

Diabetes care in private nursing homes: a DSN's survey

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ARTICLE POINTS

1 There is an increasing number of elderly people with diabetes.

2 Elderly people with diabetes are increasingly being managed in nursing homes.

3 The author carried out a survey of 17 private nursing homes to assess problems with care of elderly patients with diabetes.

4 The survey highlighted the importance of the role of the DSN.

5 A need for further education of staff was identified.

KEY WORDS

- Elderly patient
- Diabetes management
- Staff education
- DSN

Introduction

Increasing numbers of elderly people are being admitted to hospital with poorly managed diabetes. This article describes a questionnaire used to identify the problems involved in caring for elderly people with diabetes in nursing homes. Seventeen private nursing homes took part in the survey, which identified the needs of both staff and elderly diabetic residents. The results highlight the need for further education of staff to improve the quality of care for elderly people with diabetes, and emphasise the important role played by the diabetes specialist nurse (DSN).

In April 1996 I was appointed as a diabetes specialist nurse (DSN), working as part of a multiprofessional team based at Whiteabbey District General Hospital, about 5 miles from Belfast. It is one of three hospitals within a united hospitals trust. This appointment provided a unique opportunity to address areas that concerned me during my previous 10 years as a ward sister of an acute medical ward.

One of the main concerns was the care of elderly patients with diabetes — as I witnessed an increase in private and residential homes for care of the elderly, there was also an increase in elderly people being admitted with poorly managed diabetes. This prompted the instigation of a survey to identify the problems of caring for elderly people with diabetes in nursing homes, and to formulate a plan to address the issues.

Background literature

Tattersall (1984) reported that although half of the population is aged over 65 years, they have been historically neglected. Ten years later, Sinclair stated that care for elderly patients with diabetes is essentially unstructured, poorly coordinated, often inappropriate and therefore in great need of reorganisation.

Stout (1991) reported that diabetes is a common condition in older people, and becomes increasingly common with

advancing age. As the number of people in the older age group is rising rapidly, the number of those with diabetes will correspondingly increase. Halter (1998), from the USA, suggested that over 10% of people aged 65 years and over have diabetes. This fact is supported by my findings: 10.76% of the residents studied had diabetes.

It is therefore important to examine the whole service and improve the organisation of care for the elderly and the standards of nursing care while the problem is at a stage.

Method

There are 18 private nursing homes in my survey area, and because of this relatively small number, it was important to approach them all. The matrons were contacted, and 17 agreed to participate in the survey.

A questionnaire was devised for each nursing home to complete; this was pre-tested by a matron of a nursing home outside the survey area, and by members of the diabetes team.

The objectives of the questionnaire were:

- To determine what are the educational needs of private nursing home staff in relation to diabetes
- To improve blood glucose monitoring and other aspects of care regarding people with diabetes.

Analysis of the results was carried out by the clinical audit department of the trust.

Results

Seventeen homes took part in the survey. The total number of residents was 658; the number of those residents with diabetes was 73. Table 1 shows some of the results obtained from the questionnaire. (Only a selected number of findings are listed for the purpose of this article.)

Equipment used for blood glucose monitoring

Six homes had purchased meters, two residents provided their own meters and nine homes used BM-Test 1-44® sticks (BM Diagnostics) or Glucostix® (Bayer Diagnostics). The meters used were not calibrated as per manufacturers' instructions. None of the homes were involved in any quality control schemes, as is currently undertaken by hospital laboratories for hospital meters. Many meters were over 5 years old, and in most cases the instruction booklets were missing.

Finger-pricking devices

Seven homes used a variety of pen devices for finger pricking (none suitable for multi-patient use), and 10 homes used sterile needles or lancets (without a pen device).

Discussion

This survey highlighted the problems encountered, by both residents and staff, with caring for diabetes in the elderly people. It was apparent that there was lack of DSN support, which is probably due to poor communication between the DSN and the nursing homes. The BDA (1997) booklet, Diabetes Care Today: a Guide for Residential and Nursing Home Managers and Staff, gives useful advice to staff caring for people with diabetes in nursing homes, and also highlights the role of the DSN.

Blood glucose monitoring

It may not be necessary to perform blood glucose monitoring on all residents with diabetes. Gallichan (1994) compared urine testing and home blood testing, and the results suggested that home blood testing may not have any advantages over urine testing. However, it is often more difficult to obtain urine samples from the elderly, and timing of samples may influence results.

The benefits of blood glucose monitoring have also been questioned by Patrick et al (1994), but they state that blood monitoring is the only way of detecting hypoglycaemia in the elderly, who may not have symptoms.

Halter (1998) points out that the short-term risks of poor diabetes control for elderly patients merit intervention.

'Marked hyperglycaemia associated with glycosuria and weight loss is a catabolic state that predisposes the diabetic patient to various acute illnesses, particularly infections. The most extreme example of poor diabetes control among elderly patients is the syndrome of hyperosmolar coma, which is associated with a high mortality rate. Therefore, because the elderly often do not exhibit early symptoms, it is important that some monitoring of blood glucose is carried out on a regular basis.'

However, staff training is extremely important to prevent action being taken on results that are inaccurate due to user error, poor maintenance of meters or incorrect timing of monitoring. The DSN is in the ideal position to assist in education programmes. In order to improve blood glucose monitoring, it may be necessary to introduce one type of meter to a group of homes, with monthly quality control checks, regular updates on monitoring by the meter manufacturer, local laboratory staff, or DSN.

Finger pricking

Draper (1996) stated that the quality of life

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- 1 The blood testing meters used in the nursing homes were not calibrated as per manufacturers' instructions.
- 2 It was apparent that there was lack of DSN support.
- 3 The short-term risks of poor diabetes control for elderly patients merit intervention.
- 4 DSNs are in an ideal position to assist in education programmes.

Table 1. Some results obtained from a survey of 17 nursing homes to assess the care of elderly patients with diabetes

	Always (%)	Sometimes (%)	Never (%)
Named nurse contact for residents	94	6	—
Named nurse contact with diabetes training	—	6	94
	Yes (%)	No (%)	Not reported (%)
Staff training from DSN?	35	65	—
Training from dietitian?	35	59	6
Do staff use the:			
DSN service?	35	65	—
dietetic service?	88	12	—
optometry service?	88	6	6
chiropractic service?	100	—	—
Do staff have a protocol for blood glucose monitoring?	47	47	6

PAGE POINTS

1 No resident should have to suffer the pain of having their finger pricked by an open lancet or needle.

2 The DSN can help prevent residents from having to be admitted to hospital.

3 Educational training programmes should be established for institutional staff.

4 Staff should be granted more leave to attend study days.

of older people who live in hospital wards and nursing homes is a critically important issue for the nursing profession. It is our responsibility to protect residents and be their advocates. No resident should have to suffer the pain of having their finger pricked by an open lancet or needle. This practice is painful and should be stopped immediately. (Most of the homes now have information on how to obtain more appropriate finger-pricking devices.)

Education of staff

Clarke (1986) and Castledine (1989) have outlined the role of the DSN. Castledine stated that the DSN is an educator of colleagues in nursing and other disciplines, both in hospital and community, depending on need.

Hare (1997) clearly showed an improvement in care of residents by increasing the level of education of staff.

Feedback

In order to feedback the results of this survey, a series of talks will start on 12 October this year with a conference. It is hoped that the role of the DSN will be more clearly understood following these talks, and that good working relationships, with open lines of communication, can be achieved.

As far back as 1988, Sinclair was saying that the DSN can also lighten the doctor's workload. The DSN can help prevent residents from having to be admitted to hospital, therefore preventing the confusion often caused by having to move from their familiar environment.

The future

Turnbull and Sinclair (1995) made the following suggestions on how to improve institutional diabetes care:

- Increase community support of the DSN
- Establish educational/training programmes for staff
- Establish standards of care for residents with diabetes
- Ensure ready access to chiropody and dietetic advice

- Undertake research and audit in nutritional diabetes care.

These measures, they suggest, would lead to an improvement in delivery of care to this vulnerable group, as well as a corresponding increase in quality of life.

Conclusion

DSNs are ideally placed not only to help promote a good quality of care among elderly residents with diabetes, but also to develop a closer, more supportive, link with the nursing staff.

Nursing home staff can be very isolated and vulnerable. As the survey shows, many trained nurses are working with non-trained staff back-up. Having identified the need for further education, the hope is that staff will be granted more leave to attend study days in an effort to enhance their practice, and to meet nursing staff from other areas to open up support networks. ■

British Diabetic Association (1997) *Diabetes Care Today: a Guide for Residential and Nursing Home Managers and Staff*. BDA, London

Clarke P (1986) Role of the diabetes nurse specialist. *Practical Diabetes* 3(5): 229

Castledine G (1989) *The Role of the Specialist Nurse*. RCN Diabetes Nursing Forum Conference presentation

Draper P (1996) Compromise, massive encouragement and forcing: a discussion of mechanisms used to limit the choices available to the older adult in hospital. *Journal of Clinical Nursing* 5: 325-31

Gallichan MJ (1994) Self-monitoring by patients receiving oral hypoglycaemic agents: a survey and a comparative trial. *Practical Diabetes* 11(1): 28-30

Halter JB (1998) Geriatric patients. In: Lebovitz HE (ed) *Therapy for Diabetes Mellitus and Related Disorders*. American Diabetes Association: 234-40

Hare M (1997) Diabetes care in nursing homes: who cares? *Journal of Diabetes Nursing* 1(4): 104-7

Patrick AVW, Gill GV, MacFarlane IA et al (1994) Home glucose monitoring in type 2 diabetes — is it a waste of time? *Diabetic Medicine* 11(1): 62-5

Sinclair AJ (1988) Diabetes specialist nurses: how a specialist nurse can lighten the doctor's load. *Geriatric Medicine* 5: 15-8

Sinclair AJ (1994) Diabetes care in the aged — time for reappraisal. *Practical Diabetes* 11(22): 60-3

Stout RW (1991) Diabetes mellitus and old age. In: Pickup J and Williams G, eds. *Textbook of Diabetes*. Blackwell Scientific, Oxford: 897-904

Tattersall RB (1984) Diabetes in the elderly — a neglected area? *Diabetologia* 27: 167-73

Turnbull CJ, Sinclair AJ (1995) *Modern Perspectives and Recent Advances in Diabetes in Old Age*. Wiley and Sons, Chichester: 269-82