

# Models Of Care For The Management Of Hepatitis C Among People Who Inject Drug In Southern Switzerland: Role Of Nurses

Finessi V<sup>1</sup>, Borojevic M<sup>2</sup>, Messina P<sup>3</sup>, Nottaris A<sup>1</sup>, Rudel G<sup>1</sup>, Moriggia A<sup>1,2</sup>

<sup>1</sup>Epatocentro Ticino SA, Lugano, Switzerland, <sup>2</sup>Ingrado Servizi per le Dipendenze, Lugano, Switzerland <sup>3</sup>Fondazione Epatocentro Ticino, Lugano, Switzerland

## Background

People who inject drugs (PWID) represent a population that for several aspects find obstacles to access to Hepatitis C treatment. Definite discriminating barriers exist both on the part of caregivers and patients. Discriminating factors for patients can be lack of information regarding the illness and the possibilities of care. Many patients are convinced that treatment is not effective. Many do not recognize themselves as ill and do not want to undergo treatment. Others prefer

to first undergo a detox protocol and to postpone later HCV treatment. A chaotic lifestyle reflects negatively on treatment's results due to lack of adherence and possibly on treatment's follow up for the risk of reinfection. On the other hand, barriers to therapy perceived by caregivers are characterized by lack of confidence and prejudice towards PWID.

Considering these aspects, we have analysed different models of care which have been implemented in order to facilitate the management and care of PWID, pointing out the relevant role of nurses.

## Methods

We compared data of 66 PWID who underwent HCV treatment through three different models of multidisciplinary care:

- **Model 1: Liver clinic** (41 patients)
- **Model 2: Addiction clinic** (21 patients)
- **Model 3: Residential center** (4 patients).

## Models of care

### Model 1: Liver clinic

HCV care happens in a specialistical context (tertiary care setting) by a dedicated nursing staff

#### Role of nurses:

- To offer direct assistance monitoring vital signs and side effects during treatment, collecting data and giving informations throughout the course of care
- To guarantee the continuity of the treatment by ensuring that the patient takes the medications regularly and shows up to visits
- To work actively on the linkage to care of patients screened and assessed for HCV
- The nursing team is experienced on the management of PWID

### Model 2: Addiction clinic

HCV care happens in combination with the substitution therapy and is managed by the nursing staff

#### Role of nurses:

- To assist the patients with their addiction problem
- To inform patients on risk of reinfection and on risky behaviors with a preventive focus
- To propose diagnostic tests and information about available therapies
- To guarantee the continuity of treatment

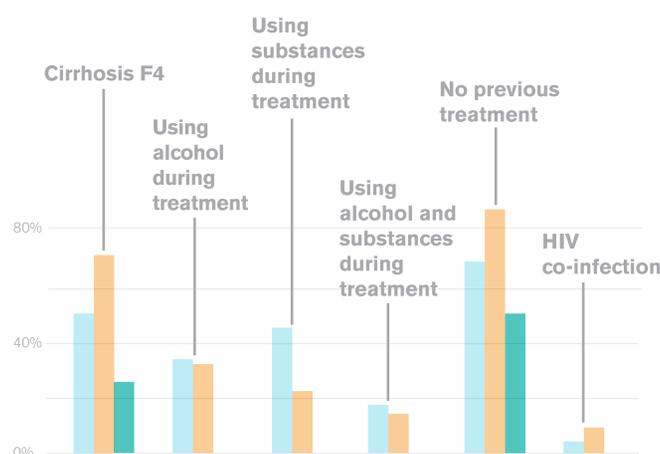
### Model 3: Residential center

HCV care happens in residential centers (as for ex. prisons or rehab centers) where PWID stay for a period of detoxification or detention

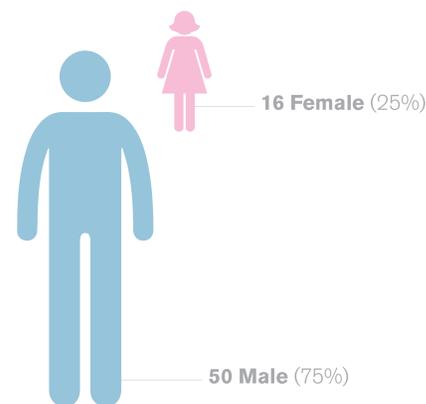
#### Role of nurses:

- To administer directly observed therapy (DOT)
- To evaluate side effects during treatment
- To guarantee the continuity of the treatment and follow ups

## Characteristics of the participants



### Gender



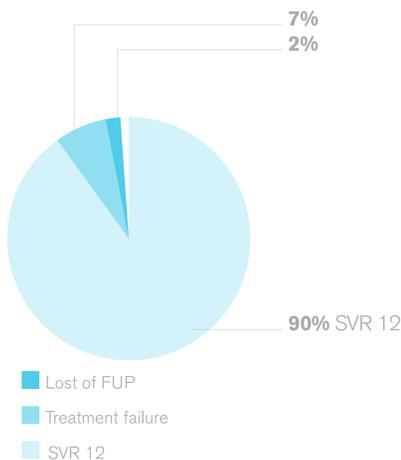
	Model 1 (41 participants)	Model 2 (21 participants)	Model 3 (4 participants)
Male	30 (73%)	16 (76%)	4 (100%)
Cirrhosis (F4)	21 (51%)	15 (71%)	1 (25%)
Using alcohol during therapy	14 (34%)	7 (33%)	0
Using substances during therapy	19 (46%)	5 (24%)	0
Using alcohol and substances during therapy	7 (17%)	3 (14%)	0
No previous treatment	28 (68%)	18 (86%)	2 (50%)
HIV co-infection	2 (4%)	2 (10%)	0

## Results

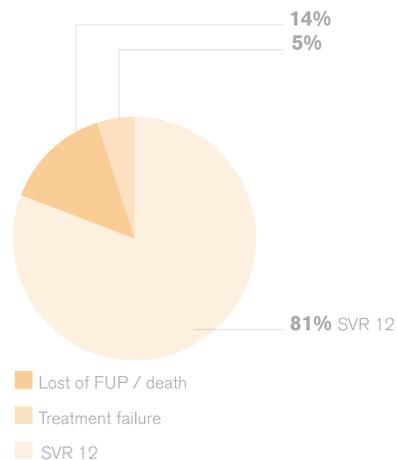
The average age of the 66 patients treated was 48 years, 16 (25%) were female and 18 (27%) already had a previous unsuccessful treatment.

The majority of patients (41) were treated according to the first model in a tertiary liver clinic with dedicated nursing staff. Of these, one was lost of follow-up, three had a treatment failure, while the rate of sustained virological response after 12 weeks of therapy (SVR12) was 90%. Twenty-one patients were treated in an addiction center (second model). Of these, two died during therapy, one was lost to follow-up, and one experienced virological failure, with a SVR12 rate of 81%. Four patients were treated as DOT in a residential center and completed the treatment with a SVR12 rate of 100%.

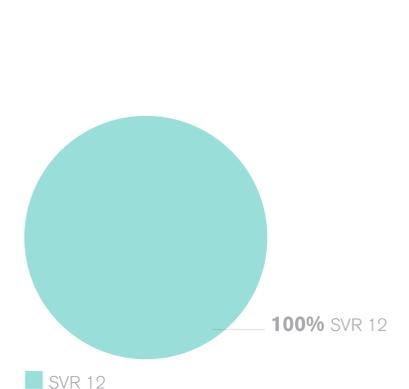
### Model 1



### Model 2



### Model 3



## Summary

Efficacy was similarly high in the three different models of HCV treatment in PWID. Model 3 with DOT seems to give better treatment results, although the small numbers are not representative. It is important to offer different care settings in order to limit the obstacles to the access to treatment among these patients. Despite the efficacy of these models, improvements

are always realizable and desirable. Possible areas of action would be: to increase nurses' education and autonomy in case management; to empower patients, involving them more in treatment goals and making them more conscious about the illness and the treatment; to increase nurses' and staff's sensitivity for PWID; to improve linkage to care and patient management during the whole course of treatment and during the follow-up period, by maintaining the continuity of care.

### EPATOCENTRO TICINO

Via Soldino 5  
6900 Lugano  
Switzerland  
+41 91 960 85 03  
epatocentro.ricezione@hin.ch