Conference report

# Melbourne takes the world to heart — and vice versa

## Four emboli from the atria of cardiovascular research

The World Heart Federation's World Congress of Cardiology brought 9000 attendees to Melbourne's bright and glittering Convention and Exhibition Centre on the Yarra on 4–7 May 2014. The conference was impeccably organised, and the Cardiac Society of Australia and New Zealand can take a bow. Hundreds of abstracts, dozens of workshops and sessions of lectures and discussion panels covered every conceivable aspect of heart health and disease: from molecular science via clinical care to societal policies and interventions seeking to prevent heart disease. Here are four highlights.

### Polypill

The polypill has been tried in both affluent and less economically advanced countries. The trials, including a large one conducted by the George Institute in Sydney, generally found favourable outcomes: patients find it easier to take one pill than several to prevent or treat their cardiac problems, and so compliance rates are higher.[1,2] The effects on risk factors are also positive.

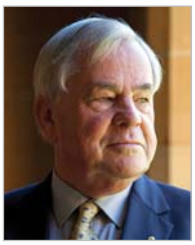
But there is strong resistance in many cardiological circles because the doses of individual components cannot be tailored to the individual patient. A decade after the polypill was proposed as a way to reduce cardiovascular disease by more than 80%,[3] it is still to "take off". While it can reduce the cost of medications, especially in poorer environments, a recent article in the Journal noted that combination therapies in Australia often cost more than the individual components.[4]

### Salt

Salt is a hot topic. Populations that consume more than 6 g of salt a day on average should mend their ways, but even then not all individuals would benefit, averages being what they are. Countries that could improve include Hungary (16–18 g), Japan (13 g), the United States (9 g) and Australia (7–12 g).[5] A large study was presented from South Africa. Controversy raged over survey data, soon to be published, that showed no benefit in mortality rates among people consuming less than 6 g a day. This deeply offended public advocates for lower salt consumption because their population-based approaches would be undermined by these assertions. Such disputation is not good for one's blood pressure.

### Stroke

With lots on heart disease, strokes also received careful attention. A massive international study from McMaster University in Canada involving 27 000 patients with stroke showed that 10 modifiable risk factors — including hypertension, smoking, cholesterol, alcohol, abdominal obesity and psychosocial factors — together explain about 90% of strokes.[6] These findings reinforce the importance of treating these factors energetically, not only to prevent stroke but because of their broad spectrum of association with other chronic disease as well.



**Stephen R Leeder**
MD, PhD, FRACP
Editor-in-Chief

*Medical Journal of Australia*, Sydney, NSW.

**sleeder@mja.com.au**

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### Rheumatic heart disease

In the face of the global burden of ischaemic heart disease and stroke, it is easy to lose sight of rheumatic heart disease, which is a special problem in impoverished communities including Indigenous groups in remote areas of Australia. The importance of providing essential medicines for rapid treatment of antecedent streptococcal infections was emphasised.[7] Work from Australians in the Northern Territory on this important topic was featured as having global significance. Great progress is being made.

### Conclusion

Science feels its way in a confusing and mysterious world. Hypotheses are often wrong. Certainties are few and far between. A careful reflection on what was said at this conference supports the view that there is much good that can be done (tobacco controls) for cardiovascular disease; that somewhat less good is being done (detection and effective, compliant treatment of elevated blood pressure); and that there is much about which we remain uncertain or ignorant. But in implementation and research — clinical, basic and population-based — Australia has, by comparison, done well. Long may it continue.

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4 Clarke PM, Avery AB. Evaluating the costs and benefits of using combination therapies. *Med J Aust* 2014; 200: 518-520.

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