The feasibility of rapid hepatitis C point-of-care RNA testing and treatment at an integrated supervised consumption service in Toronto

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Background:

Despite high prevalence of hepatitus C (HCV) amongst people who use drugs, treatment uptake for this group has always been very low. Recent advances in HCV treatment have both drastically improved treatment outcomes and reduced the burden of treatment but many barriers to healthcare engagement still persist for people who inject drugs. They include lack of trust with the health care system, difficulty accessing veins due to damage from injection drug use, and loss to follow up between testing and results.

The recent expansion of supervised injection/consumption services (SCS) across Canada offers a unique opportunity to engage people who inject drugs in HCV treatment, especially when combined with rapid point-of-care RNA testing to reduce loss-to-follow-up during the typical two-step confirmatory testing process and reduce the burden of blood work. The purpose of this study was to evaluate the feasibility of offering rapid, point-of-care HCV RNA testing and linkage to treatment among service users of a small-scale, integrated SCS.

South Riverdale CHC—Queen St E location

Lobby looking in to SCS intake

Methods:

The SCS is integrated within South Riverdale Community Health Centre (SRCHC). It is staffed by nurses, health promoters, and harm reduction workers with lived experience of drug use. The service can accommodate up to 5 injections/consumptions at a time with an average of 6 new service users per month. Testing was advertised by posters within the SCS, staff referrals, and word of mouth. HCV RNA testing was conducted by SRCHC's HCV Treatment Nurse. Testing was available 3 days per week using capillary blood samples and the Cepheid GeneXpert© platform. Test results were available in 60 minutes. RNA positive participants were offered immediate referral and follow up appointments with the HepC program nurse. Baseline questionnaires captured socio-demographics and history of HCV care.

Results:

128 service users agreed to participate in 10 months. Two later removed for ineligibility.

Participant Demographics (n=126)

Male	66%
Female	33%
Prefer to Self-Identify	1%
Age (mean)	41 years
Unstable or no housing	73%
Income (primary source) disability or welfare benefits	84%
Daily injection or drug use	68%
Drug injected most frequently	Fentanyl = 50% Crack/Cocaine = 20% Heroin = 14% Prescription Opioid = 9% Crystal Meth = 5%
No past history of HCV testing	32%

Conclusion:

Despite facing significant barriers to health care, such as homelessness, poverty and stigma related to drug use, interest in POC testing was high, and among those found to be HCV RNA positive there was substantial engagement in HCV care. Ongoing access to the HCV treatment nurse within the SCS and staff with lived experience of HCV facilitated linkage to care. POC testing in an integrated SCS is a promising model for HCV care engagement among persons who inject drugs.

Photos of SCS top left to bottom right:
Two of the injection/consumption booths
The Point-of-Care testing platform
Post-consumption 'chill' space
Staff station in the injection/consumption space

Disclosure of Interest Statement:

This research was supported by a micro-elimination grant from Gilead Sciences Canada and by in-kind support from Cepheid.

POC Testing Results

- 17 invalid test results (baseline)
- 6 participants agreed to repeat testing
- Of 114 valid tests:
  - 41% (N=47) were RNA positive
  - 2 additional RNA positive results at follow up visit (where baseline results were invalid)
  - 51% (25/49) have started additional treatment assessments
  - 9 treatment starts
  - 1 SVR
  - 1 acute clearance
  - 4 deaths
- Follow up testing (every 3 months for 1 year period)
  - 3 negative to positive seroconversions, out of 34

South Riverdale COMMUNITY HEALTH CENTRE
TORONTO COMMUNITY HEP C PROGRAM
MICHAEL GARRON HOSPITAL
TORONTO EAST HEALTH NETWORK