

week argue that professional skills are too often used ineffectively or inappropriately.⁷⁻⁹

Most importantly, health professionals still have much to learn from patients about their needs.¹⁰ Four years ago the US Institute of Medicine called for healthcare systems that respect patients' values, preferences, and expressed needs; coordinate and integrate care across boundaries of the system; provide the information, communication, and education that people need and want; and guarantee physical comfort, emotional support, and the involvement of family and friends.¹¹ There is still a lot of work to do to achieve these ideals.

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Drugs for preventing cardiovascular disease in China

Risk factor thresholds should vary according to resources

In China cardiovascular disease accounts for a third of total mortality and the rate is still increasing.¹ The disease is potentially preventable. However, the task for primary prevention targeted at risk factors is daunting given the burden of disease and sparse healthcare resources in China. The prevalence rates of hypertension, hyperlipidaemia, diabetes, overweight including obesity, and cigarette smoking in the adult population are 18.8%, 18.6%, 2.6%, 29.9%, and 36.0% respectively.² Healthcare policies need to be evidence based, but they should also consider what the society's needs are, whether it can afford the interventions, and whether it can make cost effective use of resources.

The overall risk strategy has been widely adopted in Western populations: all risk factors in a person are considered together and the overall cardiovascular risk informs treatment decisions.³ An important message for developing countries like China is that the new strategy is more cost effective than the old practice—more cardiovascular events can be prevented by using the same amount of resources while treating the same number of patients.^{3,4}

The new strategy calls for a large shift in conventional thinking. For example, hypertension has long been taken as a disease that needs treatment. The new strategy, however, implies that many people with hypertension may not need drug treatment while many with normal blood pressure can benefit from hypertensive drugs.³ Also contrary to conventional thinking, a lower threshold for blood pressure could be used in older people than in younger people.⁵ The same applies to hyperlipidaemia. This strategy may be difficult for frontline doctors in China to accept, though most doctors never read guidelines.^{5,6} New guidelines can take effect only when doctors and patients change their ideas, attitudes, and practice about hypertension.

Thresholds for initiating drug treatment of blood pressure, serum cholesterol, and overall cardiovascular risk require careful consideration. Since the absolute benefit from treatment continuously increases as the levels of these factors rise, any practical limits are arbitrary. A small reduction in the threshold considerably increases the number of people who need treatment. The choice of threshold is thus largely a matter of resources and social values. Countries of different economic status should recommend different thresholds. The WHO/International Society of Hypertension guidelines could result in a quarter of adults in Western countries receiving antihypertensive drugs, but this may not be feasible economically as a target for developing countries.³ The 2004 Chinese guidelines recommend similar thresholds.⁷ Current national guidelines on management of hyperlipidaemia state that everyone with total serum cholesterol above 6.2 mmol/l should be treated with drugs.⁸ These recommendations did not seem to fully consider the resources available.

China has 160 million people with hypertension and another 160 million with hyperlipidaemia. Assuming the daily cost to be ¥1 (£0.06; \$0.12; €0.09) for antihypertensive drugs and ¥2 for cholesterol lowering drugs,^{9,10} a conservative estimate of the total drug cost would be ¥175 billion (£11bn; \$21bn; €16bn) a year if all these patients were given drug treatment. This alone would consume almost a third of the total healthcare expenditure in the country.¹ This questions the practicality of the recommendations.

In any case, most patients in China pay for treatment from their own pockets. How many hypertensive patients in poor rural areas would be willing to pay if they knew that only one in every 50-100 people treated could eventually benefit from avoiding a cardiovascular event in the next five years, at a cost of one seventh of their family's annual income? Despite

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many years' effort by health services in rural areas, only 5.4% of people with hypertension receive drug treatment and only 0.9% have their blood pressure effectively controlled.⁷⁻¹¹

Research evidence on the biological efficacy of these drugs is often universally generalisable. Guidelines are, however, value laden, have cost implications, and are not universally applicable; thus those developed for one population may not suit another. As well as the thresholds for initiating treatment, factors such as treatment targets, competing priorities for drugs, diagnostic testing, and frequency of follow-up all have cost implications. The treatment target is the level of blood pressure or cholesterol to achieve through treatment—the lower the target the more resources are required to achieve it. China should probably consider targets that differ from those for Western populations.

Locally tailored treatment guidelines could further improve cost efficiency. For instance, antihypertensive drugs might be given precedence in China, particularly in the rural areas, over cholesterol lowering drugs

because they are cheaper and also reduce the incidence of stroke. Stroke is common in China, and in some areas it is the leading cause of death. Each year 1.3 million people have a first stroke, four times the incidence of acute myocardial infarction.¹²

Given national differences in epidemiology, local needs, and affordability, developing countries such as China need to tailor their national policies for managing chronic conditions. If policies for other populations are used, adapting, rather than simply adopting, will bring greater benefits to patients.

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Palliative care in chronic illness

We need to move from prognostic paralysis to active total care

Health, social, and palliative care services are continuing to fail many people with progressive chronic illnesses in whom death may be approaching, reflecting a failure to think proactively and holistically about their care.¹ Such people could, however, readily be identified by clinicians asking themselves, "Would I be surprised if my patient were to die in the next 12 months?" For patients in whom the answer is no, delivery of patient centred active treatment and supportive care are needed.

Prognostic paralysis has been described, whereby clinicians of patients with uncertain illness trajectories prevaricate when considering end of life issues.² For example, one general practitioner graphically summarised the feelings many experience in caring for people with terminal heart failure: "You're paddling downstream to Niagara." Another felt reduced to clinical tasks: "I feel impotent, merely a blood leech and monitor."³ End stage chronic obstructive pulmonary disease is another example where patients seldom receive holistic care appropriate to their needs.⁴ Decision analysis in end stage renal failure should include the option of palliative care.⁵ Similarly, management of diabetes at the end of

life may need to be altered to reflect different, more appropriate goals.⁶ To help overcome prognostic paralysis, quality improvement teams in the United States suggest that, rather than target patients who will die in the next six months, we should focus on those who "reasonably might die."⁷ In the United Kingdom at least, opportunities now exist to initiate such an approach.

The new general practitioner contract has resulted in the establishment of many patients' registers, such as those for chronic obstructive pulmonary disease, ischaemic heart disease, and cardiac failure.⁸ Practices are now reimbursed for doing regular assessments and investigations, offering regular opportunities to identify those who may be entering the last months of life. When establishing these registers and reviewing those on them clinicians should routinely ask the question of anticipated prognosis.

Community nurses are playing a larger part in caring for people with chronic illnesses. Practice nurses reviewing people annually, district nurses caring for housebound patients, and health visitors proactively visiting the elderly could all periodically ask themselves this question as a trigger to adopting a holistic