A one-step diagnosis algorithm reveals high burden of hepatitis C among PWID in Spain and the urgency for improved linkage-to-care

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Background/aims

- **PWID:** Highest HCV prevalence, lowest Dx rate (complex two-step testing algorithm: serology + NAAT)

- **Catalonia:** most HRC offer rapid HCV-Ab testing, but poor linkage-to-care for Dx confirmation
  ⇒ How many have hepatitis C and are in need for TT?

**Aims:**
1. To validate the real-life performance of an alternative one-step screening and confirmatory assay (HCV-RNA detection from DBS)
2. To estimate the prevalence of viremic HCV infection
3. To assess the level of hepatitis C awareness and linkage-to-care

Methods: HepCdetect II Study

- **Study design:** Cross-sectional study on current injectors (N=232)

- **Assessments:**
  - Finger-prick: Rapid HCV-Ab testing (HIV-Ag/Ab), HCV-RNA detection from DBS
  - Blood: HCV viral load, serology for HBV & HIV
  - Extensive questionnaire administered

- **Endpoints:** HCV-RNA positivity, self-knowledge of HCV status, linkage-to-care

- **Statistical analysis:**
  - Sensitivity and Specificity of the DBS assay vs. viral load in plasma
  - Descriptive analysis

Results (N=232)

- **Prevalence of HCV Ab and RNA**
  - 83.2% Ab+
  - 68.1% RNA+
  - 61.6% Ab–
  - 3.4% RNA+ Ab–
  - 86.5% exposed to HCV (28.5% HIV co-inf.)
  - 40.1% exposed to HBV

- **Real-life DBS assay performance**
  - 96.6% Sens.
  - 100% Spec.

- **Self-knowledge of HCV status**
  - Do you have hepatitis C?
  - HCV-Ab/RNA test results
  - 21.1% No
  - 37.9% Do not know/NA
  - 40.9% Yes
  - 13.5% Never exposed Ab+ RNA- (cured)
  - 14.3% unaware

- **Linkage-to-care**
  - 25.0% of known HCV cases are currently under specialist care
  - 23.4% of those ever exposed had ever started hepatitis C therapy

Conclusions/implications

- **Conclusions:**
  - This one-step diagnosis strategy presents an easy, feasible way of substantially increasing the identification and awareness of viremic HCV infections.
  - However, more effort is needed to improve linkage-to-care for hepatitis C.

- **Implications:**
  - DBS testing scale-up to other HRC (N=415)
  - Virological characterization (genotypes, transmission networks)
  - Assessment of determinants for HCV infection
  - Evaluation of educational sessions on HCV for PWID
  - On-site care and treatment of hepatitis C (pilot study in this HRC)
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POLICY MAKERS
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All study participants

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