

ORIGINAL ARTICLE

SOCIO-DEMOGRAPHIC STUDY OF HEPATITIS C PATIENTS VISITING TERTIARY CARE HOSPITAL

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Background: Hepatitis C is a very common blood-borne disease of liver caused by Hepatitis C Virus and about two third of these patients will ultimately end up having liver cirrhosis or hepatocellular carcinoma. This study was carried out to determine the sociodemographic status of the hepatitis C infected patients visiting tertiary care hospitals in Lahore, Pakistan. **Methods:** This study was conducted during the months of October and November 2009. In this cross sectional study, 154 volunteer patients of HCV were included. They were investigated for sociodemographic variables and were statistically analysed by SPSS-15. **Results:** Of these 154 patients, a high percentage of patients were females (70.1%). Majority of the patients belonged to the families of labour occupation (39.4%) of which 71.4 % were illiterate. Gender was found significantly associated with categories of sleep disturbance ($p<0.05$) and tension ($p<0.05$) among HCV patients. Married patients were significantly associated with tension ($p<0.05$) and a significant emotional and behavioural change in their attitude was also found ($p<0.05$). Patients with shorter interval after first diagnosis of the disease felt more emotional and had greater behavioural changes in their attitude ($p<0.05$). **Conclusion:** Incidence of Hepatitis C was higher in females and married females with shorter interval after first diagnosis of the disease were more depressed.

Keywords: Hepatitis C, Socio-demographic status, depression, Pakistan

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INTRODUCTION

Hepatitis C is a very common blood-borne disease of liver caused by Hepatitis C Virus (HCV). WHO reported 180 million Hepatitis Cases in the year of 2009. According to WHO, 3-4 million cases of HCV are newly diagnosed every year. Two third of these cases give rise to liver cirrhosis or hepatocellular carcinoma (HCC).¹ Pakistan is the sixth most populated country in the whole world and second most populated in the Muslim world after Indonesia. Pakistan has approximately 10 million HCV infected people² and is well behind in health services as compared to the other developing countries even in the countries of its own region.³

Blood products and transfusion of blood is the major mode of Hepatitis C transmission.^{4,5} In Pakistan, imprudent use of injections is the major cause of Hepatitis C.⁶ Use of contaminated razors, nail clippers and scissors are other common causes of HCV transmission.⁷ Although there were much chaos about the sexual intercourse as a mode of transmission for HCV but it is a rare cause of HCV.⁸

The common HCV genotype found in Pakistan is 3a genotype.⁹ By considering as a cheap and standard treatment, Interferon plus ribavirin is used as first line treatment for chronic Hepatitis C patient.¹⁰

Depression is one the psychological outcome of the Hepatitis C treatment. Hsu *et al.*, reported a

significant depression in Hepatitis C patients and especially amongst the females and shorter interval of duration.¹¹ The study was carried with objectives to determine the sociodemographic status of Hepatitis C patients visiting tertiary care hospitals in Lahore and to ascertain depression level and emotional and behavioural change in the attitude of Hepatitis C patients. This study provides us information about the sociodemographic profile and depression level of the Hepatitis C patients in Pakistan. There is no evidence of similar research at National level to date.

MATERIAL AND METHODS

It was an observational cross sectional study and the study population was the patients of Hepatitis C coming to the outpatient department of Hepatitis Unit at Jinnah Hospital, Lahore and Sheikh Zayed Hospital, Lahore. Sample of 154 Hepatitis C patients coming to the above mentioned hospitals during the months of October and November 2009 were interviewed through a well oriented questionnaire, which had been made after careful and keen study of the needs and necessities of the patients. After collection of data, all the variables of these questionnaires were entered into the SPSS v. 15 and simple description of each variable and associations of sociodemographic variable with disease and depression level among the hepatitis C patients were determined by Chi-Square test and Fisher Exact test.

RESULTS

Of the 154 patients included in this study, 53% belonged to the age group 35–50 years and among these patients, 70% were females. Of these total females, 18.5% were working-women. Of the total 154 patients in our study, 134 (87%) were married. Results are shown in table-1.

Out of the total 154 patients, 52 (34%) patients were having family history of the disease. Of these 52 patients, majority (40%) had a parent-child relationship. Results are presented in figure-1. Majority of the Hepatitis C patients in our study belonged to the labour class families (39.4%) and most of patients were illiterate (71.4%). While no major difference was found in different residential areas. Results are shown in table-2.

On determining the depression level of the Hepatitis C patients, majority of the patients had lost their interest in social activities, were feeling sleep disturbance, tension, worries & nervousness and emotional & behavioural changes in their attitude due to the disease. These psychological changes due to depression in the patients of Hepatitis C are shown in figure-2. No significant association of age with any other variable was found ($p>0.05$). Gender was found significantly associated with categories of sleep disturbance ($p<0.05$) and tension ($p<0.05$) among HCV patients (i.e., Females mostly felt tension and sleep disturbance due to their disease). Married patients were also found significantly associated with tension ($p<0.05$) and having feelings of emotional and behavioural change in their attitude ($p<0.05$). A significant association was found between emotional and behavioural change in the attitude of the patients with time interval after first diagnosis of the disease ($p<0.05$). Patients with shorter interval after first diagnosis of the disease felt more emotional and behavioural changes in their attitude.

Table-1: Socio-demographic status of Hepatitis C patients

Variables	Number	Percentage
Age		
25–35	57	37
31–45	81	53
above 45	16	10
Gender		
Male	46	30
Female	108	70
Female Status		
Working	20	18.5
House Wife	88	81.5
Marital Status		
Single	10	6.5
Married	134	87.0
Widow	7	4.5
Divorce	3	1.9

Table-2: Socio-economic status of Hepatitis C patients

Variables	Number	Percentage
Occupation		
Business	9	13.6
Public sector	15	22.7
Private sector	16	24.2
Labor class	26	39.4
Educational Status		
Illiterate	110	71.4
Literate	44	28.6
Residence		
Congested	80	52
Open area	74	48

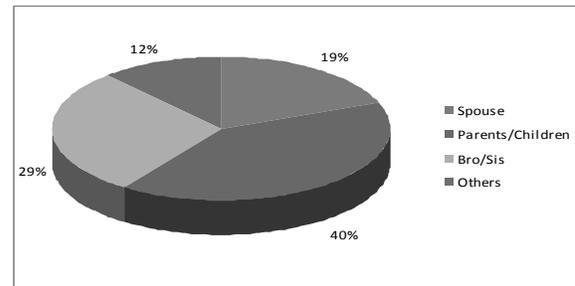


Figure-1: Family history of the disease

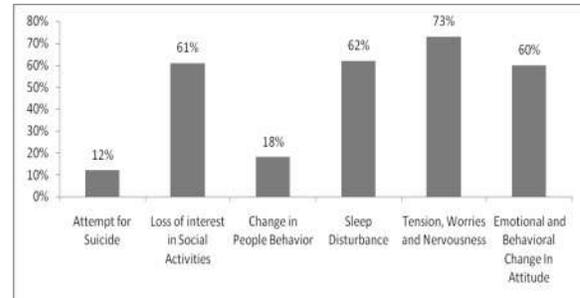


Figure-2: Psychological changes due to depression in the Hepatitis C patients

DISCUSSION

Burden of the Hepatitis C disease varies with the different demographic areas. This study was conducted in the city of Lahore, Pakistan and there is approximately 80% prevalence of Hepatitis C in the patients of chronic Hepatitis in Pakistan. Hepatitis C is the most common cause of liver cirrhosis and Hepatocellular carcinoma (HCC) which resulted into a high mortality rate all over the world.^{9,10}

In the context of the present study, the socio-economic and demographic status of Hepatitis C patients and depression level among them was determined. Our results showed that females were having more risk of Hepatitis C than males. But Pricilla C. Hsu *et al* showed opposite result.¹¹ But demographic and social setup in Pakistan is different from United States, where a woman has to look after all the members of her family, whether she is in her parent’s home or in her

husband home. Therefore, she is more exposed to the risk of disease as she looks after all patients, elders and children of her family.

Our study showed no major difference in Hepatitis C patients from different localities and higher number of patients was from low socio-economic status. The results are not dissimilar from that of a study by Ghias (2009).¹² Above 71% Hepatitis C patients were found illiterate; it shows that lack of knowledge about disease and its precautions become a strong cause for disease.¹³

Moreover, majority of Hepatitis C patients were found in tension, worry, and nervousness due to the disease.¹⁴ They felt emotional and behavioural changes in their attitude and they lost their interest in social activities.¹⁵ Due to the severity of disease, Hepatitis C patients felt sleep disturbance. Similar results were shown by Sockalingam S. *et al.*¹⁶

Gender was found significantly associated with tension, worries and sleep disturbance; indicating that females were found more depressed than males. Similar results were reported by Marian I. Butterfield *et al.*¹⁷

This study shows that married patients were found to be more depressed. This finding is in contrast to the study of Scherer *et al.*, which reported that patients who were single had higher depression levels.¹⁸ The reason for this contrast is that the social set up of Pakistan is such where married woman have to look after the whole of her family, so she gets more depressed after the diagnosis of that lethal disease. Recently diagnosed hepatitis C patients were found to be more depressed than patients with a longer time interval since diagnosis. Similar results were reported by Yesim Erima *et al.*¹⁹

CONCLUSION

On the findings of our study we can say that there is a need to educate the common people of our society specially females regarding precautions that can be taken against Hepatitis C.

AUTHOR'S CONTRIBUTION

OM: Literature search, data collection, write-up, FZ, MFM, JSK, TI: Data analysis, write-up, proof reading.

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