

Population and individual health: the two faces of Janus

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The leading paper in this issue is Selak and colleagues' *Aspirin for primary prevention: yes or no?*¹ New Zealand (NZ) cardiovascular disease (CVD) risk guidelines recommend aspirin, along with lipid and blood pressure-lowering drugs and lifestyle changes, for all people with a five-year CVD risk that is 15% or greater.² This recommendation still stands for secondary prevention (patients who have had a previous CVD event). However, a recent meta-analysis has cast doubt on whether the benefits of aspirin use outweigh the potential harms in primary CVD prevention, concluding that 'in primary prevention without previous disease, aspirin is of uncertain net value'.³ General practitioners (GPs) therefore face a clinical dilemma: should we prescribe aspirin (unless contraindicated of course) for primary prevention of CVD in at-risk patients?

Selak et al.'s research gives us the answer. They applied evidence-based modelling to the meta-analysis data (six randomised controlled trials involving 95 456 individuals without prior CVD randomised to aspirin or no aspirin) calculating the rates of benefit and of harm for men and women in 10-year age bands, at different levels of CVD risk, both for aspirin alone and also for aspirin combined with lipid and blood pressure-lowering drugs.

They found that the benefits of aspirin outweigh the harms for both men and women aged up to 80 years with a five-year CVD risk >15% in primary prevention. However, harm may outweigh benefit for primary prevention for those over 80 years, particularly for men. In men aged 70–79, lipid and blood pressure-lowering therapies should be considered first and then the patient reassessed as to whether aspirin adds an additional net benefit.

This study is a great example of translational research, using the analysis of secondary data

to answer a clinical question. We can apply the evidence to decide whether we should confirm or change our practice for optimal health care outcomes. Studies such as this, assessing the marginal benefits and harms of starting and stopping medication, are the way of the future.

The topic of primary prevention of CVD is also touched on in our ethics column.⁴ The authors discuss the difficult balance that doctors need to find between providing patients with information on all the possible, but often rare, adverse effects of management options, and informing patients about every aspect of their condition and its treatment that they might consider significant. Statins, like aspirin, are used to prevent heart attacks and strokes. Statins can cause very rare but serious and potentially life-threatening events. Most people are able to accept the remote risk that something bad may happen, but a few may be overly concerned to the point that they 'make bad decisions from a faulty appraisal' of the evidence they are given. Ideally in the patient-centred approach a GP knows when a patient might misinterpret or become unrealistically anxious and tailors how much information about risks to impart, but the real world is not always this simple.

These two papers demonstrate the potential dilemma in practising both population and individual care. Like the Roman god Janus, we can be perceived as having two heads facing in opposite directions. The GP who gives statins and aspirin to his or her at-risk patients knows that a number are prevented from having a heart attack or a stroke, and that treating the practice population in this way leads to an overall improvement in a number of patients' quality of life. However an individual patient may suffer a severe haemorrhagic stroke that can be attributed to taking the aspirin, or rhabdomyolysis and renal failure from

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the statin. This is devastating for the person, their family and their GP. We may act for the greater good, but sometimes individuals will suffer harm.

This theme is continued further in a letter to the editor by Wells and colleagues.⁵ They challenge an essay published in our December 2009 issue which argued that using CVD risk profile tools does not improve patient care nor outcomes.⁶ Wells et al. agree that merely knowing a patient's risk score and giving one-off advice is unlikely to lead to sustained changes in patient behaviour. However they provide evidence that integrating CVD risk profile tools into practice management systems provides immediately available decision support and generates 'a comprehensive, personalised set of evidence-based management recommendations' which can significantly improve quality of care.

Indeed, such clinical decision support systems help bridge the gap between population and individual care, taking best evidence obtained from large populations and tailoring management to fit a particular patient in the context of his or her specific characteristics, risks and needs.

This issue of the *JPHC* also includes a study exploring the sources that NZ GPs use both for lifelong learning and to answer clinical questions arising during consultation.⁷ Increasingly GPs are using web-based tools and resources. This research was conducted by Zachary Gravatt as a summer studentship 2008–2009. Tragically, Zac died last year during his 4th year as a medical student, and sadly never saw his work in print.

Research pertaining to practice nursing is prominent this issue. There are two papers on chronic illness care,^{8,9} another exploring the preventive care possibilities from patients seeing the practice nurse before the GP,¹⁰ a study of the enablers and barriers for practice nurses to advance their professional development,¹¹ and one addressing the skills palliative care nurses need to help terminally ill people remain in control of their day-to-day decisions for as long as possible.¹² There are also two studies addressing variation in hospitalisation rates, particularly in Maori¹³ and in Pacific people,¹⁴ and a short report exploring a possible

association of unexplained vaginal symptoms and psychological distress.¹⁵

In our usual features, two GPs go *Back to Back* on whether there should be population-based screening for attention deficit hyperactivity disorder, the *String of PEARLS* is about hypertension, *Cochrane Corner* examines the use of NSAIDs for dysmenorrhoea, *Charms and Harms* covers the herbal remedy Ginkgo and *Pounamu* explains the whanau ora approach to health care. Again, this issue reflects the diversity that is primary health care.

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