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Ongoing Transmission of HCV Infection in Community Recruited People Who Inject Drugs in Athens, Greece (2018-2020)

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BACKGROUND

- An outbreak of HIV infection occurred among People Who Inject Drugs (PWID) in Athens, Greece, in 2011
- High levels of HCV transmission were documented.
- However, there is no available data about incidence in this population in the recent years.
- In 2018 a community-based program using Respondent Driven Sampling (RDS) was introduced, in Athens, Greece. ("ARISTOTLE HCV-HIV")

OBJECTIVE

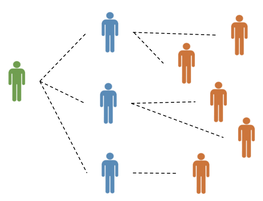
To estimate HCV incidence during April 2018-February 2020 in a sample of community-recruited PWID in Athens, Greece.

METHODS

ARISTOTLE HCV-HIV
"seek – test – treat" program

April 2018 – February 2020

Respondent Driven Sampling



ARISTOTLE HCV-HIV was implemented in two recruitment rounds

Round A	**Round B**
April 2018-February 2019	August 2019-February 2020
N = 1,365	N = 578

PWID could participate in both rounds (only once in each round)

1,634 unique participants
18.9% participated in both rounds

Participation included interviewing, HCV/HIV testing and counseling.

We assessed anti-HCV prevalence at first participation among "new injectors" (≤2 years injecting drug use) as a crude proxy for incidence.

We also estimated HCV incidence from 55 initially seronegative PWID who participated in both rounds. The seroconversion time was estimated using the midpoint between last negative and first positive test dates.

RESULTS

Table 1: Participants' characteristics as assessed in the first participation in ARISTOTLE HCV-HIV program, Athens, Greece (2018-2020)

	N = 1,634
Age (years), mean (SD)	39.2 (8.3)
Male gender, n (%)	1,366 (83.6)
Greek nationality, n (%)	1,376 (84.2)
Currently homeless, n (%)	437 (26.7)
Injection in the past 30 days, n (%)	1,223 (74.8)
Not linked to opioid substitution treatment, n (%)	1,255 (76.8)
New injectors (≤2 years injecting drug use), n (%)	125 (7.7)

Table 2: Prevalence of anti-HCV among "new" injectors as assessed in the first participation in ARISTOTLE HCV-HIV program, Athens, Greece

Number of new injectors	Anti-HCV (95% CI)
125	39.2% (30.6% – 48.3%)

Table 3: HCV incidence from 55 initially seronegative PWID who participated in both rounds of ARISTOTLE HCV-HIV program, Athens, Greece

Number of seronegative PWID with two samples	Seroconversion	HCV Incidence *(per 100 person-years)*
55	9	13.8 (7.2 – 26.5)

CONCLUSIONS

In a sample of high-risk PWID (current injectors, not linked to opioid substitution treatment) in 2018-2020, 4 out of 10 became HCV infected within the first 2 years of injecting drugs. This is slightly lower as compared to a previous estimate for 2012-2013 (49.9%; 95% CI: 45.0%-54.7%). However, this proxy measure and the estimated incidence rate highlight high levels of HCV transmission in this population and failure to meet the HCV elimination target for reduction in incidence.

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