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## Background

Psychosocial factors, such as having a partner who injects drugs and living with other drug users, have been associated with increases in injecting risk behaviour.

This study aimed to investigate injecting behaviour changes during treatment for HCV infection whilst exploring the role of psychosocial factors on patients' injecting behaviour.

## Methods

Eradicate-C was a single centred clinical trial (ISRCTN27564683) investigating the effectiveness of HCV treatment among people who inject drugs between 2012 and 2016.

Data for 84 participants was analysed retrospectively to explore mechanisms of potential behavioural changes which had occurred during treatment.

## Results

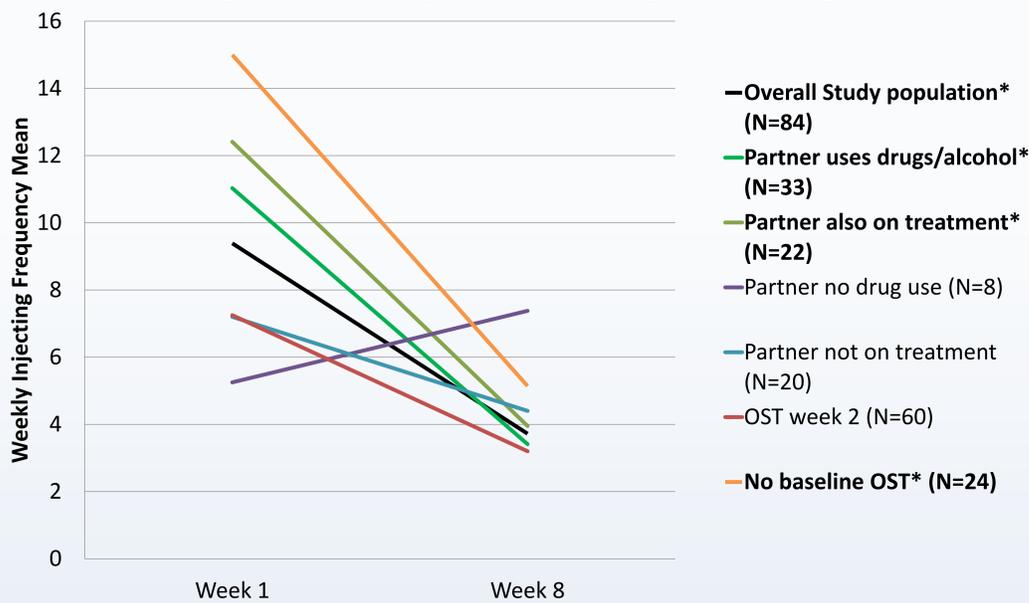
A Friedman test for differences in weekly injecting frequency among the time points (baseline and every 4-weekly interval until week 26) gave a significant result,  $\chi^2(7) = 36.44$ ,  $p < .001$ . The significant difference with the largest effect size was observed between baseline (week 1) and week 8 of treatment.(Table 1).

**Table 1: Post-hoc comparison for injecting frequency difference between baseline and week 8**

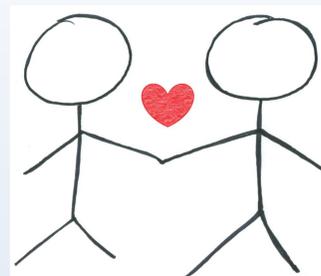
	Z	p (*Significant at $p < .007$ with Bonferroni correction)	r (Small = .1, Medium = .3, Large= .5)
Weeks 1-8	-5.459	< .001*	-.97

\* Significant at  $p < .007$  with Bonferroni correction

**Figure 1: Injecting frequency change by grouping**



Not being on Opiate Substitution Therapy (OST) was associated with a statistically significant decrease in injecting frequency,  $\chi^2(1) = 10.412$ ,  $p = .001$ , as was having a partner who also used drugs, in particular when that partner was also on treatment for HCV infection,  $Z = -2.312$ ,  $p = .021$  (Figure 1).



<https://www.medicinehow.com/methadone/>

## Discussion

Treating people who inject drugs for HCV infection is not only possible, but also bears health benefits beyond treatment of HCV alone. These findings have direct implications for practice:

- 1) Patients not on OST benefited from HCV treatment by also reducing their weekly injecting frequency. This suggests possible benefits of therapeutic alliance for those not engaging with other health services.
- 2) In addition, enrolling couples on HCV treatment when partners are sero-concordant, has also shown enhanced benefits for patients' health, by reducing injecting behaviour frequency. A transformation of individual motivation to relationship-focused motivation allows communal coping to impact behaviour through outcome and couple efficacy.

## References

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## Disclosure of interest statement

AM, FS and PD declare no conflict of interest. BPS has received honoraria for lectures from Janssen-Cilag, Merck Sharp & Dohme and Gilead Sciences. JFD has received honoraria for lectures and research grants from Janssen-Cilag, Roche, Merck Sharp & Dohme, AbbVie, Bristol-Myers Squibb and Gilead Sciences.

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