# Prospective evaluation of an outsourced HepHIV 2023 consultation model specialized with educational intervention to reduce reinfection by the hepatitis C virus in a harm reduction center

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## Introduction

Since 2018, the Hospital Clínic of Barcelona collaborate with the Catalunya Health Department and the other national health institutions in an outsourced Hepatology consultation model at the harm reduction center (REDAN) of La Mina, Sant Adrià del Besos, of the Parc de Salud Mar of Barcelona, in the project "Outsourced model for screening and access to treatment against hepatitis C, in the largest harm reduction center in Barcelona" Due to the high rate of reinfection (>25% in FU12), we intented to analyze an intensive and structured educational intervention strategy for people who inject drug (PWID) who started treatment with direct acting antivirals (DAA).

## **Objective**

The aim of the study is to evaluate a structured intensive intervention strategy ("Staying Safe Intervention" 2) to reduce the risk of HCV reinfection in people who inject drugs (PWID) and receive antiviral treatment. The secondary aims were to evaluate the effectiveness of the educational strategy in possible changes in the frequency of consumption and risk behaviors.

## Methods

### Phase 2 Phase 1: Intensive and structured educational "Peer education" intervention strategy "Staying safe **Objective:** intervention"2 Train "Expert **Objective:** Increase effective preventive actions Patients" and habits against infection in PWID **Inclusion:** receiving HCV therapy **Inclusion: HCV-RNA** - (> 1 PWID (>5 years) year) HCV-RNA + PWID (>3 years) Accept DAA treatment Residents, not "passing through" Methodology: Informed consent - 4 sessions of 90 -Methodology: 120min.\* - Groups of 4-5 persons. - Economic incentive - 4 sessions of 90 -120min. 1 per week. \* for each visit - Economic incentive for each visit/session

## Phase 3

### Evaluation of the results obtained from the intervention

- Sustained Virological Response Evaluation (SVR): HCV-RNA - at 12 weeks post-treatment (FU12)
- Phylogenetic analysis in case of non SVR to differentiate "reinfection vs relapse"
- Evaluation of the effectiveness of the educational intervention

\*Content of the training workshops: 1st Session: Evaluation of knowledge on HCV transmission during drug injection 2nd Session: Injected consumption rituals and how to avoid cross contamination 3rd Session: Threats to safe injection 4th Session: Think strategically and plan. Steps to move forward

## Flow chart

**Results** 

65(88%) completed 9(12%)not completed the program

28 (60%) from 1st treatment 11 (23%) from 2nd treatment 8 (17%) from 3rd treatment

162 (55%) PWID HCV-RNA+

301 PWID HCV-RNA

screened

74 (45% of the HCV-RNA +) PWID Included in the educational program

47 (64%) evaluated 31 SVR in FU12,

HCV-RNA - (66%)

139 (45%)PWDI HCV-RNA -

88 (52%) not starting: - Don't want / don't have time - Exclusion criteria

27 (36%) not evaluated: - 5 (19%) pending to FU12

- 20 (74%) lost - 2 (7% )exitus

16 (44%)HCV-RNA +

Reinfection rate

13 (65%) started retreatment DAA

7 (54%) evaluated

3 HCV-RNA - (43%)

8 (44%) after 1st tm 8 (44%) after 2nd tm 4 (2%) after 3rd tm

7 (35%) not started retreatment

6 (46%) pending 4 (57%) HCV-RNA +

Reinfection rate in

retreatment

## **Conclusions**

An intensive and structured educational intervention focused on risk factors for HCV acquisition including "Expert Patient Trainers" did not result in a reduction in the reinfection rate, nor changes in frequency of use or exposure to the drugs, risk factors for contagion in a population with extreme characteristics of structural vulnerability. Our results highlight the need of improving and personalizing harm reduction strategies in order to avoid HCV transmission, especially in PWIDs who have already been reinfected in the past.

1.Lens S, Miralpeix A, Gálvez M, Martró E, González N, Rodriguez-Tajes S, Mariño Z, Ibánez N, Saludes V, Reyes J, Major X, Colom J, Forns X. Externalized HCV linkage-to-care cascade in the biggest harm reduction center in Barcelona: approaching a high-risk PWID population. European Association for the Study of the Liver, ILC 2020.

2. Mateu-Gelabert P, Gwadz MV, Guarino H, et al. The staying safe intervention: training people who inject drugs in strategies to avoid injection-related HCV and HIV infection. AIDS Educ Prev. 2014;26(2):144-157. doi:10.1521/aeap.2014.26.2.144



















