Delivering "Bite Sized" education to ward-based staff

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Article points

1. There are increasing numbers of hospital inpatients with diabetes, but wards are often staffed by non-specialists. Lack of diabetes knowledge can threaten patient safety.
2. An accessible diabetes education programme was developed by the Diabetes Specialist Nurse team at West Sussex Hospitals NHS Foundation Trust to address this problem.
3. The programme, Bited Sized Chunks, was designed to be delivered to staff in a series of 15-minute sessions. It addressed the main errors and risks concerning diabetes care reported within the Trust.

Key words

- Diabetes education
- Inpatient care
- Patient safety

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People with diabetes are more likely to be admitted to hospital and have longer stays than the general population, and the number of hospital beds that they occupy continues to increase. The National Diabetes Inpatient Audit has identified that many hospital wards lack diabetes inpatient specialist nurses, which can lead to safety issues such as avoidable insulin prescription errors. In order to improve staff knowledge at West Sussex Hospitals NHS Foundation Trust, the authors developed a diabetes education programme underpinned by basic nursing values. "Bite Sized Chunks" is delivered in a series of 15-minute sessions to enable busy staff to attend, with content reflecting the most common risks identified in the management of inpatients with diabetes in the Trust.

The most recent National Diabetes Inpatient Audit (NaDIA) identified that, despite a continued increase in the number of inpatient referrals requiring the inpatient diabetes team, there has been no corresponding increase in staffing levels in England and Wales (Health and Social Care Information Centre, 2016). With 17% of hospital beds being occupied by people with diabetes and a third of sites having no diabetes inpatient specialist nurse, some of our most complex and ill inpatients are having their care provided by non-specialists. This impacts negatively upon patient safety, length of stay and safe discharge, all of which have important financial and personal implications.

The dangers of understaffing of nurses were starkly highlighted in the "Francis Report", which was published following a Public Inquiry into failings of care at the Mid Staffordshire NHS Foundation Trust (Francis, 2013). The inquiry was ordered following an investigation into a higher than expected number of deaths at Stafford Hospital from 2005 to 2009. The deaths included one of a patient with diabetes who died following a failure to administer insulin and measure blood glucose levels after admission to a ward. At the inquest into her death, the jury stated in a narrative verdict that the death followed "a gross failure to provide basic care" and that low staffing levels had contributed to it. The Trust subsequently pleaded guilty to charges brought against it by the Health and Safety Executive.

While the Stafford incident was extreme, between 2010 and 2015, NaDIA reports have consistently shown the occurrence of avoidable prescription errors concerning the wrong insulins and incorrect or omitted doses. These errors, which have resulted in patient harm and increased length of stay, have been attributed to knowledge deficiencies. A combination of factors contribute to these problems: more patients with multiple comorbidities; an increasing number of treatments for diabetes; staff shortages on ward areas; and general nurses delivering care at the bedside having difficulty accessing training. Better inpatient care, more patient support, improved footcare and integrated

Table 1. Rationale for choice of education topics.

Education topic	Ward errors identified
Hypoglycaemia	Not recognised or treated with fast-acting carbohydrate
Diabetic ketoacidosis	Trust protocols not followed
Hyperglycaemic hyperosmolar state	Incorrect diagnosis; Trust protocols not followed
Insulin infusions	Trust protocols not followed
Insulins	Inappropriate timing and administration

care have all been highlighted as having the potential to improve evidence-based care for people with diabetes, while reducing costs (Diabetes UK, 2014).

Staff education

Against the backdrop of patients with complex problems and of constantly developing treatments and technologies, education of staff is crucial for the delivery of best care. Indeed, this education can extend to the carers and families of the frail elderly (often the largest client group) who may, in addition to multiple chronic conditions, have lost their ability to self-care owing to dementia.

Competing demands on ward staff time can prevent their release to attend diabetes study days. Diabetes specialist nurses (DSNs), however, can often provide informal and opportunistic learning for nursing and medical staff in the ward setting when reviewing a patient and planning their management. This approach is purposeful and active, and embraces a style of learning that can be particularly effective with adults. It focuses on the learner and can leave a legacy of knowledge for non-specialists.

Bite Sized Chunks

The DSN team at Western Sussex Hospitals NHS Foundation Trust developed an education strategy that aimed to raise patient safety, reduce hospital length of stay and the costs thus incurred, and improve patient experience by encompassing the basic values that underpin nursing. "Bite Sized Chunks" is delivered in sessions last a maximum of 15 minutes and the content reflects the most common mistakes made and risks identified in the management of inpatients with diabetes in the Trust.

Principles behind the project

The Bite Sized Chunks educational sessions were planned with Knowles' principles of adult learning in mind. This approach recognises that adults are independent and self-directed learners who respond to problem solving (such as how to avoid repeating an error that has occurred on the ward) and collaboration (Knowles et al, 2015). It also acknowledges that adults have accumulated experiences that they can relate learning topics to, which can help them meet their learning goals. Additional motivational drivers for learning may be the need for staff to provide evidence-based care and for nursing staff to prepare for revalidation.

The team also recognised that, although the development of the sessions was in response to critical incidents, learners would need to feel safe and be able to ask questions relevant to their experience. There was, therefore, an emphasis on improving care rather than attributing blame.

As in many acute Trusts, it is becoming harder for staff within ours to be released for anything other than mandatory training. Diabetes study days and half days, and lunch-and-learn sessions have been requested, but staff have been unable to attend. Diabetes Link Nurses are not always enabled to attend or to share their knowledge with colleagues owing to staff shortages. The advent of 12-hour day shifts has meant that there is no overlapping time to update staff. In order to respect these time constraints, sessions were planned within the working day at times that suited each group of staff.

Planning and delivery

The member of the DSN team took responsibility for different parts of the process of planning Bite Sized Chunks and adhered to completion dates that were set.

Assessing the problems

In order to identify the topics that the sessions should address, the team interrogated the Trust's incident reporting system. The main types of errors and failings that had occurred were identified. This information provided us with the choice of education topics (*Table 1*).

Engagement of stakeholders

Armed with this information, we met the Director of Nursing, who has ultimate responsibility for patient safety within the Trust. She welcomed the initiative, as did the diabetologists. With their endorsement, we subsequently attended a meeting with the Heads of Nursing to apprise them of the types of errors that had been reported. We reminded them of National Patient Safety Agency (NPSA) guidance on safer administration of insulin, advised them that errors are largely preventable (NPSA, 2010) and sought their support in implementing a training programme. Furthermore, we reminded staff how an omission or delay in administering insulin can have serious or fatal consequences. Having gained the support of these stakeholder groups, we attended the ward managers' meetings to advise them of the risks within their clinical areas, to offer education and to gain their support in enabling this education to take place.

Creating the programme

Having gained approval for the programme, each member of the DSN team assumed responsibility for the production of a concise piece of education on one of the agreed education topics. Each was developed as a 15-minute PowerPoint presentation focusing on the key points necessary to bring an improvement to patient care and safety. These Bite Sized Chunks were designed to be delivered on screen or used as teaching aids for small groups without the need for information technology. The content was identified from the evidence of clinical incidents, rather than by asking staff what they would like to learn, with the areas of most clinical risk being prioritised. Each session related to Trust protocols for diabetes care, which were available on the intranet.

Creating awareness

After a launch date was agreed, the Communications Department designed eye-catching posters to highlight staff responsibilities in relation to diabetes care; these were placed in prominent areas on the wards (*Figure 1*). An article to advertise the sessions was included in the Trust newsletter and on the hospital intranet. A prominent space in a public area in each of the Trust's hospital sites was hired to launch the initiative, and to gain support from staff and public. The DSNs wore T-shirts carrying the poster logo to promote the launch of the programme. It was also arranged for an education table manned by DSNs to be based in a common area beside the staff canteens, where staff could be caught at lunchtime to be taught or to advertise the sessions to.

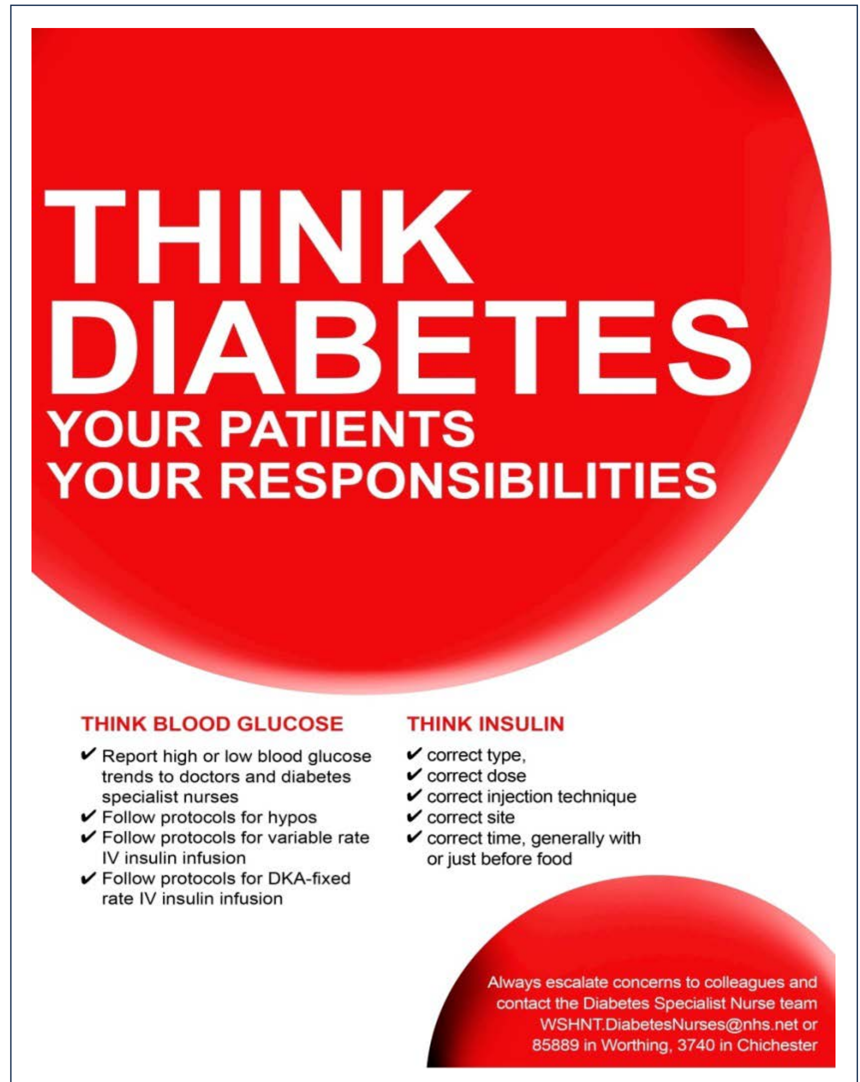

Figure 1. One of the posters used to promote the launch of the Bite Sized Chunks programme.

Scheduling the sessions

In order to enable the release of as many staff as possible to attend the teaching programme, the

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team arranged suitable times with each ward manager. Ward away days proved to be the most satisfactory times, as staff had protected study time. A brief questionnaire was completed by those attending at the beginning and end of each session to demonstrate knowledge and learning.

During the sessions, the DSNs emphasised the responsibilities of nurses and doctors, and that a failure to act was not acceptable under the Nursing and Midwifery Council's (2015) code of practice. It was also highlighted that there was a zero-tolerance attitude to these avoidable errors.

Outcomes

No extra resources were made available for this initiative. However, by having bite-sized sessions of 10–15 minutes, it was possible to deliver the programme within existing resources.

Although wards were usually able to release staff for these short periods, sometimes planned sessions had to be cancelled and rescheduled. There were occasions when the leader arrived only to discover that the staff on duty did not know about the session. At other times, staff were called away to emergencies or appeared to be distracted by what was happening on the busy ward. During the winter, the Trust's Business Continuity Plan had to be implemented and all education was stopped for its duration.

Staff feedback indicated that the sessions were enjoyed and that the focus on key points was helpful. The team's audit following the sessions showed an improvement in knowledge among attendees. When DSNs visited the wards, they found that staff were more confident in managing patients with diabetes. They feel that this has been translated into behavioural change, although the audit was not designed to measure this.

We plan to carry out a further interrogation of the incident reporting system so that the number and types of incidents that have occurred since the first audit can be compared to the original data.

Discussion

Over time, there is turnover of staff, so education needs to be updated and ongoing to deliver benefits to patient care. All of our policies are available on the hospital intranet and it is useful to keep reminding staff about this. Currently, we are considering our next campaign and thinking of videoing the teaching sessions to have them available on the hospital intranet. We would also like to consider developing an app with key information that would help staff at the bedside or when the DSN is not available. As individuals are suited to different kinds of learning, it is important that we keep innovating.

Healthcare professionals delivering care to patients with diabetes and other complex needs must be enabled to deliver safe care in line with national guidelines. DSNs need to ensure that our non-specialist colleagues receive the knowledge required to care for patients with diabetes safely. As DSNs visiting the ward areas and working as part of the extended multidisciplinary team, we have the opportunity and responsibility to share our knowledge. While recognising the difficulties of competing demands on staff time, we need to continue to find innovative ways of providing relevant, timely education to our non-specialist colleagues. ■

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