Taking control of diabetes through education

Gill Kester

Introduction

Gill Kester is a semi-retired lecturer who has diabetes. This article reflects her perspective on the provision of diabetes education for patients. Her background in education combined with her experiences as a patient offers an informed and personal opinion. In reassessing the effectiveness of our educational programmes, the views of patients and educationalists may be useful.

have long been a subscriber to the theory that having control over one's life and life choices (an internal locus of control), or perceiving that one has this control, is virtually synonymous with the maintenance of good health. It seems to me that the major reason why the diagnosis of diabetes, particularly perhaps of type 2 diabetes, has such an effect on those diagnosed, is that suddenly (and often out of the blue) some part of the control that is so much taken for granted that it does not even impinge on conscious thought, is gone. The current media publicity about the so-called 'global epidemic of obesity' and its virtual equation with the rapidly rising incidence of type 2 diabetes means that a strong sense of self-blame tends to be instilled in those who are diagnosed.

What then are the implications of these points for the care, management and education of patients with diabetes, particularly the newly diagnosed? The NSF for Diabetes notes the vital importance of education in the empowerment of people with diabetes; this could be achieved by the development of a service model that facilitates self-care. A recent newsletter (December 2003) from the Diabetes Patient Steering Group included a copy of a letter sent to the Chief Executive at Western Sussex PCT. The letter pointed out that while 95% of diabetes care is

self-care, patient-centred care and self-management will not be achieved in this locality, owing to the disparities in the standard of education delivered in some practices, as highlighted in a recent PCT audit.

Suggestions for a successful educational campaign

I know other people with diabetes who know nothing about the biology of diabetes, but manage their condition successfully. However, while recognising that the acquisition of knowledge is by no means the be all and end all of education, 'knowing the enemy' has long been regarded as a sensible prerequisite to effective self-management. The planning of a successful and effective educational strategy calls for consideration of a number of points.

Targeting

I believe that educational messages are most effectively transmitted when they are targeted, i.e. when those at whom they are aimed are defined in terms of gender, age, ethnicity (including identification of ethnic groups with particular susceptibility to development of diabetes) and perhaps geographic location as well.

Flexibility

Any programme devised needs to be flexible. Current approaches in teaching

ARTICLE POINTS

1 The diagnosis of type 2 diabetes may lead to the loss of an internal locus of control.

2 The virtual equation of rising obesity and type 2 diabetes instils a strong sense of self-blame in some people who are diagnosed with diabetes.

Patient-centred care and the emphasis on self-management, suggests a need for successful educational strategies.

4 Educational programmes need to be flexible and targeted.

5 The basic knowledge and understanding of components of educational programmes need to be defined.

KEY WORDS

- Education
- Control
- Support
- Empowerment
- Cost implications

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PAGE POINTS

1 The complexities of type I and type 2 diabetes and the range and seriousness of their potential sequelae obviously pose the need for a multidisciplinary approach.

Healthcare professionals who deliver diabetes education programmes need to have a sound knowledge base about the multipathology of diabetes.

3 Venues should allow access of the greatest possible numbers of eligible attendees, whether this is in hospital-based diabetes clinics, GP surgeries, schools or local halls for patients in more rural areas.

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and learning should be used to determine the most effective way of reaching specific groups. Since education in this context will almost always be of adults, the variety of tried and tested modes of delivery in adult education at various levels would be appropriate. Teaching programmes need to be patient-centred and carefully structured, sensitive to cultural differences and with due thought given to the most effective timing and duration of delivery. Education immediately after diagnosis may not always be appropriate, but to be of maximum value in regaining and maintaining blood glucose levels as near normal as possible and facilitating selfmanagement of diabetes, it should not be left too long. Education also needs to be ongoing, reiterated and updated at appropriate intervals.

The teachers

This then prompts the question of who the teachers should be. The complexities of type I and type 2 diabetes and the range and seriousness of their potential sequelae obviously pose the need for a multidisciplinary approach. Major input from diabetologists, DSNs or those with at least some specific further training plus dietitians with a specialist knowledge or interest in this field is certainly required.

Although the NSF for Diabetes advocates that the majority of people with type 2 diabetes should be managed in the community, the letter from the Chair of the DPSG also noted that a recent PCT diabetes audit highlighted that 'some nurses leading care (and therefore those likely to be involved with patient education as well as diabetes care in the community) have no formal training or qualifications in the care and management of diabetes.' Healthcare professionals who deliver diabetes education programmes need to have a sound knowledge base about the multipathology of diabetes. A qualification in education may also be beneficial to ensure that they can effectively deliver educational programmes.

Location

Where should such education be provided? Venues should allow access of the greatest possible numbers of eligible attendees, whether this is in hospital-based diabetes clinics, GP surgeries, schools, or local halls for patients in more rural areas.

Tools of education

Education can be conveyed effectively orally, through written information, pictures, video and computer animations. Local workshops, (e.g. blood glucose testing workshops) do much to improve both practical skills and more rational and cost-effective use of home blood glucose monitors.

Support

Facts and skills alone are not enough to enable people to self-manage their diabetes all of the time. Healthcare professionals who can provide sympathetic, professional and knowledgeable support should be at hand when necessary. Patients should be reassured that it is normal to need emotional and/or psychological support and that there is an increased risk of depression associated with diabetes.

The role of knowledge

Knowledge provision alone does not necessarily lead to alterations of lifestyle that result in improved health and wellbeing or improved self-care. This point is amply illustrated by the antismoking campaigns of recent years. However, without knowledge and understanding I do not think that it is possible for patients to regain a sense of control, and the ability to manage their own condition without having to be conscious 24 h a day, 7 days a week, that they have diabetes. The basic knowledge and understanding of components of educational programmes therefore need to be defined, i.e. the modes of delivery, the extent of detail and the specific needs of particular groups. The detail sought by a quasi 'expert patient' is very different from that for people who, like my mother, prefer to think of themselves

as 'pink all through, like a sausage', and who seek only instructions on what to do to maintain good function.

The need to know

I suggest that everyone needs to know the differences between type I and type 2 diabetes in terms of causes, pathology, treatment options and care management. Skills and competencies required for by people with type I and type 2 diabetes may vary.

For people with type I diabetes, how to inject, when, where and why, which sort of insulin and what quantity to inject and why is of basic importance. This group also needs to understand how insulin dosage is affected by all of the activities of daily living: diet, exercise, alcohol intake, pregnancy and illness. Because type I diabetes has, in general, an earlier age of onset than type 2 diabetes, parents will have questions relating to how soon children should take over the management of their own medication and how not to let their lifestyle be adversely affected. There may be major worries about convincing rebellious teenagers of the value of acceptance of their condition and compliance with what must seem an irksome and unwelcome interference with 'normal life'. Sharing the purpose of HbA_{1c} tests and the results will enable both the healthcare professional and the adolescent to explore current selfmanagement skills and the success of current treatments.

People with type 2 diabetes are usually older at the time of diagnosis (although there is a worrying increase of the increasing incidence of type 2 diabetes in obese adolescents). This group needs to know that the condition, as well as being chronic, is also progressive. Any lingering traces of the idea that type 2 diabetes is 'mild' should be dispelled. It might be possible to regain glucose homeostasis with diet and exercise initially, but most patients will need oral medication of one type or another (and maybe more than one) and that eventually, they may need exogenous insulin.

Both groups need to understand the effects of hypoglycaemia and hyperglycaemia. There may be questions about driving and hypoglycaemia. consequences of prolonged The hyperglycaemia and hyperinsulinaemia need to be understood, including dangers of potential microvascular and macrovascular damage to the cardiovascular system, retinas, kidneys and the feet through neuropathy. People with diabetes need to understand why their blood pressure and cholesterol levels are treated aggressively, why they should see the podiatrist regularly and why that should have their eyes checked. Compliance needs to be improved overall.

Conclusion

Providing education for people with diabetes has cost implications. However, not educating patients has implications in terms of patient welfare and the costs of treating people who present with the complications of poorly managed blood glucose levels. There is abundant evidence that the maintenance of as near as possible euglycaemia does much to obviate deterioration in long-term quality of life or the development of complications. Current cost estimations by the National Institute of Clinical Evidence (NICE, 2003) for some diabetes education programmes, (e.g. the DAFNE programme), but all interventions need to be evaluated to ensure that they make a real difference to patients and are costeffective. There is insufficient evidence to suggest that current education approaches are effective in terms of improving self-management. The need for ongoing education that is reiterated and updated at intervals appropriate to the individual is essential. However, despite the lack of evidence, the outcome of a failure to educate must surely be worse.

National Institute of Clinical Excellence (2003)

Guidance on the use of patient education models for diabetes. Technology Appraisal 60. National Institute of Clinical Excellence, London

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