

training (48%); job interview techniques (28%); subspecialties (22%); preparation of a CV (18%); regional differences on training (10%). This advice was mainly provided by consultants (85%); clinical tutors (58%); peers (21%); SRs (12%).

Exam related advice was given prior to Part I to 87% of trainees and to 78% before Part II. Feedback following exams was less frequently received: after Part I by 36% and Part II by 62%.

Asked about advice received on further academic opportunities, 47% had been informed about training courses; 52% about practical research issues and 40% about research supervision; 34% about the local MPsych Med degree and 11% about higher degrees. It was an interesting finding that this was nearly exclusively provided by supervising consultants and only by clinical tutors in 4%; 44% of trainees expressed concern about confidentiality if they were to discuss personal problems.

As supervising consultants still appear to provide the main bulk of career advice, we feel they need to be aware of the breadth of topics that need to be addressed in supervision and of the requirements of psychiatric training. On the basis of our findings, we would recommend the allocation of personal tutors (mentors) for long-term advice during general training in order to provide consistency and continuity in both personal and professional guidance while ensuring confidentiality and impartiality.

BRIGITTA BENDE, *Rathbone Hospital, Liverpool, L13 4AW* and RICHARD HOPKINS, *Ashworth Hospital, Parkborn, Maghull, Liverpool, L31*

Recommended: The Royal College of Psychiatrists' 'Directory of Specialised Psychiatric Facilities'

Sir: If you have wondered whether a specific facility was available, and, if so, where it was located, only to find that this information was often a matter of someone saying "I understand that there is an affective disorders unit at such and such a hospital . . .", I hope you will join me in requesting our College to take steps to compile a *Directory of Specialised Psychiatric Facilities* to document all that is available in the United Kingdom and the Republic of Ireland.

Such a directory should cover the National Health Service as well as the private sector, and include the following, with adequate information on referral criteria, costs and (in the case of NHS facilities) whether these are catchment area bound, regional or supra-regional services: adolescent units; affective disorders units; aftercare hostels; alcohol-related disorders treatment and rehabilitation units; behavioural disorders units;

drug treatment units; eating disorders units; employment rehabilitation units; facilities for mentally ill without hearing or speech; facilities for young brain-damaged people; in-patient psychotherapy units; in-patient mental impairment facilities; mother and baby units; neuro-psychiatric assessment and treatment units; obsessional disorders units; phobic disorders units; active rehabilitation hostels; therapeutic communities; psycho-surgical units; facilities specifically for people of a particular language, culture or nationality.

It would also be helpful if private psychiatric hospitals could be invited to include in the directory a list of their staff and visiting consultants, and the areas of psychiatric care in which they are particularly strong.

I believe that such a *Directory of Specialised Psychiatric Facilities* will prove to be immensely popular, and could be a useful source of income for our College.

IKECHUKWU O. AZUONYE, *Forest Healthcare NHS Trust, Claybury Hospital, Woodford Bridge, Essex IG8 8BY*

Image analysis

Sir: Dr R.M. Bilder and colleagues (1994) have suggested that a complex expert (computer) system for MRI image analysis is inferior to the combined expertise of a team of trained (human) experts. There may be an explanation for this which transcends the anthropomorphic perspective.

The number of possible pathways in any computer program rises as a fractional proportion of the factorial of the number of branch points in the program. The general relationship is given by

$$N=fB!$$

where N, the maximum number of pathways is determined by the factorial of B, the number of branches. Some pathways, being mutually exclusive, are not permitted, thus giving rise to the fractional multiplier f.

Factorial functions rise astonishingly rapidly. For example, an imaginary 'expert' system with only ten branch points would give rise to 3,628,800 possible pathways if all were permitted. For the expert systems of today we are looking at programs with the possibility of over a 1000 branch points. The factorial for this number of branch points is nearly incalculable, and even if many of the pathways are mutually exclusive (if f, say, is only 0.0000001, i.e. only one in a million pathways is permissible) the number of permissible pathways is still huge.

The consequence of this is well recognised outside of psychiatry. The number of pathways

in an average expert system makes the system untestable; at least if testability means that every potential pathway be tested. The expert system that flies your 'plane home from holiday is 'backed-up' by having a pilot on board. Hopefully, if the expert system decides to nosedive your 'plane into the ground, the pilot will take over the controls!

So what is the potential consequence for psychiatric research? Image analysis, done by computers, relies on expert systems. These are untestable. The very least we need to do is analyse our brain scans using two completely independent software programs. If, and only if, the two software systems produce the same results then we may be able to draw significant conclusions.

The problem, however, does not stop there. The scans themselves are produced by computer guided equipment. Serial scans by different machines have already been criticised in the literature. If results between research centres are to be comparable, then at least two scans per patient, done on different machines, and analysed by two different software packages may be needed. That makes four analyses per patient mandatory, whether or not the experimental design uses a 'case' v. 'control' methodology or not.

BILDER R.M. *et al.* (1994) *Schizophrenia Research*, **11**, 131.

STUART COX *UCL/Middlesex Hospital*; ANN MORTIMER *Charting Cross Hospital, London W6 8RF* and PAUL JACKSON *Bioinformatics Department, UCL/Middlesex Hospital, London W1N 8AA*

Overuse of hypnotics for psychiatric in-patients

Sir: There still appears to be a widespread problem with hypnotic prescription for psychiatric in-patients despite advice from the *British National Formulary* (1994) and the Royal College of Psychiatrists (1988) which both state that hypnotics should not be routinely prescribed for in-patients unless there are specific indications.

Insomnia causes patients subjective distress but is not dangerous. Many psychiatric illnesses present with insomnia which does not usually need either immediate treatment or treatment in isolation from other symptoms. Treating insomnia too early can mask illness during assessment causing confusion in diagnosis. Hypnotics are addictive and expensive, and form a large proportion of the NHS drug budget on volume of prescription alone. Hypnotics should therefore not be indiscriminately prescribed.

Hypnotics are often prescribed by an on call doctor in the middle of the night or late evening

for whom a significant motivation in prescribing was in not being disturbed by nursing staff further (Fry, 1985). Night sedation was also frequently started on the night of admission. However, as the duty doctor is not the key medical contact and often has inadequate knowledge of the patient's background and treatment plan, prescription of hypnotics by him or her is frequently inappropriate.

The solutions to this problem lie in proper education of staff and patients, in good communication and in consistency of treatment. Key points are:

- (a) The patient needs to be educated that it is reasonable to expect initial insomnia in the early days of admission
- (b) nurses may need reminding of simple management of mild insomnia with light physical exercise during the day, reducing caffeine intake in the evenings and reassuring some patients once their anxieties are understood
- (c) duty medical staff should observe consistency of treatment and not feel pressurised by staff or patients to prescribe hypnotics inappropriately
- (d) medical staff directly responsible for the patient's care must be explicit to other staff and patients about their policy on prescription of hypnotics for their in-patients.

Prescribing costs can be reduced and quality of care improved if hypnotics are prescribed appropriately. They should be prescribed mainly by the patient's own doctor, unless insomnia is "severe, disabling or subjecting the individual to extreme distress" (BNF, 1994). Nursing staff have an important role in containing patients' anxieties and in informing and educating them about appropriate management of their insomnia.

BRITISH MEDICAL ASSOCIATION AND THE PHARMACEUTICAL SOCIETY (1994) *British National Formulary*, **27**, 138.

FRY R.P.W. (1985) Night sedation in the admission wards of a psychiatric hospital. *Psychiatric Bulletin*, **13**, 184-185.

ROYAL COLLEGE OF PSYCHIATRISTS (1988) Benzodiazepines and dependence: a College statement. *Bulletin of the Royal College of Psychiatrists*, **12**, 107-108.

ALBERTO ALBENIZ and NICK STUART-SMITH, *St Crispin Hospital, Duston, Northampton NN5 4UN*

Educating non-medical staff about the use of psychiatric drugs

Sir: The role of the psychiatric registrar in learning disability is constantly evolving, as patients are relocated from hospital sites into small group homes within the community. Many