

# A new challenge for the Mexican health system: hepatitis C in people who inject drugs

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Injecting-drug use is present in 179 of 206 countries worldwide, with human immunodeficiency virus (HIV) and hepatitis C virus (HCV) prevalence of 17.8% and 52.3%, respectively, among the 15.6 million people who inject drugs (PWIDs) (Degenhardt et al., 2017; Platt et al., 2016). This epidemic produces a high impact on global public health by increasing days lost associated to disability, morbidity, and mortality (Degenhardt et al., 2017).

For that reason, international recommendations point out that the integration of comprehensive programs for harm reduction in PWIDs with diverse strategies at multiple levels of action increase success. Recommended strategies include: a) needle/syringe programs; b) opioid replacement therapy; c) HIV testing and counseling; d) HIV treatment and care; e) condom programming; f) behavioral interventions; g) prevention and management of viral hepatitis, tuberculosis, and mental health conditions; h) sexual and reproductive health interventions; i) provision of naloxone and training in overdose prevention for the PWIDs (Stancliff, Phillips, Maghsoudi, & Joseph, 2015); and j) drug consumption rooms (European Monitoring Centre for Drugs and Drug Addiction, 2018). Despite the impact of injected drugs worldwide, effective harm reduction programs to prevent their spread are limited in many countries (Wilson, Donald, Shattock, Wilson, & Fraser-Hurt, 2015).

In Mexico there are about 110,000 PWIDs and about only 2,700 only registered in the addiction treatment system. Additionally, 4% reported HIV and around 90% of HCV (CONADIC, 2017; Horyniak et al., 2017; Fleiz-Bautista et al., 2019).

In response to this need for medical care, since 1994 CENSIDA has progressively implemented harm reduction programs. According to CENSIDA data, this institution founded 31 projects on harm reduction between 2011 and 2017 in PWIDs (Magis-Rodríguez, García-Sánchez & Marín-Navarrete, 2018). Nineteen projects of them were implemented with NGOs where more than 44,444 participants have benefited directly and 22,468 indirectly, with an investment of approximately 23 million MXN. In the last three years, CENSIDA subsidized 12 projects with an investment of 9.5 million MXN (Magis-Rodríguez et al., 2018).

Many lessons have been learned in the last thirty years about harm reduction in Mexico, such as the implementation programs of needle/syringe, HIV testing and counseling, HIV treatment and care; condom programming; sexual and reproductive health interventions; and opioid replacement therapy. For instance, research data reports that about 220 HIV infections are prevented annually through the provision of needle/syringe programs, with an average cost of \$15,000 MXN for each avoided infection, which represents 50% of antiretroviral therapy (ART) and significant savings (Valenzuela-Lara, Ponce-Ramos, Ruiz-Herrera, & López-González, 2019).

However, much remains to be done to achieve a full program of strategies of harm reduction according to international recommendations such as: behavioral interventions; treatment for mental health conditions; provision of naloxone; training in overdose prevention; drug consumption rooms; drug-checking in nightlife settings; and special programs for women and for people in prisons (Magis-Rodríguez et al., 2018). Harm reduction is a polemic and controversial paradigm to prevent and treat PWIDs. Nevertheless, scientific

evidence has shown its usefulness as a tool for complementing strategies to combat the epidemic of blood-borne viruses such as HIV and HCV.

In the last decade, the HCV has played an important role in harm reduction programs around the world, since the probability of infection in PWIDs is elevated. Likewise, it is known that HCV infection is asymptomatic in most cases, and then many years after the infection, leading to fatal outcomes associated with hepatic failure (Noe et al., 2017).

Until a few years ago, the treatment available for hepatitis C, consisted of interferon and ribavirin protocols, which aimed at attenuating the virus attack by modulating the immune response. However, this treatment had several adverse effects and an effectiveness rate of less than 65%. Currently, there are direct-acting antiretroviral treatments for which the goal is to eliminate the virus from the body with an effectiveness rate of more than 95% depending on the genotype and co-infections. Nevertheless, high costs represent one of the main access barriers (Nápoles et al., 2019; Xue et al., 2019).

The HCV it is a strong and resistance virus to the environment, added to its asymptomatic characteristic, generates the conditions conducive to transmission in PWIDs who share consumption utensils (Salmon-Ceron, Arends, Leoni, Solas, & Peytavin, 2019).

Given this background, a main challenge of harm reduction programs is to contribute to the prevention, treatment, and eradication of hepatitis C in our country, where the following are main needs:

a) Inclusion of rapid tests for HCV. Currently, the use of rapid tests for HCV is almost limited for public prevention programs for PWID. b) Supply universal treatment with direct antiretrovirals. This point constitutes one of the public policy challenges, since the cost is usually covered by the people affected and exceeds \$78,000 MXN, without considering additional costs (laboratory and cabinet studies). c) Increasing coverage of specialized treatment units. Currently, there are few hospitals certified to treat people with HCV. Therefore, it is necessary to expand the coverage of treatment by including units of the CAPASIT/SAIH system in the states with the highest incidence and prevalence. d) Implementation of a reference and counter-reference system. It is necessary to generate linkage mechanisms between the STI care network and the mental health and addiction network, with the objective of simplifying patient navigation, reducing access barriers, and the eventual abandoning of treatment. e) Implementation of evidence-based psychosocial treatments. With the proposal of assistance of substance use disorders and other mental disorders, in addition to increasing adherence to ART in PWID. f) Standardization reduction programs into the community. Standardizing the procedures of harm reduction in PWIDs for the detection, orientation, reference, and linking to public services.

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