People with chronic hepatitis B virus infection need lifelong monitoring. This care could be provided by specialist nurses based in GP clinics.

A nurse-led community hepatitis B clinic

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Patients diagnosed with chronic hepatitis B virus (HBV) infection require lifelong monitoring and are usually cared for by specialist teams in secondary care, with viral hepatitis clinical nurse specialists (VHCNS) often playing a vital role.

The incidence of cirrhosis developing in people with chronic HBV is 8-20% (National Institute for Health and Care Excellence, 2013; European Association for the Study of the Liver, 2012); the annual incidence of HBV-related liver cancer, hepatocellular carcinoma, is 2-5% of people with cirrhosis related to hepatitis B (EASL, 2012).

KCH serves Lambeth and Southwark, and accepts referrals from outside this area. Between 15% and 18% of local people are from areas with a higher endemic incidence of hepatitis B (>8%) (Department of Public Health et al, 2009; Southwark Analytical Hub, 2009). Two of these areas are Asia and sub-Saharan Africa.

In 2011, I applied to the Queen’s Nursing Institute/Burdett Trust for support for a project to determine if people with chronic HBV under the care of VHCNS in secondary care could be managed at their GP practice by the same nurses.

Local management

Patients referred to KCH are tested for other bloodborne viruses and potential causes of liver disease. Means of exposure to the virus are discussed, as are forward transmission, requirement for family vaccination and implications of the diagnosis.

The cornerstone of HBV management is HBV DNA viral load measurement. Patients with e-antigen negative chronic HBV who have stable blood tests (HBV DNA viral levels persistently <1,000IU/mL) and normal liver function, and are deemed suitable, have their care taken over by specialist nurses (KCH, 2010). Care is under the supervision of a consultant and any concerns are discussed at a weekly monitoring meeting.
hepatitis multidisciplinary team meeting. Depending on blood tests and need for hepatocellular carcinoma screening, patients are reviewed every six months or annually.

Community-based reviews
The project’s objective was to set up clinics at two GP practices to review a small proportion of patients. This would determine if the hospital model could be adapted for the community. The two following goals were set:
« To ensure that attendance rates at the clinics were comparable with secondary care;
« To improve or maintain patient satisfaction with their care following the change of location.

Development and implementation
As the project ran for one year, only patients already registered at two GP practices near KCH were involved.

The clinics ran from April to December 2012, on alternating weeks at each practice. An operational guide set out clinic processes. The nurse was responsible for taking blood samples and arranging a courier to take them to the hospital for testing. The results were sent by letter to the GP and patient, as in existing practice.

Practical challenges
Before the clinics were opened, various issues needed to be considered, such as:
« IT access at the practices;
« Arranging the courier;
« Identifying and contacting patients;
« Health and safety;
« Clinical governance;
« Infection control policies;
« Administrative support;
« Identifying suitable days taking into account room availability and staffing.

As the clinics would be paper-free, IT access to patient records was vital, and blood tests had to be ordered through secondary care IT systems. This proved more problematic than anticipated, and steps had to be taken to ensure the network link was accessible before starting the clinics.

KCH’s operational data management team helped identify patients, who were chosen irrespective of age, sex, ethnic origin or language spoken. One patient required an interpreter. Patients were contacted by letter, which explained the reason for the change and provided contact details. The number of patients using the clinics increased as they became more established.

Achievement of the specific aims
Patient attendance
Patient attendance was slightly lower at the GP-based clinics than in secondary care over the same period.

Non-attendance was 19% (n=133/701) in secondary care and 23% (n=77/30) at the GP clinic. Various reasons were considered; some patients admitted that they did not notice the location had changed despite being sent letters about it. Two missed two appointments each, which affected the overall non-attendance rate because of the relatively small number of patients.

Patient satisfaction
Patients attending the service were given a questionnaire to evaluate their satisfaction with the service. The majority (78%) of patients under secondary care review by the nursing team already rated their care as “very good” (n=46); this increased to 86% of patients seen at their GP practice (n=14) (Fig 1 and Fig 2). The change in location was also positively viewed by patients.

Before the GP-based reviews, only 30% of patients surveyed stated they would rather be seen by a specialist nurse at their GP practice. This dramatically increased to 93% following review. Patients were initially reluctant to have their care changed but, once the service was introduced, it was viewed very positively. The return rate of the questionnaires for the GP-based clinics was relatively low (14/23, 63%). The questionnaires were available only in English and this could have been a factor.

In addition, as one of the GP practices was keen for me to see patients newly diagnosed with viral hepatitis, I was able to give general information around the diagnosis, be on hand for any questions and to discuss next steps. Eight patients were seen in this way (five with HBV and three with hepatitis C) before formal referral to the viral hepatitis service at KCH.

Plans
This project has laid foundations for exploring the potential of community-based review of low-complexity patients with hepatitis B by specialist nursing teams.

Evaluation
This project was designed on a small scale. To make GP-based reviews as cost effective as possible, it would be sensible to consider establishing GP “hubs” in one place.

The project has flagged up several challenges, particularly with regards to IT. It has also highlighted issues around attendance and location of services, and the need to tailor self-management educational material for this ethnically diverse population with a potentially stigmatised chronic viral disease. NT

References