# PREVALENCE OF DEPRESSION IN UNTREATED PATIENTS OF HEPATITIS C

Saeed Akhtar, Muneer Azhar, Azra Yasmeen

### **ABSTRACT**

Background: Hepatitis C virus infection is a public health problem worldwide, clinicians are suggesting that it may be associated with the depression even if there is no interferon therapy started. Objective: To assess the prevalence of depression in untreated patients of Hepatitis C. Place and Duration of Study: This despriptive study was conducted in the Department of Medicine, Bahawal Victoria Hospital & Quaid-e-Azam Medical College, Bahawalpur, from January 4, 2012 to April 9, 2012. Patients & Methods: The sample consisted of 100 patients visiting Outpatient Department (Male 42, Female 58), pre-diagnosed HCV positive, not getting any treatment for Hepatitis C. They were interviewed and results were analyzed using SPSS version 16, from the entries in a Performa and Hamilton Rating Scale for Depression. Results: Mean age of our patients was 37.82 years. Depression was found in 38% of the patients, 12% patients had mild depression, 20% patients had moderate depression, 4% patients had severe depression and 2% patients had very severe depression. Conclusion: Our study corroborates presence of depression among patients who did not take any treatment for Hepatitis C, suggesting that depression may also caused by disease process itself.

Key Words: Depression C, Interferon therapy, Untreated

# INTRODUCTION

Hepatitis C, the most common blood borne viral infection today is a major cause of chronic liver disease and affects an estimated 180 million people worldwide. The prevalence of hepatitis C virus (HCV) infection in Pakistan has been estimated as high as 35% in some areas.<sup>2,3</sup> Physicians are finding increasing correlation with HCV infection and clinical depression. In the absence of interferon therapy co-morbid depression, cognitive decline and fatigue are common.<sup>4</sup> According to the DSM-IV criteria, reported prevalence rates for major depressive disorder are higher in those with Hepatitis C than the general population. As estimated, 24 to 70 percent of people with chronic Hepatitis C are clinically depressed as compared to estimated 6 to 10 percent of the general population. 4 Elevated rates of depression in untreated HCV patients, can be a barrier to initiating HCV therapy and can impact fatigue and physical symptoms.

Given that depression was associated with fatigue and increased somatic complaints, improved detection and treatment of depression could depressed HCV infected patients.<sup>5</sup> Being aware of depression's prevalence among this population, will encourage both patients and their physicians to take depression seriously. This study was conducted to estimate the frequency of depression among untreated hepatitis C positive patients presenting to Department of Medicine, B.V Hospital, Bahawalpur.

reduce disability and facilitate treatment for

# **PATIENTS AND METHODS**

This descriptive, cross sectional study was conducted in the Department of Medicine, Bahawal Victoria Hospital, Bahawalpur, from January 4, 2012 to April 9, 2012. In this study, 100 patients above 13 years of age and of both sexes were included. All the pre diagnosed HCV positive cases, not getting any treatment for Hepatitis C, visiting the out patients department were asked for detailed history and depressive symptomtology, based on DSM IV criteria after informed consent.6 Patients with cirrhotic liver disease, complicated diabetes, advanced renal, hepatic, heart failure and hypothyroidism were excluded. All the information was collected on the performa by structured interview.

We included patients pre-diagnosed as hepatitis C positive but they were not on any medication, to assess the prevalence of depression among these patients as suggested by some researchers that virus itself can be a factor for inducing some pathology resulting in depression. For prevalence of depression, we assessed the patients with the help of

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**Correspondence**: Dr. Saeed Akhtar, Assistant Professor, Department of Psychiatry, Bahawal Victoria Hospital, Bahawalpur.

Phone: 0300-9689749

Email: saeed.akhtar.dr@gmail.com

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<sup>1.</sup>Quaid e Azam Medical College/Bahawal Victoria Hospital, Bahawalpur.

Hamilton Depression Rating Scale (HDRS). Data was analyzed using SPSS Version 16.

#### **RESULTS**

In this study a total of 100 patients were included, with mean age of the patients was 37.8 years, and a range of 13 to 65 years.

The overall frequency of depression was (38 patients) 38%, whereas, 12% patients (12 patients) had mild depression, 20% patients (20 patients) had moderate depression, 4% patients (4 patients) had severe depression and 2% patients (2 patients) had very severe depression, while 62% patients were not having depression. (Table I)

Table No. I: Frequency of level of depression among study subjects (N=100)

Level of depression	Frequency	Percent
Mild	12	12%
Moderate	20	20%
Normal	62	62%
Severe	4	4%
Very Severe	2	2%
Total	100	100%

Suicidal ideation was reported by only two patients (2%). Regarding sex differences in occurrence of depression, out of 58 females, 26 were depressed (i.e. 44.82%) and out of 42 males 12 (28.5%) were depressed. (Figure I)

Figure I: Sex wise prevalence of depression among study subject

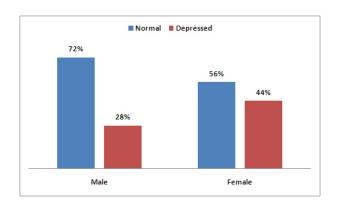


Table II: Prevalence of depression among different age groups

Age group (years)	Frequency	Percent
13-20	4	4%
21-30	30	30%
31-40	22	22%
41-50	28	28%
51-60	14	14%
61-65	2	2%
Total	100	100%

It was noted that the prevalence of depression was highest among age group 21-30 years followed by 41-50 years 28 % and 31-40 years 22%

None of the patient was on anti depressants or had referral to mental health care provider at any stage of depression.

## **DISCUSSION**

Hepatitis C is, and will remain for some time, major health problem in Pakistan and the entire world. In common with patients with other significant medical illnesses, patients with hepatitis C have high rates of psychological symptoms and reduced quality of life compared with the general population.<sup>3</sup> A high prevalence of depressive symptoms has been reported. 8,9,10 Elshahawi et al reported depression in 30% of patients with the absence of treatment with IFN. Earlier researches showed a range of between 28% and 35%. 11,12,13 In our study, depression is reported in 38% of patient, so it is in accordance with other studies. This provides the impact of chronic hepatitis C as a potent trigger for depression, irrespective of IFN-alpha treatment, presence of alcohol or substance abuse.<sup>14</sup> Etiopathogenic factors in this group are multiple, ambiguity, complexity, inconsistency and unpredictability of the course of illness, <sup>15</sup> alterations in brain metabolites as evident by magnetic resonance imaging spectroscopy and emotional volatility and perception of stigma are among the causes of depression in this population. <sup>16</sup>

#### CONCLUSION

Although our study is not population based study, it corroborates presence of depression among patients who did not take any treatment suggesting that depression is also caused by disease process itself.

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However, a well designed study is required to study the association of HCV and depression. It is also recommended to start psychiatric assessment at the beginning of therapy, to search for early predictors of depression.

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