HIGH RE-INFECTION RATES AMONG PEOPLE WHO INJECT DRUGS SUCCESSFULLY TREATED FOR HEPATITIS C IN A COMMUNITY NEEDLE AND SYRINGE PROGRAMME

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Background:
Treating people who inject drugs (PWIDs) has the potential to reduce HCV transmission, a concept known as 'treatment as prevention' (TasP). Latest international guidelines now recommend direct acting antiviral (DAA) treatment for all HCV-infected PWIDs. However, re-infection following treatment in this population remains a concern. Here we present re-infection data from a pilot of a novel HCV treatment pathway for PWIDs in a community needle and syringe programme (NSP). Primary study results have been presented previously.

Approach:
This prospective study recruited 104 HCV RNA positive participants over 42 months from the largest NSP in Dundee. 94/104 individuals commenced treatment. Individuals were treated with peg-interferon+ribavirin+/- Simepravir/Telaprevir. Weekly study visits took place within the NSP. Individuals will be followed up for a 5-year period post-treatment to determine re-infection. Here we present latest re-infection data at 18-months.

Outcome:
Mean age of participants was 34.0 years (SD 6.9), 71.3% (61/94) were male. 1 in 5 (20/94) participants were homeless. Baseline data showed high rates of injecting: participants injected median 6.5 times/week. In terms of harm reduction; 68.1% (64/94) were on opiate substitution therapy (OST) at start of treatment; 82.4% (75/94) had 100% NSP coverage. Overall sustained virological response at 12 weeks (SVR12) was 82.0% (77/92). 2 participants died prior to 3-month follow-up. Re-infection rates were 12.6/100 person-years (95% CI 5.3-30.4) at 6-months (n=5) and 17.1 per 100 person-years (95% CI 10.28-28.29) (n=15) at 18-months post-treatment. Univariable poisson regression found weak association between increasing age and lower re-infection rates (p=0.063 p=0.14). No convincing evidence of correlation between other hypothesised factors.

Conclusion:
PWIDs were successfully recruited, treated and followed-up from a community NSP. However, we also report higher rates of re-infection than many other studies. Scaling-up the intensity of harm reduction and HCV treatment provision should be pursued to minimize re-infection and reduce HCV transmission in the population.

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