

OUTCOMES OF THE CT2 STUDY: A 'ONE-STOP-SHOP' FOR COMMUNITY-BASED, GENERAL PRACTITIONER-LED HEPATITIS C POINT-OF-CARE TESTING AND TREATMENT IN YANGON, MYANMAR

Authors:

Draper BL^{1,2}, Htay H³, Pedrana A^{1,2,4}, Yee WL³, Howell J^{1,2,5,6}, Kyi KP⁷, Naing W^{7,8}, Aung KS⁹, Markby J¹⁰, Easterbrook P¹¹, Bowring A¹, Aung W⁷, Sein YY⁷, Nwe N¹⁰, Myint KT³, Shilton S¹⁰, Hellard M^{1,2,12,13,14}

Affiliations:

¹ Disease Elimination Program, Burnet Institute Melbourne, Australia

² School of Public Health and Preventive Medicine, Monash University Melbourne, Australia

³ Burnet Institute Yangon, Myanmar

⁴ Health Services Research and Implementation, Monash Partners, Melbourne, Australia

⁵ St Vincent's Hospital Melbourne, Australia

⁶ Department of Medicine, University of Melbourne, Australia

⁷ Myanmar Liver Foundation

⁸ Yangon Specialty Hospital, Myanmar

⁹ National Hepatitis Control Program, Ministry of Health and Sports Myanmar

¹⁰ Foundation for Innovative New Diagnostics, Geneva, Switzerland

¹¹ Department of Global HIV, Hepatitis, and STI Programmes, World Health Organization, Geneva, Switzerland

¹² Hepatitis Services, Department of Infectious Diseases Alfred Hospital Melbourne Australia

¹³ Doherty Institute, Melbourne Australia

¹⁴ School of Population and Global Health, University of Melbourne, Australia

Background: With the advent of low-cost generic direct-acting antivirals (DAA) and simplified clinical pathways, hepatitis C virus (HCV) elimination is now achievable even in low/middle-income countries (LMIC). We assessed the feasibility and effectiveness of a simplified clinical pathway using point-of-care diagnostic testing and non-specialist-led care in a decentralized, community-based setting.

Methods: This feasibility study was conducted at two sites in Yangon, Myanmar: one for people who inject drugs (PWID), the other for people with liver disease. Eligible participants underwent rapid anti-HCV testing and HCV RNA testing using GeneXpert on-site. An external laboratory performed pre-treatment tests, including APRI score used to determine presence of cirrhosis. General practitioners determined whether participants started DAA therapy (sofosbuvir 400mg plus 60mg daclatasvir) immediately or required specialist review. Primary outcome measures were progression through the HCV care cascade, including: uptake of RNA testing, treatment, and treatment outcomes; and secondary outcome measures included comparison of treatment outcomes by cirrhosis status.

Results: 633 participants underwent anti-HCV testing and 606 (96%) were anti-HCV positive. All had HCV RNA testing and 535 (88%) were RNA positive. All then had pre-treatment assessments and 30 (6%) completed specialist evaluation. 489 (91%) were eligible for DAAs and 477 (98%) completed DAA therapy. 421 achieved SVR12 (92%; 421/456); outcomes were similar by site (PWID site: 91%[146/161]; liver disease site:

93%[275/295). Compensated cirrhotic patients were treated in the community; they achieved an SVR12 of 83% (19/23). Median time from RNA test to DAA initiation was 3 days (IQR 2–5).

Conclusion: Delivering a simplified, non-specialist-led hepatitis C treatment pathway in a decentralized community setting was feasible in Yangon, Myanmar. Retention in care and treatment success rates were very high, including for PWID and cirrhotic participants. This care model could be integral in scaling up HCV services in Myanmar and other LMICs.

Disclosure of Interest Statement: This study was supported by Unitaid. MH has received investigator-initiated grant funding from Gilead Sciences and Abbvie for unrelated work. AP has received investigator-initiated grant funding from Gilead Sciences, MSD and Abbvie and speaker fees from Gilead Sciences for unrelated work. JH has received investigator-initiated grant funding and speaker fees from Gilead Sciences for unrelated work. WLY has received Gilead Sciences Fellowship for related work. KPK has received non-financial support from Mylan, Hetero and Royal Ruby. YYS and WA have received non-financial support from Mylan. WN has received non-financial support from Mylan and Cipla. All others declare no potential competing interests.