

# CLINICAL EFFECTIVENESS OF PHARMACY-LED VERSUS CONVENTIONALLY DELIVERED ANTIVIRAL TREATMENT FOR HEPATITIS C IN PATIENTS RECEIVING OPIOID SUBSTITUTION THERAPY: A PRAGMATIC CLUSTER RANDOMISED TRIAL

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**Background:** Highly-effective direct acting antiviral drugs (DAAs) provide the opportunity to eradicate Hepatitis C (HCV) infection from our communities. To achieve this, efficient test-and-treat approaches for high-risk groups are needed. This study examined whether a community pharmacist-led pathway, increased treatment uptake, completion, and cure rates for people receiving opioid substitution therapy (OST), compared to conventional care.

**Methods:** This cluster randomised trial was performed in 55 community pharmacies on patients receiving OST. Pharmacies were randomly allocated to refer consented patients with evidence of HCV antibodies to conventional care (27 pharmacies) or enter them into a pharmacy-led pathway (28 pharmacies) where pharmacists assessed participants in their pharmacy. All pharmacies offered dried blood spot testing (DBST) for HCV. In the pharmacist-led arm; infection with HCV genotype 1 or 3 was confirmed; assessment bloods were taken; DAAs were prescribed by a pharmacist. In the control arm, the patient was referred to a conventional nurse-led care pathway, outside the pharmacy. Treatment in both arms was delivered as daily modified directly observed therapy in the pharmacy in tandem with OST. The primary outcome was number of sustained viral responses at 12 weeks (SVR12) after treatment completion. Trial registration: NCT02706223.

**Results:** Between December 2016 and June 2018, 356 participants were recruited from 2718 OST recipients: 219 to the pharmacy-led arm and 137 to conventional care. In the pharmacy-led arm; 112 (51%) accessed treatment compared to 61 (45%) in the conventional arm (OR 1.889, 1.276-2.789,  $p=0.0015$ ) and 98 (88%) achieved SVR in the pharmacy-led arm compared to 43 (70%) in the conventional arm (OR 2.375, 1.555-3.628,  $p<0.0001$ ) (notional population cure rate of 18% versus 8%)

**Conclusion:** A pharmacist-led pathway can increase linkage to care and cure of HCV compared to conventional care.

**Funding:** Partnership between the Scottish Government, Gilead and Bristol Myers-Squibb

## Disclosure of Interest Statement:

Mr Radley: Honorariums from Gilead and Abbvie; Research Grants from Gilead and Roche  
Professor Dillon: Research Grants, and Honorariums from Abbvie, Bristol Myers Squibb, Gilead, Janssen, Merck Roche Sharp & Dohme and Roche.

Prof Donnan: Research grants from Novo Nordisk, GSK, Shire pharmaceuticals, Gilead and Bristol Myers Squibb. Member of the New Drugs Committee of the Scottish Medicines Consortium..

All other authors declare no competing interests