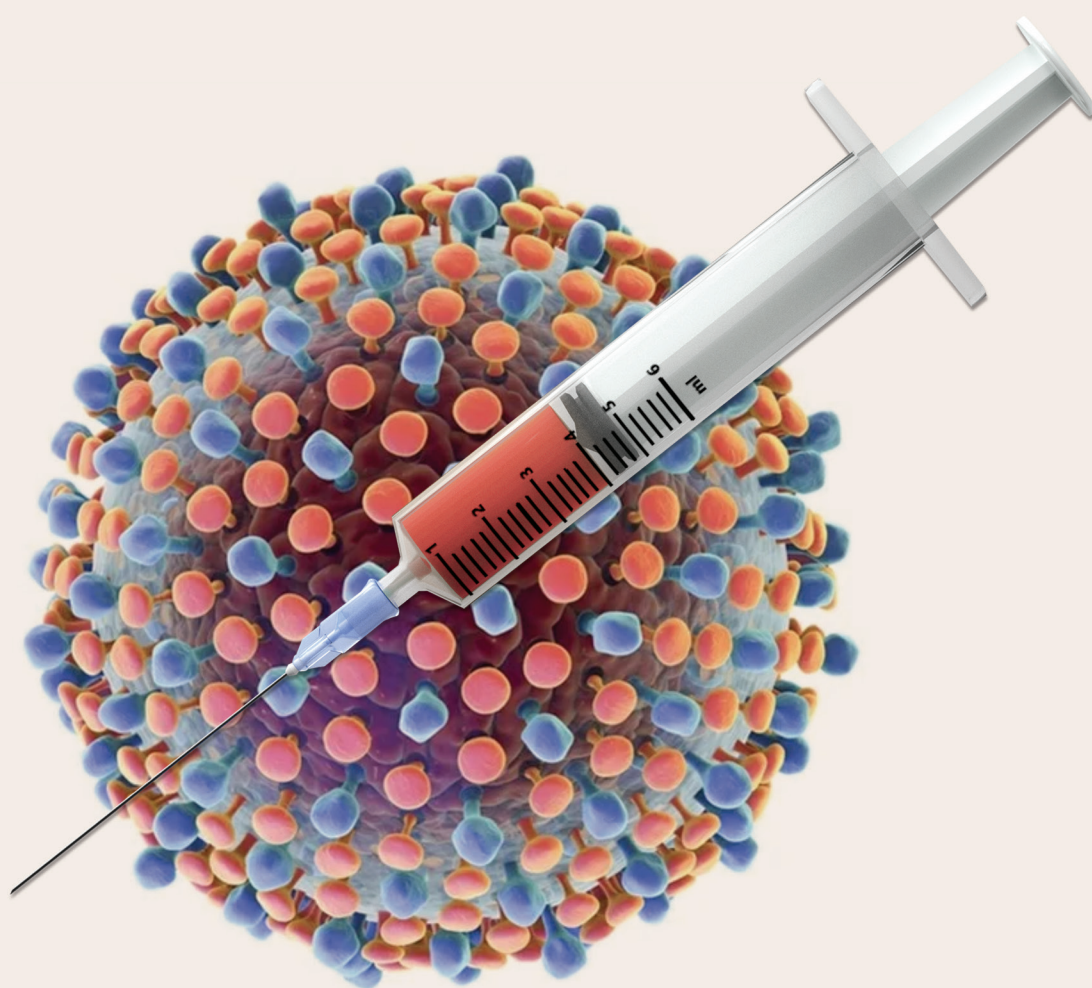


ACTION BRIEF

Hepatitis-C among People Who Inject Drugs in India - Current Scenario and Way Forward





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PATH develops and implements new approaches to prevent, manage and eliminate infectious diseases. We have been working with the government, civil societies, private sector and community-based organizations in South Asia to address the challenges of TB, HIV and neglected tropical diseases such as visceral leishmaniasis, lymphatic filariasis, dengue, malaria and reduce mortality due to acute encephalitis syndrome. We are now expanding our efforts to tackle the challenges posed by Viral Hepatitis in India. We are working towards strengthening the evidence base and knowledge repository for Viral Hepatitis. With “PWID and HCV” as our first Hepatitis C focused initiative, we will continue to expand our efforts to support decision making in the region.

Neeraj Jain

Country Director – India

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Purpose

The purpose of this action brief is to review and discuss the current situation of Hepatitis-C Virus (HCV) among People Who Inject Drugs (PWID) in India. Further, this action brief would provide potential strategies in strengthening HCV screening, confirmatory testing, treatment initiation, and treatment completion among PWIDs in India.

Approach

A review of literature on present status of HCV among PWIDs in India was conducted using key words such as, “PWID or injecting drug users (IDUs) and HCV or Hepatitis-C and India”. In addition to global guidelines and technical reports, the review included peer-reviewed articles published on PWID and HCV between 2010 to 2022 and available for free public access. The search specifically included specific Indian states namely Tamil Nadu, Punjab, Mizoram, Manipur, Nagaland, Maharashtra, Uttar Pradesh, Delhi, and Haryana. The states were chosen based on the size of PWID population, IDU, and Human Immunodeficiency Virus (HIV) epidemic. The review covers four thematic areas related to HCV - (1) awareness, (2) prevention, (3) testing, and (4) treatment. The final section of this brief discusses the challenges of HCV intervention among PWID and potential solutions.

Context

Globally, around 11 million PWIDs bear the brunt of key infectious diseases, especially with HIV. They contribute to nearly 10% of new HIV infections and 23%-39% of new HCV ⁽¹⁾ infections. Although HIV prevalence reduced in India from 13.15% in 2003 to 6.26% in 2016 largely due to systematic approach of the National AIDS Control Program (NACP), it still remains highest among HIV-associated high-risk groups ⁽²⁾. Furthermore, during the same period, the prevalence of HCV grew among PWIDs, globally. In this context, WHO published a guidance on prevention of Hepatitis B & C infection among PWIDs ⁽³⁾.

Current scenario in India

The Government of India, realizing the importance of addressing the Viral Hepatitis epidemic, launched the National Viral Hepatitis Control Program (NVHCP) in 2018. The goal of this program is to eliminate Viral Hepatitis across the country by 2030, by enhancing community awareness, early diagnosis, management of Hepatitis at levels of health care, develop standard diagnostic and treatment protocols, strengthen infrastructure, build capacity of existing human resources, develop linkages with existing national programs, and develop a web-based Viral Hepatitis information and management system ⁽⁴⁾.

“ There is a long way to reach the 2030 goal of ending Viral Hepatitis as a public health threat. The aim is to strengthen strengthening programs and improve access to PWID for HCV prevention, diagnostic, and treatment services. As many of those infected with Hepatitis C are unaware, they may go undiagnosed and untreated, posing a risk of further transmission. HCV poses a major threat to public health and economic and social crises. No one should die with a treatable/curable disease or get an infection, which is preventable. ”



About Mere
President, Indian Drug Users' Forum

In India, HCV prevalence is 0.32% (0.08%-1.16%) among general population as per the National Family Health Survey-IV ⁽⁴⁾. However, literatures indicate that there is regional- and population-wise disparity in the prevalence. For instance, studies in Uttar Pradesh (2.3%, N=9340 ⁽⁵⁾; 77%, N=177 ⁽⁶⁾) and Haryana (21%, N=7114 ⁽⁷⁾) have reported high HCV prevalence. Similarly, PWID report to have high HCV prevalence, with one study in Mizoram reporting 71%, N=143 ⁽⁸⁾, while a multi-city study reporting 37.2% (N=14447) as HCV prevalence ⁽⁹⁾. It was observed that HCV is driven by injecting drug use and the

associated injecting behaviors. A review article on HCV among prison inmates reported 67% (2206/3291) prevalence, with 10% of the prison inmates reporting injecting drug use ⁽¹⁰⁾. Table 1 is presented with key articles, in the context of PWIDs awareness on HCV, testing, treatment, and the associated challenges.

Table 1. Studies demonstrating the status of HCV among PWID in India

Source	Study sites	Sampling	Year of the study	Sample size	Key findings
Panda et.al, (2013). Alarming epidemics of Human Immunodeficiency Virus and Hepatitis C virus among injection drug users in the northwestern bordering state of Punjab, India: Prevalence and correlates. International journal of STD & AIDS. 25. 10.1177/0956462413515659.	Five cities of Punjab: Amritsar, Taran Taran, Batala, Jalandar, Ludhiana	Random sampling	Sep – Dec 2010	1,155	<p>49% (563) HCV-Ab (Antibody) prevalence. Among HCV-Ab individuals 88% were alcohol users, ranging from every day to 1-3 times a month.</p> <p>Living in Amritsar, Batala, Jalandhar, never attended school, length of time of injecting drugs, frequency of daily injection, ever sharing syringes-needles, not receiving a regular supply of syringes and needles from NSEP (Needle-Syringe Exchange Programme) were associated with HCV-Ab.</p>
Solomon SS et.al. (2017). Respondent-driven sampling for identification of HIV- and HCV-infected People Who Inject Drugs and men who have sex with men in India: A cross-sectional, community-based analysis PLoS Med 14 ⁽¹¹⁾ : e1002460.https://doi.org/10.1371/journal.pmed.1002460	26 Indian cities	Respondent driven sampling	Jan – Dec 2013	14,450	<p>92.4% (N=5777) were unaware of their HCV positive status.</p> <p>Cost for identifying one individual is US\$50 (INR 3990), whereas it is US\$11 (INR 878) for conducting along with HIV.</p>

S.S. Solomon et.al. High burden of HCV disease and poor access to HCV services among in India: A cross-sectional study among 14,481 drug users across India. Lancet Infect Dis. 2015 Jan; 15(1): 36–45. doi:10.1016/S1473-3099(14)71045-X	15 cities in India	Respondent driven sampling	Jan – Dec 2013	14,481	<p>7% (1272/14450) were ever tested for HCV. 50% never heard of HCV and cited it as the reason for not getting tested.</p> <p>Low risk perception for HCV (73%, 4374/6047); 14% (937/6047) did not know the place to get tested.</p> <p>HCV prevalence among ever tested was 62% (869/1272), while it was 35% (4635/12340) among those never tested.</p> <p>34% (2086/ 5777) reported hazardous alcohol use, while 50% (1082/2086) of them were alcohol dependent.</p> <p>Of 5,777 HCV-Ab positive, 440 (5.5%) were aware of their status, 225 (3.0%) had been to see a doctor for their HCV (linked to care), 79 (1.4%) had taken HCV treatment and 18 (0.4%) had undetectable HCV RNA (Ribonucleic Acid) at the time of the survey, while 26% reported of taking treatment.</p>
Sogarwal et al. Predisposing, enabling, and need factors associated with utilization of HCV testing services among PWID in two settings in India. Hepatology, Medicine and Policy (2016) 1:1DOI 10.1186/s41124-016-0010-z	Imphal, Manipur and Amritsar, Punjab	Consecutive sampling from NSEP facilities	Apr – Jul 2015	1,241	<p>24% (298) were tested for HCV.</p> <p>HCV testing associated with formal education, currently married, not using alcohol or injecting drugs in last one month, residents of Imphal, individuals not reported condom usage in last one month, those reported high mobility in last one month and those who are injecting drugs for ≥11 years.</p>
E.U. Patel et.al. Hepatitis C care continuum and associated barriers among People Who Inject Drugs in Chennai, India Int J Drug Policy. 2018 July ; 57: 51–60. doi:10.1016/j.drugpo.2018.03.023.	Chennai	Convenience sampling	Mar 2015 – Aug 2016	541	<p>28% (152) HCV mono-infected; 11% (61) were co-infected with HIV.</p> <p>92% of HCV mono-infected and 43% of co-infected individuals were on ART (AntiretroViral Therapy).</p> <p>53% of HCV mono-infected individuals were aware that HCV was curable, but not so among HIV-HCV co-infected.</p> <p>Co-infected patients have concerns about HCV interferon treatment.</p>

“ Due to the COVID-19 pandemic, NVHCP have suffered a major setback. Despite challenges, the program took measures to ensure possible support, such as developing communication channels with community members, state nodal officers and national team via state level meetings (virtually) during lockdowns. Yet, challenges remain - expansion of program, engagement of the community members (key populations) into the program, infra-structural barriers, capacity-building and stockouts. The way forward is active engagement with community members especially PWID for Hep C, ensuring functional governing systems and expansion of infrastructure. There is need to have more research on Viral Hepatitis, developing key population specific communication material and exploring options or providing choices like dual test kits, HCV Self Testing Kits etc. ”



Yashwinder Singh
Member, Viral Hepatitis National Committee

prevention interventions for PWIDs needs further strengthening through initiatives, such as strengthening ongoing NSEP with provision of drug cooking & injecting accessories, including, vessels, cotton and swabs. In addition, there is global evidence recommending usage of zero dead space syringes to reduce HCV transmission ⁽¹²⁾. Further, awareness on proper disposal of used needle and syringes and other accessories should be provided.

“ At present, Hepatitis C is one of the key health concerns of the PWID community in India. It is very critical to address Hepatitis C diagnostic and treatment issues pertaining to the PWID community. As Hepatitis C screening is inexpensive and treatment is affordable, it is the best time for all stakeholders working with PWID to come together and address the situation so that the community could be better-informed, at-risk population could be screened early and identified positive cases could be linked with the treatment. This will not only prevent the new infection among PWID but also ensure early treatment of infected persons. ”



Dr. Rajesh Kumar
Director, Society for Promotion of Youth and Masses

Way forward

1. Increase awareness of HCV, encourage knowledge of one's HCV status

Overall, there is a lack of knowledge and awareness about HCV among PWID as a potential treatable infection, in addition to poor awareness about their HCV status. The lack of HCV awareness was observed as a result of low-risk perception towards HCV. A structured awareness program among PWIDs as part of their ongoing programs such as Opioid Substitution Therapy (OST), Needle Syringe Exchange Program (NSEP) could be beneficial for the community.

2. Strengthen prevention interventions

The present prevention activities among PWIDs are predominantly developed and implemented in the context of HIV, although HCV is known to be more infectious and more virulent than HIV. Hence, HCV

3. Increased HCV periodical screening and confirmatory testing

Periodical screening for PWIDs is recommended through the existing facilities such as OST facilities, as the community is not aware about the other available testing facilities. In addition, information on HCV testing facilities should be made available at service facilities which are presently and predominantly accessed by PWIDs. WHO has also recommended point-of-care testing for PWIDs, which may be adopted and scaled up.

“ Over the years, India has made substantial progress in addressing the concerns related to injecting drug use and associated consequences like HIV. However, the fact remains that HIV prevalence among PWIDs is still highest among all high-risk groups. On top of that, high HCV prevalence among PWID is a cause of worry. Clearly, we need both – doing something new and doing it at a much larger scale. However, our programs and interventions must be based upon the principles of scientific evidence-base, sustainability and engagement of affected communities. ”



Dr. Atul Ambekar
Professor, National Drug
Dependence Treatment Centre, All
India Institute of Medical Sciences

4. Ensuring treatment initiation and completion

Considering the challenge of initiating and completing the 12-week treatment, WHO recommends HCV testing and treatment at harm reduction facilities and prisons. Establishing treatment at these facilities along with treatment adherence counselling would ensure increased uptake of HCV treatment. An alternative strategy could be community-based DOT (Direct Observed Therapy) strategy or peer-group supported strategy as it could help in successful completion of HCV treatment completion among this community.

Problems/ Issues Identified	Potential Solutions
Low awareness on their HCV Status (5% of those infected were aware of their HCV positive status) ⁽¹²⁾	<ul style="list-style-type: none"> ● Increase awareness activity on the importance of getting tested for HCV ● Make HCV screening and confirmatory test accessible
High HCV prevalence, reflecting high transmissibility (Prevalence is 1.5-2 times higher than HIV) ⁽¹³⁾	<ul style="list-style-type: none"> ● Increase awareness on HCV transmission routes ● Enable HCV prevention tools and strategies, such as Needle Syringe Exchange Program, no sharing of Needle/Syringe (N/Sy) and other utensils
HIV positive status increases awareness of HCV status and high co-infection of HIV-HCV ⁽¹⁰⁾	Integrate HIV and HCV services
More than 25% of the HCV positive individuals were hazardous alcohol users ⁽¹⁰⁾	Alcohol related counselling and treatment as part of HCV treatment management
High chance of re-infection ⁽¹⁴⁾	Make HCV interventions as part of harm reduction (OST and NSEP) programs
Low knowledge on HCV treatment / fear of HCV treatment among HIV-HCV co-infected PWIDs ⁽¹⁵⁾	Address HCV treatment literacy
Low willingness in treatment uptake, varies between only HCV and HCV-HIV co-infected ⁽¹⁵⁾	Strengthen post-test counselling, psycho-social support
Treatment Adherence ⁽¹⁰⁾	Field-based Direct Observed Therapy (DOT), would be more appropriate than facility-based DOT

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