To recruit and reward

The practical consequence has been that, over a fairly long time, health service units have experienced severe difficulties in attracting and retaining nurses and women orderlies—classified as junior medical personnel—who tend to leave for more lucrative jobs elsewhere. When the authorities decided that the current pay increases were to be phased in over a five year period it is not surprising that they selected those groups of staff to be among the first to benefit.

But the official report of the increases in *Pravda* invokes not problems of recruitment and retention but the admittedly overlapping imperative: additional reward for those who are performing "difficult and responsible types of work."³ In concrete terms that refers to surgeons of various specialties (among them obstetrician gynaecologists), anaesthetists and the junior and middle grade personnel who work alongside them in the appropriate hospital units, maternity homes, and women's consultation centres in urban areas. Orderlies in other types of urban hospitals have also been included in this first round.

With effect from November 1987 improved salary scales will come into operation for another group of key personnel for whom inducement additions were introduced many decades ago—those working in the rural hinterland. In this connection it is possible to cite precise figures. At present the basic salary scale of a surgeon practising in the country ranges from 138 to 180 roubles a month; from November it will rise to 190 to 230 roubles, which clearly represents a substantial improvement.

Reference to the basic scale leads on to the point that the authorities have also decided to rectify a long standing cause of complaint. In the past a doctor's basic salary reached its maximum after 30 years of service; that extremely long period has now been reduced to 15 years.

To encourage excellence

All the same, it would be a mistake to focus simply on across the board gains available to all personnel in comparable employment. The reason is that, to quote the words of one official, "by contrast with the previous ones, the current adjustment of pay is not mechanical at all."⁴ Chief doctors will now have greater

opportunities to award bonuses in order to recompense especially conscientious performance. A similar motivational objective evidently underlies the decision to increase the pay of individuals who have passed a form of efficiency assessment known as attestation and those who have obtained higher academic degrees—candidates and doctors of medical science—or honorific titles. Thus the title "Honoured Doctor of the Republic," which formerly earned its holder an extra 10 roubles a month, will now bring him 30 roubles, while the newly created title "People's Doctor of the USSR" carries a merit award of 50 roubles a month.

Also tending towards the greater recognition of individual effort is an interesting development known as the brigade form of pay which, formerly experimental, can now be adopted in any unit. Relating to the work of health care teams where, apparently, personnel of different categories can substitute for each other, it takes into account the extent of one person's responsibilities by means of his "coefficient of labour participation."

Looking ahead

The increases and restructuring have been presented as a major break with the past, when an individual's remuneration was not at all closely linked to the quality of care that he or she provided. To what extent the former health minister was himself the architect of this package of impressive reforms cannot be easily determined, but it seems appropriate to record that he entertained great hopes for their beneficial consequences. Thus, according to Burenkov's optimistic prediction, "they will help to overcome inertia and indifference—which is disastrous in this case—and will encourage work to be organised in such a way that orderliness, efficient discipline and humane attitudes towards patients will become the rule for all medical and pharmaceutical workers in the country."⁵

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MEDICINE AND THE MEDIA

FROM THE STABLE that almost brought you *Hitler's Diaries* came a scoop last week that was just as spurious: "Smallpox vaccine 'triggered AIDS virus'" (*The Times*, 11 May). Disclosed by an unnamed World Health Organisation adviser, the smallpox vaccine theory had as its central plank a case report published in the *New England Journal of Medicine* (12 March, p 673). The report described a previously well United States military recruit who had developed cryptococcal meningitis, the acquired immune deficiency syndrome (AIDS), and generalised vaccinia a few weeks after multiple immunisations.

The authors suggested that these might have accelerated the development of AIDS in their patient and that infection with the human immunodeficiency virus (HIV) might predispose to an increased risk from smallpox vaccination. "More alarming than appears warranted" was the verdict of the journal's editorial, which also questioned the wisdom of continuing to vaccinate military recruits. (Vaccination continues because of anxieties about biological warfare.)

The Times opened with a précis of the case report before taking off into speculation. Previous "anomalies" of the epidemiology of AIDS (its sex ratio in Africa compared with the West, why central African states top the league table, why Brazil has the highest incidence in South America, how Haiti became the route of spread to the US) need baffle us no longer. They are accounted for by the

WHO's successful campaign to rid the world of smallpox: the vaccinia virus awakened the unsuspected, dormant HIV.

The story continued as front page news the next two days, the "intense debate" this revelation had sparked off providing much of the copy. It was up to Tuesday's *Guardian* and *Independent*, however, to record the key words of this debate—bizarre, non-sensical, and preposterous. Dr Jonathan Mann, the director of WHO's special programme on AIDS, pointed out that globally the distribution of smallpox eradication programmes and the distribution of AIDS did not fit. In Asia, where hundreds of millions of smallpox injections were given from 1967 to 1972, AIDS remains rare. The US is experiencing a major epidemic, although smallpox was eradicated there many years ago. As many doses of smallpox vaccine were given in west Africa as in central Africa, yet AIDS is less common in west than in central Africa. And there presumably the story rests.

Not quite. AIDS and mass immunisation campaigns have now been linked in the public mind. As the National Blood Transfusion Service has found to its cost, widespread confusion about blood donation, blood transfusion, and AIDS still abounds, although the facts are simple enough. How long will the consequences of this three day wonder be with us?—

TONY DELAMOTHE, assistant editor, *BMJ*.

Medicine and the Media

Effectiveness of publicity campaign encouraging earlier referral of hearing loss in adults

R L KING, BRIGIT BARRY, D N BROOKS

Abstract

During 16 070 consultations in general practice 70 adults complained of difficulty with hearing. A simple poster displayed in the waiting areas together with an accompanying leaflet almost doubled the incidence of presentation of loss of hearing. Nevertheless, more than half of those complaining had failed to notice the prominently displayed personally relevant message, and the beneficial effect was lost almost as soon as the poster was removed.

Introduction

Deafness is a handicap that attracts little public sympathy and in the early stages is usually concealed. If severe it stigmatises the victim and the family, causing them stress. Diminished hearing results in a diminished quality of life.

Deafness is much underreported, and a delay of several years commonly occurs before help is sought. It is said that at first the patient fails to recognise the problem and tends to blame others for not speaking clearly. There then follows a period in which loss of hearing is recognised but there is a reluctance to seek help despite mounting pressure from relatives and friends.¹

The average age of new applicants presenting at an audiology department for hearing aids is now over 70, and when a postaurale aid is provided it stands a 15% chance of not being used at all.² If patients sought help when they were younger and when the deafness was less severe they would probably get used to the aid more easily and therefore derive greater benefit for longer.

This study sought to evaluate a modest publicity campaign in general practice. The campaign was designed to provide a means of self assessment and to encourage earlier referral.

Methods

Four practices in Bath, which had worked together for the purpose of audit for several years, recorded information over 12 weeks on patients aged over 20 who complained of loss of hearing. To be included they had to be making their first complaint of deafness without prompting by the doctors or members of their team.

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In the first four weeks (control period) patients were asked their reasons for mentioning their hearing to the doctor and offered audiometry, and management was left to the doctor's discretion. During the second four weeks (test period) each practice displayed a poster prominently in the waiting area and another in the vestibule. The posters were accompanied by strategically placed supplies of leaflets inviting patients to raise the subject of loss of hearing. In addition, those who complained were asked whether they had noticed the publicity material and what effect it had had upon them. In the final four weeks (postinertia period) the publicity material was removed, and patients who complained of loss of hearing were also asked if they had noticed the posters.

Results

The combined number of patients on the lists of the four practices was 28 631, 17% of whom were aged over 65. There were twelve and a half whole time equivalent principals and four trainees.

PATIENTS

During the control period 5893 patients attended the surgeries to see the doctors. Twenty three complained of loss of hearing for the first time. Of these, four had problems with wax alone and were cured by its removal; they were therefore excluded. This left 19 patients in the study, equivalent to an incidence of one complaint for every 310 attending, or 0.3% (table I).

In the test period 4887 patients attended. Forty two complained of hearing loss, two of whom were cured by removal of wax. Of the 40 remaining patients, 25 complained without being prompted by the publicity and a further 15 stated that their complaint had been provoked by the publicity. The incidence was 0.5% for those complaining spontaneously and 0.3% for those whose complaint was provoked by the poster.

TABLE I—Results of publicity on complaints of deafness

	Practice				Total
	A	B	C	D	
Control phase:					
No of attenders	1490	2083	1660	660	5893
No of complaints of deafness	7	3	7	2	19
No of attenders/complaint	213	694	237	330	310
Test phase:					
No of attenders	1447	1973	1467	609	4887
No of complaints of deafness	14	11	13	2	40
No of attenders/complaint	103	179	113	305	122
No brought by publicity	7	4	3	1	15
No of leaflets taken	66	66	101	10	243
No of attenders/leaflet	21.9	29.9	14.5	60.9	20.1
No of leaflets taken/complaint	4.7	6.0	7.8	5.0	6.1
No of leaflets taken/complaint generated by publicity	9.4	16.5	33.7	10	16.2
Follow up phase:					
No of attenders	1470	1880	1322	618	5290
No of complaints of deafness	5	3	3		11
No of attenders/complaint	294	627	441		481
No brought by publicity			1		1

TABLE II—Comparison of group who complained as result of publicity with those who complained spontaneously

	Provoked by publicity	Complained spontaneously
Average age (years)	59.8 (n=16)	61.8 (n=52)
Median of declared duration of deafness (years)	3.6 (n=13)	1.2 (n=43)
Average hearing loss in better ear (dB)	33.6 (n=12)	35.0 (n=46)

Effect of publicity on percentage of attenders reporting loss of hearing. X=Practice A. ●=Practice B. ■=Practice C. Δ=Practice D.

In the postinertia period 5290 patients attended and 14 complained of difficulty in hearing, one as a result of the earlier publicity. Two were cured by removing wax, and one had acute otitis media. The incidence of spontaneous presentation fell to one in 529, or 0.2%.

The overall incidence of spontaneous presentation over the three months was 0.3%, and the publicity generated an additional 0.3%, doubling the rate ($p < 0.01$). In all, 70 patients complained of loss of hearing and did not have trivial or curable conditions. Of these, 39 (56%) said that it had been their own awareness of deafness that had led them to seek help and 12 (17%) that it had been pressure from relatives or friends.

Table II shows the average ages of those who complained and the corresponding median declared durations of loss of hearing. Fifty nine of the patients agreed to undergo audiometry; the average hearing losses shown in table II are the averages of losses measured at 1, 2, and 4 Hz in the better ear.

POSTERS

Patients complaining of deafness who attended during the second month were asked whether they had noticed the publicity material. Nineteen (48%) had seen the poster, and 13 (33%) had taken a leaflet. Altogether 243 leaflets were taken, one for every 20 people attending. The rate of uptake was 16.2 leaflets for every patient who complained of deafness and who stated that he or she had done so as a result of the publicity.

The patients' observation was further tested in one of the practices five weeks after the study had finished. One hundred and three consecutive

patients who had attended earlier for any reason during the time when the publicity was displayed and had not mentioned deafness were asked if they could recall having seen the poster. Twenty (19%) recalled seeing the posters and eight the leaflets, and two said that they had taken a leaflet.

Discussion

The incidences of presentation varied among practices (figure), but they all increased when the posters were displayed except in practice D, which had been actively screening for deafness in the elderly for several years. The publicity almost doubled the incidence of presentation of deafness but did not draw in patients with hearing problems at an earlier stage (table II). The two groups seemed to be indistinguishable apart from those attending as a result of the publicity having a longer duration of difficulty in hearing, but this difference was not significant.

We conclude that the publicity may have been the stimulus enabling some reluctant deaf patients to obtain the help that they needed. Comments such as "I've been trying to get her to come about it for ages" and "When I saw the poster I said, 'There's your mum'" support this view.

The incidence of new referrals to audiology departments in England and Wales is 1/300 population/year (personal communication). The population under study would therefore have been expected to generate 24 new referrals in three months. Thirty eight patients had a loss of hearing of at least 30 dB in both ears and certainly merited referral, 30 of whom attended spontaneously and the remaining eight as a result of the publicity, increasing the incidence to well above that expected and achieved spontaneously. We conclude that the publicity was responsible for the increase in incidence above that expected.

Most general practitioners' waiting rooms are festooned with posters and other health education material, yet reports evaluating their effectiveness are extremely sparse. During a multimedia campaign about measles immunisation only 45% of the mothers questioned when attending their child health clinic recalled seeing the posters.³ In this study the equivalent figure was 48%, and five weeks after the posters had been removed the rate had fallen to 19%. Of the 103 patients questioned, one very deaf person had seen the posters and been urged to seek help but had not done so and three apparently deaf patients failed to notice them.

Most posters seem to be displayed in faith or for their artistic merit. Why not have more pictures and just one poster, aimed at a specific problem and changed regularly?

We thank the following doctors for supplying data on patients: Colin Bevan, Jane Blackmore, Paul Booth, Colin Chapman, Ruth Gillies, Alastair Graham, Tim Harris, Mark Jackson, Brigit Matthews, Sam Medworth, Margaret Muddiman, Marian O'Reilly, Jill Porter, Sam Priestman, Graham Purnell, George Walker, Jenny Walker, and Judith Wilson. We also thank Marcel Brimecombe for her invaluable secretarial support and for repeatedly typing the manuscript.

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(Accepted 27 February 1987)