that some reassignment is generally a reasonable practice<sup>6</sup> but more research is needed to calculate the proportion that would be appropriate for China. The most recent Global Burden of Disease estimate for suicide in China in 2000 is 23 per 100 000 (A Lopez, personal communication).

The study by Phillips and colleagues is important, not so much for its rather more conservative estimate of China's suicide rate, as for its being a key step along the path to encouraging China, and other countries, to have a complete vital registration system. Also, it highlights suicide as a leading cause of death among the young and a major cause of death in all age-groups, and the need to acknowledge and address suicide as a serious publichealth problem.

Both the WHO and the UN have recommended that member states should develop national suicideprevention programmes, where possible linked to other public-health policies, and that they should establish national committees to coordinate the prevention strategies.<sup>7,8</sup> Over the past decade, several countries have set suicide reduction as a target and have developed or are now developing and refining suicide-prevention strategies, which include: improving prevention, detection, and treatment of depression, particularly in primary care; improving access to mental-health services; improving assessment of deliberate self-harm; supporting high-risk groups; improving control of disinhibiting, facilitating factors, such as alcohol; influencing the media in their portrayal of suicide to prevent the glamorisation of suicide and the reporting of the method; auditing all suicides in detail to learn the lessons for prevention; reducing access to the means of suicide; and encouraging essential research and development. Improvement in international suicide statistics will undoubtedly assist this effort.9-18

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## Partnerships between expert patients and physicians

It has become fashionable to think of patients as consumers of health care and of the health-care system as providers of care. The Expert Patient report<sup>1</sup> produced last September by the UK Department of Health challenges this worldview. Expert patients are those who take responsibility for the day-to-day decisions about their health, and who work with health-care providers as collaborators and partners to produce the best possible health given the resources at hand. Expert patients, especially those with chronic disorders, have been said to be not only consumers of health care but also producers of health.<sup>2</sup> To be producers of health, patients ought to be provided with the education for this new role. At the same time health-care professionals must adjust their worldview as they become true health-care partners. With the publication of *The Expert Patient*,<sup>1</sup> England became the first country to undertake and fund a national initiative aimed at this fundamental change in the healthcare system.

How can patients and professionals best prepare for these new roles? Self-management programmes for people with chronic disorders have been shown to have long-term positive effects on patients' behaviours, their health status, and their use of the health service.<sup>3-8</sup> Unlike traditional patient-education programmes, which are aimed at increasing disease-specific knowledge and encouraging compliance with medical regimens, selfmanagement programmes are aimed at giving patients the knowledge and skills to manage their illnesses daily. Corbin and Strauss<sup>9</sup> have identified three selfmanagement tasks for patients with chronic diseases: medical management, such as taking medicines and exercising; maintaining and adapting important life roles, such as those of mother, or worker; and managing the anger, fear, frustration, or depression that come, singly or together, with having an uncertain future. The programmes must give roughly equal emphasis to each of these tasks.

Self-management programmes are focused on the problems experienced by patients, and disease-related problem-solving is a key self-management skill; learning to solve one's own problems is very different from having health professionals do it. The second key skill is goalsetting or action-planning. These goals are chosen by the patient and are generally short term. For example, a diabetic patient may make an action plan to eat sweets no more than four times a week. Such a plan may seem unacceptable to professionals, but for a patient eating sweets twice daily, this goal demands a huge behavioural change. Patients generally do things in their best interests

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if they receive the proper understanding and, most importantly, support. Patients are also the best judges of what is possible. All too often they do not comply with orders because the expectations of health professionals are not realistic for the patient's circumstances. The other part of goal-setting is giving patients an opportunity to give and receive feedback on their accomplishments.

Many studies have shown that patients who are confident in their ability to manage are the ones who have the best health outcomes.10 Health professionals are instrumental in helping patients gain this confidence. Professionals must make it clear that they want patients to become expert patients. Without proactive endorsement by the physician, patients cannot embrace their new role. One way for health professionals to boost patients' confidence is to collaborate with them on short-term goal-setting to master new skills. This collaboration enables patients to make changes that are realistic and feasible. A second way is to give patients opportunities to meet others like themselves, through patient groups, peer-leaders, and disease-specific e-mail lists and organisations. The third way is to assist patients to understand their symptoms. If patients believe that medicines should make them better, they may stop taking those that do not appear to be working. Symptoms should usually be explained as having many causes, which offers the possibility of different actions. For example, a person with fatigue might try healthier eating and exercise. Fourth, professions should practise social persuasion. People are more likely to change their behaviours and have confidence in doing so if they perceive those around them, including their health-care providers, to be supportive. All it takes is a kind word and a notice of even small accomplishments.

The expert-patient initiative should provide the opportunity to improve the health-care environment for both patients and providers, and in turn the effectiveness of health care and hence satisfaction for everyone. Years ago an advertsing slogan for *Medical Self-Care Magazine* was that physicians would get off their pedestals when patients got off their knees (Tom Ferguson, editor of the magazine, personal communication). The expert-patient initiative should speed the formation of such equal partnerships.

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## Management of oral mucositis associated with cancer chemotherapy

The mucositis that is commonly associated with cancer chemotherapy is often accompanied by pain, loss of taste, and reduction in oral intake, with consequent weight loss. Thus it can cause treatment delays and necessitate dose reductions, thereby affecting delivery of effective care with possible adverse effects on outcome. Some chemotherapeutic agents-in particular fluorouracil, methotrexate, doxorubicin, and bleomycin-are especially likely to be associated with this complication. The mucositis with each of these drugs is often strikingly dependent on dose or schedule and, for many of them, can be a dose-limiting toxic effect. Groups prone to this effect are children (although their healing capacity is better than in older patients), patients with haematological cancers, those with head-and-neck cancer treated with chemoirradiation, and patients receiving high-dose chemotherapy. In this last group mucositis is also a surrogate measure of outcome because severe oral inflammation in such patients is strongly associated with an increased risk of sepsis, use of total parenteral nutrition, high hospital costs, and poor treatment results.

This complication has been widely written about in oncology, nursing, and dental publications. The earliest evidence of mucosal damage can be detected in animal models within 24–36 h of start of chemotherapy or radiotherapy,<sup>1</sup> when damaged epithelial cells release cytokines, which increase local vascularity and cause an inflammatory response. Within a few days the rapidly dividing cells of the oral basal epithelium are also affected such that the rate of cell division and replacement declines. Local soiling and trauma of the epithelium then leads to ulceration, pain, and infection, often at a time of systemic neutropenia. Blood-borne infection can occur but generally, in the absence of further chemotherapy, symptoms and signs gradually diminish spontaneously.

Although many randomised trials have been reported, these are on the whole very small and have produced conflicting results. A particular problem in these studies has been the lack of an agreed scoring system for mucositis, but the oral mucositis assessment scale,<sup>2</sup> the result of an international collaborative effort, should help standardise such studies. However, there is no consensus on the most effective way of preventing and treating this distressing complication. Nevertheless, the issue is being actively investigated and there have been several reports of studies, albeit small and inconclusive, into the management of mucositis in the past few months.<sup>3-6</sup>

As alway, the best approach is prevention. The value of good oral care (frequent rinsing of the mouth and effective brushing of the teeth two or three times a day with a soft brush) is difficult to validate but these measures are easy and probably helpful.<sup>3</sup> Self-help guides to mouth care are available and should be used more extensively.<sup>7</sup>

A well-validated, simple, cheap, and effective approach for mucositis associated with drugs with a short half-life (particularly intravenous fluorouracil) is the sucking of ice chips during the intravenous infusion.<sup>8</sup> By decreasing

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