Peer support in small towns: A decentralized mobile HCV clinic for people who inject drugs

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INHSU 2021

Disclosures

Håvard Midgard and Olav Dalgard: Advisory boards and lecture fees from Abbvie, MSD and Gilead

An initial pilot project was funded by Abbvie, MSD and Gilead

Acknowledgements

Thank you to all study participants and people who inject drugs who generously contributed to this research

This project was initiated by **ProLAR Nett,** the Norwegian peer-support organization for opioid agonist treatment recipients

The project was exclusively funded by the Norwegian Directorate of Health

proLAR Nett
NASJONALT FORBUND FOR FOLK I LAR

Helsedirektoratet
Norwegian Directorate of Health

Background and aims

- New and simplified models of HCV care are needed to reach people who inject drugs (PWID)
- Marginalized PWID living in rural areas and small towns may face considerable barriers to HCV care
- Point of care (POC) HCV RNA testing enables testing and treatment initiation during one visit
- More data is needed on POC testing and simplified models of care outside the urban centers
- **Aims of the study:**
  - Evaluate HCV treatment uptake among HCV RNA positive individuals identified by POC testing and liver disease assessment in a decentralized mobile clinic
  - Describe the cascade of care among HCV RNA positive individuals
  - Assess HCV RNA prevalence among tested individuals

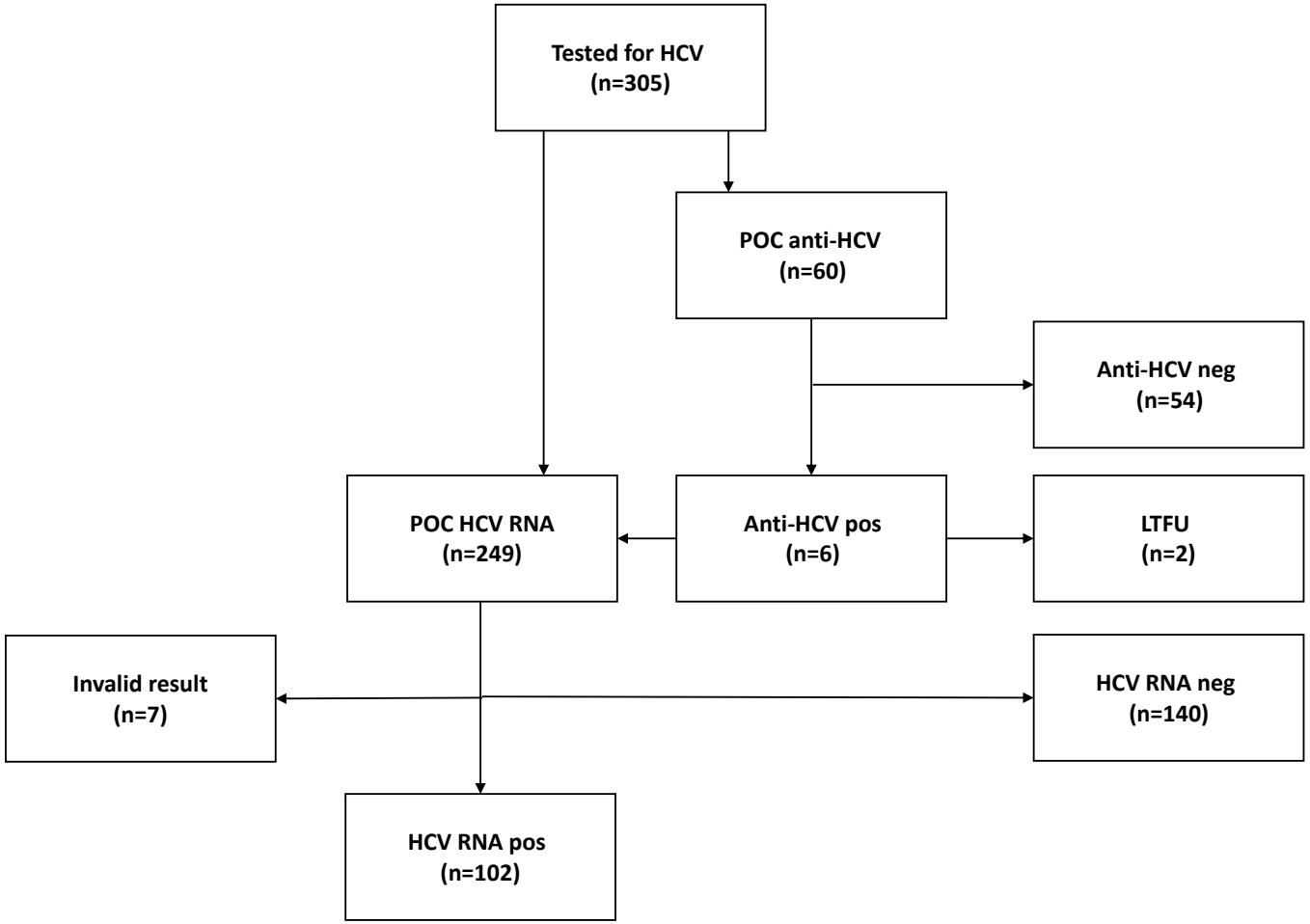
Study setting and methods

- In 2018 the Norwegian government aimed for HCV elimination within 2023
- As a response, the Norwegian peer support organisation **proLAR Nett** initiated a mobile outreach HCV clinic to reach PWID living outside the urban centres
- The clinic visited 32 small towns in Southern Norway Nov 2019 – Nov 2020, staying 1-3 days at each site
- The tour schedule was organized by a consultant at the Norwegian Directorate of Health
- Drop-in services provided by a bus driver with user experience and a health care worker
- Health care providers and social workers at local municipalities prepared for the visit in advance

Study setting and methods

- Consecutive patients >18 years assessed between November 5 2019 - November 13 2020 were included
- Assessments provided by the bus personnel
  - POC HCV RNA testing (GeneXpert®)
  - Liver disease assessment (FibroScan® 402)
  - Questionnaire (socio-demographics, clinical data, drug and alcohol use)
- HCV treatment prescribed by local hospital employed specialists following a brief telephone assessment
- Ambition to provide assessment and linkage to care within the same day
- Personnel at local municipalities assisted participants with dispensing DAA treatment from the local pharmacy and scheduled on-treatment follow-up on a discretionary basis
- The clinic was temporarily stopped during the COVID-19 lockdown in Norway between March - May 2020

Results: Flow chart of study particpants

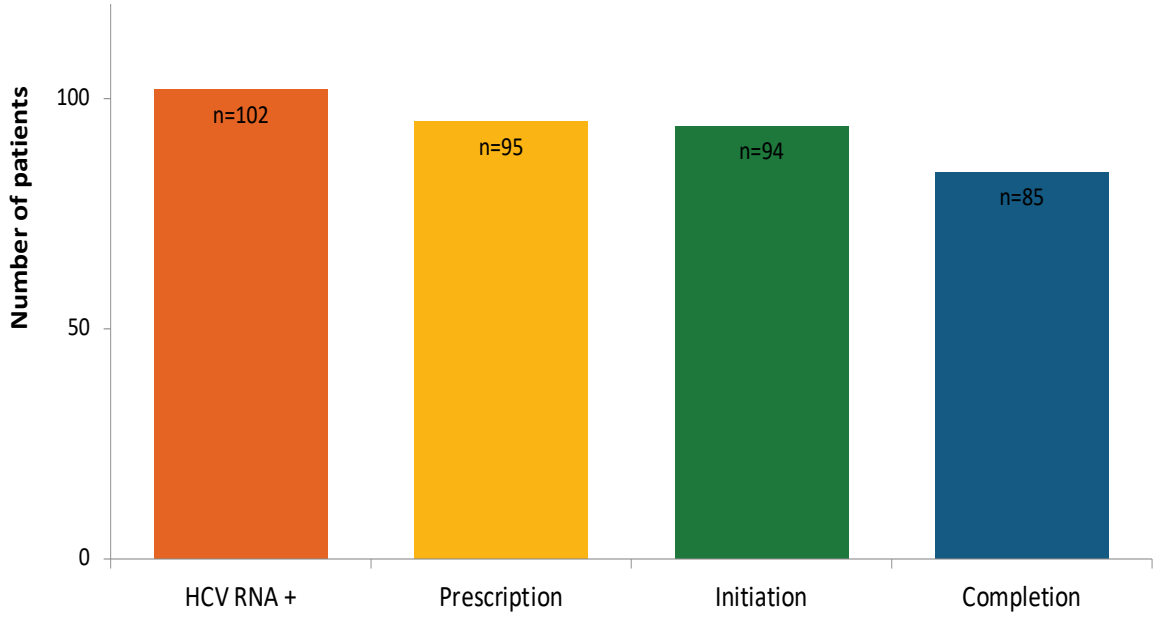


Results: Participant characteristics (n=102)

Variable	Overall (n=102)
Median age (IQR)	51 (42-56)
Age groups	
<30	1 (1)
30-39	18 (18)
40-49	29 (28)
50-59	43 (42)
60-70	11 (11)
Gender	
Male	78 (77)
Female	24 (23)
Housing status	
Owned accommodation	32 (32)
Municipal housing	61 (62)
Prison	4 (4)
Homeless	2 (2)
Source of income	
Welfare pension	83 (87)
Social benefits	8 (8)
Other	5 (5)
History of injecting drug use	98 (100)
Median age at first injecting (IQR)	18 (15-23)
Recent (past 3 months) injecting drug use	68 (71)
Drug most frequently injected	
Heroin	31 (46)
Amphetamines	37 (54)
Current opioid agonist treatment	37 (37)
Opioid agonist treatment drug	
Methadone	15 (41)
Buprenorphine	9 (24)
Buprenorphine-naloxone	7 (19)
Other	6 (16)
HCV treatment experienced	7 (7)
Somatic comorbidities	17 (17)
Harmful alcohol consumption	11 (11)
Stage of liver disease	
F1 (<7 kPa)	45 (40)
F2 (7-9.5 kPa)	23 (26)
F3 (9.5-12.5 kPa)	9 (10)
F4 (>12.5 kPa)	13 (14)
Median liver stiffness, kPa (IQR; range)	7.0 (5.5-9.4; 3.2-55)

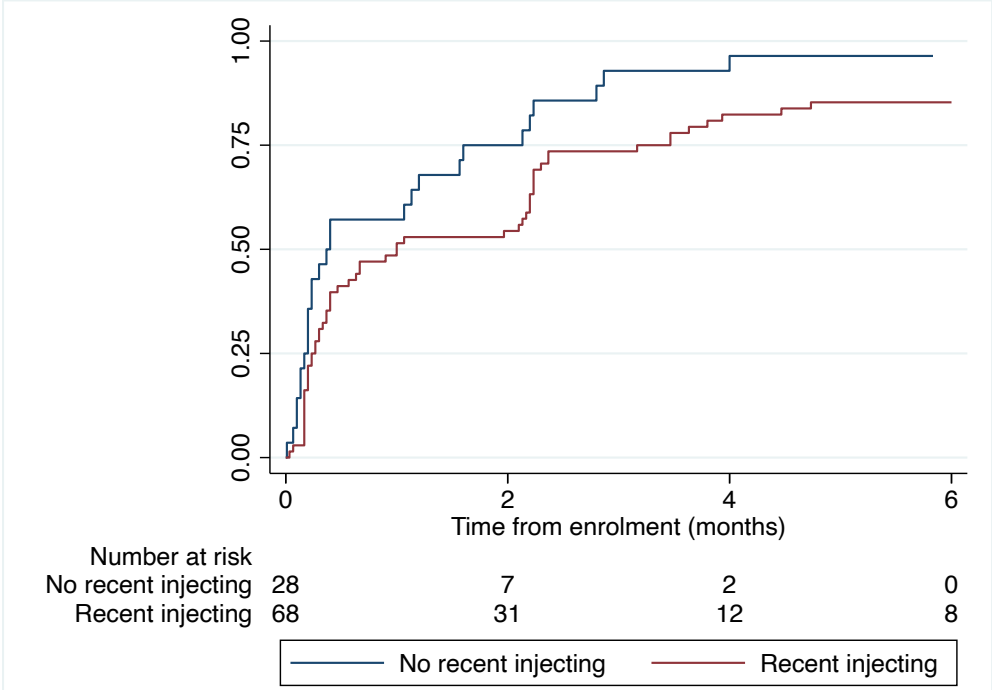
Results: The HCV cascade of care

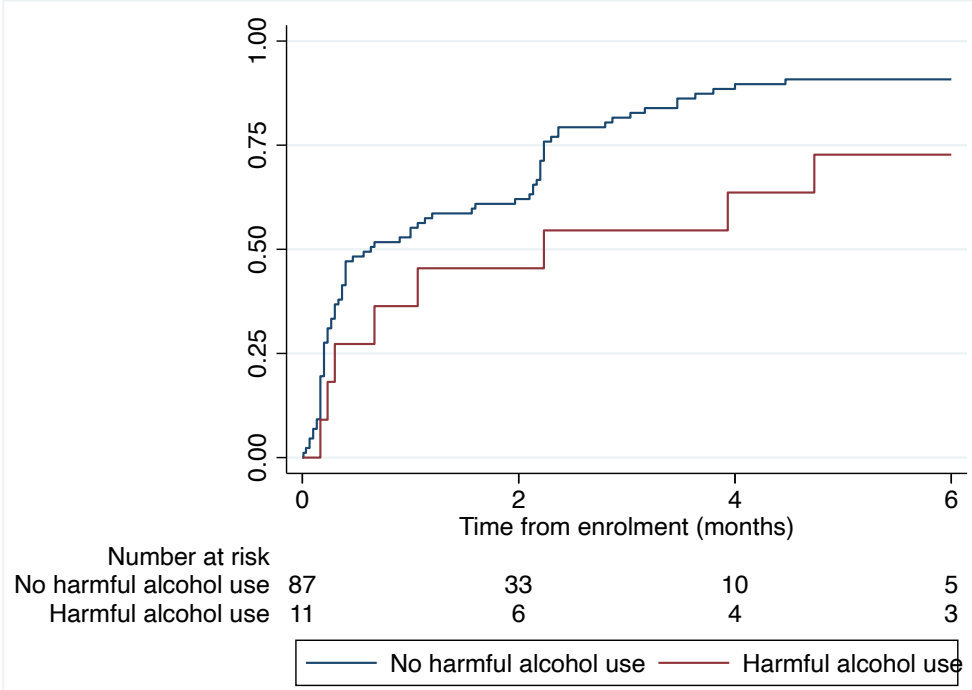
- Treatment uptake within 6 months
  - 90 of 102 (88%)
- Treatment uptake at data lock
  - 94 of 102 (92%)
- Treatment completion among those who initiated treatment
  - 85 of 94 (90%)
- Median time from enrolment to treatment
  - 13 days (IQR 6-67)



Prescribed DAA regimens

- sofosbuvir/velpatasvir (87%)
- sofosbuvir/ledipasvir (8%)
- glecaprevir/pibrentasvir (2%)
- grazoprevir/elbasvir (2%)


1.00
0.75
0.50
0.25
0.00
0
2
4
6
Time from enrolment (months)
Number at risk
No recent injecting 28 7 2 0
Recent injecting 68 31 12 8
No recent injecting
Recent injecting


1.00
0.75
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2
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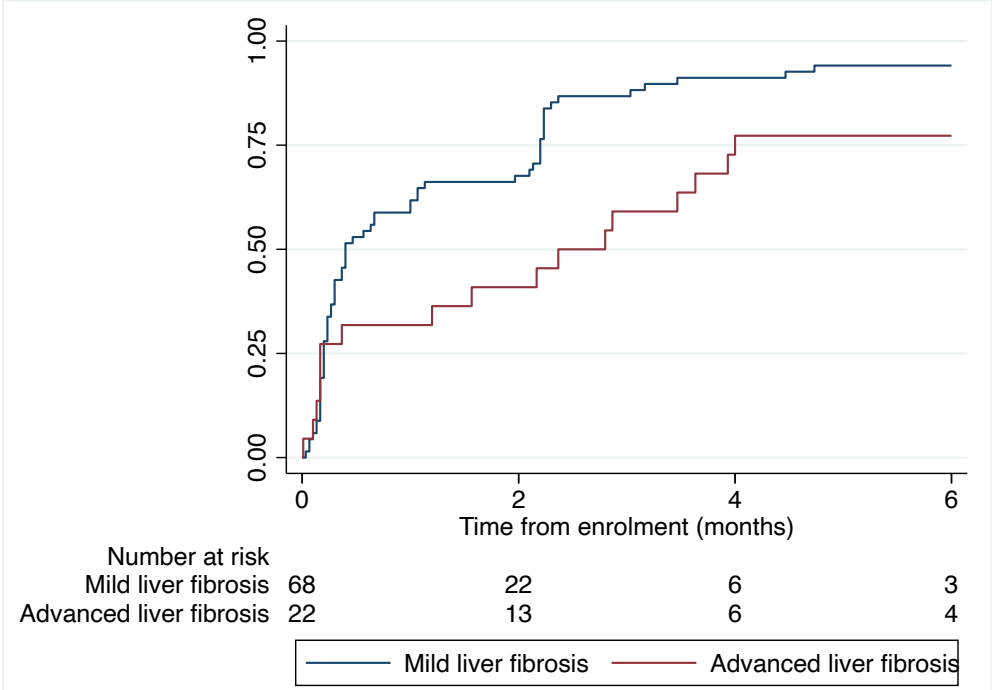
6
Time from enrolment (months)
Number at risk
No harmful alcohol use 87 33 10 5
Harmful alcohol use 11 6 4 3
No harmful alcohol use
Harmful alcohol use


1.00
0.75
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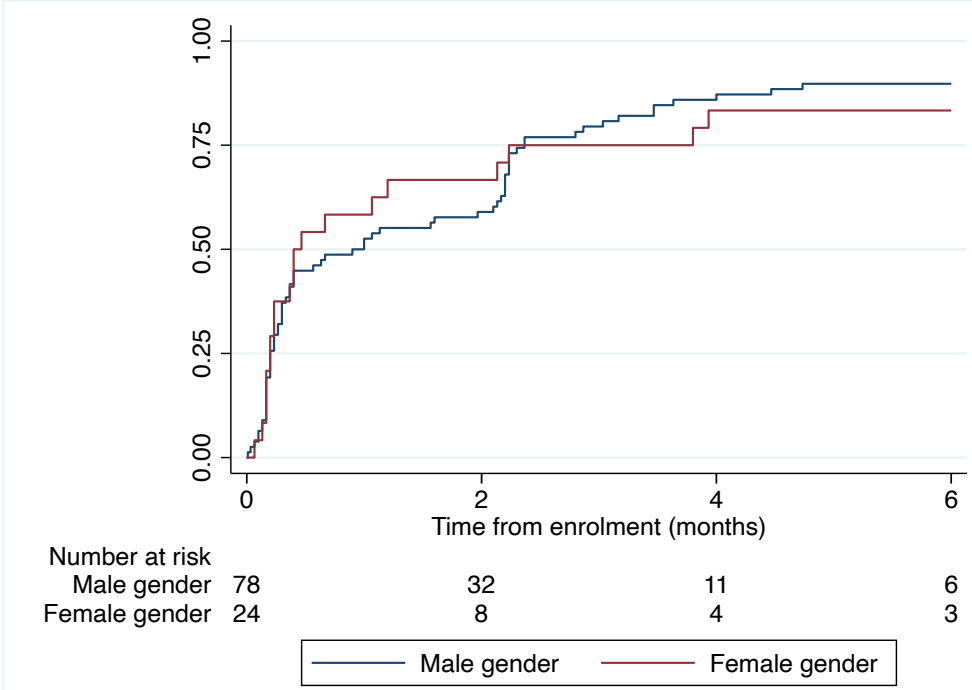
Time from enrolment (months)
Number at risk
Mild liver fibrosis 68 22 6 3
Advanced liver fibrosis 22 13 6 4
Mild liver fibrosis
Advanced liver fibrosis


1.00
0.75
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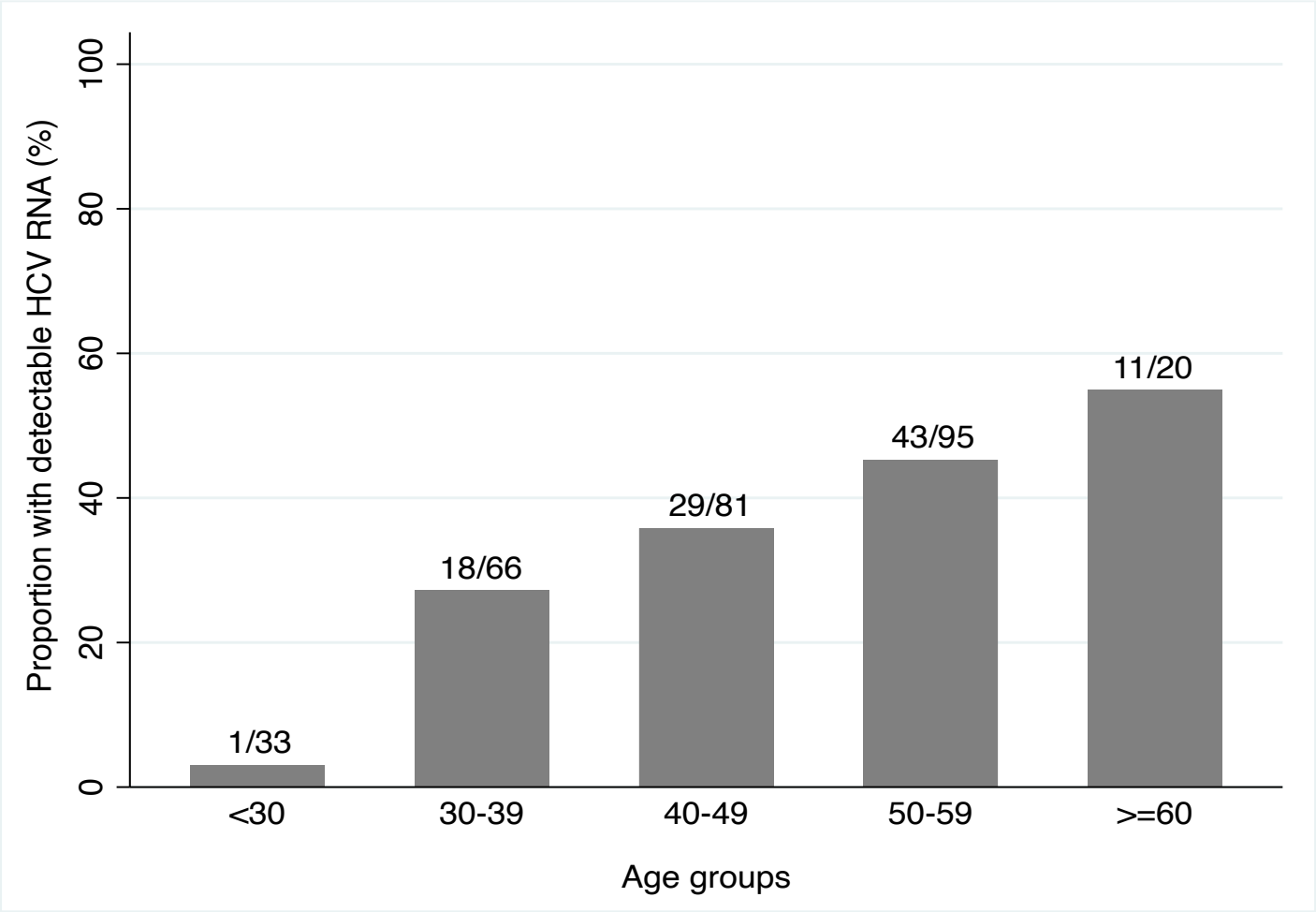
0.25
0.00
0
2
4
6
Time from enrolment (months)
Number at risk
Male gender 78 32 11 6
Female gender 24 8 4 3
Male gender
Female gender

Results: Factors associated with treatment uptake

Factor	**Primary outcome, n (%)**	**Unadjusted model**		**Adjusted model**	
		HR (95% CI)	***p***	**aHR (95% CI)**	***p***
Age (per 10-year increase)	N.A.	0.99 (0.76-1.28)	0.916	1.15 (0.84-1.57)	0.381
Female gender (vs male)	20/24 (83)	0.95 (0.58-1.56)	0.832	1.25 (0.71-2.20)	0.436
Unstable housing (vs stable)	5/6 (83)	0.82 (0.33-2.02)	0.665	-	-
Welfare pension (vs not)	73/83 (88)	0.83 (0.45-1.53)	0.548	-	-
Recent injecting drug use (vs not)	58/68 (85)	**0.60 (0.38-0.95)**	**0.029**	**0.60 (0.36-0.98)**	**0.042**
Current opioid agonist treatment (vs not)	33/37 (89)	1.16 (0.75-1.80)	0.495	-	-
Any somatic comorbidity (vs none)	16/17 (94)	0.91 (0.53-1.57)	0.741	-	-
Harmful alcohol consumption (vs not)	8/11 (73)	**0.52 (0.25-1.08)**	**0.078**	**0.44 (0.20-0.99)**	**0.046**
Advanced fibrosis/cirrhosis (vs mild)	17/22 (77)	**0.50 (0.29-0.86)**	**0.012**	**0.44 (0.25-0.80)**	**0.007**

Results: HCV RNA prevalence



- Overall HCV RNA prevalence 34% (102/296)
- Detectable HCV RNA associated with increasing age (OR 1.81 per 10-year increase; 95% 1.41-2.32)

Conclusions

- This study reported 88% HCV treatment uptake among HCV RNA positive PWID identified by POC HCV RNA testing and liver disease assessment in a peer-led decentralized mobile clinic
- Despite rolled out during the COVID-19 pandemic, the mobile clinic was effective and feasible
- Success factors could be attributed to the peer-led approach
  - Bus driver with user experience
  - Health care worker employed by a peer-support organization
  - Thorough planning of the tour schedule
  - Empowerment of local municipalities and low-threshold services
- The model should be considered to reach PWID living in rural areas with limited infrastructure
- The model could serve as blueprint for addressing other health problems among PWID
  - Skin and soft tissue infections, diabetes care, HIV, COVID-19, prophylactic vaccines