

A Review of an Epilepsy Nurse Specialist's Clinical Activity & Association with Paediatric Epilepsy Admissions

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Introduction

The new post of a Children's Epilepsy Nurse Specialist (ENS) at Kings Mill Hospital, Sutton in Ashfield, UK was created April 2007. Funding was supported by the Roald Dahl Foundation and Epilepsy Action for the first twelve months. The ENS works as a key member of a multidisciplinary epilepsy service, providing appropriate, accessible services for children with epilepsies, their families, schools and other professionals. We aimed to quantify and characterise clinical activity for the ENS over time and to assess whether the introduction of an ENS is associated with a change in paediatric epilepsy admission rates.

Methods

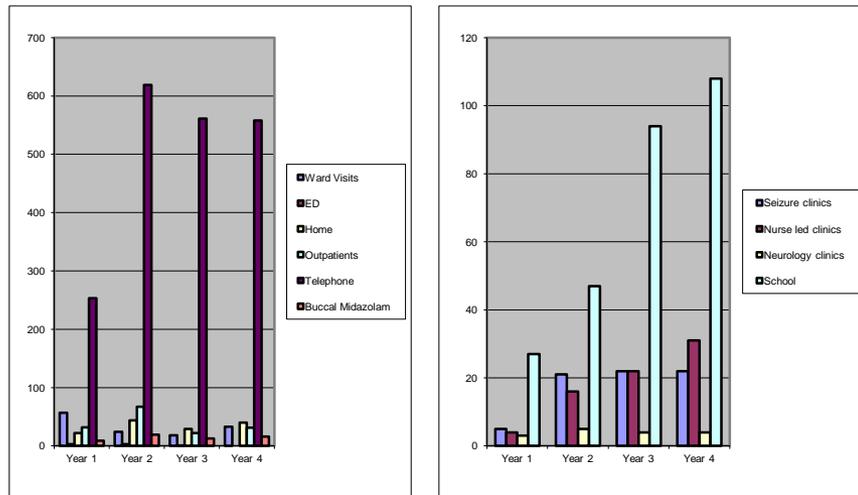
A prospective review of the ENS diary was undertaken documenting all client contact. Activity was collated comparing the types of client contact over a 4 year period 2007-2011.

Local admission rates of children with epilepsy were also obtained using the Child and Maternal Health Observatory (CHIMAT) Data Atlas which maps Hospital Episode Statistics (HES) data to geographical areas.

Diary Review

The prospective diary review showed a yearly median of 29 ward visits; 2 Emergency Department visits, 35 home visits; 560 telephone contacts; 15 Buccal Midazolam training sessions and 32 ad-hoc paediatric outpatient reviews. Each year there was a median of 22 multidisciplinary epilepsy clinics; 19 nurse led clinics; 4 paediatric neurology clinics and 71 school visits.

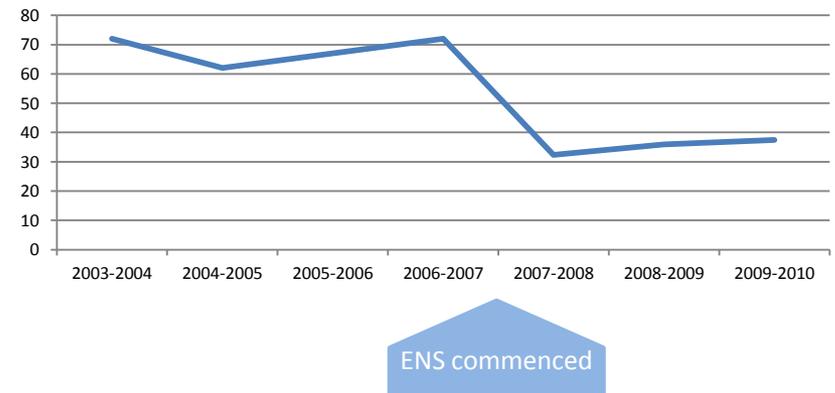
Fig 1. Bar charts showing totals of different activities for each year



Epilepsy related admissions

Mean admission rates over 3 years before the ENS commenced were 67/100,000 children/year (range 62-72.1). Mean rates over 3 years after ENS commencement were 35.2/100,000 children/year (range 32.3-37.5)

Fig 2. Graph showing annual epilepsy admissions aged under 19 years for Nottinghamshire County per 100, 000 population



Conclusions

The diary review clearly shows the diversity of the ENS activity and how this has changed over time. Ward visits have reduced coinciding with reduced epilepsy admissions. Outpatient interventions have increased. The number of telephone contacts have more than doubled in the second year, appearing static in years three and four. Educational and supportive visits to the child's home and school have also increased. Activities of an ENS changes over time towards non-admission and community-based activity.