

Undiagnosed infection is an important barrier to treatment

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Improving targeted screening for hepatitis C in the UK

Primary care practitioners can play an important role

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A recent report from the Health Protection Agency in the United Kingdom estimates that 216 000 people, 90% of whom have injected drugs, are infected with the hepatitis C virus.¹ Also at higher risk of infection are migrants from South Asia and eastern Europe and men who have sex with men.¹ Of major concern is that half of the infected people who inject drugs who were surveyed (equivalent to nearly 100 000 people) were unaware of their diagnosis.¹ This represents a huge burden of undiagnosed chronic hepatitis C in the UK and means that we should seriously consider targeted screening for hepatitis C. Such a shift in policy would have implications for primary care.

Targeted screening for hepatitis C fulfils World Health Organization criteria for screening.² Because chronic infection has no specific symptoms, screening is the only way to identify people with hepatitis C before the onset of symptomatic liver disease. Serious complications such as cirrhosis develop in about 30% of chronically infected people after 20 years, and people who are infected with hepatitis who also have cirrhosis have a 5% annual risk of decompensated liver disease or hepatocellular carcinoma.³ Disease associated with hepatitis C infection is now a leading indication for liver transplantation.³ Hepatitis C related hospital admissions, deaths, and liver transplants have been rising steadily in the UK since 1996,¹ and further substantial increases are projected. Treatment of chronically infected patients with pegylated interferon and ribavirin is a cost effective way to prevent these complications. Cure rates in clinical practice (40% for genotype 1,

70% for genotype 3) are comparable to rates seen in randomised trials,⁴ but treatment is associated with frequent and unpleasant side effects.

However, treatment is improving rapidly. Several new directly acting antivirals are available or are in advanced stages of development.⁵ The hepatitis C virus NS3/4A protease inhibitors boceprevir and telaprevir (recently approved by the National Institute for Health and Clinical Excellence; NICE) improve cure rates in patients with the more difficult to treat genotype 1 to 70% when given with standard treatment.³ In addition, interferon sparing regimens considerably improve tolerability of treatment, and clinical trials of combinations of directly acting antivirals without pegylated interferon show efficacy rates that are encouraging.⁵ Tolerable and effective treatments of short duration are likely to become available in the next few years, and treatment services will probably need to be expanded beyond what has already

been achieved through the national hepatitis C action plans.

Undiagnosed infection remains an important barrier to treatment.¹ Draft NICE guidelines currently under consultation recommend strategies to improve testing of people in high risk groups in various settings.⁶ Screening of people who currently inject drugs should take place in any setting, particularly drug services, whereas primary care is more appropriate for identifying and screening people who previously injected drugs.⁷ Test-

ing has increased considerably in primary care in recent years.¹ However, the proportion of positive tests is falling,¹ which suggests that testing might be more efficiently targeted.

In clinical trials, primary care interventions to encourage case finding have increased uptake of testing and diagnosis.⁷⁻⁸ In the UK, the yield is greater when screening is targeted at high risk groups because the prevalence of hepatitis C in the general population (such as first time blood donors) is very low.¹ A systematic review of eco-

nomical evaluations provides evidence that screening in primary care is cost effective if targeted at high risk groups.⁹ Population age based screening, as advocated in the United States, is unlikely to be cost effective in regions like the UK, where population prevalence is lower.⁹ However, this does not mean that people who lack traditional risk factors should not be tested if there is clinical suspicion.

Successful interventions are not limited to people who inject drugs; community interventions to increase testing in South Asians in the UK have also shown acceptability and efficacy.¹⁰ Public education campaigns to raise awareness of hepatitis C have been instituted in recent years, and studies suggest that these campaigns are more effective when complemented by education and support in primary care.¹¹ New technology, such as testing dry blood spots, improves uptake in people in whom venous access is difficult.¹

However, case finding is unlikely to be beneficial unless sufficient numbers of infected people ultimately undergo successful treatment. Attendance at specialist clinics in the UK remains suboptimal. If screening in primary care is to translate into more patients being treated, it is crucial to increase attendance rates by strengthening treatment outreach programmes from secondary care and improving communication about the benefits of treatment.

Intervention studies support the acceptability of targeted screening, but previous qualitative studies have highlighted the need for sensible and appropriate pre-test and post-test counselling in vulnerable groups.¹² Concerns about counselling should not become a barrier to testing, particularly given the clear benefit of curative treatment. Specific training in detecting and testing for viral hepatitis in primary care is offered through the Royal College of General Practitioners (www.elearning.rcgp.org.uk).

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