

Family-centred education for migrants with diabetes in Scotland

Lubna Kerr

A culturally sensitive, intensive diabetes education service is being delivered in the community to people of ethnic-minority origin living with type 2 diabetes in Lothian, Scotland. Designed by a pharmacist, the initiative began as a research project, but the effectiveness and popularity of the programme resulted in its development and implementation as part of the local diabetes care package. The programme was recently awarded the Novo Nordisk DAWN Award 2006 for its contribution to reducing health disparities in minority populations with diabetes and its potential for inspiring similar activities in other countries. Lubna Kerr reports.

In Scotland, there are approximately 200 000 people with diabetes. Each year, this number increases by around 13 000. Uncontrolled diabetes can lead to long-term complications, such as cardiovascular disease, blindness and kidney failure. The rise in the number of people with type 2 diabetes is being driven by genetic predisposition as well as lifestyle-related factors, such as a sedentary lifestyle and diets that are high in animal fats and added sugars. People of South Asian origin are up to six times more likely to develop type 2 diabetes than Caucasians. In addition, cultural and language differences may represent barriers for South Asian people with diabetes to accessing appropriate healthcare (see the article by Leah Macaden in this issue).

There is a need for an education service that can address cultural needs.

Currently in the UK, if people are diagnosed with diabetes, they are entitled to receive essential diabetes education. However, this is delivered in English only and in group



Offering culturally sensitive diabetes education improved people's adherence to treatment.

sessions. Obviously, people are less likely to join group session if they cannot speak the language. Therefore, there is a need for an education service that can address cultural needs as well as diabetes requirements.

Culturally appropriate diabetes education

An initial study in Scotland led to a new service. A group of South Asian people living in the South East of Edinburgh were given culturally appropriate diabetes education and advice on healthy eating and living by a bi-lingual pharmacist, who also carried out a review of each person's medication. Another group of people with diabetes of South Asian origin living in West Lothian, serving as the control group, received standard treatment and support for their diabetes. Prior to the delivery of the diabetes education, a baseline assessment, including HbA_{1c}, weight, blood pressure, and cholesterol, was carried out in both groups of people. These biochemical measurements were taken again after 6 months.

The education package consisted of a specifically designed questionnaire, which was conducted in a semi-structured interview, to record each person's living situation, and their knowledge and understanding of diabetes. This was carried out in the respondent's preferred language; the results were used to deliver tailored diabetes education to the study group. The semi-structured interview was conducted before and after the delivery of the education package, which included culturally appropriate cookery classes to demonstrate healthy adaptations of traditional Asian cuisine and culturally sensitive exercise classes.

Cultural issues

Research has shown that, compared to the general UK population, migrants of South Asian origin are less likely to access healthcare services due to cultural, language, religious and family barriers. In order to overcome some of these barriers, the people were visited at their home or workplace.

People in this community place a great deal of importance on the support and opinions of the family. Therefore, the cookery classes were not attended only by the people with diabetes; family members were also invited, strengthening the impact of the diabetes education.

A dietitian and a diabetes liaison nurse took a team-based approach to delivering educational input in the first cookery class. The classes were enjoyed by the participants, who learned about various aspects of living with diabetes, including alternative approaches for preparing food. The approach used was not to 'teach participants how to cook'; they learned approaches to adapt their own recipes to healthier styles of cooking.

The education package included culturally appropriate classes in cookery and exercise.

People were also given the opportunity to try gentle exercise during the cookery class. The participants learned to exercise sitting down, for instance, in a location and dress that suited them. This was the first time that many of the women in the group had experienced exercise. Specific separate exercise classes for men and women were organized in a sports centre, where they were able to use a gym, play badminton and take part in aerobic exercise.

Medication and psychosocial issues

With the support of the information from the questionnaire, the pharmacists conducted a review of each person's medication. The list of medications was obtained previously from the family doctor. During the review, each person's knowledge of their medications was assessed, including the purpose of the drugs they were taking and the duration of their prescription. It was found that many of the respondents were not sure of the purpose of each medication, and were also not aware that they would need to continue taking these for life.

Problems related to inadequate diabetes knowledge are compounded by socio-cultural issues. When people do not have English as their first language, they are less likely to negotiate with their healthcare provider. Furthermore, in South Asian cultures, it is customary to accept without ques-

tion the opinion and advice of a healthcare professional, especially a doctor.

Encouraging results

After 6 months, the participants were evaluated again. Results from the post-intervention questionnaire showed an increase in people's knowledge of diabetes and its complications; the largest difference was seen in the increase in knowledge of hypoglycaemia and hyperglycaemia.

People reduced their risk of microvascular problems by 37%.

The results from biochemical measurements showed a reduction in HbA_{1c} of 1% in the people who had received the education package, which, according to the findings of the UK Prospective Diabetes Study (UKPDS), would reduce their risk of microvascular problems by 37%. There was no difference in the HbA_{1c} readings of people in the control group. The study group also experienced a reduction in their cholesterol levels and an average 2.5 kg loss in weight; again, there was no difference in the control group.

Multiple benefits

Findings from this project highlight the benefits of culturally sensitive and relevant diabetes education. Amongst the people who received this education package in Lothian, there were significant improvements in diabetes control and people's ability to access health services and leisure facilities. Overall understanding of the condition increased and throughout the group there was improved adherence to treatment.

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