LIVER DISEASE BURDEN AND CLINICAL FOLLOW-UP DURING A LIVER HEALTH PROMOTION INTERVENTION INTEGRATING NON-INVASIVE LIVER DISEASE SCREENING IN DRUG AND ALCOHOL SETTINGS: THE LIVERLIFE STUDY

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Background: Liver disease burden among people who inject drugs (PWID) is high, yet few strategies to enhance liver disease screening have been evaluated. The aim of this study was to assess factors associated with severe fibrosis/cirrhosis and follow-up among PWID participating in a liver health promotion campaign.

Methods: The LiveRLife campaign involved: 1) educational resource development; 2) resource testing; and 3) implementation. Between May-October 2014, participants were enrolled in an observational cohort study with recruitment from four clinics in Australia (one community-based primary health care clinic, two opioid substitution treatment clinics, and one medically supervised injecting centre). Participants received educational material, clinical assessment, transient elastography (TE) assessment, dried blood spot testing, and completed a knowledge survey. Qualitative HCV RNA testing was performed on dried blood spots collected from the study.

Results: Of 253 participants (mean age=43), 68% were male, 71% had injected in the past month, and 68% were HCV RNA+. Overall, 68% had no/mild fibrosis (F0/F1, ≥2.5 - ≤7.4 kPa), 13% moderate fibrosis (F2, ≥7.5 - ≤9.4 kPa), 10% severe fibrosis (F3, ≥9.5 - ≤12.4 kPa), and 9% had cirrhosis (F4, ≥12.5 kPa). The proportion of people with severe fibrosis/cirrhosis (F3/F4, 19%) was higher in those who were >50 years (33% vs. 15%, *P*=0.003), male (23% vs. 11%, *P*=0.069), and those HCV RNA+ (24% vs. 10%, *P*=0.011). In adjusted analysis, age >50 years (OR 2.91, 95%CI, 1.42, 5.95) and being HCV RNA+ (OR 2.61, 95%CI, 1.08, 6.28) were associated with severe fibrosis/cirrhosis (F3/F4). Sixty percent (n=152) returned for a follow-up nurse/specialist assessment.

Conclusion: Liver disease burden in this population was high and was associated with age >50 years and HCV RNA positive status. The majority of people assessed

for liver disease returned for a follow- up assessment by a nurse/specialist, supporting the inclusion of TE in HCV-related care.

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