Real world adherence to Direct-Acting Antivirals in a cohort of people who use drugs in Rome, Italy

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Background. For a long time, drug-addiction strongly limited anti-HCV treatment. Since newer direct-acting antivirals (DAAs) significantly improved tolerability and manageability, we evaluated adherence and efficacy of DAA-regimens in a drug-users cohort.

Methods. Drug users with chronic hepatitis C (n=106) were enrolled from June 2015 to December 2017. Adherence was calculated as percentage of control-visits attended among those scheduled (monthly during treatment and at 12 weeks of follow-up). Fischer test and Mann-Whitney test were used for the statistical analysis.

Results. Patients' cohort (n=106, male 83%, median duration of substance abuse 29 years [IQR 23-35.5]) was so represented: active drug users including chaotic subjects that is, those who use substances despite taking opioid substitution treatment, OST (group A, n=60/106, 56.6%), OST patients (group B, n=13/106, 12.3%) and rehab patients (group C, n=33/106, 31.1%). All Drug users (with complex viral, clinical and social features) received at least one DAAdose. Median duration of HCV infection was 22 years [IQR (8-27)], genotype-1a and genotype-3 infections were the most common (52.4% and 35.3%); 81.9% of patients had advanced liver fibrosis (F3-F4) and 26.4% had resistance-associated variants; 10.4% of patients was HIV-coinfected; almost half of the population showed a concomitant occult HBV infection (48.1%); 32.7% had psychiatric comorbidities, 10.4% was house arrested. Overall treatment adherence was 94.9%, in particular: 79.2% of subjects had ≥80% adherence to the scheduled visits, while 20.8% of subjects had ≤80% adherence Low rates of adherence emerge analysing only the follow-up period: 29.2% of subjects dropped out during follow up. HCV-RNA undetectability rate at the end of treatment was 100%, and sustained virological response SVR12 fate in patients who completed treatment at the time of the analysis was 98.4% (one relapse); four patients discontinued prematurely (three of these because of advanced liver clinical conditions).

Conclusions. Although drug users still face several clinical and social issues, our data indicate that even active drug-users can be highly adherent to DAA treatment, achieving optimal HCV cure-rates. Treatment adherence rates are very high, while retention in follow up is still a challenge.