The interests of pharmaceutical companies may coincide with the interests of patients. Novel drugs which dramatically improve the management of patients benefit all parties. The introduction of such drugs should rightly be facilitated by opinion leaders. However, a close relationship between industry and opinion leaders may have negative consequences. Examples include the creation of new diseases or the dramatising of relatively minor conditions. This medicalisation of ordinary life, for example male baldness, has been termed 'disease mongering'.<sup>5</sup>

The use of opinion leaders in such disease awareness campaigns is crucial. There is evidence that some opinion leaders have been successfully chosen and groomed by pharmaceutical companies. Individual doctors, who may not be well known or widely published, are chosen by a company because of their favourable views of a specific drug.<sup>6</sup> The promotion of these individuals as opinion leaders results in a distortion of the consensus process regarding the role of that drug.

A close relationship between companies and opinion leaders in research may also be problematic. The involvement of independent academics in research is one of the important safeguards in ensuring checks on companies. The inexplicable failure of a pharmaceutical company to report deaths in a large study of rofecoxib, and the subsequent defence of the drug's utility by some opinion leaders, raises questions

regarding their independence.<sup>7</sup> Similarly,

the involvement of opinion leaders does not seem helpful in convincing companies to publish the results of negative studies, particularly if there are other positive studies of the drug.

Pharmaceutical companies have a legitimate right to contract opinion leaders to help publicise their products oncerns are

## Most concerns are about the influence of the pharmaceutical industry

leaders to help publicise their products and maximise their profits. Respected colleges<sup>8</sup> and medical associations have argued for greater transparency of the relationships between opinion leaders and companies. This would enable other health professionals to consider the putative financial gain when they weigh up the arguments of these opinion leaders. Such transparency has not been achieved, and how to monitor and deal with noncompliance with college and association guidelines remains a problem. Transparency would resolve many of the current tensions as to how opinion leaders are perceived. In the meantime, all opinions, including those contained in this editorial, should be treated with healthy scepticism. ◄

Conflict of interest: none declared

#### REFERENCES

- Coumou HC, Meijman FJ. How do primary care physicians seek answers to clinical questions? A literature review. J Med Libr Assoc 2006;94:55-60.
- McAlister FA, Graham I, Karr GW, Laupacis A. Evidencebased medicine and the practicing clinician. J Gen Intern Med 1999:14:236-42.
- Flodgren G, Parmelli E, Doumit G, Gattellari M, O'Brien MA, Grimshaw J, et al. Local opinion leaders: effects on professional practice and health care outcomes. Cochrane Database Syst Rev 2011;8:CD000125.
- 4. Medicines Australia. Code of Conduct. 2010. www.medicinesaustralia.com.au [cited 2012 May 7]
- Moynihan R, Heath I, Henry D. Selling sickness: the pharmaceutical industry and disease mongering. BMJ 2002;324:886-91.
- Moynihan R. Key opinion leaders: independent experts or drug representatives in disguise? BMJ 2008;336:1402-3.
- 7. Topol EJ. Failing the public health Rofecoxib, Merck, and the FDA. N Engl J Med 2004;351:1707-9.
- The Royal Australasian College of Physicians. Guidelines for ethical relationships between physicians and industry. 3rd ed. 2006. www.racp.edu.au/page/policy-and-advocacy/ethics [cited 2012 May 7]

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The Editorial Executive Committee welcomes letters, which should be less than 250 words. Before a decision to publish is made. letters which refer to a published article may be sent to the author for a response. Any letter may be sent to an expert for comment. Letters are usually published together with their responses or comments in the same issue. The Committee screens out discourteous, inaccurate or libellous statements and sub-edits letters before publication. The Committee's decision on publication is final.

## Letters to the Editor

# Management of polypharmacy: can we safely discontinue medications?

Editor, – The authors of the article on deprescribing (Aust Prescr 2011;34:182-5) remind us about the critical role all clinicians play in generating, and potentially mitigating, polypharmacy. There is a paucity of high quality evidence to guide when to discontinue medications, especially where the event to be avoided may not be experienced for years or decades. Initiating any medication requires a framework to evaluate its continuing use and includes:

- explicitly categorising the level of prevention (primary, secondary or tertiary) that the new medication is addressing
- agreed, measurable and clinically relevant endpoints
- the time by which clinical benefits are likely to be experienced

- the time frame for expected toxicities
- the time period in which it is likely that a condition will manifest after a medication is stopped
- a plan to individually balance the net clinical benefit (observed clinical benefits vs harms).<sup>12</sup>

As a patient's overall clinical condition, prognosis and range of comorbid illnesses shift over time, their individual benefit:harm ratio will need to be updated continually for each long-term medication. Individually, the number needed to treat and the number needed to harm are not static nor linear over time, and the ratio between them will shift from the time each medication is introduced.<sup>3</sup>

With so much effort expended by industry establishing the short-term efficacy of medications that will be used in the long term, it is time for an expansion of comparative effectiveness research defining when long-term medications can be ceased safely and in which sub-populations this should occur.<sup>4,5</sup> To minimise iatrogenic morbidity and premature mortality, publicly funded studies to develop credible evidence are needed urgently to inform timely and confident discontinuation of appropriate medications.

David C Currow Palliative and Supportive Services Flinders University, Adelaide

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#### REFERENCES

- Stevenson J, Abernethy AP, Miller C, Currow DC. Managing comorbidities in patients at the end of life. BMJ 2004;329:909-12.
- 2. Quill TE, Holloway R. Time-limited trials near the end of life. J Am Med Assoc 2011;306:1483-4.
- Currow DC, Abernethy AP. Frameworks for approaching prescribing at the end of life. Arch Intern Med 2006;166:2404.
- Garfinkel D, Mangin D. Feasibility study of a systematic approach for discontinuation of multiple medications in older adults: addressing polypharmacy. Arch Intern Med 2010;170:1648-54.
- Abernethy AP, Aziz NM, Basch E, Bull J, Cleeland CS, Currow DC, et al. A strategy to advance the evidence base in palliative medicine: formation of a palliative care research cooperative group. J Palliat Med 2010;13:1407-13.

#### Danijela Gnjidic, David Le Couteur, Emily Banks and Andrew McLachlan, authors of the article, comment:

We thank David Currow and his colleagues for their comments. We agree strongly with them and would like to see randomised controlled trials of long-term use of medicines and outcomes of judicious cessation of medicines in older people.

Deprescribing in older adults has been found to be difficult. We recently reviewed methods of deprescribing to reduce polypharmacy and the impact on prescribing and outcomes in older adults.<sup>1</sup> While different interventions (for example pharmacy-based, physican-based and multidisciplinary-based interventions) can reduce medication exposure in older adults, the evidence for their clinical effectiveness and sustainability is limited and, where it is available, conflicting.

Moreover, time-limited trials of treatment may be suitable for safely discontinuing medications and guiding the deprescribing process in clinical practice.<sup>2</sup> Further research is needed to determine the most feasible and effective strategies for discontinuing medications, and to provide a better understanding of the clinical benefits of deprescribing.

#### REFERENCES

- Gnjidic D, Le Couteur DG, Kouladjian L, Hilmer SN. Deprescribing trials: methods to reduce polypharmacy and the impact on prescribing and clinical outcomes. Clin Geriatr Med 2012;28:237-53.
- 2. Abernethy AP, Currow DC. Time-limited trials. J Am Med Assoc 2012;307:33-4.

#### Critical appraisal: court in the Act

Editor, – The Therapeutic Goods Administration (TGA) wishes to ensure that readers of your recent editorial (Aust Prescr 2012;35:38-9) are not left with the misapprehension that they place themselves at legal risk by reporting concerns about a therapeutic good to the TGA. Your editorial failed to acknowledge that personal information relating to complaints made to the TGA is regarded as confidential and that neither the TGA, nor the Complaints Resolution Panel, publishes information that identifies a complainant. In the instance that you cite in your editorial, it was only after a third party published the complaint (and the identity of the complainant) on the internet that the company initiated legal action against Dr Harvey.

The TGA is particularly concerned to ensure that readers do not infer from your editorial that legal action taken by a company about the advertising of its product has implications for healthcare professionals who report suspected adverse events to the TGA.

Health professionals play an important role in ensuring the safe use of therapeutic goods by

reporting both adverse events and advertising breaches to the TGA. These reports are essential to the role of the TGA in safeguarding the health of all Australians who use therapeutic goods.

Your editorial further comments that the TGA's strategy of silence and secrecy gave the appearance we were doing nothing in respect of the alleged advertising breach. Although the TGA operates within a statutory framework and needs to ensure that proper procedures are followed when taking regulatory action, your editorial should have noted that a number of reforms announced by the Parliamentary Secretary for Health and Ageing in December 2011 are being implemented to address this concern.

**Brian Richards** National Manager (acting) Therapeutic Goods Administration Canberra

#### Statins for primary prevention of cardiovascular disease

Editor, - Thank you for the article by Jane Smith 'Appropriate primary prevention of cardiovascular disease: does this mean more or less statin use?' (Aust Prescr 2011;34:169-72). In the very high risk category, when patients should be treated at any lipid level, there is no mention of family history.

The Pharmaceutical Benefits Scheme (PBS) and Therapeutic Guidelines recommendations are for patients with a family history of premature coronary heart disease (one or more first-degree relatives symptomatic before the age of 45 years, or two or more first-degree relatives symptomatic before the age of 55 years).

Is there any evidence for this and what would be the recommended dose?

Louise French General practice registrar Canberra

#### Associate Professor Jane Smith, author of the article, comments:



Dr French is correct to raise the issue regarding PBS recommendations about use of statins in this patient group.

The risk from 'family history of cardiovascular disease in first degree relatives under the age of 60 years' is validated to increase the relative risk of cardiovascular disease by 1.6-1.9.1

The risk from family history of cardiovascular disease has been shown to vary with the age and sex of the first degree relative. If both father and mother have had cardiovascular disease under the age of 50 and 60 years respectively, then the relative risk is increased by 6.9. However, if both father and mother had their cardiovascular disease over the age of 60 and 80 years then the relative risk is only increased by 1.3.2

Logically one could expect family history at a younger age to convey a higher risk, but I am unaware of a calculated value, other than relative risk, and I believe the recommendation to treat as high risk is based on expert opinion.

Such premature onset of cardiovascular disease suggests a genetic predisposition like familial hypercholesterolaemia, but this specific diagnosis is based on a number of criteria.

Risk calculators in the UK (QRISK2) and the New Zealand Heart Foundation adjust for family history. The Australian National Vascular Disease Prevention Alliance risk calculator and the Australian adjusted Framingham risk tables do not. The individual prescriber should accommodate this in their assessment

#### REFERENCES

- Hippisley-Cox J, Coupland C, Robson J, Brindle P. 1 Derivation, validation, and evaluation of a new QRISK model to estimate lifetime risk of cardiovascular disease: cohort study using QResearch database. BMJ 2010;341:c6624
- Sesso HD, Lee IM, Gaziano JM, Rexrode KM, Glynn RJ, Buring JE. Maternal and paternal history of myocardial infarction and risk of cardiovascular disease in men and women. Circulation 2001;104:393-8.