

Scope & Challenges of Hepatitis C Virus (HCV) Management Among PWID (People Who Inject Drugs) in Manipur, India – A Review

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Abstract

Hepatitis C virus (HCV) infection is a recent alarming public health issue worldwide and the prevalence of HCV infection is higher in high-risk populations, including patients undergoing haemodialysis (HD) or repeated blood transfusions. To be specific the Seroprevalence of Hepatitis C was highest in group in the region of Manipur, Mizoram and Nagaland. PWID are particularly high risk of infection with hepatitis C virus (HCV). The HCV/HIV co-infection among PWID in Manipur was very high. Risky injecting practices were more common among younger PWID and while unprotected sex was more common among older PWID. The prevalence of hepatitis C virus (HCV) infection among people who inject drugs (PWID) in Manipur is 64.9% and contrarily the access to HCV care amongst this vulnerable population is poor. Identification, targeted intervention, co-infection management, promotion of HCV testing and treatment through community settings could contain the menace.

Key Words: HCV, PWID, targeted intervention, co-infection management

Introduction

Hepatitis C virus (HCV) infection is a major public health problem worldwide, with more than 52 million people having been exposed¹. HCV disproportionately affects vulnerable and socially marginalised populations in low- and middle-income countries (LMICs), including people who inject drugs (PWID) and people living with HIV (PLHIV). In 2016, the World Health Organization (WHO) launched a strategy for the elimination of viral hepatitis by 2030. As per World Health Organisation (WHO) excellent progress has been made towards achieving the targets, with more than 9.4 million people treated globally since 2015; however, it is estimated that 21% of infected individuals have been diagnosed with 62% of these on treatment. Of those infected with HCV, about 75 per cent become chronically infected, and of these, 7-18 per cent will develop cirrhosis over a 20-year period and be at risk of hepatocellular carcinoma (1-6% per year) or liver failure (2-3% per year). Thus, improving access to HCV services, including simplified, decentralised care to key population, will be critical if the elimination targets are to be reached by 2030.

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Objectives

This paper aims to analyse the prevalence of HCV in India especially in Manipur state with a view to promote an understanding and a caution about the newly spread HCV and its burgeoning due to PWID. It also intends to look into the scope and challenges along with the available interventions by various agencies and to suggest future care, support and intervention strategies involving community participation.

Hepatitis C Virus (HCV) in India

The estimated prevalence of HCV infection in India is between 1% and 1.9%ⁱⁱ totalling approximately 12–18 million people infected with HCVⁱⁱⁱ and accounting for a significant proportion of the global HCV burden. The prevalence of HCV infection is higher in high-risk populations compared with the general population, including patients undergoing haemodialysis (HD) or repeated blood transfusions (e.g. patients with thalassemia major), healthcare workers (HCWs) and particularly in PLHIV and PWID. Mehta et al. (2010) reported the seroprevalence of HCV to be 13% among the 2.1 million PLHIV and 55% in PWID^{iv}. National seroprevalence of Hepatitis C was 0.32% (0.28- 0.36) as per the factsheet 2021 of Seroprevalence of Hepatitis B and C among general population (Based on National Family Health Survey-4). The Seroprevalence of Hepatitis C was highest in group 7 [1.68% (1.31-2.16)] in the region of Manipur, Mizoram and Nagaland^v

People who inject drugs (PWID)

In line with programmatic and epidemiological perspective, it is recommended that for this purpose the definition of PWID population should aim to represent people who engage in High-risk behaviours. The definitions adopted under the targeted interventions of the National AIDS Control Programme have been in line with these objectives. Table 1 summarizes the various definitions used under the programme and surveillance, vis-à-vis United Nations definitions.

Table 1

<i>UN Definition</i>	Men or women who have injected any time within the previous 12 months (not including for medical purposes).
<i>Targeted intervention definition (NACP)</i>	Injecting drug users are defined as those who used any drugs through injecting routes in the last three months.
<i>HIV sentinel surveillance definitions (NACP)</i>	Men and women, 15-49 years old, who use addictive substances or drugs for recreational or non-medical reasons, through injections, at least once in the last three months

The term HRG refers to a group of people who are at increased risk of being exposed to HCV because they frequently engage in risky behaviour rather than the individual identity. The other critical consideration while defining the population is the frequency and duration of the behaviour to be considered as a significant exposure for HCV transmission.

Hepatitis C Virus (HCV) among PWID

The national level estimation of People who inject drugs is 1,63, 162 as per National level High Risk Group (HRG)^{vi}. PWID are at particularly high risk of infection with hepatitis C

virus (HCV), which is transmitted via exposure to infected blood during the act of injecting, not only through sharing needles and syringes but also other injecting equipment such as filters, spoons, mixing pots and swabs. The prevalence of HCV infection among PWID is higher than that in HIV positive individuals because HCV is more efficiently transmitted from one person to another, and the pool of infected peers is generally large^{vii}.

Targeted intervention in HCV must include PWID, who are key drivers of HCV epidemics around the world. In 2015, it was estimated that there were 15.6 million PWID globally, of whom 8.2 million were HCV antibody-positive and 6.1 million had chronic HCV infection requiring treatment^{viii}. The average annual prevalence of opiate consumption of South Asia was 0.4% in 2006. India faces a unique challenge, located as it is, adjacent to the largest heroin-producing region globally, known as the 'Golden Triangle'. India is home to the largest number of opioid users globally (approximately 3 million), according to the United Nations Office of Drugs and Crime (United Nations Office on Drugs and Crime, 2008).

Hepatitis C Virus (HCV) among PWID in Manipur

Manipur (with around 3 million populations) is a state in Northeast India, with the city of Imphal as its capital. It is bounded by the Indian states of Nagaland to the north, Mizoram to the south and Assam to the west. Manipur is one of the Northeast states in India an ethnically distinct and geographically isolated part of the country. Manipur has the highest burden of injectable drug use of any state in India. The estimated size of the PWID population is 21,000. Risky injecting practices were more common among younger PWID and while unprotected sex was more common among older PWID^{ix}. The prevalence of hepatitis C virus (HCV) infection among people who inject drugs (PWID) in the Manipur capital, Imphal, is 64.9%^x; however, access to and uptake of HCV care amongst this vulnerable population is poor, largely due to economic barriers faced by PWID.

Challenges in HCV Management among PWID in Manipur

There are many barriers confronting people, who have in the past or currently inject drugs, from accessing healthcare, including stigma and discrimination. One of the main barrier in availing HCV testing and treatment is the lack of symptoms associated with HCV meant the infection was not seen to be an issue that needed to be addressed urgently. Access to HCV testing and treatment services at periphery level is limited due to insufficient diagnostic infrastructure in the state of Manipur. HCV program in the state is yet to start on peer driven strategies. Lack of concentrated effort to build the capacity of the community health care workers to identify people at risk, offer testing and develop proficiency in initiating DAA treatment is limited.

Need for targeted interventions

Community Based Organisations (CBOs) and Non-Government Organisations (NGOs) to continue to implement prevention care and support services delivery towards better management of behaviours related to Injecting drug practices to achieve desired goals of elimination of HCV among PWID. The ongoing harm reduction activities to continue to provide comprehensive health care at community settings in relation to management of HIV, HBV, HCV and STI. It is important to establish and sustain enabling environment to increase access to diagnosis and treatment at community settings considering the intrastate travel

challenges in the state of Manipur. There are ongoing pilots which can provide a way forward towards strengthening community-based HCV intervention. Planning, implementation and monitoring of impact of programmes and will also help in the design of differentiated programmes targeting PWID populations based on their specific needs in relation to HCV management.

Promotion of HCV testing and treatment through peers who availed services and address negative perceptions about the treatment, the success and ease of DAAs to motivate and encourage their peers to access treatment.

To maintain momentum, PWID supported through community awareness campaign to encourage people with, or at risk of, HCV to access health services for testing and treatment in uninterrupted manner.

- Advocacy and community engagement with support of opinion leaders.
- Psychosocial support to PWIDs and their families
- Adopt destigmatized approaches both in community and health care settings

HCV and HIV Coinfection management among PWID

It is estimated that approximately 15 per cent of people infected with HIV are co-infected with HCV^{xi}. HCV/HIV co-infection can accelerate the progression of hepatitis C^{xii}, and co-infected people have shorter life expectancy than those with HIV alone^{xiii}. HIV/HCV co-infection complicates anti-retroviral therapy (ART) for treatment of HIV infection, as several anti-retroviral drugs are poorly tolerated by co-infected patients. Early detection of co-infection is optimal so that HCV treatment can be commenced before initiation of ART^{xiv}.

The new pan genotypic direct acting antivirals (DAAs) are more effective, can treat more HCV serotypes, are administered orally for a shorter duration of treatment 12 to 24 weeks, and have limited side effects. However, it is to be scaled up and made access to life saving treatment to all PWIDs to sustain the impact created in smaller population.

Conclusion

Recently conducted pilot interventions have demonstrated that fully decentralised community centric model of HCV care for PWID resulted in better retention compared with retention in non-community centric (Hospital/Health institution) model. The HCV/HIV co-infection among PWID in Manipur was very high, it demands the urgent need for effective prevention, diagnosis and treatment program implementation through community settings. It is also expected that the program managers will explore similar community centric models while planning and implementation of the HCV prevention, care, support and treatment activities among PWID in Manipur and other regions of the country.

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