Functional classification of older people: A useful framework?



Jennefer Richmond

Jennefer Richmond is a Senior Diabetes Specialist Nurse and Team Leader at Stockport Primary Care Trust, and Honorary Lecturer at the University of Manchester. Diabetes is a significant and growing problem for older adults. In America, nearly 20% of people over the age of 65 years have type 2 diabetes, making up more than 40% of all adults with type 2 diabetes (Harris et al, 1987) and creating a clinical and financial 'time bomb'. There are similar problems in the UK (Croxson, 2002).

Multiple morbidities and disabilities (Gregg et al, 2000) are common among the older population, but as Blaum et al (2003) point out, depressive illness (Peyrot and Rubin, 1999) and cognitive impairment (Permuter et al, 1984) are also adverse symptoms which disproportionately affect older people with diabetes. Blaum et al (2003) argue that clinical guidelines for type 2 diabetes were developed for middle-aged people and therefore fail to address explicitly the heterogeneity of health status in older people. As such the researchers stress that this fact potentially decreases the credibility of the guidelines among clinicians caring for complex older patients with diabetes.

Functional capacity

Blaum et al (2003) hypothesised that a simple functional classification of older adults with diabetes would predict different health outcomes 2 years later and, if this was the case, diabetes management goals and interventions could be adjusted to accommodate the health problems and risks associated with differing health outcomes.

The group carried out longitudinal health interviews to determine how baseline functional status affects health outcomes in this population group. The study showed that well over 25% of people aged 70 years or over with diabetes enjoy high functional status with few co-morbid chronic conditions. However, after 2 years they experienced higher levels of heart disease and mortality than high-functioning older people without diabetes.

Also revealed was that 38% of older people

with diabetes in the study were low functioning and demonstrated more vascular co-morbidities than low-functioning people without diabetes, but at 2 years, their outcomes were similar. Interestingly, those with intermediate functional status and diabetes at baseline were found to have more baseline co-morbidities, more vascular disease and worse follow-up functional status than those with intermediate functional status and no diabetes. Blaum et al concluded that it is plausible to target different management strategies at different types of older people with diabetes and that it may be reasonable to adopt a treatment plan based on functional status.

Making assumptions

I found Blaum et al's research particularly interesting as the older person with diabetes is often assumed to be incapable of taking on board the inevitably complex management regimens associated with diabetes.

Some weeks ago, for example, a person with diabetes was referred to me because of poor metabolic control and for insulin initiation. I have to confess that I thought the referring doctor had taken leave of her senses when I discovered that the person in question was 97 years old! However, undeterred, I took myself off to the person's home convinced that I could make some alterations in this lady's present treatment and suggest lifestyle changes without having to resort to insulin therapy. I was confident that I would be returning to base, having left the old lady on oral therapy.

How wrong could I have been?! The old lady looked no more than 65 years old, had all her faculties and, cognitively, was more aware than some 40-year-olds I have treated. She was symptomatic, however, and this was causing her a problem. She travelled into town on the bus once or twice each week and often had to 'find a loo quickly to spend a penny'. She was quite happy to start insulin therapy and definitely did not want district nursing back-up, as this would mean she would have to 'wait in for the nurse to come'. This person has coped extremely well with insulin therapy; she feels much better, is now asymptomatic, gives her own injections, adjusts her own insulin doses and continues to travel to town twice a week on the bus.

I have to admit that the preconceived image I had of this person was completely wrong and highlights the dangers of prejudging situations without all of the facts.

Getting it right

On the other hand, a simple functional classification schema for older adults with diabetes, such as that proposed by Blaum et al (2003), would provide a useful framework on which to assess and adjust management goals. It would also help to avoid healthcare professionals making assumptions (wrongly, in my case) about their clientele. Such a schema would also highlight the vulnerable older people who require far more in the way of healthcare support and perhaps more innovative management plans.

There is no doubt that older people with diabetes require specialised care, but there are sub-groups within this population who need more than others. Sinclair (2005) suggests that clinical practitioners should be more vigilant and thorough in their approach to assessment and treatment of the older person with diabetes. He also argues that patterns of care should be characterised by a major emphasis on quality of life and wellbeing, early and effective interventions and, lastly, a commitment to improve or maintain functional status (Sinclair, 2000).

The Welsh Community Diabetes Study (Sinclair and Bayer, 1998) recognised the considerable impact of diabetes on both physical and cognitive function in ageing people with significant reduction in activities of daily living and quality of life, but as Sinclair (2005) argues, the study attracted scant attention.

These people do require greater specialist care than younger people with diabetes (Sinclair, 2005). This fact was highlighted in a previous editorial (Richmond, 2004) and also by Urwin (2004). Sinclair (2005) has pointed out that it is now recognised that diabetes is a premature ageing syndrome, a cause of 'unsuccessful' ageing and a disabling syndrome. Like Blaum et al (2003), he suggests that healthcare professionals regularly managing diabetes in the older age groups require detailed knowledge of their client group and the therapies and appliances available to them, but he also stresses that we now need to give additional priority to functional status.

This will allow the right people to be targeted in the right way with the right tools, so that those who can manage with little intervention are allowed to do so and those who require greater intensive input can get it.

Blaum CS, Ofstedal MB, Langa KM, Wray LA (2003) Functional status and health outcomes in older americans with diabetes mellitus. *Journal of the American Geriatrics Society* 51: 745–53

- Croxson S (2002) Diabetes in the elderly: problems of care and service provision. *Diabetic Medicine* **19**(Suppl 4): 66–72
- Gregg EW, Beckles GL, Williamson DF et al (2000) Diabetes and physical disability among older US adults. *Diabetes Care* 23: 1272–7
- Harris MI, Hadden WC, Knowles WC, Bennett PH (1987) Prevalence of diabetes and impaired glucose tolerance and plasma glucose levels in United States population aged 20-74 years. *Diabetes* **36**(4): 523–34
- Permuter L, Hakami MK, Hodgson-Harrington C et al (1984) Decreased cognitive function in ageing noninsulin dependent diabetic patients. *American Journal* of Medicine 77(6): 1043–8
- Peyrot M, Rubin R (1999) Persistence of depressive symptoms in diabetic adults. *Diabetes Care* 22: 448–52
- Richmond J (2004) DSNs for the elderly: a proven need. Journal of Diabetes Nursing 8(5): 178
- Sinclair AJ (2000) Diabetes in old age: changing concepts in the secondary care arena. *Journal of Royal College of Physicians* **34**: 240–4
- Sinclair AJ (2005) Diabetes mellitus in senior citizens – a major threat to personal independence. *British Journal of Diabetes and Vascular Disease* 5(1): 3–5
- Sinclair AJ, Bayer AJ (1998) All Wales research in elderly (AWARE) diabetes study. Department of Health Report 121/3040. Department of Health, London
- Urwin A (2004) Do we need DSNs for elderly and older people? *Journal of Diabetes Nursing* **8**(5): 179–81

'There is no doubt that older people with diabetes require specialised care, but there are sub-groups within this population who need more than others.'