As the Psychiatric co morbidity especially anxiety and depressive disorders in patients suffering from hepatic disorders is so frequent hence the doctors dealing with such patients should be better trained in assessment and management of these disorders. **Key Words:** Hepatics, Anxiety, Depression, Psychiatric co morbidity

INTRODUCTION

All forms of viral hepatitis pose serious public health problems world wide. In the United States viral hepatitis ranks second among the reportable communicable diseases. In our country the prevalence rate is very high and it falls in the intermediate to high endemicity zone of hepatitis prevalence[1]. Psychiatric co morbidity with general medical conditions is quite high. Anxiety and depressive disorders are the most relevant co morbid psychiatric disorders in clinical settings. 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 condition 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 diagnosis[2.]

In another study, General Health Questionnaire 12 (GHQ-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 severe[3].The evidence about the presence of psychiatric symptoms in hepatitis is important because they have an adverse effect upon the course of illness in form of amplification of physical symptoms, functional impairment, reduced treatment compliance, and reduced quality of life[4]. The association is of particular importance in hepatitis C because hepatic patients often come from population groups at risk of psychiatric disorders, such as intravenous drug abusers. In addition, treatment of hepatitis C involves interferon alfa, which has neuropsychiatric side effects. These psychiatric symptoms are the major reason for the

delay or discontinuation of interferon alfa treatment [5]. Hepatitis C is also associated with an increased prevalence of psychiatric disorders particularly anxiety and depression[6].

Successful medical treatment of hepatitis C therefore requires detection and management of depression and other psychiatric symptoms before and during the treatment[4]. Anxiety and depression are more prevalent in intravenous drug abusers who are also HCV positive than HCV negative substance users. During treatment with regular or pegylated (PEG) interferon depression is a frequent side effect (30%) and occurs independently from pre-existing psychiatric disorders or drug abuse. It is extremely important to monitor symptoms of depression in the early weeks of treatment[7]. The reasons for high prevalence of depression in persons with liver diseases are not clear. It has been hypothesized that these may arise from the disease itself or these may have been found because a high proportion of the patients come from population segments at risk of psychiatric disorders or these symptoms may be triggered by the stigmizing nature of the diagnosis.

Another study indicates that about 55% of all the liver cirrhosis patients developed diagnosable psychiatric co-morbidity including depressive episodes, generalized anxiety disorder, delirium, and adjustment disorders. 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 morbidity[8].

Despite this literature many questions remain unanswered regarding Pakistan. Depression has been the main focus of the previous researches but few of them addressed anxiety. The purpose of current study is to see the rate of co morbidity of generalized anxiety and depression with hepatic diseases. It is aimed at studying the relationship between generalized anxiety and depression and to examine the split up of co morbid patients as per gender, age, education, marital status, family type, residence, occupation, income, and type of hepatic diagnosis. This study provides a basis for an ideal hospital setting where biopsychosocial model gets its roots and attention is paid upon consulting the psychiatrist for psychiatric evaluation and treatment of the patients with medical problems. In addition, the study gives some useful material to provide information to the patient and the family as well, to understand the psychiatric problems resulting from physical illness.

METHOD

One hundred and two (102) liver disease patients from Liver Center DHQ Hospital, Faisalabad participated in the research. Participants having diagnosis of hepatitis B, hepatitis C, liver cirrhoses and other liver diseases were approached with the help of liaison medical officers using purposive convenient sampling technique.A clinical interview was conducted to diagnose anxiety and depression in the hepatic patients. To label the patients as having anxiety and / or depression, the diagnostic criteria of DSM IV[9] was employed. Bio data form consisted of questions about personal and demographic variables. Researchers approached the participants having diagnosis of hepatitis B, hepatitis C, liver cirrhoses and other liver diseases. Researchers took a verbal 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 IVTR criteria. When all the data had been collected, raw results were tabulated along with demographic information obtained from the participants. SPSS 16.0 was used to analyze the raw data.

RESULTS

Results have shown that the proportion of co morbidity is about 88.2 % of the total hepatic patients. Out of which 52.9 % are diagnosed with anxiety, and 35.3 % patients were found depressed. 52.17% of the males and 53.57% females are diagnosed with anxiety, while the proportion was 23.91% and 44.64% for depression from entire male and female hepatic sample. For the percentages of age and education see table 1 and 2. 57.63% Patients from urban areas and 46.51% from rural areas received the diagnosis of anxiety while for depression it was 37.3% and 32.56% respectivly. In joint and nuclear families percentage of anxiety was 45.94% and 56.92% while 32.43 and 36.92 percent patients were diagnosed as depressed from respective categories. Anxiety was higher in lower middle class (58 %) and depression was higher in lower class (50 %) see table 3. Results are unable to clear the relationship between marital status and psychiatric diagnosis see table 4. Service personals were least diagnosed with both anxiety (42.11 %) and depression (26.32 %) see table 5. In types of hepatic diagnosis, patients of hepatitis C were found more anxious (57.14) than other hepatic patients see table 6.

Table 1:
Anxiety & Depression as Per Age

Age limits	Total no. of patients	Diagnosed with anxiety	% age of anxiety	Diagnosed with depression	% age of depression
20-29	19	10	52.63	7	36.84
30-39	31	15	48.38	11	35.48
40-49	33	21	63.64	8	24.24
50-59	14	6	42.85	8	57.14
60-69	5	2	40	2	40

Table 2:
Anxiety & Depression as Per Education

Level of education	Total no. of patients	Diagnosed with anxiety	% age of anxiety	Diagnosed with depression	% age of depression
Illiterate	30	15	50	13	43.334
Primary	14	7	50	6	42.86
Middle	21	13	61.90	6	28.57
Matric	21	11	52.38	7	33.33
Intermediate	8	7	87.5	1	12.5
Graduation	4	1	25	1	25
Masters	3	0	0	2	66.66
Professional	1	0	0	0	0

Table 3:
Anxiety & Depression Socioeconomic Status

Socio economic status	Total no. of patients	Diagnosed with anxiety	% age of anxiety	Diagnosed with depression	% age of depression
Lower	6	2	33.33	3	50
Lower middle	50	29	58	17	34
Middle	45	23	51.11	16	35.6
Upper middle	1	0	0	0	0
Upper	0	0	0	0	0

Table 4:
Anxiety & Depression as Per Marital Status

Marital status	Total no. of patients	Diagnosed with anxiety	% age of anxiety	Diagnosed with depression	% age of depression
Single	10	5	50	4	40
married	87	45	51.72	31	35.63
Divorced	1	0	0	1	100
Widow	4	4	100	0	0

Table 5:
Anxiety & Depression as Per Occupation

Occupation	Total no. of patients	Diagnosed with anxiety	% age of anxiety	Diagnosed with	% age of depression
Student	4	3	75	1	25
Business	14	7	50	6	42.86
Service	19	8	42.11	5	26.32
Housewife	48	26	54.17	21	43.75
Farmer	2	1	50	1	50
Unemployed	5	3	60	0	0
Laborer	5	3	60	1	20
Jobian student	1	1	100	0	0
Other	4	2	50	1	25

Table 6:
Anxiety & Depression as Per Hepatic Diagnosis

Hepatic diagnosis	Total no. of patients	Diagnosed with anxiety	% age of anxiety	Diagnosed with depression	% age of depression
Hepatitis B	4	3	75	1	25
Hepatitis C	70	40	57.14	23	32.86
CLD	4	0	0	4	100
Liver cirrhosis	16	8	50	5	31.25
Other	2	0	0	2	100
Multiple	6	3	50	1	16.67

DISCUSSION

Results have shown that 88.2 % of the total hepatic patients were found to be co morbid with either anxiety or depression. This is in agreement with previous work findings that brought evidence of psychiatric co morbidity in medical illnesses[10]. More of the co morbid patients are diagnosed with anxiety. It may be because of the way the hepatic diseases are portrayed in our society with a strong held notion that these are dangerous and cannot be cured or managed. This creates insecurity and anxiety among the patients. Though the proportion of depressed patients is not as high as the proportion of anxiety but is still sufficiently notable. The complex and complicated consequences and course of hepatic diseases mimic the depressive trends in patients. Other researches indicate that anxiety and depression are the most common psychiatric diagnosis among medical problems [2,3]. Not only that the rate of anxiety and depression is notable in medical illnesses[11] but some researches also indicate that co morbidity of psychiatric diagnosis also increase the number of medical complaints associated with medical diagnosis[12]. There are no notable difference of percentage in anxiety of males and females, but in depression females have higher proportion than males. In age wise comparison, the proportion of the patients diagnosed with anxiety decreases slightly after 50 years of age when the proportion of depression slightly increases. The reason may be the changes that occur as a function of maturity by time e.g., easily fatigued, lots of leisure, negligence of children and grand children, poor prospects of recovery or poor prognosis. Anxiety is found notably higher in proportion in urban areas than rural areas while depression is only slightly higher in urban areas than rural areas. It may be because the awareness about the complications of the disease is more readily available in urban areas than rural areas. This knowledge of complexity of the disease accelerates anxiety and depression. Anxiety is 87.5 % in patients having intermediate level education, while in lower levels anxiety is lesser than that of intermediate level and within the lower levels percentages are not variable, where as graduates showed very less proportion of anxiety. In line of the past researches, this study also found that depression decreases as the education increases[13]. The diagnosis of anxiety is found more frequent in lower middle class and middle class while depression is more frequent in lower class. Both of the diagnosis cannot be examined in upper middle class and upper class because of the lack of representative sample as the data were collected in a public hospital where these two classes usually do not visit. A slight decrease of percentage is found in both anxiety and depression in joint families as compared with nuclear families. It may be because the joint families provide social and emotional support to the patients that help them fight against the psychological strain caused by the chronicity and complexity of the disease. The picture of both anxiety and depression is not significantly indicative as for the marital status is concerned the proportion of single and married is not meaningfully different in both anxiety and depression. While the proportion of divorced and widows is not representative enough in whole sample to draw a meaningful conclusion. In the analysis of anxiety and depression as per occupation only three classes (businessmen, service men & housewives) have representative sample. Among these three, service personals have lesser proportion of anxiety and depression than the other two. The hepatic diagnosis wise analysis is not possible with all types of diseases included in the research because the representative number of sample are found only in two categories i.e. Hepatitis C and liver cirrhosis. Previous studies have found a higher association of anxiety and depression in hepatitis C as compared with other psychiatric disorders [4,6]. Among these two, proportion of depression is not significantly different but anxiety is only slightly higher in Hepatitis C than liver cirrhosis.

CONCLUSION

The psychiatric co morbidity of generalized anxiety and major depression is that high in liver and other medical diseases as told by this study and other studies as well, so the doctors working in liver/medical units should be better educated and trained in assessment of psychiatric disorders especially anxiety and depression as well as their management. They should also be sensitized when to refer complicated cases to the psychiatrists.

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