Hepatitis C virus direct acting antiviral dispensing mode and treatment completion within inner-city Vancouver community health centres

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### **Disclosures**

- I have no conflicts of interests to declare
- Mark Hull has received honoraria for speaking engagements and advisory boards from Merck, Gilead and Vive, with all honoraria paid to his institution.
- Susan Nouch has received an honorarium for an advisory board from Gilead.
- Lesley Gallagher has received honoraria for speaking engagement from Merck, Abbvie and Pendopharm, has participated in advisory committees for Merck and Gilead and has received travel grants from Gilead.

# Background/aims

- Oral direct acting antiviral agents (DAAs) highly effective for Hepatitis C virus (HCV) treatment in PWID in clinical trials and real-world studies.
- Poor adherence has previously been raised as a potential barrier to HCV treatment, especially among people who inject drugs (PWID)
- Relatively little data regarding impact of frequency and location of DAA dispensing on adherence/treatment completion, particularly among PWID
- Aim of our study: Compare HCV treatment completion among patients receiving DAAs in different dispensing modes and to identify factors associated with treatment completion.

### **Methods**

- Observational prospective cohort study at three inner-city interdisciplinary primary care/addiction clinics (enrolled 2015-2018)
- 239 participants (29% recent injection drug use (IDU), 55% on opioid agonist therapy (OAT)) undergoing HCV DAA treatment
- Categorized into three dispensing methods: 1. Daily dispensing (47%), 2.
   Weekly dispensing from HCV clinic (44%), 3. All other (9%)
- Outcome variable: HCV treatment Completion
- Bivariate analysis (Fisher's exact test/Wilcoxon rank sum test) to identify factors associated with treatment completion
- Subgroup analysis for people with recent IDU and people on OAT

#### Results

- 97% (232/239) completed treatment
- Intention-to-treat (ITT) SVR 12: 85%, modified ITT SVR12: 95%
- Dispensing mode was not associated with higher treatment completion (p=0.606).
- Lower treatment completion was associated with:

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younger age (p=0.034)
presence of medical co-morbidities (p=0.045)
recent IDU (p=0.021)
higher frequency of cocaine use (p=0.011)
higher frequency of alcohol intake (p=0.003)
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- Treatment completion was not associated with being on opioid agonist therapy (OAT) at treatment initiation, housing, attendance of group meetings, frequency of meeting with HCV nurse (p>0.05)
- Subgroup analysis showed that treatment completion was not associated with dispensing mode among recent IDU (p=0.223); it was also not associated with codispensing of HCV DAA with OAT among those on OAT (p=0.576)

# Conclusions/implications

- No significant effect of dispensing mode on treatment completion
- Younger age, medical co-morbidities, recent IDU, cocaine and alcohol use were associated with reduced treatment completion
- PWID receiving DAA treatment in real-world interdisciplinary setting can achieve high rate of treatment completion.
- Small number of participants who did not complete treatment. Not randomized.
   Difficult to draw conclusions
- Further studies needed to explore improved supports for recent PWID on HCV treatment

# Acknowledgements

- The authors would like to acknowledge the support of Vancouver Coastal Health and the staff members of British Columbia Centre for Excellence in HIV/AIDS, Pender, Ravensong, and Downtown Community Health Centre.
- We would also like to thank all the people have generously participated in this research