

nurses already have formal links with palliative care services.

As doctors we are facing a marked shift in our thinking about this non-cancerous, terminal disease. It is always hard to acknowledge that therapeutic options are exhausted, particularly when patients have not recognised this themselves. But it is disturbing and lamentable that patients with heart failure, in stark contrast to those with cancer, are still not told their diagnosis or prognosis. Doctors caring for their patients with severe heart failure have much to learn from their colleagues in cancer services and from specialist nurses.

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Competing interests: None declared.

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Complications of diabetes in elderly people

Underappreciated problems include cognitive decline and physical disability

The diabetes epidemic continues to garner headlines, with the emergence of type 2 diabetes among young people the most alarming.¹ The greatest increases in numbers of total cases of diabetes in industrialised countries are, however, occurring among elderly people.^{2,3} This is because of the ageing of the overall population as well as a greater absolute increase in the prevalence of diabetes among elderly people than among young people. People 65 years and older will make up most of the diabetic population in the United States in the next 25 years.² More alarmingly, the proportion of the diabetic population 75 years or older is projected to exceed 30% in the United States in the next 50 years. Considerable progress has been made in reducing risk for the traditionally recognised microvascular (retinopathy, nephropathy, neuropathy), and macrovascular (coronary heart disease, stroke, peripheral arterial disease) complications of diabetes. But as diabetes increasingly becomes a disease of elderly people, some of its underappreciated complications must be addressed. These include cognitive disorders and physical disability, falls and fractures, and other geriatric syndromes. Such outcomes, as well as having a direct impact on quality of life, loss of independence, and demands on caregivers, may ultimately be as great a concern to older people with diabetes as the more traditionally recognised vascular complications. These problems present a looming challenge for clinicians and the public health community and, as such, are examples of the confluence of ageing with other chronic diseases as well.

The potential for diabetes to cause cognitive impairment among the aged is well documented, but only recently has this association been examined in prospective studies: four of six studies have found an association between diabetes and cognitive decline as measured by repeated neuropsychological tests.⁴⁻⁷ Additionally, five of seven cohort studies associated diabetes with roughly a doubling of the overall risk of dementia.⁴⁻⁹ The specific association with Alzheimer's disease may be weaker and the association with stroke mediated dementia considerably stronger.⁴⁻⁹ Although the specific mechanisms and pathophysiology of diabetes associated dementia must be clarified further, the consistency of the overall association between diabetes and cognitive disorders indicates that exploration of preventive measures is warranted.

Diabetes is also associated with greater risks of disabilities related to mobility and daily tasks among elderly people.¹⁰⁻¹¹ Findings from the National Health and Nutrition and Examination Surveys indicate that people with diabetes have about two to three times the prevalence of inability to walk 400 metres, do housework, prepare meals, and manage money.¹⁰ One fourth of diabetic women 60 years of age and older report being unable to walk 400 metres, compared with less than one sixth of non-diabetic women of the same age. Diabetic women became disabled at approximately twice the rate of non-diabetic women and have an increased risk of falls and hip fractures.¹¹⁻¹² The association of diabetes with physical disability is explained in part by classic complications of diabetes (for example, coronary heart disease, peripheral

BMJ 2002;325:916-7

arterial disease, and visual impairment), but a 60% excess prevalence of disability remains after controlling for these factors.^{10 11}

The specifics of how to manage elderly patients with diabetes, prioritise their problems, and implement effective interventions for functional outcomes are not clear. For example, glycaemic control, management of blood pressure, and hyperlipidaemia each could conceivably affect cognitive decline, but few data exist to inform clinicians. The association between diabetes and physical disabilities seems to be mediated by several potentially modifiable factors, including coronary heart disease, peripheral arterial disease, stroke, visual impairment, obesity, physical inactivity, and depression.^{10 11} This would imply that prevention of secondary cardiovascular disease, weight loss, exercise programmes, and screening for depression and its treatment may help prevent disability, but data relating such interventions to functional outcomes are lacking too. Finally, guidelines for the quality of care in diabetes are based primarily on research conducted among middle aged populations, and their appropriateness in the face of complex complications related to ageing is less clear.

As the number of older people with diabetes and other chronic diseases increases, outcomes such as cognitive and physical disability will become greater concerns because of their implications for quality of life, loss of independence, and demands on caregivers. The management of these patients will be complex because they may have several other diseases and require numerous medications, compounded by the fact that at least half of older diabetic adults will have a major physical or cognitive disability. Clinicians will need to be aware of the functional implications of diabetes in elderly people as they assess and prioritise treatment for the individual patient. This will require public health agencies and diabetes research programmes to adapt to the shifting demographics of the disease, by more directly examining the effects of

diabetes and interventions on the outcomes that are most important to patients.

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Competing interests: None declared.

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Systolic blood pressure

It is time to focus on systolic hypertension—especially in older people

Elevation of systolic blood pressure predicts the risk of cardiovascular disease better than increases in diastolic blood pressure.¹ Although this was observed more than three decades ago, no attempt was made to translate this evidence into practice until in 1993, when a report of the fifth joint national committee of the United States for the detection, evaluation, and treatment of high blood pressure recognised isolated systolic hypertension as an important target for the control of blood pressure.² Nevertheless it is the elevation in systolic blood pressure that still limits our ability to control blood pressure to the recommended goal of less than 140/90 mm Hg.³

Although associated with more variability in measurement, systolic blood pressure is easier to determine and allows more appropriate risk stratification than diastolic blood pressure. In a recent analysis

of the Framingham heart study, knowing only the systolic blood pressure correctly classified the stage of blood pressure in 99% of adults over age 60 whereas knowing the diastolic blood pressure allowed only 66% to be classified correctly.⁴ Isolated systolic hypertension is defined as a systolic blood pressure more than or equal to 140 mm Hg and a diastolic blood pressure less than 90 mm Hg and is the most common form of hypertension.⁴ Its prevalence increases with age occurring in two thirds of people 65 years of age and three quarters of those over 75 years of age.⁵

In people aged up to 50, both diastolic blood pressure and systolic blood pressure are independently associated with cardiovascular risk. At age 50 systolic blood pressure is far more important than the level of diastolic blood pressure in predicting the risk of coronary heart disease, left ventricular hypertrophy,

BMJ 2002;325:917-8



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