



## SEXUAL DYSFUNCTION IN HCV PATIENTS- EXPERIENCE AT TERTIARY CARE CENTER OF NORTHERN INDIA

Parveen Malhotra<sup>1\*</sup>, Sidharth Arya<sup>2</sup>, Pranav Malhotra<sup>3</sup>, Rahul Siwach<sup>4</sup>, Avani Sharma<sup>5</sup>, Abhishek Yadav<sup>6</sup>, Ankit Chahal<sup>7</sup>, Chitrakshi Bhardwaj<sup>8</sup>, Himanshu Shivanshu<sup>9</sup>, Rajasvi Khurana<sup>10</sup>

<sup>1\*,2,3,4,5,6,7,8,9,10</sup> Department of Medical Gastroenterology and Psychiatry, PGIMS, Rohtak, India.

**Correspondence author:** Dr. Parveen Malhotra

Department of Medical Gastroenterology and Psychiatry, PGIMS, Rohtak, India.

128/19, Civil Hospital Road, Rohtak, and Haryana, India. (124001)

### ABSTRACT

**Introduction** - Sexual dysfunction is highly prevalent in patients with chronic Hepatitis C Virus (HCV), with rates reported between 19% and 88%. It presents in various forms, including premature ejaculation, decreased libido, erectile dysfunction, and arousal disorders, often linked to both the disease itself and its treatment. **Aim of study-** To estimate prevalence of sexual dysfunction in Hepatitis C patients at tertiary care center of Northern India. **Material and Methods-** This study was conducted at Medical Gastroenterology Department at PGIMS, Rohtak. It was a prospective study done over one year, from 01.04.2025 to 31.03.2026, during which 200 confirmed hepatitis C patients were enquired for any kind of sexual dysfunction. For better understanding 100 patients each of chronic hepatitis and cirrhosis were enrolled. All 200 HCV patients were males, in 20-50 yrs age group and were sexually active. Patient with past history of sexual dysfunction, anxiety, depression, diabetes mellitus, hypertension, hypothyroidism which can cause sexual dysfunction were not included in the study. All hepatitis C patients were confirmed on anti HCV antibody on Enzyme linked immunosorbent assay (ELISA) test and HCV RNA Quantitative on Polymerase chain reaction test (PCR). The written informed consent was taken before enrollment in the study. **Observation and Results-** Our department is Model treatment Center (MTC) under National Viral Hepatitis Control Program (NVHCP) and is one of the high flow centers in India. On daily basis, 8-10 new and 20 follow up patients of HCV come for consultation and till date 12,000 HCV patients have been enrolled in last twelve years in this program. On prospective analysis of 200 confirmed hepatitis C patients, all were males and 100 each were in chronic hepatitis and cirrhotic stage and both were treated with oral antiviral drugs. The sexual dysfunction was seen in 40 patients (20 %), out of which 25 were in F0-F3 stage and 15 had cirrhosis. Most common kind of sexual dysfunction was erectile dysfunction, followed by premature ejaculation and loss of libido. **Conclusion** -The management of hepatitis C patients need broader approach and all of them should be evaluated not only from hepatic point of view but also for its extra hepatic impact, of which sexual evaluation is must. The sexual aspect is often missed by treating team as well as not shared by patients. In India, masculinity is attached to core of heart of males and majority do not accept and share with health professionals. Hence, good repo of doctor with patients will help in healthy discussion among them on this sensitive issue.

**Keywords:** Loss of Libido, Erectile Impotence, Premature Ejaculation, Hepatitis C Virus, Anti HCV Antibody, HCV RNA Quantitative.

### INTRODUCTION

Chronic hepatitis C virus (HCV) infection represents a major health problem and is estimated to affect 170 million persons worldwide. (1) Chronic viral hepatitis is typically silent; symptoms and signs are present only in those with severe or advanced disease. (2) Sexuality is an important aspect of the quality of life. Although sexual transmission has been an area of research in HCV positive patients,

sexual functioning of these patients has received very limited attention. The frequency of sexual dysfunction (SD) is not well known in patients with chronic hepatitis C. (3) Studies show that sexual dysfunction (SD) is a common, under-recognized sequela of chronic HCV, affecting both men and women. In males, erectile dysfunction is most common (up to 59.3%), followed by reduced desire and premature ejaculation. Female patients frequently report lower libido and difficulties with arousal and lubrication. The severity of sexual dysfunction directly correlates with the severity of liver disease (e.g., higher prevalence in cirrhosis) and is linked to factors like low testosterone and depression. While older interferon-based therapies were known to cause significant sexual dysfunction,



www.ajmrhs.com  
eISSN: 2583-7761

Date of Received: 06-04-2026  
Date Acceptance: 13-04-2026  
Date of Publication: 16-05-2026

modern direct-acting antiviral agents (DAAs) have shown a positive impact, with studies reporting significant improvement in sexual function after successful virus clearance. Depression, often associated with chronic infection, is a significant predictor of SD, particularly in males. Routine sexual health assessment and counselling should be integrated into standard HCV management. Sexual dysfunction is often manageable, with studies suggesting that viral clearance can reverse many of the associated sexual problems.

**Aim of Study** - To estimate prevalence of sexual dysfunction in Hepatitis C patients at tertiary care center of Northern India.

### MATERIAL AND METHODS

This study was conducted at Medical Gastroenterology Department at PGIMS, Rohtak. It was a prospective study done over one year, from 01.04.2025 to 31.03.2026, during which 200 confirmed hepatitis C patients were enquired for any kind of sexual dysfunction. For better understanding 100 patients each of chronic hepatitis and cirrhosis were enrolled. All 200 HBV patients were males, in 20-50 yrs age group and were sexually active. Patient with past history of sexual dysfunction, anxiety, depression, diabetes mellitus, hypertension, hypothyroidism which can cause sexual dysfunction were not included in the study. All hepatitis C patients were confirmed on anti HCV antibody on Enzyme linked immunosorbent assay (ELISA) test and HCV RNA Quantitative on Polymerase chain

reaction test (PCR). The written informed consent was taken before enrollment in the study.

### OBSERVATION AND RESULTS

Our department is Model treatment Center (MTC) under National Viral Hepatitis Control Program (NVHCP) and is one of the high flow centers in India. On daily basis, 8-10 new and 20 follow up patients of HCV come for consultation and till date 12,000 HBV patients have been enrolled in last twelve years in this program. On prospective analysis of 200 confirmed hepatitis C patients, all were males. Out of total pool of 200 HCV patients, 100 patients each of F0-F3 fibrosis and cirrhosis after completion of antiviral treatment were enrolled in the study. The sexual dysfunction was seen in 20% of total HCV patients. Out of these 40 patients, 25 (62.5%) were in F0-F3 and 15 (37.5%) were having cirrhosis. Most common kind of sexual dysfunction was erectile impotence (52-53.33%) followed by premature ejaculation (26.66%-28%) and loss of libido (20%). Out of 100 patients of HCV related cirrhotic patients, sexual dysfunction was seen in 15 patients (15 %) and out of them 8 (53.33 %) had erectile impotence and 4 (26.66%) had premature ejaculation and 3 (20%) had loss of libido. In group of 100 patients of Chronic Hepatitis C with Sf0-F3 Fibrosis, total 25 patients (25 %) had sexual dysfunction. In them majority 13 patients (52%) had erectile impotence, 7 (28%) had premature ejaculation and 5 (20%) had loss of libido.

Table 1- Showing sexual dysfunction distribution in total pool of HCV Patients

Total HCV Patients	Males	Females	Sexual Dysfunction Present	Sexual Dysfunction Absent
200	200 (100%)	0 (0%)	(40 Patients, 20 %)	(160 Patients,80 %)

Table 2- Showing prevalence of sexual dysfunction in various groups of HCV Patients

Total HCV Patients	F0-F3 Fibrosis	F4 (Cirrhosis)
200	100	100
<b>Sexual Dysfunction Present</b>	25 (25%)	15 (15 %)
<b>Sexual Dysfunction Absent</b>	75 (75%)	85 (85 %)

Table 3- Showing types of sexual dysfunction in various groups of HCV Patients

Total HBV Patients with Sexual Dysfunction	F0-F3 Fibrosis	F4 (Cirrhosis)
40	25	15
<b>Erectile Impotence</b>	13 (52%)	8 (53.33%)
<b>Premature Ejaculation</b>	7 (28%)	4 (26.66%)
<b>Loss of Libido</b>	5 (20%)	3 (20%)

### DISCUSSION

SD is defined as disturbances in sexual desire and the psychophysiological alterations that characterize the sexual response cycle, significantly contributing to interpersonal conflict and unhappiness. Female SD is mostly characterized by issues such as dyspareunia, diminished sexual desire, arousal difficulties, and orgasmic disorders. In contrast, male SD is predominantly characterized by erectile

dysfunction (ED), premature ejaculation, and reduced sexual desire. (4-5) This variability can be attributed to differences in the assessment methods for SD employed by various studies, as well as the characteristics of the patient populations. This inconsistency hampers future intervention studies aimed at accurately estimating the prevalence of SD. Furthermore, Ma et al. identified age and depression as independent factors contributing to ED in male

patients with chronic viral hepatitis. (6) Our study clearly highlights, that sexual dysfunction does occur in HCV patients but in our geographical distribution prevalence was determined to be 20 % which is much lower than reported in other studies. (7,8) The overall most common sexual dysfunction noted was loss of libido, followed by erectile impotence. The reason for it can be that erectile impotence has two main reasons- one is depression associated with disease and other is hormonal alterations, leading to decreased testosterone levels which are mainly seen in advanced fibrosis and cirrhosis. But in our study group of 200 HCV patients with equal distribution in both cirrhotic and non-cirrhotic groups, sexual dysfunction was more commonly seen in non-cirrhotic group. It clearly proves that cirrhosis was not the main reason in causing impotence. It is difficult to say whether the sexual dysfunction is attributable to HCV infection or treatment related, as the history of SD was taken at time of SVR testing after three months of completion of treatment. Some patients, even complaint of developing SD after few months of completion of antiviral treatment. It means that it is not due to drugs or HCV virus which has already successfully disappeared after achievement of SVR. Thus, it can be delayed effect of HCV infection, on same lines of causation of hepatocellular carcinoma in HCV related cirrhotic which can occur even after achievement of SVR. By regular counselling of patient and family members and good bonding with them of treating team helped in decreasing fears and depression associated with illness. All these factors played role in decreasing prevalence of erectile impotence.

### CONCLUSION

The management of hepatitis C patients need broader approach and all of them should be evaluated not only from hepatic point of view but also for its extra hepatic impact, of which sexual evaluation is must. The sexual aspect is often missed by treating team as well as not shared by patients. In India, masculinity is attached to core of heart of males and majority do not accept and share with health professionals. Hence, good rapport of doctor with patients will help in healthy discussion among them on this sensitive issue. The good compliance on drugs, regular follow up, abstinence from

**How to cite this article:** Parveen Malhotra, Sidharth Arya, Pranav Malhotra, Rahul Siwach, Avani Sharma, Abhishek Yadav, Ankit Chahal, Chitrakshi Bhardwaj, Himanshu, Shivanshu, Rajasvi Khurana, SEXUAL DYSFUNCTION IN HCV PATIENTS- EXPERIENCE AT TERTIARY CARE CENTER OF NORTHERN INDIA, Asian J. Med. Res. Health Sci., 2026; 4 (2):274-276.

**Source of Support:** Nil, Conflicts of Interest: None declared.

alcohol, smoking and drugs leads to improvement or stabilization of disease. The good psychotherapy leads to removal of depression which is an important reason for causing sexual dysfunction.

**Conflict of Interest-** The authors have no conflicts of interest to declare. No financial support was taken for the same.

### REFERENCES

1. Shepard CW, Finelli L, Alter MJ. Global epidemiology of hepatitis C virus infection. *Lancet Infect Dis.* 2005; 5:558–67. doi: 10.1016/S1473-3099(05)70216-4.
2. Hoofnagle JH. Hepatitis C: The clinical spectrum of disease. *Hepatology.* 1997; 26:15S–20. doi: 10.1002/hep.510260703. [
3. Soykan A, Boztaş H, Idilman R, Ozel ET, Tüzün AE, Özden A, et al. Sexual dysfunctions in HCV patients and its correlations with psychological and biological variables. *Int J Impot Res.* 2005; 17:175–9. doi: 10.1038/sj.ijir.3901267.
4. McCabe MP, Sharlip ID, Atalla E, Balon R, Fisher AD, Laumann E, et al. Definitions of sexual dysfunctions in women and men: a consensus statement from the fourth International Consultation on Sexual Medicine 2015. *J Sex Med.* 2016; 13:135–43.
5. Clayton AH, Valladares Juarez EM. Female sexual dysfunction. *Med Clin North Am.* 2019; 103:681–98
6. Ma BO, Shim SG, Yang HJ. Association of erectile dysfunction with depression in patients with chronic viral hepatitis. *World J Gastroenterol.* 2015; 21:5641–6.
7. El-Atrebi KA, El-Atrebi MA, El-Bassyouni HT. Sexual dysfunction in males with hepatitis C virus: relevance to histopathologic changes and peginterferon treatment. *Saudi J Gastroenterol.* 2011 Nov-Dec;17(6):406-10. doi: 10.4103/1319-3767.87183. PMID: 22064340; PMCID: PMC3221116
8. Katerina Karaivazoglou. Sexual functioning in patients with chronic hepatitis C: A systematic review. August 2017 *European Journal of Gastroenterology & Hepatology* 29(11):1DOI: 10.1097/MEG.0000000000000949