ROLE OF PEER SUPPORT IN A HEPATITIS C ELIMINATION PROGRAM

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Background:
Many people with chronic hepatitis C infection do not engage in conventional treatment services. To eliminate hepatitis C and avoid perpetuating health inequalities therapy must be provided to everyone. In other diseases peers with lived experience of the condition have improved access to care but for hepatitis C studies have not shown unequivocal benefit.

Methods:
Natural experiment emulating step-wedge design. Retrospective analysis of the English National Health Service treatment registry comparing treatment delivery networks with and without peers using either Bayesian Poisson (for count outcomes) or Bayesian Binomial (for proportion outcomes) mixed effects models with time fixed effects to adjust temporal trends in the data. For each outcome, we estimated the relative ratio (RR - Poisson model) or the odds ratio (OR - Binomial model) between peer networks and non-peer networks.

Results:
We analysed 30,729 patients within 21 operational delivery networks. In networks with peers there was an increase in the number of people initiating therapy (RR 1.12 95%, credible interval 1.02 to 1.21) and an increase in the proportion who completed therapy (OR 2.45 95%, credible interval 1.49 to 3.84). There was weak evidence of improvements in virological response (OR 1.14 95% credible interval 0.979-1.36). We repeated the analysis looking at the impact of peers two months after they had been introduced, which we assumed was when they had established networks of contacts, but we saw no meaningful changes in measured outcomes compared to the analysis conducted immediately after their introduction.

Conclusion:
In treating patients with chronic hepatitis C infection, the inclusion of peer supporters may increase the number of people who initiate and complete antiviral therapy. We demonstrate potential of natural experiments and alternative emulated trial designs in evaluation of HCV interventions.

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