The young at risk of CVD are the least likely to receive preventive cardiovascular medications in New Zealand

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The paper by Mehta in this issue of the *Journal of Primary Health Care* describes the overall provision rates of the main cardiovascular (CV) preventive therapies, namely blood pressure–lowering (BPL) and lipid-lowering (LL) medications in New Zealand between 2006 and 2009. The methods selected were rigorous and valid and, despite inevitable study limitations, probably represent best practice, as the authors state. We don't know the relative influence of patient factors (such as refusal of medication, and non-concordance or persistence) or physician under-management in explaining these data. However, there are a number of potentially important messages for practising clinicians.

Firstly, these GPs appeared to target individual risk factors rather than global risk in their interventions—only 67% of patients receiving both LL and BPL medication, with 87% receiving only one intervention type. This is unsurprising because, though the concept of global risk in terms of patient assessment is now mostly well understood (i.e. use a risk algorithm to define who to treat), the idea that you should then treat automatically with BPL and LL medications regardless of the baseline BP and lipid levels is not. (Probably the only CV medication that is used holistically in this way—a risk factor modifier given as a fixed target dose regardless of risk factor level—is metformin in Type 2 diabetes.) The message for overall CV risk has not been widely promulgated, nor how you would practically implement it, i.e. which drugs, at what fixed dose, and in what order, even though we know each of these factors predicts subsequent patient concordance.[1,2] The significant number of people who stop their CV prevention medications suffer worse clinical outcomes[3] and cause higher health care costs.[4]

Practising GPs, it appears, are therefore continuing to base CV interventions on the 'traditional' way of treating to specific risk factor targets.

The general backdrop of health care payer pressure on prescribers to limit medication choice and reduce overall prescribing costs is likely to further influence conservative approaches to disease prevention.

Against this backdrop, the authors further identify that, encouragingly for New Zealand, this under-utilisation appears to be no worse for the more deprived population, and is only worse for LL amongst Maori and women. The main disadvantaged group, however, were the young: compared to those with established CV disease at baseline aged 65–75, those aged 35–44 were up to 40% less likely to get BPL medication, LL medication, or both and those 45–54 up to 15% less likely (especially for LL). Given that these populations are also under-served by CV risk scores that measure short-term (five or 10 year) absolute risk rather than lifetime risk to determine access to prevention, these data showing that even those young patients with established CV disease are under-treated are particularly sad. These young high-risk patients have the most to gain individually and as family members. These important data highlight a major challenge to health care providers: to shift the emphasis for treatment from individual risk factors to global risk intervention and, particularly, to overcome this inverse age bias.

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