

## AWARENESS - A MUST FOR MANAGEMENT OF HEPATITIS C

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### Abstract

**Introduction:** Hepatitis C is a pan global health problem and once goes into chronicity then leads to deadly complications of cirrhosis and hepatocellular carcinoma. Thus Chronic HCV has become universally, one of the most common cause of End stage liver disease and indication of Liver transplantation. **Aim:** The aim of study was to assess the awareness of Hepatitis C in patients suffering from it and reporting for treatment at Model treatment Centre (MTC), PGIMS, Rohtak. **Material and Methods:** This was a prospective study conducted over a period of five years i.e. 01.01.2017 to 01.01.2022 at MTC, PGIMS, Rohtak. Three thousand two hundred and ninety patients of Hepatitis C who were confirmed on ELISA (Enzyme linked immunosorbent assay) and HCV RNA Quantitative test were enrolled in the study after proper consent. A multiple choice structured questionnaires about Hepatitis C was put to the patients and their responses were recorded by the team at MTC which included Gastroenterologist. The team assessed knowledge and awareness about hepatitis C infection, transmission and screening was the tool of data collection. **Results:** Most of the HCV patients were unaware about existence of hepatitis C infection, modes of transmission, and treatment. A direct positive correlation was found between education level and awareness, which reveals that patients with better knowledge and information had better attitudes toward the infection and prevention of hepatitis transmission. **Conclusion:** There is urgent and strong need for increasing the level of awareness about HCV infection not only in patients suffering from them but also among their family members and general society.

**Keywords:** Hepatitis C, Awareness, Blood borne transmission, Sexual transmission.

### INTRODUCTION

As per WHO 2016 report, 3% of the world population has been infected with HCV worldwide with more than 170 million chronic carriers and 3.5 lakhs deaths every year (Basnayake and Easterbrook, 2016). The proportion of cirrhosis in chronically infected patients is rising and projected to reach 44.9% by 2030 (George *et al.*, 2009). The widely available pan-genotypic, oral, direct-acting antiviral (DAA) drugs are simple, safe, to be taken orally once a day, well-tolerated, highly effective with reported sustained virologic response (SVR) rates exceeding 95% in patients with compensated liver disease (Morgan *et al.*, 2010). The SVR leads to improvement in HCV-related liver damage, leading to liver fibrosis regression, and a reduction in the incidence of hepatocellular carcinoma (HCC), thereby prolonging overall survival (Singal *et al.*, 2010; Morgan *et al.*, 2013; Calvaruso *et al.*, 2018; Backus *et al.*, 2017). It is always said that prevention is better than cure, hence awareness about various aspects about hepatitis C including route of transmission, spread, impact on human body, treatment in general public is a major challenge pan globally, especially in developing countries like India and should form the basis of health care policies. In India, maximum number of patients of Hepatitis C are illiterate, belong to rural background with poor socio-economic status and minimal health care facilities exist at that level. Thus, due to above explained limitations, there is minimal awareness about hepatitis C even among the patients who are themselves suffering from these deadly disease. The obstacle of illiteracy and poor health care facility at rural level can be overcome by initial determination of awareness about hepatitis C followed by spread of awareness in these patients, their family members and general society.

Therefore, it is very important to assess the awareness, knowledge and attitude about this disease in public in India for future health policy planning as well as its implementation.

**Aim of study:** The aim of study was to assess the Awareness of Hepatitis C in patients suffering from it and reporting for treatment at MTC, PGIMS, Rohtak.

### MATERIALS AND METHODS

This was a prospective study conducted over a period of five years i.e. 01.01.2017 to 01.01.2022 at MTC, PGIMS, Rohtak. Three thousand two hundred and ninety patients of Hepatitis C patients who were confirmed on ELISA (Enzyme linked immunosorbent assay) and HCV RNA Quantitative test were enrolled in the study after proper consent. A multiple choice structured questionnaires about Hepatitis C was put to respective patients and their responses were recorded by the team at MTC which included Gastroenterologist. The team assessed knowledge and awareness about hepatitis C infection, mode of transmission, screening and treatment was the tool of data collection.

### Observations

In our total pool of 3290 patients, there was male predominance i.e. 2270 (69%) while females were only 1020 (31%). Majority of patients belonged to poor socio economic status and had rural background i.e. 2105 patients (64%). The maximum number of patients belonged to younger age group i.e. from 20-40 yrs of age group i.e. 1875 (57%) with minimal representation at extreme of age group. Out of the pool of 3290 patients, 2730 (82.97%) were illiterate and only 560 (17.03%) were literate.

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**Table 1. Distribution among total pool of chronic hepatitis c patients**

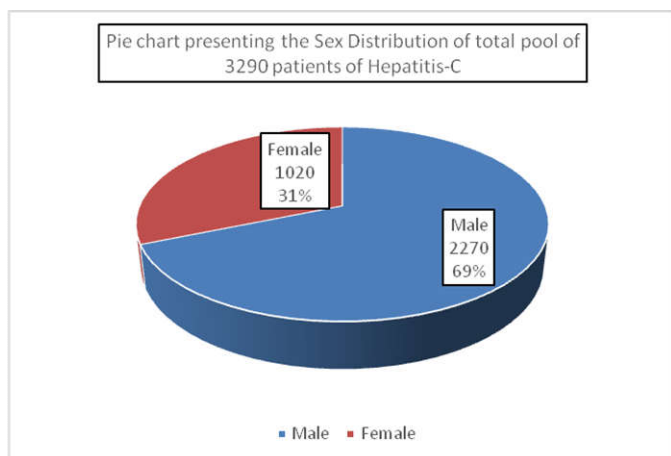
Total Number of Patients on Treatment	Males	Females	Rural Background	Urban Background	Illiterate	Literate
3290	2270 (69%)	1020 (31%)	2105 (64%)	1185 (36%)	2730 (82.97%)	560 (17.03%)

**Table 2. Awareness parameters in patients**

Total No. of Patient	Aware About Correct Mode Of Transmission	Not Aware About Correct Mode Of Transmission	Aware About Hepatitis C Impact on Body	Not Aware About Hepatitis C Impact on Body	Aware About Available Treatment	Not Aware About Available Treatment
3290	410 Patients	2880 Patients	450 Patients	2840 Patients	877 Patients	2413 Patients
%	12.46%	87.54%	13.67%	86.33%	26.65%	73.35%

In our study group of 3290 patients, only 410 patients (12.46%) had correct knowledge of mode of transmission and majority of these patients were literate with good socio-economic status and resided in urban areas. Moreover, out of total pool of 3290 patients, only 450 Patients (13.67%) were aware about deleterious effects of HCV on various organs of human body. In our study group, only 877 patients (26.65%) were having knowledge of availability of effective treatment against hepatitis C and bit better percentage of this parameter can be attributed to free government scheme for last nine years under which patients are getting free diagnostic as well as treatment for HCV. Most of patients came about effective treatment from other patients who were there relatives, friends or neighbour and have been successfully treated for HCV. Hence, it highlights the importance of mouth to mouth spread of health issues in society.

The Knowledge of correct mode of transmission i.e. through blood contamination and sexual route was seen in only 410 patients (12.46%) but in rest majority of 2880 patients (87.54%), they thought that infected water and food is route of transmission for Hepatitis C. They even thought that even sharing utensils and toilets can lead to spread of hepatitis C infection. There was low percentage of patients in our study group who were having knowledge of sexual route of transmission. Only 7% of patients knew about vertical transmission from pregnant mother to new born. Majority of patients thought that breast feeding should not be given to avoid transmission of infection to the child. Out of total pool of 3290 patients, 350 (10.63%) thought that there is vaccine available for HCV infection. The availability of effective treatment was known to only 877 (26.65%) patients and rest majority of patients thought that there is no treatment available for controlling hepatitis C infection. One thing prominently noted that majority of patients related hepatitis C infection to Jaundice and thus majority of asymptomatic patients, took time to accept that how they can be having hepatitis C infection without having any symptoms including jaundice. The positive correlations between knowledge and practice in this study reaffirm the relationship between knowledge and practice with infection control measures. At government level, seeing the dismal situation of awareness about the parental illness in the patients of hepatitis C, many steps have been taken for improving the same by means of distribution of pamphlets, placement of hoardings, calendars & bill boards in various government hospitals & public places, regular publication of articles in print media and distribution of drugs in carry bags having information about hepatitis C and availability of free treatment at Government hospitals. The Government has even started toll free helpline also from which anybody can gather information round the clock. At our department, we generate awareness in all the hepatitis C patients and their relatives on first visit and as a policy enquire about knowledge retained on subsequent visits. Majority of patients remember about awareness aspects and only minimal percentage who are illiterate have to be reinforced about various aspects of hepatitis C infection.

**Figure 1. Sex distribution of total chronic hepatitis C patients**

## DISCUSSION

HCV infection remains a serious threat to the general public in our country and vaccine is not available against it at present. This study was a patient-based questionnaire survey determining the knowledge, awareness, and practices in regard to HCV infection at tertiary care centre of North India. There are studies in literature about awareness of HCV infection in Health care workers and general society but there is shortage of such awareness data in HCV patients. Hence, the need of conducting this study. The results revealed a negative association of low educational level and poor health care facility and good HCV knowledge. The willingness for further investigations, screening for HCV were independently associated with good knowledge. In our study group, majority of patients belonged to younger age group, were males, residing in rural background, with poor socio-economic status and 82.97% were illiterate. Out of total pool of 3290 patients, only, 790 (24.01%) had heard about hepatitis C in past.

## Conclusion

Our study concludes that there is poor knowledge and awareness among hepatitis C patients about their illness, complications, mode of transmission and prevention. As prevention is always better than cure, thus onus lies on the state and treating physicians for taking urgent meaningful steps for increasing awareness about these deadly infections, so as to break the transmission chain. The goal should not be limited to just treatment of the confirmed patients but should extend for stoppage of transmission from them to others. The knowledge about hepatitis C can be increased with help of mass media, internet, health education programme and regular conduction

of workshops. The majority of patients are inactive carrier and asymptomatic, thus testing for HCV infection in high risk groups and hotspot areas, is the gateway for access to both prevention and treatment services and is an essential component of controlling hepatitis C epidemic. Testing provides an opportunity to link people to interventions to reduce transmission, through counselling on risk behaviors.

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