



Evaluation of treatment willingness for hepatitis C virus infection among people who inject drugs in the opioid substitution setting: on behalf of the ETHOS study



ETHOS cohort

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Conflict of Interest

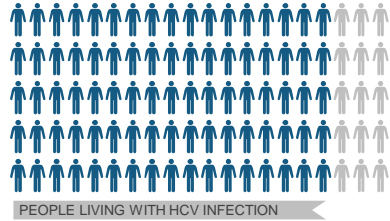


None of the authors has commercial relationships that might pose a conflict of interest in connection with this presentation.

Background



80% OF NEW HCV INFECTIONS OCCUR AMONG CURRENT PWID

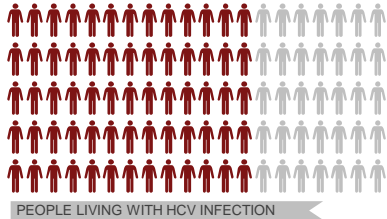


Hajarizadeh B, et al. *Nature Rev Gastroenterol Hepatol* 2013. Grebely J and Dore GJ *Antiviral Research* 2014.

Background



60% OF EXISTING HCV INFECTIONS ARE AMONG CURRENT & FORMER PWID

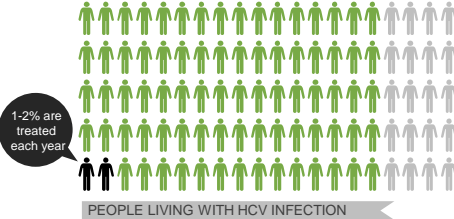


Hajarizadeh B, et al. *Nature Rev Gastroenterol Hepatol* 2013. Grebely J and Dore GJ *Antiviral Research* 2014.

Background



80% OF PWID ARE WILLING TO RECEIVE HCV TREATMENT



Stein MD. *Drug and Alcohol Dependence* 2001. Walley AY. *J Substance Abuse Treatment* 2005. Doab A. *Clinical Infectious Diseases* 2005. Fischer B, et al. *Presse Med* 2005. Strathdee S, et al. *Clinical Infectious Diseases* 2005. Grebely J, et al. *Drug and Alcohol Dependence* 2008.



Objectives

- I. To evaluate HCV treatment willingness and intent and associated factors and;
- II. To evaluate the impact of HCV treatment willingness and intent on subsequent HCV assessment and treatment uptake

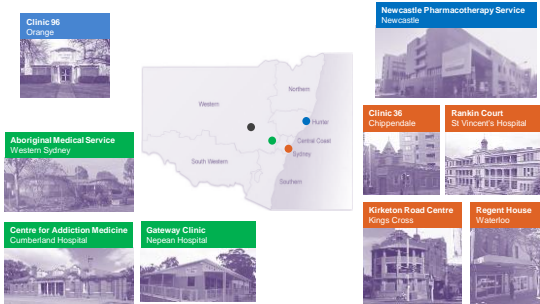


The ETHOS Study

- The Enhanced Treatment of Hepatitis C in the Opioid Substitution Setting
- Provision of on-site HCV nursing and physician assessment and treatment in clinics with existing infrastructure for addiction care
- A prospective observational cohort in the OST setting, NSW
- Among people with a history of injecting drug use, recruitment between 2009-2012



Study Sites



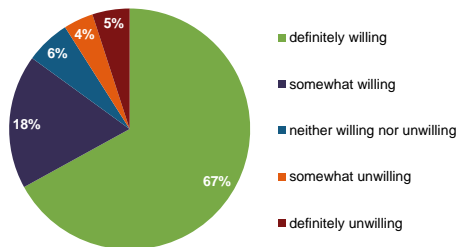
Characteristics of ETHOS Participants

Characteristics, n (%)	Overall, n=409
Age, mean (±SD)	41 (±9)
Male gender	291 (71%)
Aboriginal ethnicity	62 (15%)
Current opioid substitution treatment	327 (80%)
Living with spouse or other relatives/friends	196 (48%)
Drug use (injecting and non-injecting)*	262 (64%)
Benzodiazepine	143 (55%)
Injecting drug use*	200 (49%)
Heroin	137 (69%)
HCV genotype 2, 3, 6	195 (48%)
Moderate, severe & extremely severe symptoms of stress	147 (36%)
Social functioning score, mean (±SD)	8 (±3)

*over the past six months



HCV Treatment Willingness in ETHOS



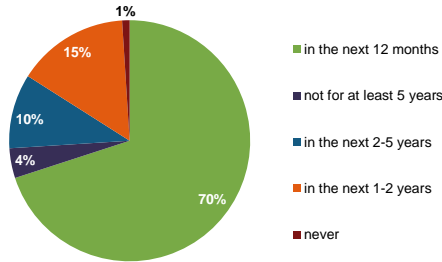
Factors Associated with High Treatment Willingness

Characteristic, n (%)	High treatment willingness (n=273)	OR (95% CI)	aOR (95% CI)	P
<i>Ethnicity</i>				
Aboriginal	33 (53%)	1.00	1.00	-
Non-Aboriginal	240 (69%)	1.97 (1.14, 3.41)	1.93 (1.08, 3.45)	0.027
<i>OST</i>				
Current	205 (63%)	1.00	1.00	-
Previous, not current	17 (65%)	1.12 (0.49, 2.60)	1.14 (0.47, 2.75)	0.770
Never†	51 (91%)	6.07 (2.36, 15.62)	4.90 (1.87, 12.83)	0.001
<i>Symptoms of stress-DASS</i>				
Moderate, severe & ex. severe	87 (59%)	1.00	1.00	-
Normal & mild	175 (71%)	1.65 (1.08, 2.54)	1.57 (1.01, 2.43)	0.043

†unadjusted and adjusted Wald test P-overalls were <0.001 and 0.005, respectively



HCV Treatment Intent in ETHOS



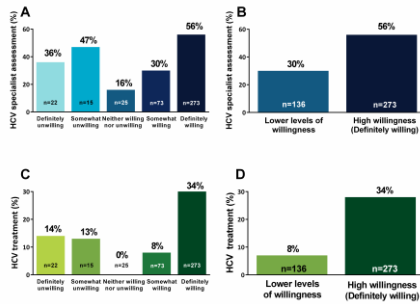
Factors Associated with Early Treatment Intent

Characteristic, n (%)	Early treatment intent (n=284)	OR (95% CI)	aOR (95% CI)	P
Social Functioning				
≥8	151 (64%)	1.00	1.00	-
<8	133 (77%)	1.94 (1.25, 3.03)	1.87 (1.18, 2.99)	0.008
OST				
Current	215 (66%)	1.00	1.00	-
Previous, not current	19 (73%)	1.41 (0.58, 3.46)	1.35 (0.53, 3.41)	0.520
Never [†]	50 (89%)	4.34 (1.81, 10.43)	3.38 (1.38, 8.28)	0.008
HCV Genotype				
1	105 (63%)	1.00	1.00	-
non-1	152 (78%)	2.12 (1.34, 3.36)	2.18 (1.35, 3.51)	0.001

[†]unadjusted and adjusted Wald test P-overalls were 0.004 and 0.025, respectively



HCV Treatment Willingness in ETHOS



HCV Treatment Willingness & Subsequent Assessment and Treatment

Characteristics, n	Specialist assessment (n=194) [*]	aOR (95% CI)
High HCV Treatment willingness	153	2.50 (1.57, 3.99)

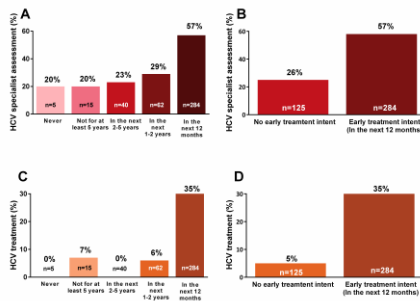
^{*}non-Aboriginal ethnicity, no recent benzodiazepine use and non-1 HCV genotype

Characteristics, n	Treatment uptake (n=105) [*]	aOR (95% CI)
High HCV Treatment willingness	94	4.72 (2.08, 10.69)

^{*}non-Aboriginal ethnicity, living with relatives/friends, never receiving OST, no recent methamphetamine use and non-1 HCV genotype



HCV Treatment Intent in ETHOS



HCV Treatment Intent & Subsequent Assessment and Treatment

Characteristics, n	Specialist assessment (n=194) [*]	aOR (95% CI)
Early HCV Treatment Intent	162	3.29 (2.01, 5.38)

^{*}non-Aboriginal ethnicity, no recent benzodiazepine use and non-1 HCV genotype

Characteristics, n	Treatment uptake (n=105) [*]	aOR (95% CI)
Early HCV Treatment Intent	99	8.21 (3.39, 19.87)

^{*}non-Aboriginal ethnicity, living with relatives/friends, never receiving OST, no recent methamphetamine use and non-1 HCV genotype



Conclusions

- HCV treatment willingness and intent among ETHOS participants were high
- In adjusted analyses, demographic, behavioural and clinical factors were associated with HCV treatment willingness and intent
- HCV treatment willingness and intent were associated with subsequent HCV specialist assessment and treatment uptake
- The development and implementation of strategies for enhanced HCV assessment and treatment should be expanded with an initial focus on people more willing to receive treatment. Strategies are needed to increase treatment willingness among those less willing



Acknowledgements

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- Professor Paul Haber – University of Sydney
- Dr Carolyn Day – University of Sydney
- Ms Nicky Bath – New South Wales Users and AIDS Association
- Mr Stuart Loveday – Hepatitis NSW
- Mr Victor Tawil – NSW Health Department
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- Dr Murray Krahn – University of Toronto

Partner Organisations

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- Sydney South West Area Health Service
- Hepatitis NSW
- NSW Users & AIDS Association (NUAA)



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ETHOS cohort