Differences in the Hepatitis C Virus Cascade of Care and Time to Initiation of HCV Therapy Among Vulnerable Subpopulations Using a Mobile Unit as the Point-of-Care

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Background: People who inject drug (PWID) and other vulnerable sub-populations are a unique challenge for HCV treatment.

Methods: We carried out a prospective study of vulnerable persons from Madrid, Spain. A mobile unit was used to screen active hepatitis C using a linkage to care and two-step PoC-based strategy. Participants viremic were stratified into four subgroups: PWID, the homeless, people with mental health disorder (MHD) and people with alcohol use disorder (AUD).

Results: A cohort of 214 individuals active HCV diagnosed were stratified as 73 PWID, 141 homeless, 57 with MHD and 91 participants with AUD. The overall HCV cascade of care was: 178 (83.1%) were attended at hospital, 164 (76.6%) initiated DAA, and 141 (65.8%) treatment completed and 99/104 (95.2%) of those with available SVR sample were cured, and the SVR by subgroups was: PWID (91.9%); people with AUD (97.5%); people with MHD: (96.5%); homeless people: (94.4%). Participants with AUD were significantly more likely to have cirrhosis at the moment to treatment initiation (p=0.006). People with recent injecting drug use were significantly less likely to initiate HCV treatment (aOR 0.40; 0.24-0.61; p<0.003) in the logistic regression analysis. Also, people with AUD (aOR 0.45; 0.29-0.67; p=0.004) and people with recent inject drug use (aOR 0.49; 0.30-0.73, p 0.001) were significantly less likely to completing HCV treatment in the logistic regression analysis.

In the Cox analysis of time to HCV treatment initiation, people with AUD were associated with longer time to HCV treatment initiation (aHR 0.63; 0.45; 0.88).

Conclusion: Disparities in the cascade of HCV care exist among vulnerable sub-populations. Overall, SVR was very high and more than 90% in all sub-groups. Models of care need to better engage PWID on treatment, while specific care and strategies to avoid delays in the treatment initiation for people with AUD are urgent.

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