

caution is required and ECT is contraindicated in patients with uncontrolled hypertension or raised intracranial pressure.

In all cases, frequent liaison with other professionals involved with the management of the patient is essential. In some disorders such as chronic pain, the interactions between illness and depression are so complex the patient is best managed in a multidisciplinary rehabilitation program where physician, psychiatrists, psychologists and physical therapists meet regularly and address the issues in a co-ordinated approach. Changes to the Medicare Benefits Schedule may make it easier for patients to access these services.

## Patient support

As with all therapeutic interactions, and in particular when they are complex and likely to be prolonged as in the case of comorbid depression with medical illness, a good rapport with the patient and their family is essential. This will begin with education of the patient and their family about both the medical disorder and the depressive disorder. Often there are negative judgments from family members who may be critical of the patient for not trying or using the symptoms to avoid the usual responsibilities of their role. On the other hand, some families may perpetuate disability and not encourage the patient to maximise their capacity. The patient and their family are likely to need a prolonged period of support which may be best supplied with regular appointments.

## References

1. Bridges KW, Goldberg DP. Psychiatric illness in inpatients with neurological disorders: patients' views on discussion of emotional problems with neurologists. *BMJ* 1984;289:656-8.
2. Astrom M, Adolfsson R, Apslund K. Major depression in stroke patients. *Stroke* 1993;24:976-82.
3. Bruce ML, Leaf PJ. Psychiatric disorders and 15-month mortality in a community sample of older adults. *Am J Pub Health* 1989;79:727-30.

4. Drayer RA, Piraino B, Reynolds CF, Houck PR, Mazumdar S, Bernardini J, et al. Characteristics of depression in hemodialysis patients: symptoms, quality of life and mortality risk. *Gen Hosp Psychiatry* 2006;28:306-12.
5. Frasure-Smith N, Lesperance F, Talajic M. Depression and 18-month prognosis after myocardial infarction. *Circulation* 1995;91:999-1005.
6. Glassman AH, O'Connor CM, Califf RM, Swedberg K, Schwartz P, Bigger JT, et al. Sertraline treatment of major depression in patients with acute MI or unstable angina. *JAMA* 2002;288:701-9.
7. Malinin AI, Ong S, Makarov LM, Petukhova EY, Serebruany VL. Platelet inhibition beyond conventional antiplatelet agents: expanding role of angiotensin receptor blockers, statins and selective serotonin reuptake inhibitors. *Int J Clin Pract* 2006;60:993-1002.
8. Atar D, Malinin A, Takserman A, Pokov A, van Zyl L, Tanguay JF, et al. Escitalopram, but not its major metabolites, exhibits antiplatelet activity in humans. *J Clin Psychopharmacol* 2006;26:172-7.
9. Koenig HG, Shelp F, Goli V, Cohen HJ, Blazer DG. Survival and health care utilization in elderly medical inpatients with major depression. *J Am Geriatr Soc* 1989;37:599-606.
10. Clarke DC, Cavanaugh SV, Gibbons RD. The core symptoms of depression in medical and psychiatric patients. *J Nerv Ment Dis* 1983;171:705-13.

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## Self-test questions

*The following statements are either true or false (answers on page 111)*

1. Dothiepin is the first treatment of choice for patients with comorbid depression and medical illness.
2. Unexplained weight loss and sleep disturbance should not be considered signs of depression in medically ill patients.

## Letters

Letters, which may not necessarily be published in full, should be restricted to not more than 250 words. When relevant, comment on the letter is sought from the author. Due to production schedules, it is normally not possible to publish letters received in response to material appearing in a particular issue earlier than the second or third subsequent issue.

### Generic medicines

Editor, –The article, 'Frequently asked questions about generic medicines' (*Aust Prescr* 2007;30:41–3), provides a clear and useful précis of some of the key issues that can impact on the decision to substitute an equivalent generic medicine.

However, the question of whether or not to substitute a medicine with a narrow therapeutic index with a

bioequivalent generic remains open to debate. Perhaps the prescriber and pharmacist could approach this decision with more confidence if we consider the criteria used to define the term narrow therapeutic index, or more correctly narrow therapeutic ratio, by regulatory agencies.

The US code of federal regulations (Part 320.33(c) – Bioavailability and bioequivalence requirements) defines a medicine displaying a narrow therapeutic ratio as follows:

There is less than a 2-fold difference between median lethal dose and median effective dose

OR

There is less than a 2-fold difference between minimum toxic concentrations and minimum effective concentrations in the blood

AND

Safe and effective use of the drug products requires careful dosage titration and patient monitoring.<sup>1</sup>

The US Food and Drug Administration (FDA) specifically mentions only five medicines falling into this category, namely digoxin, lithium, phenytoin, theophylline and warfarin. However, the FDA recommends that even medicines with narrow therapeutic indices may be evaluated for bioequivalence using the conventional confidence interval limits of 0.80 to 1.25.<sup>2</sup>

In reality, the number of medicines matching the definition of narrow therapeutic ratio is very small indeed. In clinical practice, the dosage and plasma concentration of these medicines is usually carefully titrated and monitored.

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#### References

1. Williams RL. FDA position on product selection for 'narrow therapeutic index' drugs. *Am J Health Syst Pharm* 1997;54:1630-2.
2. <http://www.fda.gov/cder/news/ntiletter.htm> [cited 2007 Jul 10]

*Professors AJ McLachlan, I Ramzan and RW Milne, authors of the article, comment:*

We agree with the issues that Dr Pearce raises and add a further comment. We would suggest that the list of narrow safety margin medicines (and the criteria listed) also includes immunosuppressants (such as cyclosporin) and many anticancer medicines. A useful commentary on this issue makes the critical point that inter-subject (between people) variability in the pharmacokinetics of narrow safety margin medicines is considerably higher than intra-subject (within the same person on any given day) variability in pharmacokinetics.<sup>1</sup> This means that for many of these drugs careful monitoring of a patient's therapeutic response (or some surrogate of that response) can facilitate dose individualisation and that once that dose is selected, therapy can generally continue uneventfully with appropriate monitoring.

In our article we also highlighted the importance of separating the scientific (which remain unchallenged)

from the clinical (which remain in the purview of clinical judgement) issues surrounding generic substitution of medicines. The latter point being that the potential for confusion around the issues of brand substitution can be managed by effective communication and clinical judgement. Obviously the potential for problems increases significantly when people are confused about their medicines and are taking medicines with a narrow safety margin.

In summary, Australian prescribers, pharmacists, other healthcare providers and patients should have full confidence in the Australian system used to establish and evaluate bioequivalence of drug products which applies to all medicines independent of their safety margin. Effective communication of all these issues is a central component of brand substitution.

#### Reference

1. Benet LZ. Relevance of pharmacokinetics in narrow therapeutic index drugs. *Transplant Proc* 1999;31:1642-4.

Editor, – I note that the problem of generic medicines has been mentioned again in your April edition (*Aust Prescr* 2007;30:41–3).

I am a firm believer in not using generic names – not from habit, but from practicality. When a drug is marketed the makers go to a lot of trouble to find a name that is easily recognised and remembered and unlikely to be confused with other drugs. The same cannot be said about generic names which are often complicated chemical names and the possibility of confusion arises.

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#### Response:

The Editorial Executive Committee believes that the use of generic names in *Australian Prescriber* is appropriate. There are several reasons for this.

1. Medical students are not taught brand names, so it is appropriate that educational material uses generic names.
2. There are many different brand names for commonly prescribed drugs. It would be impractical to include all the brand names of each drug mentioned in *Australian Prescriber*.
3. The variety of brand names can cause confusion. There is a possibility of medication error with badly written prescriptions for drugs such as Losec and Lasix, Mobilis and Movalis, MS Contin and Oxycontin, Provera and Proviron.

4. The brand names are devised as part of a drug company's marketing strategy. As *Australian Prescriber* is independent of the pharmaceutical industry it avoids brand names.
5. Many thousands of people overseas visit the *Australian Prescriber* website ([www.australianprescriber.com](http://www.australianprescriber.com)). As brand names vary from country to country it is helpful if the articles use internationally approved names.

While the Editorial Executive Committee appreciates other views, generic names will continue to be used in *Australian Prescriber*.

### Nurse prescribing

Editor, – It was with interest that I read the editorial 'Nurse prescribing: adding value to the consumer experience' (*Aust Prescr* 2007;30:2–3). As Australia finds itself in the midst of a health workforce crisis, there is pressure to allow health professionals other than doctors to prescribe.

The strength of medical practitioner training means doctors are the health professionals most qualified to understand the risks and benefits inherent in prescribing, and to make a complete diagnosis. Patients have confidence in a doctor's ability and knowledge. We should not substitute doctors with lesser-trained health professionals simply to ease an acute political problem with little acknowledgement of the effect it will have on fragmentation of care, patient outcomes and the quality of prescribing. Where there is no other choice, an alternative must be sought in the best interests of patient care, but such a compromise should not become the standard.

Non-medical practitioners are able to prescribe from a broad range of S3 medications. The remaining S4 prescription-only medicines should remain as that – doctor prescription-only medications.

The prime consideration should be the safety of patients. The benefit of a degree in medical training as opposed to a short course in prescribing should be paramount to any discussion around prescribing and the quality use of medicines.

The Productivity Commission proposals have the potential to realign healthcare delivery. However, in the words of Martin Van Der Weyden, the Editor of the *Medical Journal of Australia*, 'It should not be the slippery slope to doctor pretenders'.<sup>1</sup>

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### Reference

1. Van Der Weyden MB. What is a doctor, and what does a doctor do? *Med J Aust* 2005;183:560-1.

### Evidence, risk and the patient

Editor, –The article, 'Evidence, risk and the patient' (*Aust Prescr* 2007;30:47–50) shows the limitations of statistics in medical decision making. While we would like a p-value to answer the question, 'How likely is it that the results are 'for real' and not just due to chance?' this is not the question that the p-value answers. Instead, it answers the question 'If we wanted to blame chance for the results, what sort of chance would we be blaming?'

Consider a trial of the power of anonymous prayer to improve the recovery of patients in coronary care units.<sup>1</sup> This was summarised in the Australian medical press as concluding that prayer works, but '[t]here was a one in 25 chance that the better outcomes had arisen by chance'.<sup>2</sup> This misinterpretation of a p-value of 4% implies that there is precisely a 96% chance that there is a God responsive to prayers. What has actually been discovered is that the prayed-for group recovered a little faster to an extent which would be explained by atheists as the outcome of a 4% chance and which would be regarded as anything but chance by the religious.

The calculation of the 'number needed to treat' also has its limitations. In chronic conditions, people who receive the additional treatment may all have an event delayed by a few months, but if the data are arbitrarily presented so that we are told that an extra 10% survive for five years, this implies only 1 in 10 has benefited.

Evidence-based medicine has generated a lot of suspicion amongst 'rank and file' doctors. This is understandable, because if statistics are misunderstood and the clinical context is ignored, bizarre assertions can result. For example, the pronouncements that there is no evidence to support cleaning the skin before administering injections.<sup>3</sup>

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### References

1. Harris WS, Gowda M, Kolb JW, Strychacz CP, Vacek JL, Jones PG, et al. A randomized, controlled trial of the effects of remote, intercessory prayer on outcomes in patients admitted to the coronary care unit. *Arch Intern Med* 1999;159:2273-8.
2. Woodhead M. Better health for prayer subjects. *Aust Doct* 1999; Nov 19. p. 21.
3. Is isopropyl alcohol swabbing before injection really necessary? [letters]. *Med J Aust* 2001;175:341-2.