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CHRONIC DISEASE AND COMORBIDITY

Alvan Feinstein coined the term comorbidity in 1970,[1] defining it as the presence of 'a distinct additional clinical entity'. Charlson's index sought to measure the health impact of various comorbidities and more recently others have underlined the difficulties that comorbidity presents for the production and implementation of clinical guidelines, for the delivery of whole-person care, and for the assessment of the quality of care.[3,4] In this month's *BJGP,* chronic disease and comorbidity are examined from various different standpoints, with consideration of important aspects of the management of chronic renal disease, of cardiovascular disease, and of diabetes.

Comorbidity can be thought of in a number of ways. Some comorbidities are contingent on pre-existing conditions, such as heart failure in patients with hypertension. Other comorbidities are distinct, almost certainly unrelated to the index condition, such as osteoarthritis in a patient with hyperthyroidism. Comorbidity is an important facet of the spectrum of so-called medically unexplained physical symptoms (MUS) which includes irritable bowel syndrome, fibromyalgia, headache, urinary symptoms, pelvic pain, and low back pain, and in which the presence of one of these MUS strongly predicts the development or co-existence of one or more others. The importance of psychiatric comorbidity in chronic disease has been appreciated widely in recent years and the study by Reddy *et al* (page 417) emphasises this important aspect of clinical practice. Finally, the dual diagnosis of a psychiatric disorder with an addiction represents an important further sub-group of comorbidity.

The prevalence of comorbidity is striking — for example, comorbidity is present in over 25% of adults in the Dutch population, with four or more conditions together in 55% of patients over the age of 75 years[5,6] and in Canada two or more distinct conditions are present in over 90% of the population aged over 65 years.[7]

The problems of incorporating guidelines — which tend to be written for single diseases — into the general practice consultation with a patient with multiple morbidities are self-evident, as are the difficulties of prioritising interventions, defining, balancing, and trading off risks and benefits, and assessing quality of care. Not only is the evidence base for the management of many comorbidities at the best uncertain, but there are also major, reciprocal problems to do with the impact of comorbidity on the evaluation of the efficacy of therapies in randomised controlled trials.

Clinical trials of new drugs are invariably conducted according to trial protocols with explicit inclusion and exclusion criteria. These exclusion criteria are likely to exclude from study the very patients whose complex medical problems we need to address — the very old, the demented, frail patients with serious co-existing disease, abnormal liver and renal function, and taking multiple drug treatments — they are too difficult for inclusion in drug trials in search of a 'clean' study population and a clear result. At the other end of the spectrum, of course, are children and young adolescents who are infrequently enrolled in such studies.

At the heart of the consultation for many patients is the need to make an accurate determination of the likely seriousness of the presenting problems — marginalising danger — and the studies by Bösner and colleagues (page 420), on the diagnosis of coronary heart disease and by Thomas *et al* (page 426) on the role of CT in diagnosing the causes of headache are useful additions to the growing literature on diagnostic research in primary care. Studies which define the likelihood of certain diagnoses in individual patients in primary care will sharpen our diagnostic acumen and lead to more appropriate use of tests and drugs; one challenge for diagnostic research is to disentangle the significance of different symptoms in patients with existing comorbidity.

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