

Improving inpatient care with the help of a diabetes link nurse

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Introduction

The diabetes link nurse system often fails to make any impact on patient care (Cullum, 2002). Feedback from patients with diabetes on their experiences while in hospital is frequently negative (Hallworth, 2003). An investigation carried out by the author discovered that diabetes link nurses felt that not only did the role lack structure but they lacked the knowledge, skills and confidence to influence patient care in this area. This article looks at the steps taken to improve the contribution of the diabetes link nurse to patient care within a large teaching hospital through education and support.

At any time, approximately 10% of hospital inpatients have diabetes (Diabetes UK, 2004), and there is evidence to show that length of stay in hospital for these patients can be prolonged (Department of Health [DoH], 2001; Wallymahmed et al, 2005). Standard 8 of the National Service Framework (NSF) for diabetes (DoH, 2001) demands that 'effective care' should be the basic standard for inpatients with diabetes, regardless of age or medical condition. Both the NSF (DoH, 2001) and Diabetes UK (2003) encourage patients, wherever possible, to be involved in decisions concerning the management of their diabetes.

Given such basic standards and the substantial number of patients with diabetes in hospital wards, it would be reasonable to expect that the majority of hospital nurses would have sufficient experience and knowledge to care for the inpatients with diabetes. However, research has shown that registered nurses' knowledge of diabetes is variable, with nurses' practical skills being particularly deficient (Findlow and McDowell, 2002). Anecdotal evidence from patients on their experiences while in hospital bears this out, with negative reports of inappropriate insulin doses, failure to recognise and treat hypoglycaemia and problems with diet being common.

Link nurse roles have been heralded as a potentially very valuable resource (Cullum, 2002) and hospitals tend to have a variety of

link nurses within wards – diabetes link nurses, wound care link nurses and infection control link nurses, to name but a few. However, it has been suggested that link nurses often lack the structural power to be able to influence change to any degree (Cullum, 2002) and there is little evidence in the literature to show that they are effective in influencing patient care.

Background

It is not uncommon, in the author's experience, for a staff nurse with little knowledge and training or motivation in the field of diabetes to have been appointed diabetes link nurse by his or her ward manager. Often, the naming of a diabetes link nurse appeared to be where the responsibility was felt to end, with even the minimal expectation of attendance at diabetes link nurse meetings for updates of the latest evidence in the field being ignored.

Feedback from individuals on negative experiences as inpatients and an overstretched diabetes specialist nurse (DSN) inpatient service made it imperative that the diabetes link nurse system in the large teaching hospital where the author works as a DSN was one that would make a difference to the care of the inpatient with diabetes. This led to the facilitation of a group of ten link nurses with the remit of developing objectives for the role of the diabetes link nurse and examining the perceived barriers to implementation of this role.

ARTICLE POINTS

- 1 The diabetes link nurse is potentially a valuable resource.
- 2 There is little evidence to suggest that link nurses influence patient care.
- 3 Link nurses state that they lack knowledge, skills and confidence for the role.
- 4 The diabetes specialist nurses have organised education and support for the link nurse, including a 5-day education programme.
- 5 Evaluation of the programme is to include impact on patient care.

KEY WORDS

- Diabetes link nurses
- Knowledge
- Skills
- Education
- Inpatient care

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PAGE POINTS

1 The link nurses identified the main barriers to their role as a lack of knowledge, skills and confidence.

2 Education was therefore identified as a priority and was to take two routes.

3 The first route was the restructuring of the diabetes link nurse meeting into 4 half-days per year.

4 The second route was the development of a flexible, 5-day programme to be centred on a placement within the Diabetes Education Centre.

Role of the diabetes link nurse

There is a marked lack of guidance on the expected role, skills or training of the diabetes link nurse from any source. The group decided that any objectives set had to be realistic and measurable. It was agreed that the overall aim was to ensure a good standard of care for the inpatients with diabetes. The group identified four main components of the role:

- education of colleagues to ensure evidence-based practice
- participation in the education of patients
- responsibility for the quality assurance of ward blood glucose meters
- identifying patients' areas of concern with care by carrying out ongoing audits.

The nurses identified the main barrier to these objectives as a lack of knowledge, skills and confidence. Furthermore, cost and lack of commitment by managers to grant study leave made it difficult to avail of diabetes courses offered by universities in the area. Education was therefore identified as a priority and was to take two routes.

Link nurse meeting

The first route was the restructuring of the diabetes link nurse meeting into 4 half-days per year. In addition to the dissemination of

new research findings and information, it was decided that the meeting should include a topic of the link nurses' choice, a problem solving exercise and an opportunity for reflection on any incident relating to care of the patient with diabetes. Since the restructuring, four link nurse meetings have been held, with attendance ranging from 15 to 20 nurses, which is a substantial increase from the four or five nurses who attended before the restructuring.

Five-day programme

The second route was the development of a flexible, 5-day programme to be centred on a placement within the Diabetes Education Centre. Nurses and their managers had to commit to 5 full days' attendance; however, timing of the days could be influenced by the needs of the service. The programme was initially offered to the diabetes link nurses, with the intention of eventually rolling it out to other qualified nurses.

The course involved the participation of the multiprofessional team, with dietetic, podiatric and medical staff agreeing to be involved. Teaching took place through placements with the various team

Table 1. Examples of competency criteria.

Competency criteria	Comments
Being able to describe the different types of insulins and insulin regimens	Make use of the insulin charts in the Diabetes Education Centre
Being able to discuss the evidence and research available for guidance in injection technique	Read the literature available in the Diabetes Education Centre
Being able to demonstrate the loading of insulin pens, attachment of needles and dialling of the correct dose of insulin	Accompany the specialist nurse in teaching sessions, practise with pens available in the Diabetes Education Centre and teach the patient to use an insulin pen under the supervision of a specialist nurse
Being able to discuss the possible problems or difficulties that patients may experience with insulin	Accompany the specialist nurse on inpatient rounds and discuss with patients any problems they may have experienced with insulin injections while in hospital

Table 2. Subjects to be covered on the placement.

- Diagnosis and types of diabetes
- Diet
- Oral hypoglycaemic drugs
- Insulin treatment including pen devices
- Hypoglycaemia
- Illness
- Prevention of diabetic ketoacidosis
- Preparation for surgery or investigations
- Foot care
- The audit cycle
- Planning of audit or project for the ward

members, making use of educational aids within the Diabetes Education Centre (such as computer-assisted programmes, journals and books) for independent study and structured teaching sessions with one of the DSNs. A competency programme was devised with input from the link nurses (Table 1).

Although not without its critics (Watson et al, 2002), it is generally agreed that the use of competency-based education is the method of choice, and it is endorsed by the World Health Organization (2000). Competency has been described as the judicious application of knowledge, attitudes and skills required for performance in a designated role and setting (Canadian Nurses Association, 1997) and the skills and ability to practise safely and effectively without the need for direct supervision (United Kingdom Central Council for Nursing, Midwifery and Health Visiting, 1999).

The content of the course was agreed with the link nurses and the multiprofessional team and incorporated many of the usual subjects associated with a diabetes course (Table 2). An evaluation of the placement by the link nurses and a framework for reflection was included (Table 3). However, it was decided that development of skills and knowledge was not enough by itself. It could not be assumed that attendance at the course would influence patient care, and evidence available suggests that new knowledge is unlikely to result in significant improvements in care (Clark, 2005). To combat this, a core element of the course

was the planning of an audit or a project for the ward that would impact on patient care. The project was to be planned with the DSN, ward manager and link nurse during the programme, with support from the DSN continuing after the programme to facilitate the carrying out of the project.

Evaluation of the programme

To date, six nurses have completed the programme. Five nurses attended for 1 full week; the other attended 1 day per week over 5 weeks. Feedback from these nurse has been encouraging, with all reporting a new empathy for inpatients with diabetes as they have gained insight into their hospital experiences. A knowledge questionnaire completed before and after the placement showed an improvement in the knowledge of all six nurses.

Evaluation of skills was through observation. For example, the link nurse was given the opportunity to teach a patient to use an insulin pen or blood glucose meter. Evaluation of nurses' projects is ongoing, but to date progress has been promising. Three nurses chose to carry out audits of nurses' knowledge of recognition, treatment and prevention of hypoglycaemia for ward patients and, acting on the results, have provided education and written information for their ward staff. One nurse audited the practice of monitoring inpatients' blood glucose, with particular regard to frequency and what actions were taken on results. She discovered that doctors occasionally prescribed inappropriate bolus doses of insulin and steps are being taken to address this. Two nurses decided to make an educational package using the competency system to be used by both trained nurses and student nurses. The patient satisfaction surveys have yet to be audited, but informal feedback from patients has been positive. It has been noticeable that the number of inappropriate referrals to the DSNs from these areas are far reduced in comparison with other wards.

Discussion

The restructured diabetes link nurse meetings have proved more popular than before; however, it still has to be proven

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2 To combat this, a core element of the course was the planning of an audit or a project for the ward that would impact on patient care.

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1 The 5-day education programme has been successful in improving the knowledge, skills and confidence of the nurses who have completed it.

2 Initial feedback from staff and patients has been promising, but there needs to be a sustained effort by all concerned.

3 Improvement in care for the inpatient with diabetes – which is the overall aim – has yet to be proven.

Table 3. A framework for reflection.

- What was my involvement in this placement?
- What have I learned that maintains or develops my professional development?
- What do I know, or can I do now, that I could not do before the placement?
- What can I apply immediately to my practice and patient care?
- Is there anything I need to explore further?
- What else do I need to know to extend my professional development in this area?
- How might I achieve the identified needs?

that they have made a difference to the care of the inpatient with diabetes. This may be addressed on auditing the patient satisfaction questionnaires, which is due to take place soon. This will also allow a comparison between those areas where nurses have completed the programme and those that have no extra education or support.

The 5-day education programme has been successful in improving the knowledge, skills and confidence of the nurses who have completed it and therefore in removing the main barriers that were identified as impeding their role. However, an audit focusing on the four components identified needs to be carried out to ascertain if the nurses are actually using their new skills, knowledge and confidence to carry out the role.

The inclusion of a project related to the nurses' area has gone some way to ensuring that attendance at the course affects practice. But it has taken a sustained effort and commitment from all involved and is particularly time-consuming for the DSNs.

The flexibility of the programme has been an advantage to the wards in that they can release the nurse when it suits the service but a disadvantage to the DSNs and other members of the multiprofessional team in that nurses have changed attendance dates at short notice. Fewer nurses have completed the programme than was first anticipated (only six nurses in a year). The aim is to have ten nurses complete the programme in the next year.

Conclusion

In the past year, the DSNs have made a sustained effort to improve the diabetes link nurse service within their hospital. Restructured diabetes link nurse meetings

and the provision of a 5-day education programme have gone some way to changing attitudes to the care of the inpatient with diabetes. Initial feedback from staff and patients has been promising. However, this has to be a sustained effort by all concerned. Improvement in care for the inpatient with diabetes – which is the overall aim – has yet to be proven. ■

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