**INJECTING AND DRUG USE FACTORS ASSOCIATED WITH RECENT HEPATITIS C INFECTION: NEW FINDINGS FROM A NATIONAL SAMPLE OF PEOPLE WHO INJECTING DRUGS IN THE UNITED KINGDOM (UK)**

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**Introduction:** Globally 130-150 million people have the hepatitis C virus (HCV); around 10% of these are people who inject drugs (PWID). In some countries up to 90% of cases are among PWID. Studies indicate that injecting equipment sharing and the drugs used are involved in HCV acquisition, though available data are limited. We examined factors associated with recent HCV infection in a national sample of PWID.

**Methods:** A voluntary unlinked-anonymous survey recruited PWID throughout the UK (except Scotland) during 2011-13. Participants provided dried-blood spot samples and completed a short behavioral questionnaire. Associations between recent HCV infection (HCV antibody [anti-HCV] negative, HCV RNA positive) and risk factors were examined using logistic regression (adjusting for age, gender and recruitment region).

**Results:** Among 4,479 participants who had injected during the preceding 28-days the anti-HCV prevalence was 51%. Among those anti-HCV negative (2,209; mean age 33 years; 24% women), 54 (2.4%) had HCV RNA (recent infections). Recent HCV infection was associated with sharing spoons (46% of recent infections shared vs. 28%, adjusted odds ratio [AOR]=1.97, 95%CI 1.13-3.42) and injecting with needles/syringes that had been cleaned (48% vs. 30%, AOR=1.95, 95%CI 1.09-3.49) during the preceding 28-days. Though sharing filters and needles/syringes were both more common among those with recent infections, these differences were not significant (37% vs. 23%, AOR=1.69, 95%CI 0.95-2.97; 20% vs. 15%, AOR=1.26, 95%CI 0.64-2.50; respectively). Injection of crack-cocaine was associated with elevated risk of recent HCV infection (AOR=2.95, 95%CI 1.67-5.23)

**Conclusion:** Our findings corroborate other evidence indicating that injecting equipment sharing is associated with recent HCV acquisition. The association with using cleaned needles/syringes indicates that ‘unknown’ sharing due to equipment mix-ups, and the reuse of ineffectively cleaned needles/syringes, could both play an important role in HCV transmission. Interventions to reduce the reuse of injecting equipment and promote good cleaning techniques are needed.

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