Editorial

Undertreatment of rural people with cardiovascular disease

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Key words: drug utilisation, therapeutic guidelines.

(Aust Prescr 2008;31:86–7)

A report by the Australian Institute of Health and Welfare (AIHW) shows that drugs and some interventions for cardiovascular disease are underused in rural areas.[1] It found that rural patients are getting far fewer prescriptions for beta blockers, ACE inhibitors, statins and warfarin than other Australians. For example, the report found that for males the rate of new prescriptions per 100 000 people for lipid-lowering drugs was 286 in metropolitan areas, 147 in rural areas and 10 in remote areas.[1]

Mortality rates for coronary heart disease are higher outside capital cities. The difference between rural and urban areas accounts for approximately 5000 excess deaths per year.[2] If some of the increased mortality in rural people[1,3] is the result of underprescribing for cardiovascular disease, then doctors can make a difference by addressing the issue of appropriate prescribing and 'compliance'.

Access problems probably account for much of the rural-urban gap. We know that rural patients see their general practitioners, on average, 1–2 fewer times per year than city dwellers.[1,4] Additionally, rural patients have less access to cardiologists, who are more likely to be aggressive with cardiac therapies and do not have to pay attention to the patient's many other needs. Timely access to technical intervention in acute coronary syndromes is a problem, for example if patients have to travel for hours before even being considered for thrombolytics, pacemakers or percutaneous coronary intervention.

The evidence about prevention and treatment of ischaemic heart disease has matured to the point that guidelines are relatively simple and straightforward for most patients.[1] While specialists may be more familiar with guidelines, the studies about whether or not patients with cardiovascular disease are best cared for by cardiologists, general physicians or general practitioners are conflicting. Some studies show more intervention by specialists, but no difference in mortality. Others show that patients do better if cared for by cardiologists, or doctors who graduated from medical school more recently, possibly because they have been trained to use guidelines.[5]

Even if doctors know the recommended drugs, they may be reluctant to prescribe them. For example, doctors often hesitate to prescribe beta blockers because of myths about suppression of hypoglycaemic reactions in diabetes.[6] However, patients with diabetes and cardiovascular disease benefit (reduced mortality) more than others from beta blockers so the drugs are strongly recommended.[1,6] Chronic obstructive pulmonary disease often raises concerns among doctors when beta blockers are indicated, but systematic reviews show that this concern should not prevent doctors from prescribing this life-saving therapy.[7]

Rural areas have a disproportionately high and increasing percentage of elderly patients[3] who are more likely to have cardiovascular disease, and are also likely to have other medical problems. Legitimate concerns about drug interactions and adverse effects in this vulnerable group may increase the reluctance to prescribe. However, studies looking at hypertension treatment and anticoagulation show

In this issue…

In the previous issue of *Australian Prescriber* we discussed how the initial enthusiasm for thiazolidinediones (glitazones) in diabetes was diminished by the emergence of serious adverse effects. Inside this issue we feature the incretin mimetics and enhancers and their use in the treatment of diabetes. In their reviews Johannes Prins, Anne Reutens and Jonathan Shaw all caution that the role of these new drugs requires further study.

While there are interesting new developments in the drug treatment of diabetes, it is essential that basic care is not overlooked. Kerry May explains the importance of looking after patients' feet to prevent ulcers.

Many patients with diabetes have cardiovascular disease. While there are guidelines for managing cardiac diseases, some patients do not receive optimum care. Dawn DeWitt discusses why undertreatment may be a particular problem in rural areas of Australia.

Diabetes is also associated with restless legs syndrome. Dominic Thyagarajan explains how people can be helped without the need to take neurological drugs.

that, generally, older patients should have the same goals (for example blood pressure < 130/80) as younger patients.

Indigenous Australians have high rates of heart disease. Living in a remote area, as well as having comorbidities, may make them less likely to receive coronary interventions.[8]

Some patients do not fill their prescriptions and the major problem here seems to be cost.[9] The AIHW report does not address this directly, but, for example, general patients prescribed an ACE inhibitor, a beta blocker and a lipid-lowering drug would pay about $90 per month. Rural patients also face higher costs accessing medical care, although their incomes tend to be lower than those of urban residents.

Assuming cost issues can be overcome, what about compliance? The report reveals that rural patients are actually slightly more compliant than their city peers, but many stop taking the drugs because of adverse effects or a lack of understanding about their treatment.[1] Better doctor-patient communication and more time spent reviewing medication compliance might help. However, I know from experience as a rural doctor that the pressure on general practitioners to see more patients may subvert preventive therapies or counselling when doctor availability and waiting lists are problems and diverting 'crises' are common.

I think we can do better in the country. We should firstly think about cardiovascular disease and know the major recommendations. Secondly, we need to schedule time to review treatment or consider ordering a medication review. Adherence to lipid-lowering therapy improves if patients get their cholesterol checked and have their medications reviewed by their own doctor.[10] Improved adherence then improves mortality.[9,11]

Other health professionals could be involved in a structured campaign that goes straight to rural people. For example, if the main problem is access, we could look at mechanisms in pharmacies that appropriately identify people who would benefit from cardiovascular drugs. Rural pharmacies and general practices could be given support to improve patient knowledge and adherence to treatment. Staff could ask a few direct questions about heart disease or risk factors. A 'yes' then prompts a pharmacy or practice nurse review of whether the patient's blood pressure is controlled and whether they are taking the recommended list of medications.

The Commonwealth government has increased the number of medical school places across Australia. The new rural clinical schools are training 25% of the nation's medical students, so that in about 10 years we may have enough doctors for regional and rural Australians. In the meantime, knowing the guidelines and being mindful of the gap in mortality, rural doctors should work with other health professionals to identify patients for whom cardiovascular medications could prove life-saving, and work together to close the gap.

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Conflict of interest: none declared