“Diabetes and You”: A multidisciplinary approach to education for people with newly diagnosed type 2 diabetes

Margaret Daley, Maureen Wallymahmed

People with diabetes have to make multiple daily choices about the management of their condition, often with minimal input from their healthcare professional. The necessary lifestyle changes, the complexities of management and the side effects of therapy make education a central part of diabetes management and it is recommended that structured education is made available to all people with diabetes at the time of initial diagnosis and on an ongoing basis. This article describes how a number of multidisciplinary teams, across three NHS trusts, collaborated to standardise education for people with newly diagnosed type 2 diabetes. A previously developed structured education programme, “Diabetes and You”, was re-evaluated to meet the needs of the local population.

In the United Kingdom, there are approximately 3 million people with diagnosed diabetes and this is estimated to rise to 5 million by 2025 (Diabetes UK, 2012). In addition, it is estimated that around 850,000 people have diabetes but have not yet been diagnosed; therefore, more than one in 20 people in the UK has diabetes, either diagnosed or undiagnosed (Diabetes UK, 2012). The burden of diabetes is well known, with over 10% of the NHS budget being attributed to inpatient care and treating diabetes-related conditions (Department of Health [DH], 2012). The psychological and physical impact of diabetes on individuals is immeasurable as people with diabetes are more likely to have heart disease, stroke, kidney failure, blindness, depression and amputation of a lower limb than people without diabetes (Healthcare Commission, 2007).

It is recommended that structured education is made available to all people with diabetes at the time of initial diagnosis and then, as required, on an ongoing basis, based on a formal, regular assessment of need (NICE, 2003; 2009a).

“...A planned and graded programme that is comprehensive in scope, flexible in content, responsive to an individual’s clinical and psychological needs and adaptable to his or her educational and cultural background.”

The NICE (2011) document The Quality Standards for Diabetes In Adults includes 13 patient-centred quality statements. One of the statements is that people with diabetes and/or their carers receive a...
structured educational programme that fulfils the nationally agreed criteria, from the time of diagnosis, with annual review and access to ongoing education.

This article describes how a number of multidisciplinary teams (MDTs), across three NHS trusts (including both primary and secondary care providers), collaborated to standardise education for people with newly diagnosed type 2 diabetes. A previously developed structured education programme, “Diabetes and You” was re-evaluated to meet the needs of the local population.

“Diabetes and You”
The education programme “Diabetes and You” was originally designed and delivered by a local secondary care provider, Aintree University Hospital NHS Trust. However, in 2004, a new community service, South Sefton Community Diabetes Team, was commissioned to deliver diabetes care closer to home and this programme was rolled out to community settings. Following the publication of the NSF for diabetes and NICE guidance on structured patient education, a local assessment of educational needs, seeking the views of people with type 2 diabetes, was undertaken in both secondary and primary care settings (Daley et al, 2006). The results informed a review of the education provided for people with type 2 diabetes and an education pathway was developed for both group and individual education. Changes, which have led to merging of services and commissioning of new services. This has involved several trusts, including Aintree University Hospital NHS Trust, Liverpool Community Health NHS Trust and the Southport and Ormskirk Hospital NHS Trust. Each service was delivering a different education programme and a decision was made to standardise education offered to people with type 2 diabetes. Representatives from local primary and secondary care diabetes services were invited to take part in the review. Several of the participants, now working in different Trusts, had been involved in the development of the original programme and subsequent reviews.

Review of the programme
The group met on a regular basis over an 8-month period and reviewed all sections of the existing “Diabetes and You” programme. The following documents were used to guide the process:

- Patient education programme for people with type 2 diabetes: Commissioning guide (NICE, 2009b).

All structured education programmes for people with diabetes should meet the following 4 criteria:

1. A structured curriculum
The structured curriculum needs to have a patient-centred philosophy. The group reviewed the philosophy that had been adapted from the Diabetes Education Network (www.diabetes-education.net). This philosophy supports self-management, attitudes, belief, knowledge and skills and reinforces the need for the programme to be centred around people with diabetes. Living with diabetes not only affects the individual but can also affect the family (Turner, 2008). It was, therefore, important that the philosophy included the role of carers.
The development group involved diabetes nurses, dietitians and podiatrists and each discipline was requested to review their section of the written curriculum. In addition, service users with type 2 diabetes were invited to contribute to the review. It was agreed that the aims of the sessions needed to be clearly defined and that each section could have two clear messages for the participants (the person with diabetes and/or their carer) to take home. Formosa et al (2012) suggest moving away from traditional didactic diabetes-related education to a person-centred approach, to improve better metabolic outcomes and quality of life for the individuals with diabetes.

The main changes within the curriculum were to change the teaching methods to be more interactive and to incorporate Social Learning Theory (Bandura, 1977) more throughout the programme. Social learning is the most widely used theory in education programmes and describes the ways that people become confident to carry out different behaviours, and includes problem solving in a group and learning from the experiences of others. There was a great deal of discussion on how much time should be allocated to each section and what education should be covered within the programme but it was also important to be realistic about the amount of time available to deliver the programme. The group also needed to consider the participants' ability to understand and remember the information, as the estimated average reading age in certain deprived areas is reported as 11 years. The programme needed to be flexible in order to adapt to the participants' needs and, therefore, it was felt that visual tools would be more appropriate as a teaching and learning aid. The programme would also be supported by either the locally developed resource called the Diabetes education book, which includes handheld records and/or Diabetes UK information.

It was agreed that at the end of the first session there should be a discussion on goal settings for each person, if they wanted to participate. This was conducted as a group discussion. Lesson plans would include aims and objectives, the educator's activity, the participant's activity, what resources were needed and the length of the session. An overall programme was developed and agreed (see Table 1 and Table 2).

2. Trained educators

When the initial programme was developed to meet this criterion, staff at Aintree Diabetes Centre and South Sefton Primary Care Trust worked with Edge Hill University to develop a “Train the Trainers” 2-day programme. The MDT, including staff with a recognised national certificate in education, attended the programme. This provided an opportunity to work together to change the programme to reflect learning theories. Since then, new staff have accessed “train the trainers” education in a variety of ways, for example, via Trusts’ learning and development programmes, or local higher education institutes.

3. Be quality assured

The Diabetes Education Network actively supports the need for a quality assurance programme to be implemented in each centre to ensure continued development of the educators and the programme. The criteria include internal quality assurance through peer review and feedback from people with diabetes. To meet these criteria, the peer review form from the Diabetes Education Network was adapted and a feedback form was developed. In addition, there should be external quality assurance by an independent assessor. Each Trust has arranged external quality assurance, either through the Trust’s Learning and Development Department or through the local higher education institute. This external quality assurance will focus on developing the skills of the educators. The aim is to implement the external quality assurance after six months of delivering the new programme. Regular meetings have been agreed to continually review the programme and make changes accordingly.

4. Be audited

The key outcomes to measure the success of the education programme that might be included are:
- Biomedical (for example, HbA1c, weight, lipid profile).
- Quality of life.
- Satisfaction with care.
- Experience of person with diabetes and/or carers.
- User involvement.
- Degree of self-management achieved as a result of the programme.

The present audit tool is still to be redesigned but includes a questionnaire given to the participants at the end of the programme. The questionnaire will cover whether people are satisfied with the education, whether they feel more confident looking
after themselves and will ask the person to list the three main things they have learnt during the programme. The programmes are audited on the number of people invited and attendance rates. The group acknowledge the limitation of collecting biochemical data.

**Discussion**

This article describes the development and re-evaluation of a local education programme for people with type 2 diabetes. The programme was developed following an audit of the perceived educational needs of people with type 2 diabetes and patient involvement has been sought at each stage of the re-evaluation.
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The programme is delivered by skilled and experienced MDTs, who have contributed to the development and evolvement of the programme and have knowledge of local needs and services. The programme is easy to access, delivered at different times, including morning, afternoon and evening, and includes sessions at a variety of sites across north Liverpool and surrounding areas. Family and carers are welcome to attend, and it is delivered in an open and friendly approach, using the appropriate terminology.

Working in collaboration with other MDTs, from both primary and secondary care Trusts, gives a greater understanding of each healthcare professional’s role within the team and also of the services that each Trust is able to contribute. This collaborative approach not only benefits people with diabetes but also supports networking and communication, which is a key factor in the delivery of health care. Being involved in the design of the programme may increase

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<tr>
<th>Title</th>
<th>Subject</th>
<th>Activity/Time</th>
<th>Lead</th>
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<tbody>
<tr>
<td>Welcome back</td>
<td>Did anyone make any changes? Questions from last week</td>
<td>5–10 minutes</td>
<td>Educator and Dietitian</td>
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<td>Recap: The four cornerstones of management</td>
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<td>Looking after yourself</td>
<td>Discuss annual review What parts of the body can be affected by diabetes?</td>
<td>25 minutes</td>
<td>Educator</td>
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<td></td>
<td>What tests are needed for each part and what should they be aiming for?</td>
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<td></td>
<td>Monitoring</td>
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<td>Include driving, insurance, holidays, pre-conception care</td>
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<td>Understanding feet</td>
<td>How to look after your feet</td>
<td>30 minutes</td>
<td>Podiatrist</td>
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<td>What to look for if there is a problem</td>
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<td>Where to go to if there is a problem</td>
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<td>Looking after your heart</td>
<td>Weight management</td>
<td>40 minutes</td>
<td>Educator</td>
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<td>How to change a recipe to reduce fat</td>
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<td>Types of fat and impact on cholesterol</td>
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<td>Advice on salt intake</td>
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<td>Alcohol</td>
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<td>Evaluation and the next step</td>
<td>Evaluation form</td>
<td>10 minutes</td>
<td>Educator</td>
</tr>
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<td></td>
<td>Local education book or Diabetes UK information available</td>
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Table 2. “Diabetes and You” agenda: Day two.
a sense of ownership for the healthcare professionals involved and promote a positive approach to the review. Delivering a high-quality programme that can improve the life of a person with diabetes can also lead to greater job satisfaction for the healthcare professional.

The consensus of the advisory group (Healthcare Commission, 2007) felt that when people with diabetes are advised that structured patient education programmes are an integral part of diabetes care, services are likely to achieve a 60–90% take up. A review of each Trust’s referral pathway and how the programme is being promoted by practice nurses may improve the uptake of the education programme. In the future, each Trust will monitor and compare uptake of the programme, discuss methods of promotion and share best practice.

The aim of the “Diabetes and You” programme is to promote self-management; however, the group acknowledge that there is a limit to what can be achieved in two sessions and that ongoing education is needed. Khunti et al (2012) report that a cohort of adults attending the DESMOND programme did not achieve sustained benefits in biochemical outcomes measures and lifestyle outcomes at three years, but some changes to illness beliefs were sustained. Ongoing education is essential as the psychological effects of diabetes changes over a period of time. Group education should be seen as additional to the local programme, including: time to develop the course; staff training (train the trainers); funding of external quality assurance and making staff available to deliver the programme. All services have managed to do this with the existing staff establishment, although development of the course is initially time consuming.

Conclusion

Collaborative working across different Trusts has greatly benefited the education programme and the staff delivering the programme. As a result, there is a closer link between services and this allows teams to share good practice. Within 8 months, the group has redesigned the programme and delivered a pilot, which included user involvement. There will be an internal peer review of the programme in 3 months and the main group will meet again in 6 months. External quality assurance of both the programme and educators will be conducted by either a local higher education institute or local Learning and Development Departments. The programme will be reviewed on a regular basis, taking account of feedback from internal and, external reviewers and people with diabetes and their carers.

Areas which may require further development include the referral pathway and how the programme is promoted by practice nurses. The redesign of the audit tool, which may include a recognised tool to measure self-management skills, knowledge and patient satisfaction, will also be developed.

NICE (2009a) Type 2 diabetes - newer agents. CG87. NICE, London.

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Authors
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