

Sandwell and West Birmingham Hospitals NHS Trust diagnostic headache nurse specialist service

Professor C E Clarke

In Sandwell and West Birmingham Hospitals NHS Trust catchment area in the north of the West Midlands, we were swamped by headache referrals because some GPs were not sufficiently confident to diagnose or treat simple headache disorders.

In 2004, we trained an experienced neurology ward sister in the differential diagnosis of headache disorders (Clarke et al, 2005). Over 6 months, patients with non-acute headache disorders were seen by the nurse and a consultant neurologist to take a history and perform a neurological examination. Both reached independent diagnoses for patient's various headache disorders. Since serious causes of headache would be unlikely, a series of role players were included who had been trained to present with either benign or sinister headaches.

We found that consultants diagnosed 239 patients with tension-type headache (47%), migraine (39%) or other headache disorders (14%). The nurse agreed with the consultant in 92% of cases of tension-type headache, 91% of those with migraine and 61% of other diagnoses. Where the nurse did not agree with the diagnosis, most would have been referred for a consultant opinion. The nurse and the doctors misdiagnosed the same 3 of 13 role players.

We concluded that a nurse can be trained to diagnose simple headache disorders. We introduced the diagnostic headache nurse specialist service to our sub-regional neurology unit to:

1. Diagnose migraine, tension-type headache and medication overuse headache
2. Advise GPs on the treatment of these disorders
3. Collaborate with consultant neurologists in managing more complex headache disorders.

Over the following 5 years, we audited our experience (Clarke et al, 2008 and 2010). The nurse saw 3,655 new patients with headache disorders with good patient satisfaction levels and no complaints from patients or GPs.

530 (14.5%) of the 3,655 patients underwent cranial imaging, but the large differences in the proportion referred for imaging by each consultant disappeared following feedback on their behaviour. The other unexpected outcome from introducing the nurse is a specialised service for patients with cluster headache, with rapid access to the nurse and thus treatment when a cluster starts.

The diagnostic headache nurse specialist service is now contracted with our CCG as an integral part of the neurology service. In the latest development of the service, we are training the nurse to administer Botulinum toxin in chronic migraine following NICE guidelines.

This headache nurse specialist model should be extended to all major headache services throughout the UK. It will reduce the time consultants need to spend with simple headache disorders and improve the quality of service for patients in terms of reduced waiting times and more rapid access to specialised treatments for cluster headache and chronic migraine.

Clarke CE, Edwards J, Nicholl DJ, Sivaguru A, Davies P, Wiskin C. Ability of a nurse specialist to diagnose simple headache disorders compared with consultant neurologists. *J NeurolNeurosurg Psychiatry* 2005;76:1170-2.

Clarke CE, Edwards J, Nicholl DJ, Sivaguru A, Furnston A, Davies P. Prospective evaluation of a nurse-led headache service in a sub-regional neurology unit. *Brit J Neurosci Nursing* 2008;4:74-8.)

Clarke CE, Edwards J, Nicholl DJ, Sivaguru A. Imaging results in a consecutive series of 530 new patients in the Birmingham Headache Service. *J Neurol* 2010;1274-78.