

Impact of an audiology clinic in one general practice

K KHUNTI

M CARR

SUMMARY

There is a large demand for the provision of hearing aids. However, there are lengthy delays involved between referral and fitting of National Health Service (NHS) hearing aids. This report shows that a general practice based audiology clinic can lead to an increase in the number of patients referred and fitted with a hearing aid. The introduction of the clinic also led to reduced waiting times for patients to be fitted with hearing aids.

Keywords: audiology; deafness; hearing aid.

Introduction

In the United Kingdom (UK) there is a large demand for the provision of hearing aids, which is likely to increase as the population ages. However, there is a large unmet need for hearing aid provision, and simple audiometric assessment in health centres may satisfy this need.¹ Furthermore, the Royal National Institute for the Deaf issued a report expressing concerns about the lengthy delays involved between referral and the fitting of NHS hearing aids, with large variations (1–132 weeks) being reported.² A subsequent report suggested that hearing aids could be provided in health centres by community dispensers supervised by general practitioners.³ This study retrospectively examined the impact of an audiology clinic in one inner-city training practice situated in a health centre in Leicester.

Method

Initial assessment of patients with deafness, prior to the implementation of the audiology clinic, included examining the external ears and carrying out tuning fork and whisper tests. Patients unable to hear whispered conversation or the tuning fork were referred to the otolaryngology department at the local hospital. After the introduction of the audiology clinic, patients were referred to an experienced audiologist after an examination of their external ears. Pure tone audiometry was carried out in a quiet room in the health centre using the PC Worth Kamplex Diagnostic Audiometer. Patients with an abnormal audiogram were referred directly to the hospital hearing aid clinic if they did not have any other accompanying symptoms. Patients suffering with other symptoms were referred to an otolaryngologist for further assessment at the only provider unit in Leicester. The practice audiology clinic stayed in operation for eight months from 1 April 1991, after which the audiology clerk was on prolonged study leave. We carried out a retrospective review of

notes identified by a computer search of all new patients with deafness who were referred during the eight-month periods from 1 April 1990 and 1 April 1991.

Results

Table 1 shows the results of this study. Fifty-three patients were referred to the audiology clinic in the eight-month study period following the introduction of the clinic. Thirty patients were subsequently referred with a new diagnosis of deafness. Half of the patients referred with deafness were fitted with a hearing aid prior to the audiology clinic (5/10); however, this increased to three-quarters of patients being fitted with a hearing aid after the introduction of the clinic (24/29). One patient did not attend for an appointment. Over half the patients (17/30) with deafness were referred directly to the hospital hearing aid clinic. All patients referred directly to the hearing aid clinic were fitted with a hearing aid.

Discussion

Hearing disability is common in elderly people and may cause communication difficulties, social isolation, and depression.⁴ This is the first study to investigate the impact of a health centre based audiology clinic in primary care, although it has limitations. Surveys have shown that over half of all elderly people with a hearing disability possess hearing aids.^{1,5} The low uptake of hearing aids in elderly people is related to several factors including low referral rates by general practitioners, a resigned acceptance of deafness by patients, and poor diagnostic facilities.⁶

Pure tone audiograms can be carried out accurately in general practice.⁷ This study confirms that a general practice based audiology service can lead to an increase in the number of patients being referred and fitted with a hearing aid, and to a reduction in waiting times. The number of patients referred for a hearing aid increased significantly following the introduction of an audiology clinic. Previously, patients were assessed using crude whispering tests, which may not be as sensitive. The waiting time for patients referred through the otolaryngologist was significantly lower in the period following the introduction of the audiology clinic. This probably reflects the local initiatives introduced by the hospitals to reduce waiting times.

Open access to complex diagnostic tests is becoming more popular and we propose that a health centre based audiology service should also be available, although this will have resource implications. Strict guidelines need to be drawn up between otolaryngologists and general practitioners if this system of referrals is to be successful. Further research needs to be undertaken to determine the outcome of patients who are fitted with a hearing aid following the introduction of an audiology clinic in primary care.

K Khunti, FRCGP, lecturer, Eli Lilly National Clinical Audit Centre, Department of General Practice and Primary Health Care, Leicester.
M Carr, RGN, practice nurse, Winstanley Drive Health Centre, Leicester.
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Table 1. Results of patients referred and fitted with a hearing aid before and after the introduction of the audiology clinic.

	Pre-audiology clinic (1990)	Post-audiology clinic (1991)	
Number of patients registered with the practice (April)	9602	9639	
Number of patients referred with a new diagnosis of deafness	10	30	$\chi^2 = 8.97, 1 \text{ df}, P = 0.0027$
Number of new patients with deafness who had a hearing aid fitted	5	24	$\chi^2 = 11.12, 1 \text{ df}, P = 0.0009$
Mean age in years of patients fitted with a hearing aid (range)	75.8 (63-83)	76.1 (60-94)	
Mean waiting time in weeks between referral and fitment of a hearing aid for patients referred via the otolaryngology dept (range)	64 (35-66)	23 (8-44) ^a	Mann-Whitney U: $P = 0.05$
Mean waiting time in weeks between referral and fitment of a hearing aid for patients referred directly to the hospital hearing aid clinic (range)	N/A	13 (7-38) ^a	

^aMann-Whitney U: $P = 0.023$

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Address for correspondence

Dr Kamlesh Khunti, Clinical Lecturer, Eli Lilly National Clinical Audit Centre, Department of General Practice and Primary Health Care, Leicester General Hospital, Gwendolen Road, Leicester LE5 4PW.

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