Country of birth as indicator for hepatitis C testing in a Sydney metropolitan sexual health service. Is it an effective strategy?

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Background

- National Hepatitis C (HCV) testing policy recommends testing migrants from high HCV prevalence regions; it is unclear how successfully this is implemented in sexual health services and if it identifies populations with HCV.
- Sydney Sexual Health Centre (SSHC) is the largest publicly funded sexual health service in NSW and provides care to a high proportion of culturally and linguistically diverse (CALD) people who may benefit from screening initiatives.
- Audit of HCV testing at SSHC in 2021: majority of HCV testing was in the context of HIV pre-exposure prophylaxis (PrEP) initiation and injecting drug use (IDU). In comparison, 31% of clients born in a high HCV prevalence country ever had testing.

Aims

- To determine HCV prevalence in clients attending SSHC from high HCV prevalence countries

Methods

- Opt-out HCV testing was implemented in the electronic medical record over a 6-month period (November 2022-May 2023).
- Inclusion criteria
  - No prior testing in the previous 12 months
  - Born in 1 of 33 high HCV prevalence countries as defined by absolute number of HCV infections and HCV RNA prevalence ≥2%
- Testing data was compared to the same period in 2019-2020.
- Data analysis: X^2 univariate analysis ($p<0.05$).

Clients from high HCV prevalence countries with no prior HCV testing in the previous 12 months

	2019-2020 N (%)	2022-2023 N (%)	
Gender			
Male	145 (87.3)	781 (73.0)	p<0.001
Female	11 (6.6)	266 (24.8)	
TGD	4 (2.4)	21 (1.96)	
PrEP in the last 3 months			
Yes	42 (25.3)	183 (17.1)	p<0.001
No	98 (59.0)	855 (80.0)	
HIV status			
Positive	28 (16.9)	31 (2.9)	p<0.001
Negative	134 (80.7)	1027 (96.0)	
IDU in last 12 months			
Yes	4 (2.4)	11 (1.0)	p=0.13
No	162 (97.6)	1059 (99.0)	
CSW in last 12 months			
Yes	16 (9.6)	182 (17.0)	p=0.02
No	150 (90.3)	880 (82.2)	

Clients who met inclusion criteria who had a positive HCV Ab test

	2019-2020 N (%)	2022-2023 N (%)	
Gender			
Male	4 (2.5)	6 (0.6)	p=0.27
Female	0 (0.0)	2 (0.2)	
Test result			
HCV Ab positive	4 (2.5)	8 (0.8)	p=0.04
HCV RNA positive	1 (0.6)	0 (0.0)	p=0.14
PrEP in the last 3 months			
Yes	1 (0.6)	1 (0.1)	p=0.06
No	0 (0.0)	6 (0.6)	
HIV status			
Positive	3 (1.9)	1 (0.1)	p=0.03
Negative	1 (0.6)	7 (0.7)	
IDU in last 12 months			
Yes	0 (0.0)	0 (0.0)	-
No	4 (2.5)	8 (0.7)	
CSW in last 12 months			
Yes	0 (0.0)	1 (0.1)	p=0.46
No	4 (2.5)	7 (0.7)	

Results

- 194% increase in HCV testing overall (2324 tests in 2022-2023 compared to 1070 tests in 2019-2020)
- 46.0% (1070/2324) of tests in 2022-2023 were clients from high HCV prevalence countries who never had an HCV test in the last 12 months compared to 20.3% (160/790) in 2019-2020.
- Most clients were from China (11.9%), Brazil (5.1%) and Indonesia (4.4%).
- 8 (0.8%) clients had a positive HCV antibody (Ab) test; HCV RNA was not detected in all cases.
  - 1 reported history of past treated HCV, 2 reported history of past cleared HCV without treatment; 1 had HIV, 1 had HBV; 1 was on PrEP; 2 had no additional HCV risk factors.
  - 6 were men who have sex with men (MSM)

Conclusions

- Implementation of opt-out HCV testing increased HCV testing in patients attending SSHC from high HCV prevalence countries; however, it did not increase detection of newly identified HCV infections in this group.
- This single site study may not be reflective of populations attending other sexual health services; larger scale studies will be needed to assess this testing strategy in people attending sexual health services.

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