Occupational and Environmental Medicine

Editorial

FOR DEBATE

From time to time we will be publishing papers that take a clear position about a topical issue. These "FOR DEBATE" papers are not attempting to give a balanced picture of both sides of a debate. They will often be controversial because they give a view that is not shared by everyone. Readers are invited to respond to these articles, usually by way of letters. Do you agree with the authors? Do you disagree? Why do you think the authors have got it wrong? Do you have alternatives to propose?

The following article sets out to describe the current

problems faced by Occupational Medicine in the United Kingdom as seen by the authors, and suggests ways to change the situation in the future. The views expressed are those of the authors themselves, rather than *the Journal*. I look forward to receiving letters for or against their conclusions and proposed solutions. Subsequent "FOR DEBATE" articles will appear before the correspondence.

ANNE COCKROFT
Editor, OEM

Occupational medicine: the way ahead

The origins of the specialty

The practice of occupational medicine may be traced back historically through two traditions. The first is that established by Ramazzini and, in the United Kingdom, by Thackrah, and passed through such hands as those of Arlidge, Legge, Baker, Merewether, Hamilton, Browning, Meiklejohn, and Hunter; this might be regarded as the academic tradition, concerned primarily with the investigation, causation, and prevention of occupational disease. The second is that which started in the industrial revolution with the early Factories Acts, when it became necessary to ensure that children were not employed below a certain age and employers started to engage doctors for pre-employment examinations. This tradition was developed through the public health movement, assisted by doctors such as Southwood Smith, and more recently by the contributions of occupational physicians such as Peter Taylor. These two complementary traditions may be summarised as the roles of the doctor in preventing work related disease and in ameliorating the effects of ill health on the capacity to work.

The development of occupational medicine in Britain has continued to follow these two paths. Moreover, the academic and the clinical practices of the discipline remain largely distinct. Academic practice maintains a tenuous hold in some universities and research institutes, whereas clinicians practise, often in relative isolation, in industry. This isolation is increased by the historical separation of occupational medicine from the NHS, where most British doctors work.

The problem

Three factors have brought about a serious weakness of occupational medicine in Britain. Firstly, the academic base was seriously eroded when Public Health became Community Medicine and, in concentrating on health

services research and epidemiology, lost its traditional role in teaching medical undergraduates about occupational diseases; thus most British doctors now qualify without any real instruction in the subject.¹ Secondly, there has developed a widespread perception that occupational diseases are no longer a problem in Britain, and specialists in many subjects such as orthopaedics, rheumatology, and general medicine are often quite unfamiliar with the techniques required to investigate and manage such conditions, even when they are recognised. And, thirdly, general practitioners are unable to keep themselves updated on the subject because there is no consultation service easily available to them. These three problems mean that a young doctor will often qualify and become a specialist or general practitioner without even a basic understanding either of the diagnosis or of the management of occupational disease.

Such widespread ignorance in the medical profession would be excusable if occupational diseases were indeed rare or if health problems related to work were uncommon. The facts, however, clearly indicate otherwise. The 1990 labour force survey showed that some 750 000 people in England and Wales in that year with musculoskeletal, psychological, skin, or lung disease, or with deafness, attributed it directly to their work, and a similar number also thought that their work made their condition worse. Altogether, some 2.2 million people that year had an illness that they thought was caused or made worse by their work.² These illnesses include, of course, the commonest chronic diseases, and it was estimated that about 7% of general practice consultations are on account of illness caused or exacerbated by work. Any doctor confronted with such patients should be in a position to investigate the possibility of an occupational factor in the aetiology of their disease. Even in our personal practice, in what would be regarded as low risk service industries, some

30% of the patients referred by managers have ill health attributable in whole or in part to their work. On the other side of the coin, ill health is the main reducible cause of lost production in industry, having been responsible for 472 million days of absence (or 20.6 days/employee) in 1990. Looked at another way, sickness absence is responsible for the loss of £24–27 billion each year, or 5% of the gross national product. Reduction of this figure is to an important degree in the hands of doctors, but for us to play our part we need some understanding of workplace rehabilitation. Few doctors have the necessary knowledge, yet most sign sickness certificates on a regular basis.

To put the problem starkly, there are important areas of medical practice that cannot be assessed competently by most doctors. For example, how well are overuse syndromes or work related stress reactions managed? How many patients are kept back from work after an illness until they are 100% fit, rather than being rehabilitated when they are 80%? And in these cases, in contrast with the situation in other areas of medical practice, it is usually very difficult for the doctor to find a second opinion or to obtain specialist advice. The separation of occupational medicine from the mainstream of practice in the NHS means that in most parts of the country there are no obvious specialists to whom such patients might be referred, and so someone with work induced musculoskeletal disease is referred to an orthopaedic surgeon who may think that such conditions do not exist, and a patient with depression due to problems at work is referred to a psychiatrist who does not know how to deal with the causative factors.

In any other specialty, this problem would be regarded as a disaster. Which other branch of medicine deals with diseases of considerable economic importance to the nation yet is barely taught in medical school and has no NHS consultative service? How far have we gone towards rectifying these problems and what more needs to be done? At present there are some strengths and many weaknesses in the structure of occupational medicine in the United Kingdom; there are opportunities to build on the strengths and to eliminate the weaknesses, but to do so requires agreement within the specialty as to what should be done and how it should be achieved. In this paper we propose a way forward.

Our strengths

Three important strengths are apparent in occupational medicine in Britain today. These are, firstly, an agreed structure for postgraduate training and qualification under the control of the Faculty of Occupational Medicine and the Joint Committee on Higher Medical Training; secondly, a thriving society with active groups throughout the country; and, thirdly, a well established national advisory and investigative service in the Employment Medical Advisory Service (EMAS). Although the hierarchy of postgraduate qualifications, with diploma, associateship, membership, fellowship, as well as specialist accreditation, is more than adequate in such a small specialty, it does give all who practice at whatever level the opportunity to obtain suitable recognition. Similarly, the Society of Occupational Medicine provides the necessary framework for the introduction, now recognised as essential in all specialties, of continuing medical education, having, with its national and regional groups, the ability to bring together all who practise, both full and part time. Thirdly, EMAS has from a shaky start progressively grown in professionalism, to provide an essential advisory service nationwide as well as a critically important link with the enforcing authority.³

Our weaknesses

More than balancing the strengths are three weaknesses. Clearly, the overwhelming one is the lack of familiarity of doctors with the basic concepts of occupational medicine, stemming from its virtual exclusion from the curricula of most medical schools. As most doctors are confronted in clinical or public health practice with occupational problems, this is a fundamental difficulty on which the solution of the other problems depend. Second is the presence among those who practise occupational medicine of a proportion who have no training in the subject and whose quality of practice may be weaker as a result.⁴ Third is the lack of a nationally available consultant referral service for general practitioners and hospital specialists, even accepting that EMAS does its best with the limited resources at its disposal.

The threats

The most important threat comes from the manner in which the Health and Safety Executive, and with it EMAS, are being under resourced, coupled with the government's declared policy of deregulation.⁵ If, as the evidence suggests, industrial illness and injury are responsible for a great deal of loss of time from work, not to mention litigation and insurance expenses,² anything that implies that to improve the safety of industry is relatively unimportant is likely to have a counter productive effect on commercial profitability. If EMAS were to continue shrinking until it became a small cadre of medical inspectors of factories, then it could make a very limited contribution to the practice of occupational medicine in the way we think it should. Any loss of the ability of doctors to obtain the help of EMAS, and through it the relevant inspectorates, will make it even more difficult to obtain the improvements so often required in a workplace where cases of occupational disease have occurred, and is likely to lead to a great increase in litigation against employers.

A second and rather insidious threat comes from the shift in occupational health (as opposed to occupational medicine) away from an emphasis on making the workplace safer by application of the principles of occupational hygiene and ergonomics and on improving rehabilitative services, towards a more general emphasis on lifestyle based health promotion activities. Most of these are modelled on community based programmes and many are of unproved value. Such programmes are being promoted commercially and may be tempting to managers, who can easily confuse them with occupational medicine. Logically, however, it is clear that such efforts are only likely to be worthwhile if the organisation has already eliminated most of its occupationally caused illness. This has been discussed at greater length elsewhere.^{6,7} Well argued and concerted efforts should be made to achieve a valid balance between the prevention of occupational ill health and other aspects of health promotion in the workplace, but it should be clear that if doctors are to justify their role as leaders of the occupational health team their primary function should be one in which they are uniquely qualified, in the clinical diagnosis, management, and prevention of disease.⁸

The opportunities

Paradoxically, at a time of change not always seen to have been for the better, we perceive two important opportunities that may bring about a major improvement in the practice of occupational medicine in Britain. These are, firstly, the General Medical Council's (GMC's) requirement that all medical schools reform their curricula and, secondly, the potential for growth in the numbers of well qualified occupational physicians employed in the NHS as a consequence of the formation of NHS Trusts.

Reform of the curriculum requires medical schools to reduce the load of facts on students (incidentally, a cry that has been heard for at least 100 years!) and also to integrate clinical and preclinical teaching, with a system based on core knowledge together with various options from which students will have to choose several. Most schools are therefore engaged in a radical change, which in many will be in place for students entering in 1995/6. Two models for the introduction of teaching of occupational medicine are possible. In one, which is that being planned in Aberdeen, the subject is being introduced as part of the "community core", where it will take its place, along with family practice, paediatrics, geriatrics, psychiatry, and public health, in an integrated system of teaching given from first to fourth years. In this system it is hoped that such matters as work related illness and rehabilitation, along with an understanding of the influences of general environmental factors on health, will be seen to be a part of the mainstream of clinical medical practice, not separated into a few apparently irrelevant lectures. In the other model, already being piloted in Edinburgh, occupational medicine has been introduced as a special study module. In this model a proportion of students have the opportunity of studying the subject in greater depth and thus a proportion of graduates will qualify with a more positive attitude to and understanding of occupational medicine than has been the case hitherto. Whichever path is followed in different schools, and doubtless combinations or other models are possible, it is clear from the GMC's document, "Tomorrow's Doctors"⁹ that all new curricula must give the student the opportunity of learning in an integrated way about the interrelations of people, their environment, including their working environment, and their health, and must include in this appropriate consideration of handicap, disability, and rehabilitation. What medical schools will make of this is open to conjecture, but it clearly represents an opportunity to make an understanding of the interactions of work and health a fundamental component of undergraduate medical education.

The second important opportunity arises from the reorganisation of the NHS. Whatever the merits and disadvantages of these fundamental changes, they have plainly put responsibility on hospital managers to run their organisations as efficiently as possible. Occupational medicine has now got a foothold in the NHS and there is evidence that the number of consultants in the specialty is increasing. Forward looking managers are likely to see the advantages to their trusts of employing a professional occupational health service, at least to help in the management of the huge sickness absence problem. It is essential that able young doctors are recruited into occupational medicine to compete for the new consultant posts that are now appearing, and that these consultants are seen to be on a clinical and academic par with those in other specialties. In aiming towards this objective, those already in post need to provide more of the traditional consultant service; that is, as well as ensuring the occupational health of the workforce, we should also provide a consultative service for general practitioners and other specialists. There is some evidence that this is now happening. In the records of the Association of NHS Occupational Physicians there are the names of 47 consultants, and we have contacted 34 of them; 21 had seen referrals from general practitioners and others had given advice over the telephone or had seen patients at the request of other consultants. Few, however, ran formal clinics.

The changes in the NHS will not only increase the opportunities for improving the care of its employees, but

will also allow consultants to develop out patient services for general practitioners and to provide services to local industries; both have the potential to bring income to their hospital. Whether this is achieved depends critically on the ability of those currently in post being able to convince their managers of the likely advantages of this course of action. Also, and of crucial importance, consultants in the teaching hospitals are strategically placed to make sure that those components of occupational medicine that are part of the core of general medical knowledge do not get ignored in the new curricula.

It is not our intention to imply a downgrading of the role of the accredited specialist working in industry. Such physicians will continue to provide the services required by major organisations but will, as now, generally be unable to participate in providing a national consultative service. Most postgraduate trainees will however continue to learn the specialty under their guidance, and it is likely that with the new curriculum there will be a renewed demand for elective placements in such companies. It is particularly important that doctors in this area of practice maintain their clinical skills and participate in clinical audit^{6,10} so as to be able to play their part in such activities at an appropriate level.

The way ahead

Occupational medicine is at a crossroads. It can continue on its present path as a predominantly non-NHS specialty, divorced from the mainstream of medicine in general and hospital practice, and relatively inactive in research intended to improve practice and the health and safety of the employee, or it can turn towards the future as a specialty like most others, with a cadre of able NHS consultants providing services for their local areas as well as for their fellow employees. Such consultants now have the opportunity of ensuring that the core aspects of the discipline are included in the curricula of their local medical school and thus that our graduates know of occupational medicine, not just as an interesting possible career option, but also as a part of all good medical practice. We think that this is the way ahead for the specialty.

A SEATON

*Department of Environmental and Occupational Medicine,
University of Aberdeen*

R AGIUS

*Department of Public Health Sciences,
University of Edinburgh
Medical School, Teviot Place, Edinburgh*

Correspondence to: Professor A Seaton, Department of Environmental and Occupational Medicine, University Medical School, Foresterhill, Aberdeen AB9 2ZD.

Accepted 3 May 1995

- Harrington JM, Philipp R, Seaton A. Undergraduate occupational health teaching in British medical schools. *J R Coll Physicians Lond* 1989;23: 24-7.
- Davies NV, Teasdale P. *The costs to the British economy of work accidents and work-related ill health*. Sudbury: HSE Books, 1994.
- Carter JT. Twenty-one years of EMAS. *Occup Med* 1994;44:119-22.
- Agius RM, Lee RJ, Symington IS, Riddle HFV, Seaton A. An audit of occupational medicine consultation records. *Occup Med* 1994;44:151-7.
- Seaton A. Diagnosing and managing occupational disease. *BMJ* 1995;310.
- Seaton A, Agius R, McCloy E, D'Auria D. *Practical occupational medicine*. London: Edward Arnold, 1994: chapters 9 and 10.
- Harrington JM. Improving the health of people at work. *Ann Occup Hyg* 1994;38:811-3.
- Seaton A. Occupational medicine—let's keep our white coats and stethoscopes. *Occup Med* 1993;43:63-4.
- General Medical Council. *Tomorrow's doctors. Recommendations on undergraduate medical education*: 1993, General Medical Council, London.
- Faculty of Occupational Medicine. *Quality and audit in occupational health*. London: FOM, 1995.