

REACHING PEOPLE RECEIVING OPIOID AGONIST THERAPY ATTENDING COMMUNITY PHARMACIES WITH HCV: AN INTERNATIONAL CLUSTER RANDOMISED CONTROLLED TRIAL.

Byrne C^{1,2}, Radley A³, Inglis SK², Beer L², Palmer N⁴, Pham MD^{5,6}, Allardice K⁶, Wang H⁷, Hermansson M⁸, Semizarov D⁸, Healy B⁴, Doyle JS^{5,6}, Dillon JF^{1,3}

¹Division of Molecular and Clinical Medicine, School of Medicine, University of Dundee, Ninewells Hospital and Medical School, UK.

²Tayside Clinical Trials Unit, University of Dundee, UK.

³NHS Tayside, Directorate of Public Health, Kings Cross Hospital, Dundee, UK.

⁴Department of Microbiology and Infectious Diseases Cardiff, Public Health Wales, UK.

⁵Department of Infectious Diseases, the Alfred and Monash University, Melbourne, Australia.

⁶Disease Elimination Program, Burnet Institute, Melbourne, Australia.

⁷Division of Population Health and Genomics, School of Medicine, University of Dundee, UK.

⁸AbbVie Ltd, AbbVie House, Vanwall Business Park, UK.

Background:

Direct acting antivirals (DAA) can facilitate elimination of hepatitis c virus (HCV). However, conventional healthcare models struggle to engage those at risk. This study evaluated point-of-care (POC) HCV RNA diagnosis and DAA treatment for Opioid Agonist Therapy (OAT) clients in community pharmacies against conventional care.

Methods:

Pharmacies in Scotland, Wales, and Australia were randomized to conventional or intervention pathways. In the conventional pathway, pharmacists discussed HCV with OAT clients and directed them to local testing sites. In the intervention pathway, clients were directed to nurses for POC RNA testing in the pharmacy using Genedrive Diagnostics' platform. HCV-positive participants received DAAs alongside OAT and follow-up for Sustained Virologic Response (SVR); via local sites in the conventional arm, and within pharmacies in the intervention arm. The study ran from October 2019–January 2021. Mixed effects logistic regression was performed using Stata IC 16.

Results:

Forty pharmacies were randomized evenly to each arm. The intention-to-treat (ITT) population contained 1,410 OAT clients. In the conventional arm (n=648), 62 (10%) agreed to testing, 17 (27%) were tested, 6 (35%) were RNA positive, and 5 (83%) initiated treatment. In the intervention arm (n=762), 148 (19%) agreed to testing, 144 (97%) were tested, 23 (16%) were RNA positive, and 22 (96%) initiated treatment. SVR was obtained by 2 (40%; conventional) and 18 (82%; intervention) participants. Statistical analysis indicated that participants in the intervention arm had higher odds of being tested, OR 16.95 (7.07–40.64), $p < .0001$; initiating treatment, OR 4.29 (1.43–12.92), $p = .010$; completing treatment, OR 4.53 (1.39–14.71), $p = .012$; and obtaining SVR, OR 8.64 (1.82–40.91), $p = .007$.

Conclusion:

POC HCV diagnosis by nurses in pharmacies made testing and treatment more accessible for OAT clients. The model delivered higher treatment completion and cure rates than conventional care. This pathway can facilitate local HCV elimination.

Disclosure of Interest:

CB has no disclosures. AR has received personal honoraria from AbbVie and Gilead and institutional research grants from MSD, AbbVie, Gilead, Roche and Camerus. SKI has no disclosures. LB has no disclosures. NP has no disclosures. MP has no disclosures. KA has no disclosures. HW has no

disclosures. BH has received unrestricted educational grants, payments for advisory boards and payments for presentations from Jannet, Gilead, BMS, Abbvie and Merck. He has also received funding from Gilead, Merck, Abbvie and BMS. He has secured unrestricted funding from Abbvie, Merck and Gilead. JSD has received investigator-initiated research support from AbbVie, Gilead Sciences, Merck and Bristol Myers Squibb; and has received honoraria from AbbVie, Gilead Sciences, and Merck. JFD has received personal honoraria for lectures and institutional research grants from MSD, AbbVie, Gilead, Roche and Janssen. DS and MH are employees of AbbVie and may hold stock in AbbVie. AbbVie were involved in a collaborative process to develop the protocol alongside study Investigators as part of the AbbVie Investigator Initiated Scheme. AbbVie funded the study and provided DAAs.