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Which treatments work for drinking problems?

SIR,—Professor Griffith Edwards's leader (2 January, p 4) summarises in a concise way current views on the effectiveness of treatment of drinking problems. Some of the statements in this review, however, are apt to be misinterpreted by cost conscious managers and others, who could come to the conclusion that they should leave the responsibility for treating this group of people to the voluntary and primary care agencies and decide not only to deprive mental health units of necessary funding to establish alcohol and drug services but also to consider closing these where they exist—a course of action contemplated in this district some time ago.

As has been pointed out,¹ primary care workers do not, by and large, possess the necessary skills, nor have they the time or the willingness, to treat problem drinkers. Moreover, if they were to acquire these skills it would inevitably increase the number of patients detected with higher degrees of disabilities who perhaps require specialist help.

Case register data from the Worcester Health District, where a substance abuse service has operated for some years, have indicated that the annual prevalence of substance abuse problems was 118 per 100 000 population in 1984 (105 alcohol and 13 drugs) and 151 per 100 000 in 1985 (112 alcohol and 39 drugs)² whereas the corresponding rates per 100 000 population in 1984 were 133 for schizophrenia and 147 for affective psychosis. Thus patients with alcohol and drug problems constitute a sizable and still growing proportion of the total psychiatric case load in a semirural district.

Furthermore, these patients have considerable medical, social, and legal problems, which had been previously attended to by a variety of professionals, who in turn often had not recognised that these were related to alcohol.

Many districts still do not provide specialist treatment services for this large group of patients with considerable handicaps. Capital outlay to set up a comprehensive community substance abuse service needs to be minimal. The revenue costs in the Worcester Health District are in the region of £100 000. This forms a small part of the total budget of the mental health unit, which at the moment is £7m a year.

A team of this type, integrating the voluntary and statutory sectors into one continuum of care, can effectively respond to a variety of client or patient needs, give training and support to primary care workers, and stimulate and coordinate local alcohol and drug abuse prevention strategies. I would suggest that it is also a good buy.

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The future of medical microbiology

SIR,—From representations being made to me by consultant microbiologists from all over Britain it is apparent that many are deeply concerned that some recent events could undermine not only the service that they provide but also the future of medical microbiology in Britain.

Firstly, the role of medical microbiologists in infection control is being questioned. For over 30 years they have been responsible for developing and implementing policies and procedures for controlling infection in hospitals, and they have not been unsuccessful. Hospital infection control is now an integral part of the practice of medical microbiology, and Britain leads the world in this subject. Consultant microbiologists have built up a body of knowledge and experience, which is being passed on to doctors in training, who must face questions on the subject in their examinations for membership of the Royal College of Pathologists. Unfortunately, at a time when microbiologists should be directing their undivided attention to solving such serious problems as those presented by the spread of multiple antibiotic resistant organisms and the acquired immune deficiency syndrome they are being diverted from the task.

Since the introduction of Griffiths management some district medical officers have shown a desire to assume an increased responsibility for hospital infection control. Unfortunately, although they may have statutory obligations and duties, few have the knowledge, training, and experience necessary for anything other than a managerial role. Yet microbiologists can find their authority eroded, their effectiveness reduced, and their time consumed by the new administrative arrangements.

The second area of concern results from a growing tendency to regard clinical pathology, including microbiology, as a purely technical service with laboratories looked on as mere processing units which, like slot machines, will issue results if they are fed with specimens. In this scenario the professional role of medical microbiologists working at the interface of clinical and laboratory medicine is disregarded, either because it is not appreciated or because the sort of bucket shop service which could be provided without them looks cheap. The concept of a medical microbiology service without doctors should be as unacceptable as a surgical service without surgeons. Medical microbiologists know that most of their clinical colleagues recognise the importance of the service provided. I hope that they will help us to defend it.

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Response to deoxycoformycin in T cell leukaemias

SIR,—Dr A D Ho (5 December, p 1483) comments on our results on the treatment of mature T cell leukaemias with deoxycoformycin (10 October, p 873). His experience does not appear to confirm a correlation between the membrane phenotype of the neoplastic T cells and the response to deoxycoformycin. We have now extended our results to 28 patients treated by deoxycoformycin (table) and these show even more clearly than before that no meaningful responses were observed in cases with a phenotype other than CD4+, CD8—.

One possible explanation for the differences observed is that the largest group of our patients,

Response to deoxycoformycin in post-thymic T cell leukaemias

Phenotype	No	Responders*	No remission
CD4+, CD8—	15	10 (67%)	5
CD4+, CD8—	8	0	8
CD4—, CD8+	5	0	5
All cases	28	10 (36%)	18

*Partial and complete remission.

11, had T polymorphocytic leukaemia,¹ a disease represented by one case in Dr Ho's study. Possibly the type of T cell disease may be just as important in relation to the effect of deoxycoformycin as the cell phenotype. For example, eight of the T polymorphocytic cases were CD4+, CD8— and six (75%) experienced a good response. In contrast only one out of six patients with adult T cell leukaemia/lymphoma (four were CD4+, CD8—) experienced a remission. We do not agree with Dr Ho that different definitions of remission could account for our results as some of our complete responders had prolonged periods (more than 20 months) free of disease without requiring further treatment.

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Gonadotrophin hormone releasing analogues open new doors in cancer treatment

SIR,—In reply to my leading article (31 October, p 1084) Messrs A J Arnold and A D Desmond (12 December, p 1565) advocate the use of subcapsular orchidectomy for patients with prostatic cancer and suggest that "patient acceptability in elderly men is high."

At present three monthly depot injections of gonadotrophin releasing hormone analogues are under clinical investigation and have been shown to suppress testosterone over this period. If the patient is given a choice by his clinician of an injection once every three months or an operation I suggest that in almost every case he will prefer injection treatment. The cost at present is relatively high but no more expensive than that of cyproterone acetate treatment. Most drugs when introduced are expensive. This reflects development costs, and after an initial period the cost inevitably comes down.

Messrs Arnold and Desmond are advocating the use of a primitive and mutilating procedure and ignoring a clinical advance of advantage to the patient, who has enough, dealing with the idea of cancer, without having to experience surgical orchidectomy as well.

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Obstetricians on the labour ward

SIR,—Mr J S Samra and others (12 December, p 1566) express surprise at the findings of Ms Coupland and others (24 October, p 1077) and highlight directly and by implication the fears of many hospital doctors over two tier working. As a consultant obstetrician who elected to move from three tier to two tier working, may I seek to allay some of these fears.

Hinchingsbrooke Hospital opened at the end of 1983 as a new unit in a new health district. Our obstetric and gynaecological staff comprise four consultants and four general practice trainee senior house officers, and in 1987 we had 2008 deliveries. Like Mr Samra's unit, we have the lowest perinatal mortality rate in our region, 5.2 per 1000 (uncorrected) based on the 7015 deliveries in 1984-7. Neonatal intensive care is available on site, also "two tier"; we do not transfer high risk cases elsewhere. In these four years our caesarean section rate was 13.7%, 6% elective and 7.7% emergency; our vaginal instrumental delivery rate was 5.2%. Thus it appears that, neglecting possible population differences, we plan rather more elective caesarean sections than are planned in Mr Samra's unit but perform proportionately less than half the number of instrumental deliveries, probably because, without intermediate grade medical staff, our midwives enjoy greater freedom of practice.

No one would suggest that all three tier units should be dismantled immediately and replaced by two tier units, but even in its authors' wildest dreams "Achieving a Balance" cannot live up to its title. Under this plan over half the service posts in the intermediate grade in obstetrics and gynaecology will need to be filled by overseas graduates, brought over usually from developing countries simply to do this work. No other profession runs itself in this way; if a similar staffing structure were suggested for lawyers, teachers, or even general practitioners we as consumers would be horrified. If half Britain's obstetric units converted to two tier working we would be "in balance," with a sound career structure to offer to our aspiring juniors. Overseas visitors could then be treated correctly on a supernumerary basis, as pupils to be taught rather than cheap labour to be exploited.

Certainly, everything in the two tier garden is not fine; much bargaining is still to be done on matters such as staffing levels, free time, and easing of duties once the mid-50s are reached. But we have built a system that is liked by the doctors who work it, the nurses and midwives who support them, and the women who deliver under their care. What we need is for the BMA and the royal colleges to help us improve this system and refine it into an acceptable alternative to three tier working, rather than to pull it down and destroy it.

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Diagnosis of diabetes mellitus: pitfalls in the glucose tolerance test

SIR,—Dr K Wiener (28 November, p 1363) draws attention to the World Health Organisation's criteria for diagnosing diabetes mellitus and raises several important issues which appear to remain unresolved despite the latest recommendations of a study group.¹

The blood glucose response to a glucose load will be influenced by the timing, size, composition, and quantity of preceding food. These influences will be minimised by a suitable period of fasting. No study, however, has adequately examined the influence of the duration of fasting. It therefore seems reasonable to standardise to 10-16 hours, as recommended by the study group.¹ The test should be performed in the morning both for convenience and to avoid the effects of circadian variation in glucose tolerance.²

All laboratories should standardise the glucose load to 75 g (or 1.75 g/kg body weight to a maximum of 75 g for children) as recommended by the World Health Organisation¹ and other authoritative bodies^{3,5} and as emphasised by

Dr Wiener. With regard to anhydrous glucose, as opposed to the monohydrated form, most data have been obtained with 75 g of pure glucose or its equivalent, and this should be adhered to. Thus 82.5 g of the monohydrate would be required to deliver the 75 g glucose load.

We agree with Dr Wiener that the misdiagnosis of diabetes mellitus can have serious implications for the person concerned. In a clinical setting the diagnosis must be corroborated by supporting evidence. A lifetime diagnosis of diabetes mellitus should not be made on the basis of a single abnormal test result alone.¹ The introduction of the intermediate category of impaired glucose tolerance^{3,5} was, in part, designed to achieve this objective. Nevertheless, such individuals are at substantially higher risk for the subsequent development of diabetes.¹

In the epidemiological setting rather different considerations apply. The need for rigorous standardisation becomes paramount; even small, but systematic, differences in the test procedure may result in apparently significant, but spurious, differences between populations in glucose tolerance and in the prevalence of diabetes mellitus. Even taking the glucose load over five minutes, rather than 15 minutes, can make a 1 mmol/l difference in the mean two hour blood glucose concentration.⁶ Of course, if individuals qualifying for the diagnosis of diabetes come to light during epidemiological surveys it is as important to confirm the diagnosis by suitable repeat measurements as it is in a clinical setting.

The World Health Organisation is now preparing a survey manual for the study of diabetes mellitus, which will provide detailed guidance in these matters.

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Secretor state of patients with insulin dependent or non-insulin dependent diabetes mellitus

SIR,—Dr P J Lamey and colleagues (12 December, p 1563) presented data contradicting ours (24 October, p 1024). The proportion of non-secretors in their control population (33%) was, however, unusually high for the United Kingdom. As their letter came from a department of oral medicine and

pathology I wonder whether the controls were taken from patients referred for investigation of recurrent oral infection. The authors' group works on oral candidiasis, and we have found a significant increase in the proportion of non-secretors among patients referred to the Edinburgh Dental School for investigation of this condition.¹

The number of patients with diabetes was roughly half the number examined in our study and the number of controls less than a third.

Nevertheless, the same pattern we observed was present in the results they reported: the proportion of non-secretors with type II diabetes was similar to that of the controls and the proportion of non-secretors with type I diabetes increased.

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1 Blackwell CC, Tom FF, Lawrie O, Weir DM, Wray D, Kinane DF. Non-secretion of blood group antigens and susceptibility to oral infections due to *C albicans*. *J Dent Res* 1980;65:502.

Logic in medicine: the role of leads

SIR,—There was a particularly important omission from the Logic in Medicine series (24 October, p 1033): the role of "leads"^{1,2} or "pivots"³ in medical problem solving. Leads are findings associated with a limited list of diagnostic possibilities, which are used to simplify the solution of a diagnostic problem. All diagnostic methods whether they are based on computers or human reasoning depend on this type of problem reduction.

Sometimes the presenting complaint is a good lead—for example, a lump in the neck. More often the initial possibilities are numerous and the diagnostician must proceed systematically in the hope that a better lead turns up: a systolic thrill would have been a good lead in Professor Fergus McCartney's example (21 November, p 1325). This lead can be discarded in favour of a better one in due course—for example, an ejection systolic murmur. Previous and subsequent evidence can then be used to eliminate^{1,2} or prune³ all but one of the possibilities raised by the best lead. The pruning may be done by using single items of powerful information⁴ or by using weak evidence and Bayes's theorem with the independence assumption (21 November, p 1329) or some other mathematical device (28 November, p 1392).

It must not be forgotten that hypothetico-deductive thought (31 October, p 1108) also occurs in clinical diagnosis. This begins by choosing one diagnostic possibility from the lead. The diagnostic term represents what the doctor imagines may be going on (the hypothetico part). The possibility is chased by looking for findings which are common in the postulated diagnosis but rare in at least one of the others. A number of such items may thus complement each other by eliminating or "refuting," but not usually completely, all but one of the initial possibilities (the deductive part). This chasing of a diagnostic possibility can be done as soon as a good lead is found by looking only for features which confirm and eliminate (they are simultaneous processes in clinical diagnosis). It is often more convenient, however, to keep going systematically and to leave most of the interpretation until the end, especially if it seems that there are going to be many leads leading to a number of coexisting diagnoses.

Formal logic (7 November, p 1195) can be regarded as a special case of reasoning logically with probabilities or frequencies when some of the latter are zero or 100%.⁴ It is something along these