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Impaired hearing in the elderly

Durham Area Health Authority is developing audiology services and has recently established a centre for issuing hearing aids. Accurate figures of the number of elderly people with hearing problems are not available, for definitions are not always consistent. When more than 4000 persons aged 65 years and over were interviewed one-third had some difficulty in hearing.[1] Only 6·3% had a hearing aid. A summary[2] of statistical data suggests that 3%-3½% of British people have a socially handicapping hearing loss. A variety of available statistics has been collated[3] which give some indication of the numbers affected. We investigated the hearing of patients attending a day hospital, serving a population of nearly 125 000, mainly for hemiplegic patients recovering from strokes. The staff were concerned that some patients had hearing difficulties affecting their behaviour, wellbeing, and response to treatment.

Patients, methods, and results

One of us (GWC) attended the hospital on six consecutive days and produced an audiogram for each of 38 patients (10 men, 28 women). Their ages ranged from 47 to 89 years—18 were between 58 and 69, five between 70 and 79, and 11 were 80 or over. Air and bone conduction tests and, when indicated, a tympanogram were done in each case, using a Kamplex TA155 and an AP61 impedance audiometer. A threshold of 20 dB, except at 6000 and 8000 Hz, was regarded as normal.

Five patients had normal hearing. Five others with a pure conductive loss of 30-35 dB on the lower frequencies had little or no difficulty. Eight out of 27 patients showing the typical curve associated with presbyacusis had little difficulty. Nineteen with a moderate to severe perceptive loss have since been fitted with aids. One patient, deafened in 1941, heard and understood speech at 10 feet (3 metres) when fitted with a commercial aid. Thus over half the patients had very poor hearing. Aids had previously been prescribed for two. One used it successfully, the other did so after proper instruction and fitting. Another patient, having declined an aid two years previously, changed his mind. Shortly after the hearing aids had been fitted the hospital staff noticed an improvement in the patients' attitudes and communication.

Six months later the 20 patients with impaired hearing were reviewed. One had died; one had refused an aid; and out of the 18 fitted with an aid 15 had continued to use it, one used it occasionally, and two did not use it.

Comment

Presbyacusis was expected in these patients but most were unaware of the help that is freely available from hearing aids. Almost all accepted their poor hearing as something they must expect with lengthening years. Attitudes seem to have changed little since Miss Bates described her mother's disability.[4] Our small survey shows that screening the hearing of groups of elderly people would be valuable. But providing a hearing aid is not enough: appropriate back-up facilities are required and about one-quarter of the patients may need additional rehabilitation.[2] Expansion of the services, though clearly desirable, is dependent on resources available.

We thank Dr G Ismay and Mr J S C Munro for their help and Sister Finnigan and her staff for their co-operation.

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Correction

Successful prophylaxis against febrile convulsions with valproic acid or phenobarbitone.

In the study by Sheila J Wallace and J Aldridge Smith (9 February 1980, p 353) the preparation used was Epilim syrup, which contains the sodium salt of valproic acid rather than the acid itself.

Instructions to authors

The following are the minimum requirements for manuscripts submitted for publication.

A stamped addressed envelope or an international reply coupon *must* accompany the manuscript if acknowledgment of its receipt is desired.

(1) **Typing** should be on one side of the paper, with double or triple spacing between the lines and 5-cm margins at the top and left-hand side of the sheet.

(2) **Three copies** should be submitted.

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(4) **References** must be in the Vancouver style (*BMJ*, 24 February 1979, p 532) and their accuracy checked before submission.

(5) **SI units** are used for scientific measurements. In the text they should be followed by traditional units in parentheses. In tables and illustrations values are given only in SI units, but a conversion factor must be supplied. For general guidance on the International System of Units, and some useful conversion factors, see *The SI for the Health Professions* (WHO, 1977).

(6) **Authors** should give their names and initials, their current appointments, and not more than two degrees or diplomas. Each author must sign the covering letter as evidence of consent to publication.

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(9) **Detailed instructions** are given in the *BMJ* dated 5 January 1980 (p 6).