records, Information and Statistics Division, Common Services Agency, Edinburgh). Clearly, many factors influence reinsertion rates,<sup>2,3</sup> but these factors and alternative treatments, such as hearing aids,<sup>4,5</sup> need to be evaluated to avoid repeated operations in young children.

I thank Mr E Alexander and Dr J Clarke for supplying information on the Scottish morbidity records.

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- 1 De Melker RA. Treating persistent glue ear in children. BMJ 1993;306:5-6. (2 January.)
- 2 Otitis media with effusion in children. *Lancet* 1990;336:23-4.
- 3 Curley JWA. Grommet insertion: some basic questions answered. Clin Otolaryngol 1986;11:1-4.
- 4 Currie E, Stillfried D. Otitis media: a purchaser's guide to costeffective screening and treatment. York: York Health Economics Consortium, 1992. (Occasional paper 5.)
- 5 The treatment of persistent glue ear in children. Effective Health Care 1992; No 4.

EDITOR,—Ruut A De Melker failed to mention the important contribution of allergy to secretory otitis media (glue ear).

Successful treatment of glue ear by attention to underlying allergic disease has been previously reported.23 Our experience at the Royal National Throat, Nose, and Ear Hospital over the past two years in a study of over 200 children aged 3-8 years with chronic (more than six months) or recurrent (more than three episodes) glue ear is that a high proportion (over 80%) have allergic rhinitis and that treatment of this is associated with resolution of the secretory otitis media in most cases. With further respiratory tract infections there remains a tendency to impaired hearing, but this is transient.4 Evidence in support of this comes from a further study of 80 children with perennial allergic rhinitis and no hearing complaints. These underwent audiometry and tympanometry, which showed that only 17 (21%) had entirely normal hearing.

The children with secretory otitis media also had a high prevalence of asthma (over 35%), often previously undiagnosed, and eczema (20%), with blood eosinophilia in 35%. Such children obviously need general assessment, not merely an examination of their ears and hearing.

Allergy, although probably not the cause of glue ear, is a factor in its persistence and recurrence and should be taken into consideration when evaluating treatment methods.

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- 2 Borge P. Atrophy and secretory otitis media. Immunological studies and responses to corticosteroid therapy. J Laryngol Otol 1983;97:117-29.
- 3 Hurst DS. Allergy management and refractory serous otitis media. J Otol Laryngol Head Neck Surg 1990;102:664-9.
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## **Medical education**

EDITOR,—The recent series of articles by Stella Lowry offers some profound insights into the problems, current and long standing, in medical education. We are particularly struck by the concern that doctors are now expected to work in multidisciplinary teams, not automatically as their leaders.

To respond to this development in a positive way, in Southampton we have introduced multiprofessional teaching for students from physiotherapy, occupational therapy, nursing, podiatry, and medicine. Problem based learning techniques are used, and students work in teams to define professional roles and develop management plans for patients.

Feedback suggests that students enjoy the experience, acquire knowledge about professional roles and patient management, improve their teamworking skills, and develop positive attitudes towards multidisciplinary teamworking which might serve them well in their later professional practice. As facilitators, we have also learned a great deal about our professional roles.

If medical education is to respond to modern developments in health care, we believe that more of this sort of teaching will be required.

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1 Lowry S. What's wrong with medical education in Britain? BMJ 1992;305:1277-80. (21 November.)

EDITOR,—There is a general perception that change in medical education is starting to occur. It may be difficult for a medical school, itself relatively small, to plan and implement this. The City and East London Confederation for Medicine and Dentistry consists of Queen Mary and Westfield College, the London Hospital Medical College, and St Bartholomew's Hospital Medical College. Cooperation between their staff and students has been extremely effective in providing a critical mass for generating ideas and implementing new teaching methods.

The students of Queen Mary and Westfield College (not of St Bartholomew's as incorrectly stated in Stella Lowry's article'), which is next to the Royal London Hospital (Mile End), undertake at Oueen Mary and Westfield College the innovative phase I of the curriculum which she describes. This is taught by staff of all colleges including basic and behavioural scientists, clinicians, and community staff. The educational content of all phases is supervised by the curriculum management committee of the City and East London Confederation, on which the three colleges are represented, and to which all local implementation groups are responsible. During phase II (in which behavioural sciences, statistics, ethics and the law, and clinical and communication skills are taught, and further project and community experience is gained), the students go to their "parent" medical colleges (the London or St Bartholomew's colleges).

The main clinical modules constitute phase III, and their aims and teaching methods are carefully scrutinised by the phase III committee to ensure suitability and avoidance of factual overload. This, again, includes members of all three colleges and incorporates clinicians, basic and behavioural scientists, and students. Such cross college and interdisciplinary pressure has been found invaluable in replacing passivity and resistance to change by enthusiasm and a desire to innovate and improve.

The modules in each medical college are similar but utilise local strengths to best advantage. For students at the London Hospital Medical College the "core" attachments will be supplemented in their final year by two months of electives and three months for the study of more strictly defined "options."

There is a point of particular concern. The cheapest and easiest way of teaching subject matter is by large group lectures. The cheapest and easiest

way to teach clinically is by apprenticeship. These are educationally unsatisfactory and unlikely to generate the deep thinking referred to by Lowry or produce caring doctors with a holistic attitude to illness and their patients. Good education is not cheap, as we have already found.

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1 Lowry S. Curriculum design. *BMJ* 1992;**305**:1409-11. (5 December.)

EDITOR,—The logistic problems that Stella Lowry associates with community based teaching could be resolved by funding in proportion to that supporting teaching hospitals.<sup>2</sup>

Such teaching is certainly feasible. As distinct from the four week experience of general practice which all of our final year students receive (with a final objective structured clinical examination (OSCE) in general practice) this university department of general practice has over many years provided generic clinical teaching for the department of medicine.

In year 1 all 130 students now have four introductory sessions—dealing with people, professional ethics, problem solving, and population based medicine—at local practices. General practitioner tutors are paid at NHS consultant rates for both teaching and training sessions. Patients' expenses are reimbursed and buses are hired for students. The total cost is about £100 per student. This is a realistic estimate of the cost of "casual" systematic teaching. Major resources and imaginative mechanisms² are, however, required to enlarge the scale.

The infrastructure of teaching hospitals is largely NHS (rather than university) funded and there has only recently been a welcome extension of this mechanism to general practice. Including this, the combined funds in my region are about £20m a year for hospital as against £0.3m for general practice. Per student per year, general practitioners' funding is about 50% of the hospital rate. These differences merely reflect the current balance of locus of academic activity and the obviously higher unit costs of hospital infrastructure.

General practice based education is still a marginal activity. Even modest expansion will need funds to provide accommodation and resources for good systematic teaching and protected academic time through enhanced staff levels.<sup>2</sup> Our vision should not be clouded by present logistic and structural constraints: the NHS reforms have shown how quickly these can be changed. Although a fivefold increase in funding for academic general practice may seem inconceivable it is a comparatively modest sum that would drive change in the balance of clinical education and pay handsome dividends for both the patients and the profession as a whole.

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1 Lowry S. Medical education: strategies for implementing curriculum change. BMJ 1992;305:1482-5. (16 December.)

2 Taylor RJ. General practice in the medical school: the way ahead. Update 1985;30:615-8.

EDITOR,—The recent articles by Stella Lowry<sup>12</sup> have highlighted several important issues in medical education arising from the recommendations of the recent GMC report.<sup>3</sup> At Manchester University, "core plus option" curricular changes have already been implemented. Most traditional style, discipline oriented lectures have been discontinued. We anticipate that our integrated clinical practice course will encourage students to

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