

then found that delirium ($p < 0.02$) and severity of physical illness ($p < 0.01$) were independently associated with mortality, but the effect of dementia was no longer significant.

It thus seems that, at least as far as acute mortality in the ill elderly is concerned, delirium has an independent predictive effect, but the increased mortality in demented subjects is secondary to their physical morbidity. We are currently performing follow up of our cohort at one year to assess the independent predictive value of delirium and dementia on longer term mortality and change in dependency level.

It is clearly important in community studies as well as in hospital based studies to differentiate between the major causes of cognitive impairment in the elderly and to establish the independence of any increase in relative risk of death.

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First line cephalosporins

SIR,—Professor John Feely and colleagues investigated the use of cefotaxime as the drug of first choice to monitor the quality of prescribing.¹ The drug's overuse, especially in the absence of microbiological testing, was described as unsatisfactory. In an otherwise excellent case report Dr H S Markus and Dr A Wolverson² gave no explanation for using cefotaxime to treat an eyelid abscess caused by *Salmonella enteritidis*, which had been shown to be sensitive to the much cheaper ampicillin.

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Child health surveillance

SIR,—It is extraordinary that while Mr D M B Hall and others have considered training requirements for general practitioners who wish to participate in child health surveillance, nothing has been said about training for the annual assessment of the elderly.¹ It is assumed that all general practitioners will be able to carry out this function with knowledge and efficiency. My experience of speaking to trainee groups has, however, shown that 50% of general practitioners have had no previous education in normal age changes or experience in assessing physical and mental function. As an examiner for the diploma in geriatric medicine I am fully aware that performing such assessment is an enormous skill to develop and one that can be fully developed only by work in the community, where a knowledge of the services and facilities available is as important as the knowledge of human anatomy.²

For 15 years I ran a child health surveillance programme. Though I recognise its importance,

the fact that most babies are now born in hospital and the newborn are checked before discharge allows us to undertake the routine with some initial reassurance. Looking through the 485 cases that passed through my hands, most conditions, such as squint, hernia, or atopic eczema, were not discovered by the test but by the mother. The most important part of this procedure was to put the question to the mother: "Are you happy with your baby's progress?" As time went on I began to think that I was doing what the health visitor could do, but what restrained me from handing over was the continued difficulty in being certain about feeling the femoral pulses.

So why is it then that consultants in geriatric medicine have not written with concern about special training for assessment of the elderly? If paediatricians are concerned whether we shall test efficiently for sensorineural hearing loss or check the normal placement of the testes should we not be concerned about, say, the recognition of retinal emboli or our ability to recognise the importance of periphrasis or jargon fluency? Above all there must be recognition of the need to change our basic education from the linear process of making a diagnosis by taking a history and performing a full examination, which is rarely carried out in general practice. What is needed, however, is not to discover new "diseases" or decide whether the patient has a disease or not but the process of management of conditions such as ischaemic heart disease, hypertension, cardiac failure, and depression, of which the causes are multifunctional.

Medical education should now be about process as much as content, about communication and a team approach in management. Many still think of medicine as just a relationship between the doctor and patients as individuals. Redefinition requires us to see it as the organisation of programmes capable of delivering effective health care. Conventional medical training is fine in certain respects but not in the management of uncertainty or setting objectives in functional terms concerning those with chronic illness.

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Audit in practice

SIR,—The article by Mr C D Collins¹ about the potential contribution of regional specialist committees to medical audit is timely. Many consultants have inhibitions about the process of medical audit, and there needs to be a mechanism to induce them gently to participate. The degree of self revelation and openness to criticism necessary for the proper audit of medical management cannot flourish if consultants are pitchforked into the exercise.

In the North East Thames region all 16 districts are represented on the psychiatric advisory committee either by their current or by a recent chairman of the local psychiatric advisory committee. The structure gives direct access to each district through an influential consultant in that district. Last year we had our own working party on medical audit, which came up with proposals that were essentially a review of randomly selected cases taken from the previous month and a checklist of desirable facilities and practices for psychiatric services. It seemed essential to begin low key to get something going that could defuse the suspicions and anxieties about audit but which could provide a structure that could later grow.

Medical audit is a standing item at each meeting of the regional committee for each district to report progress and to share their experience. In this way

gentle peer pressure has resulted in the burgeoning of activity in the districts, and also the shared experience is helping the development of the process. Already we are looking at the considerable problem of recruiting consultants in the region. The more anxious districts have invited the chairman of the regional psychiatric advisory committee to address them on the subject, and it could later become appropriate for the chairman to propose a visit to help lagging districts to get started. Some regional psychiatric advisory committees are differently structured and have representatives elected from the whole of the region and do not lend themselves to this approach, but regions with a structure comparable with ours are in a specially favourable position to get the process launched and developed.

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- Collins CD. Contribution of regional specialty subcommittees to organising audit. *Br Med J* 1990;300:94-5. (13 January.)

SIR,—The first series of articles on medical audit places too little emphasis on the essential relation between audit and continuing medical education. This important relation has been emphasised by others.¹

According to Mr C D Collins's review of a regional audit structure there seems to be no educational input into the organisation of audit in South Western region.² In Liverpool Health Authority, by contrast, there is cross-representation between the district audit advisory committee and the district medical education committee, with the chairmen of each of these committees sitting on the other committee. In addition, the minutes of these two committees are exchanged.

The success of audit as a means of improving patient care depends on the implementation of change after problems have been identified ("closing the feedback loop"³). This may occasionally entail drawing the attention of managers to deficiencies; but more often clinical care is likely to be improved by the participation of medical educators.

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The dystonias

SIR,—Professor C D Marsden and Dr N P Quinn¹ included in their list of chemical investigations indicated in patients with suspected dystonia (table III) three separate entries that may at least partly overlap—namely, sequential multiple analyser with computer (SMAC), creatine phosphokinase activity, and uric acid concentration. The SMAC entry was inappropriate for various reasons.

The Technicon SMAC system (Technicon Instruments, Basingstoke, Hampshire) can perform up to 20 different analyses on each specimen. Analyses to be performed are specified, when ordering the system's configuration, from a list of 23 different measurements that include creatine kinase activity and uric acid concentration. Many departments have chosen to specify SMAC systems with smaller configurations than the maximum of 20 channels. For instance, we obtained a 14 channel SMAC II system that measures uric acid concentration through one of its channels but does not measure creatine kinase activity.