An education programme for people with newly diagnosed type 2 diabetes

Janet Sumner, Jenny Harper, Rosemary Ginns, Dot Powers

Introduction

Diabetes education and the empowerment of people with diabetes have become fundamental to diabetes management. As the incidence rate of type 2 diabetes continues to rise, the government has placed a high priority on improving diabetes self-management (Department of Health, 2003). The results of the UK Prospective Diabetes Study Group (1998) also demonstrate the benefits of well-controlled blood glucose and blood pressure control. This article describes an education programme developed for people with newly diagnosed type 2 diabetes, and discusses the results of an evalution of the project.

A central theme of the National Service Framework (NSF) for diabetes (Department of Health [DoH], 2001; DoH, 2003) is that people with diabetes should be empowered so that they can play a positive role in managing their own diabetes. The NSF also stated that 'those newly diagnosed after April 2003 may benefit immediately from systematic education in groups.' It has become clear that new ways of working need to be created in order to implement these national requirements.

The National Institute for Clinical Excellence (2003) guidance on educational models requires education to be provided by a trained team, preferably in groups, in an accessible location. In the authors' area, the diabetes care teams from both primary and secondary care have worked together to provide this education in a structured manner. The teams have also ensured that the education they give is accurate and consistent to prevent mixed messages and possible confusion.

Local history

At a diabetes primary care conference in Oxford in April 2002, the diabetes specialist nurse team presented a session on diabetes education for the newly diagnosed. As part of this talk, various models of education were proposed. A demonstration was given of how a group education session could look. There was an open discussion, and case studies were used to illustrate the current service provision. An assessment followed and it was demonstrated that education was currently unstructured and was delivered on a one-to-one basis only. A vote was taken on the day to assess whether delegates (general practitioners [GPs] and primary care nurses) would support developing a structured package to be delivered locally. There was overwhelming support (results of the vote can be found in *Table 1*), and this formed the mandate to proceed with the group session ideas that were presented on the day.

Based on this, an education programme was developed. The programme content included information about diabetes, food, exercise and minimising the risk of long-term complications, in line with recommendations in the supplementary information for the NSF for diabetes Standard 3 (DoH, 2001).

Project objectives

The objectives of the project were:

- to develop a structured education programme for people with newly diagnosed type 2 diabetes
- to train practice nurses to deliver this programme locally
- to evaluate the effectiveness of the programme.

The project was run in four local towns over a 3-month period. Seven practice nurses were trained to deliver the session. The practice nurses were trained by the diabetes specialist nurse team to deliver the group education package. To ensure consistent, high-quality education, visual aids, interactive discussion cards, food models and lesson plans were provided.

ARTICLE POINTS

1 The project aim was to develop a programme for people with newly diagnosed type 2 diabetes and to train practice nurses to deliver the programme locally.

2 Diabetes education has become fundamental to diabetes management.

3 Empowerment can enable people to play a positive role in managing their own diabetes.

4 Joint goal-setting is used from the onset as a tool for working together.

5 Visual aids, interactive discussion cards, food models and lesson plans were provided.

KEY WORDS

- **Education**
- **Diagnosis**
- **Empowerment**
- **Self-management**
- **Goal-setting**

Janet Sumner is a Senior Diabetes Specialist Nurse and Jenny Harper is a Diabetes Specialist Nurse at the Oxford Centre for Diabetes Endocrinology and Metabolism, Churchill Hospital, Oxford. Rosemary Ginns is a GP Registrar and Dot Powers is a Clinical Effectiveness Co-ordinator for the South Oxfordshire Primary Care Trust.

PAGE POINTS

1 Teaching methods included interactive discussion cards, 'the patient story', visual aids and goal-setting.

2 It was integral to the project philosophy to allow time for questions and discussion of different options for change.

Evaluation

Data from the study were collected and analysed by the clinical effectiveness coordinator on the following criteria:

- patient acceptability and satisfaction with the programme
- patient knowledge (related to the key learning points) using questionnaires and interviews.

A GP registrar carried out the interviews, but participants were not aware that the interviewer was a doctor.

Teaching methods

Teaching methods included the following.

- **Interactive discussion cards:** these were used as prompts to explore myths about diabetes (such as 'diabetes is more serious if you take insulin' and 'if I had problems with my eyes I would know straight away'). This technique was based on the *Discovering Diabetes* programme (Brackenridge and Swenson, 2003).
- **'The patient story':** *Figure 1* shows the overhead transparency that encourages storytelling. Participants were asked to discuss how they arrived in 'the boat' – or how their diabetes was diagnosed – and how they felt about it.
- **Visual aids:** these were employed to demonstrate dietary components of common foods and to stimulate discussion. For example, a bottle of fat was used to demonstrate the difference in the amount of fat in fried as opposed to grilled fish, and food packets were used to demonstrate the varying amount of sugar in normal and 'diet' versions of products (*Figure 2*).
- **Goal-setting** (based on the work of Arundel et al, 2003): this was related to the individual's personal circumstances. People have their own test results (HbA_{1c}, blood pressure and cholesterol) on their appointment information card and individuals set their own goals and decide what they want to focus on. The information given in the group session was used to help individuals to develop realistic strategies about meeting goals. The focus of the follow-up consultations was on how to support people in meeting their goals. Joint goal-setting, identification of barriers and options for change were also discussed. People were asked to use the basic documentation as a tool to enable this (*Figure 3*).

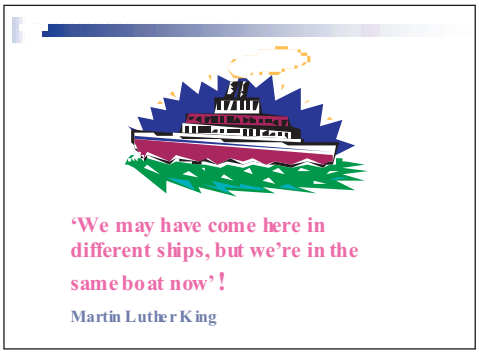

Figure 1. An overhead transparency used to encourage storytelling.

Figure 2. An example of food packets used to show the varying amount of sugar in normal and 'diet' versions.

Table 1. Results of a vote to assess whether delegates would support developing a structured package.

Develop structured one-to-one sessions only	9
Develop structured group sessions only	36
Develop structured group and one-to-one sessions	20

It was integral to the project philosophy to allow time for questions and discussion of different options for change. One-to-one follow-up sessions with individuals' GP or practice nurse also helped build confidence. The frequency of this depended on people's circumstances and needs as well as their individual goal-setting priorities.

Results of the evaluation

Thirty-seven people attended over 3 months. A questionnaire comprising open and multiple-choice questions was given to participants at the end of each session. There was a 62% response rate to the questionnaire. This rate is fairly low and it is not possible to assume that non-responders

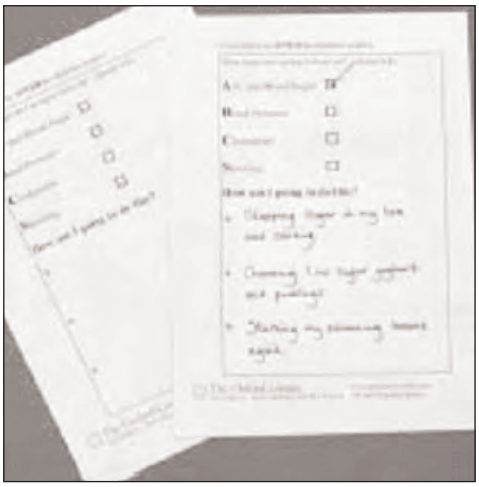

Figure 3. The basic documentation used to help with joint goal-setting and identification of barriers and options for change.

would mirror those who did respond. No attempt was made to follow up the non-responders. The findings were as follows.

- Positive comments covered friendliness, illustrations and 'layperson's English', among other things.
- All responders thought that 'tight' control was worthwhile, but they varied in their confidence to achieve it (61% were 'very confident', while 39% were 'confident' or 'fairly confident').
- Seventy-eight per cent correctly recognised that their diabetes treatment may change with disease progression.
- Ninety-one per cent correctly identified specific complications.

The practice nurses competently delivered the programme, as demonstrated by positive evaluations and outcomes surrounding core messages being received. A selection of results from specific questions from the questionnaires are detailed in *Figures 4* and *5*.

Individuals were asked if they would agree to be interviewed; all those who consented were interviewed (28%). Some of the comments obtained from the interviews are given in *Table 2*.

Discussion

The project has shown that patient education groups are achievable, and it is hoped that coverage can be extended to all Oxfordshire primary care trusts (PCTs), to ensure that there is availabity for all newly diagnosed people with type 2 diabetes.

It is estimated that at least one session a month for each PCT would be needed. This is based on data relating to type 2 diabetes incidence rate (Gatling et al, 2001).

Education for people with newly diagnosed type 2 diabetes is a national priority and the Diabetes Education and Self-Management for Ongoing and Newly Diagnosed (DESMOND) Collaborative has addressed this (DESMOND Collaborative, 2004). DESMOND is providing a model for newly diagnosed education and is also addressing ongoing education needs. Oxfordshire has prioritised education at diagnosis and is working towards a broader educational model within the district resource constraints.

Three out of four Oxfordshire PCTs are currently prepared to trial the project in a further roll-out and it is hoped that the remaining PCT will also come on board. This will allow further evaluation and data collection to ensure that we are going some way to meeting our diabetes population's needs.

PAGE POINTS

1 The practice nurses competently delivered the programme, as shown by positive evaluations and outcomes surrounding core messages being received.

2 The project has shown that patient education groups are achievable, and it is hoped that coverage can be extended to all Oxfordshire primary care trusts.

3 With the programme, a way has been found to deliver the essential ingredients without unsustainable financial burden.

Figure 4. Responses to the question 'How useful was the session to you?' (n=23).

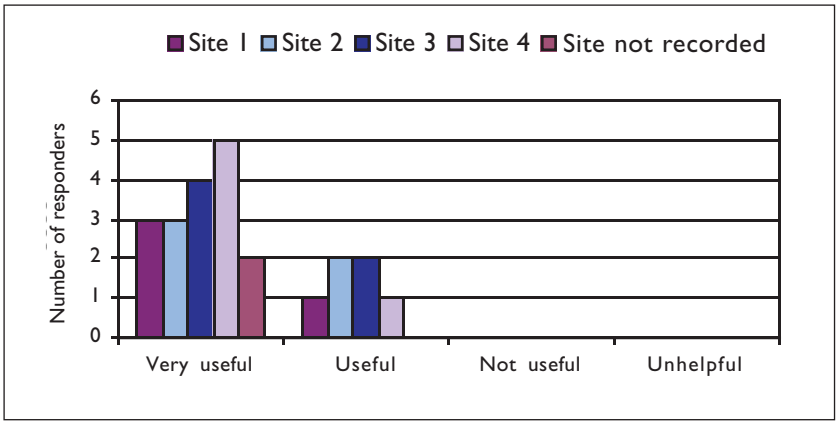

Figure 5. Responses to the question 'How confident are you that good control of your diabetes can reduce the risk of long-term complications?' (n=23).

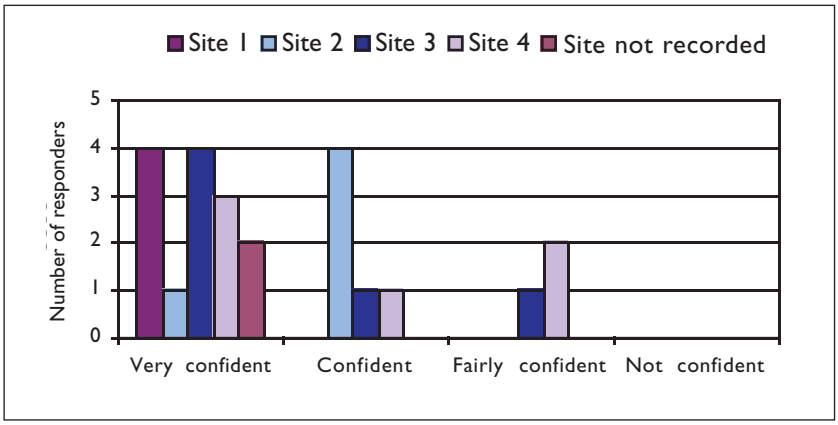

Table 2. Interviewees' comments.

Positive comments

- I most liked gaining information and meeting people in a similar situation
- I liked their [the facilitators'] caring approach and the time taken to ensure as far as possible that they were understood
- We could ask questions that bothered us
- The sessions were instructive, in a friendly manner, where questions could be asked without embarrassment
- There were very informative cards
- The presentation was good, especially on food and drinks
- I was put at ease, having an explanation of what diabetes is and how best to manage it
- Everybody was in the same boat as me
- All the people participated and seemed on the same level
- The session helped to convince me that the diagnosis was true
- I liked the images used and the targets
- The oil and sugar made a big impression
- It was helpful to see that others have the same questions and problems

Negative comments

- I didn't like being told that diabetes was a progressive disease
- More information could have been given about specific foods
- I would have liked more information
- A more high-tech presentation would have been good
- I would have liked follow-up sessions

PAGE POINTS

1 Self-care is a complex issue and it is a life-long undertaking for people with diabetes.

2 At diagnosis, people are often shocked and find it difficult to take in information.

3 In the long term, it is hoped that the initial education given will become a foundation for people to understand their own diabetes, with benefit to their health.

A further ten practice nurses have been trained to deliver the programme. Also, to ensure that the nurses delivering the programme have a wider understanding, they have undertaken a group working skills workshop run by In Balance Healthcare (www.ibhuk.com [accessed 17.06.2005]).

One of the Oxfordshire PCTs has run the programme continually since the project inception, owing to the commitment and enthusiasm of the individual practice nurses involved. This has also served as a model for other groups.

Self-care is a complex issue and it is a life-long undertaking for people with diabetes. This initial education begins to help people make informed choices. Additional work will now be necessary to ensure a consistent approach to treatment from all professionals involved in an individual's care. Although not all GPs and practice nurses will be involved in the main education programme, the part they play is vital in maintaining empowerment principles. To address this, there is a plan to run educational events for all members of the primary care team at a later date.

Conclusion

Well-structured and carefully delivered education programmes are clearly needed by people with diabetes. At diagnosis, people are often shocked and find it difficult to take in information (Diabetes UK, 2001). This programme, if fully implemented, will provide wider access and a structured approach to the essential process. It is also a chance for people to talk about their diagnosis and how diabetes can fit in with their life. In the long term, it is hoped that the initial education given will become a foundation for people to understand their own diabetes, with benefit to their health. ■

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