A community-based fast-track seek-test-treat program to enhance diagnosis and linkage to care for hepatitis C infection among people who inject drugs in Athens, Greece (ARISTOTLE HCV-HIV program)

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INTRODUCTION

In recent years, people who inject drugs (PWID) have become the main risk group for HCV transmission in Greece [1]. In 2016, 64% of PWID entering drug treatment programs were anti-HCV(+) [2]. In addition, there is evidence of ongoing transmission; HCV prevalence among "new" injectors (i.e. with injecting history of less than 2 years) increased from 29% in 2008 to 50% in 2015 [2].

The population of PWID in Athens is particularly affected: HIV prevalence rose to 16.5% in 2013 following an HIV outbreak [3] and 85% of those entering opioid substitution treatment programs in 2015 were anti-HCV(+) [5]. It is estimated that, in 2015, the size of the population of high-risk drug users in Athens was about 8,700. Among high-risk drug users, about 2,450 were current users, i.e. they reported injecting in the last month [4].

It is estimated that annual treatment rates with DAAs of 4%-8% would reduce HCV prevalence in this population by 46%-90% in 2030. A national treatment registry for chronic hepatitis C was set up and access to DAAs is granted through that registry. Despite the fact that treatment with DAAs is provided without restrictions since September 2018 (Box 1), treatment rates remain low in this population.

BOX 1. Access to DAAs in Greece

July 2017 → HIV-HCV coinfection or ≥F2

September 2018 → No restrictions

ARISTOTLE HCV-HIV is a program aiming to increase diagnosis and linkage to HCV care among PWID in Athens. It is actually the continuation of ARISTOTLE program which was implemented during the HIV outbreak during 2012-2013 which was successful in reaching rapidly the population, offer screening and, eventually, reduce HIV incidence [3, 5].

AIM OF ARISTOTLE HCV-HIV

To increase diagnosis and treatment for HCV and HIV infection among PWID in Athens

TARGET POPULATION

3,000 PWID in Athens
Injecting drug use in the past 12 months
≥18 years old

Here, we present the progress of the program during April 2018- December 2018

METHODS

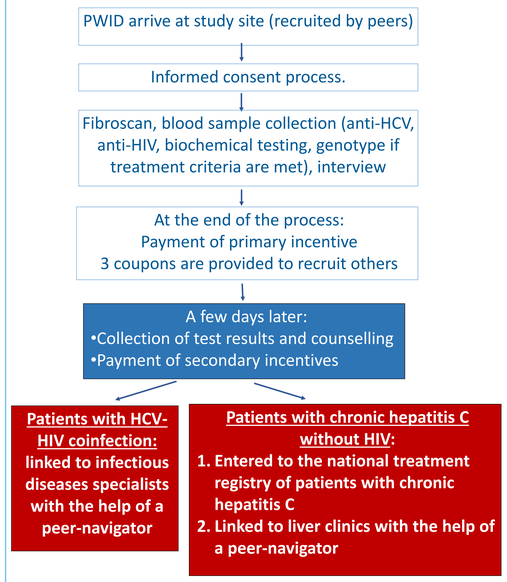
Reaching the population

PWID are recruited using chain-referral sampling with monetary incentives (Respondent-Driven Sampling). An initial number of recruits (seeds) from the target population receive coupons and are asked to draw from their existing injection networks to identify up to 3 potential recruits. Chains of recruits are thus accrued. The study site is located in the centre of Athens.

Design of ARISTOTLE HCV-HIV

ARISTOTLE HCV-HIV is designed as a "seek-test-treat" community-based program (Figure 1).

Figure 1. Design of ARISTOTLE HCV-HIV program



To facilitate linkage to care:

- All examinations are performed in the first visit to the study site
- A network of collaborating clinicians was set up
- Clinicians visit the study site and enter PWID who are eligible for DAAs to the national HCV treatment registry to obtain treatment approval (social security number is required)
- A peer-navigator accompanies patients to their first appointment with clinicians.

RESULTS

During April-December 2018 → 1,318 PWID were recruited. Their characteristics and anti-HCV, anti-HIV and HBsAg prevalence are presented in Table 1 and Table2, respectively.

Table 1: Characteristics of the participants (N=1,318 PWID)

Age (years), mean(SD)	39 (8.2)
Gender: Male	83.7%
Country of origin: Greece	85.0%
Currently homeless	27.2%
Injecting at least daily	29.7%
Main Substance of use	
Heron	61%
Cocaine	23%
Currently on opioid substitution treatment program	22.3%
Injecting drug use in the past 30 days	72.8%

Table 2. Anti-HCV, anti-HIV and HBsAg prevalence

HBsAg (+)	2.7%
Anti-HIV(+)	16.0%
Anti-HCV (+)	77.4%
HCV-HIV coinfection	15.9%

Only 3.0% of anti-HCV(+) PWID had received DAAs in the past.

During the first period of the program when treatment restriction were in place (i.e. HCV/HIV coinfection or ≥F2), 56.4% of PWID with HCV monoinfection were not eligible as they had fibroscan<7.0 kPa. Overall, and even under these treatment restriction, 5 out 10 participants (553/1318) were chronically HCV infected and eligible for treatment with DAAs (Figure 2). The distribution of HCV genotype differed between patients with HCV/HIV coinfection or HCV monoinfection (Figure 3).

Figure 2. Number of PWID who fulfil treatment criteria.

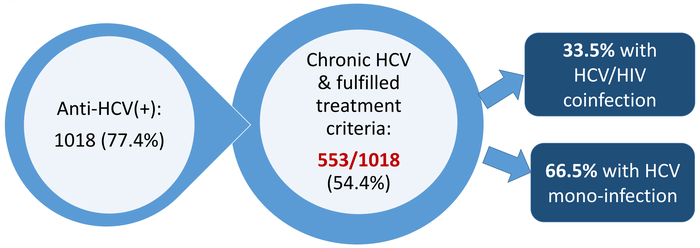
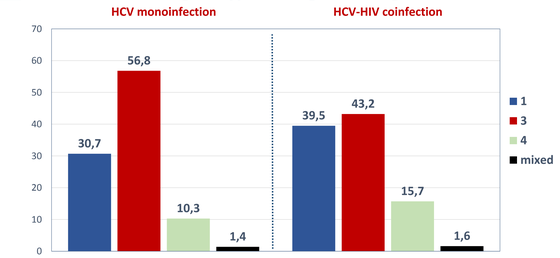
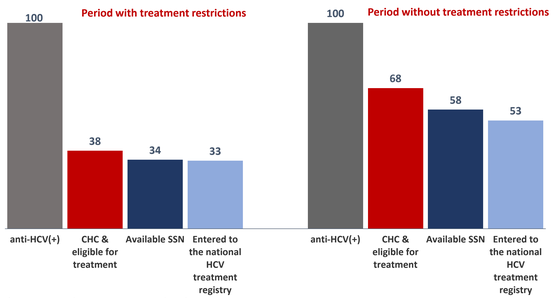


Figure 3. Distribution of HCV genotype among PWID eligible for HCV treatment



Patients with HCV/HIV coinfection were linked to infectious diseases specialists. For patients with HCV monoinfection, the following process was applied: 1) Identification of social security number and 2) Entry of patient' data to the national treatment registry on site using the information collected during the program (fibroscan, genotype, other lab results and social security number) (Figure 4). This process is ongoing.

Figure 4. Steps towards linkage to HCV treatment for anti-HCV(+) patients (without HIV) during the periods with and without treatment restrictions



(SSN:Social Security Number)

CONCLUSIONS

- Community-based peer-driven chain referral allowed to reach rapidly a large number of a population most in need: active PWID not linked to OST.
- In the presence of treatment restrictions, approximately 4 out of 10 PWID with HCV monoinfection were eligible for DAAs; this increased to 7 out of 10 when restrictions were removed.
- The majority of patients fulfilling treatment criteria were entered in the national treatment registry and efforts to issue social security numbers for the remaining is ongoing.

REFERENCES

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