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Letters

Effectiveness of guidelines on persistent glue ear in children

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Authors' estimates of size of impact are probably excessive

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EDITOR—Mason et al have shown how the *Effective Health Care* bulletin on treating persistent glue ear in children was associated with a subsequent significant decline in rates of surgery for this condition.¹ Their estimates of the size of the impact, however, are probably excessive. This illustrates the dangers of undertaking short time series analyses.

They compared surgical rates after publication of the bulletin with the rates in the preceding three years. They report that during the preceding years the rate rose from about 1.7 to 2.1 per 1000 children. The rise over this period, however, does not reflect the longer term trends in the surgical rate observed in children aged under 10 in the districts covered by the old Oxford and East Anglian regions: the rate peaked in the mid-1980s and then fell slowly but steadily during the following six years.² Mason et al seem to have based their claim that the rate increased greatly during the 1980s on a paper that covered the period only up to 1982.³

The upturn during 1989-92 has to be seen in the context of an overall decline from 1985 to the present day. The reason for the short reversal in an otherwise steady decline is unclear. One clue is provided by the observation that the same happened for tonsillectomy rates, which, with the exception of an upturn in 1989-92, have continued their longstanding decline right up to the present day.

This paper illustrates the need, when undertaking time series analyses, to consider a sufficiently long period.

References

1. Mason J, Freemantle N, Browning G. Impact of Effective Health Care bulletin on treatment of persistent glue ear in children: time series analysis. *BMJ* 2001; **323**: 1096–1097. (10 November.)
2. Black NA. Surgery for glue ear: the English epidemic wanes. *J Epidemiol Community Health* 1995; **49**: 234–237.
3. Black NA. Surgery for glue ear—a modern epidemic. *Lancet* 1984; **i**: 835–837.

Effect claimed may depend on how persistent glue ear is defined

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EDITOR—Mason et al reported a dramatic decline in procedures to insert grommets for glue ear in the population of England aged under 15.¹ This prompted us to re-examine our earlier analysis of the same dataset for the same condition, included in an evaluation of the reports published by the South and West Development and Evaluation Committee.² The committee's recommendation that glue ear should be managed by a period of watchful waiting³ mirrored that of the *Effective Health Care* bulletin studied by Mason et al.⁴ Unlike the result reported in the bulletin, however, we concluded that the committee's report, published two years after the bulletin, had no discernible effect.

In the same way as Mason et al did, we identified all grommet procedures from hospital episode statistics OPCS-4 surgical code D15.1 for inpatient and day case admissions. Our analysis of the data for all England shows that although the annual rate for all grommet procedures carried out in the population aged under 15 declined significantly between 1992-3 and 1997-8, as Mason et al showed, those procedures carried out specifically for persistent glue ear remained relatively constant.

Limiting the number of different ICD-9 (International Classification of Diseases ninth revision) codes in the hospital episode statistics surgical code D15.1 to those containing over 100 cases in 1992 yielded 49 different codes. In 1994 it yielded 57 different codes. We selected ICD-9 codes 381.2, 381.29, and 381.20, and ICD-10 code H65.3 (for chronic mucoid otitis media (glue ear)) to isolate those procedures carried out on children whose reason for admission was “persistent glue ear” from those carried out for other conditions. The rate of grommet insertion fell by 21% (from 3.3/1000 children aged under 15 in 1992-3 to 2.6/1000 in 1997-8) for glue ear but by 35% (from 4.9/1000 to 3.2/1000) for conditions not coded specifically as glue ear.