LOW RATE OF PEOPLE WHO USE DRUGS (PWUD) WITH HEPATITIS C VIRUS (HCV) INFECTION PRESENT WITH SERUM HCV RNA LEVELS BELOW 1000 IU/mL

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Background:

Drug use remains the main route for new HCV infections especially in Western populations. To achieve the HCV elimination goal, the diagnostic process must be simplified in difficult to reach populations like people who use drugs (PWUD). Various simpler assays have been proposed as alternatives to the classical screening approach, however, some of them with lower sensitivity than standard real-time PCR assays. In order to investigate the utility of "lower" sensitivity but simpler and more rapid approaches, we analyzed quantitative HCV RNA concentrations in a large cohort of PWUD patients with HCV before initiation of anti-viral therapy.

Description of model of care/intervention/program:

We retrospectively reviewed data of patients who visited our Liver Clinic from 2017 until December 2023 with detectable anti-HCV and serum HCV RNA (low limit of quantification 15IU/mL). Inclusion criteria: current or past history of drug use and not receiving treatment at the time of evaluation. The patients were divided in 3 groups according to serum HCV-RNA levels: Group 1:<1000 IU/mL, Group2: 1000-2000 IU/mL, Group3:>2000 IU/mL.

Effectiveness:

1100 anti-HCV (+) PWUD were included in the study. HCV-RNA was detected in serum of 628 (57%) of them. (Male/female 521/107, mean age 47,3 years, 97% of Greek origin, three out of four attended an OST program (methadone/buprenorphine). HCV genotype distribution was: Gen3/1a/4: 60%/20,6%/12%. Median HCV-RNA (range) was 912200 (17.02-8016803333) IU/mL. Seventeen patients (2, 7%) had HCV-RNA <1000 IU/mL and only 2 patients had HCV-RNA 1000-2000 IU/mL). 97% of the patients belonged to Group 3.

Conclusion and next steps:

Our data supports that a very small rate of patients would have been lost if a simpler but with lower sensitivity diagnostic approach had been used. Strategies including simpler methods for HCV screening and diagnosis could be implemented to boost the elimination efforts in difficult to reach populations at a national level.