Diabetes education: Teaching old dogs new tricks?

Elizabeth Kamps

The subject of education of people with diabetes has occupied many column inches over the years. How, where, when and by whom should it be carried out? What are the skills needed to provide essential knowledge for those who live with diabetes on a daily basis? How to help them become more focused on their diabetes? Through discussing some specific examples of diabetes education programmes for people with diabetes this article offers a couple of scenarios for the future of group-based and one-on-one education of people with diabetes.

Article points

1. All methods of education require a willingness of the healthcare professional to develop new approaches and patterns of working.
2. Changes that took place in the delivery of diabetes education during the 1990s have led to the introduction and establishment of group-based learning for specific sub-groups of people with diabetes.
3. Knowledge alone is not enough to maintain any clinical outcome.

Key words

- Group education
- DAFNE
- DESMOND
- Patient-centred

The need for and the process of education by healthcare professionals for people with diabetes has been hotly debated by the multidisciplinary diabetes teams involved for many years. Questions that are commonly asked include the following.

- Should patient groups be established?
- Should education be conducted in a designated 'diabetes centre'?
- Should education sessions be held in non-healthcare settings?
- Are one-to-one consultations effective?

The above issues notwithstanding, all methods of education require, in the author's opinion, a willingness of the healthcare professional to develop new approaches and patterns of working. This may be developed within his or her place of work or by collaborating with individuals from other agencies, such as charities and private healthcare companies.

Education models for people with diabetes

Changes that took place in the delivery of diabetes education during the 1990s have led to the introduction and establishment of group-based learning for specific sub-groups of people with diabetes. For instance, the Patient Education Working Group recommends the use of Dose Adjusted For Normal Eating (DAFNE) for people with type 1 diabetes and Diabetes Education and Self Management for Ongoing and Newly Diagnosed (DESMOND) for people type 2 diabetes (Department of Health [DoH], 2005).

DAFNE

DAFNE is based on the Düsseldorf model (Berger, 1984) and teaches adults with type 1 diabetes to adjust their insulin doses according to their lifestyle needs rather than adjusting their lifestyle to suit a regular insulin dose. It has been developed in Northern Europe over the last 20 years. Assessment of this education programme's effectiveness included a randomised controlled trial (DAFNE Study Group, 2002) and an economic assessment that demonstrated that it pays for itself in approximately 4 years (Shearer et al, 2004). People who have taken part in DAFNE speak very highly of the quality of life issues that it addresses (visit www.dafne.uk.com/scripts/professionalhealthcare/dafnetrial.html for some personal accounts [accessed 30.08.2006]).

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Page points

1. Education programmes centred around the person with diabetes have been developed by diabetes teams around the UK in order to impart knowledge and educate their local population with diabetes in order for them to successfully self-manage their condition.
2. The availability of training sessions and workshops on empowerment, group work and facilitation skills have grown.
3. Empowerment is a complex concept. In the author's opinion empowerment is a term used to suggest a more patient-centred model of care.
4. Despite widespread acceptance that the empowerment model is a good one to follow, healthcare professionals still find themselves falling back onto traditional styles of education delivery.

It requires 5 days of commitment, by the participants, to the programme, and one follow up session (visit www.dafne.uk.com for more information [accessed 24.08.2006]).

DESMOND

DESMOND is a group education programme for adults with type 2 diabetes. It helps people to identify their own health risks and to set their own specific behavioural goals. It was piloted in 2004 and is currently being rolled out nationally (visit www.desmond-project.org.uk for more information [accessed 24.08.2006]).

Other models

The DoH's publication on structured patient education in diabetes (*Structured Patient Education in Diabetes. Report from the Patient Education Working Group*; DoH, 2005) recommends that structured education include at least the following four key components, which are in line with guidance from the National Institute for Health and Clinical Excellence (formerly the National Institute for Clinical Excellence [NICE]; 2003):

- a structured curriculum
- trained educators
- quality assurance
- audit.

The charity Diabetes UK suggests that the following topics should be covered in group education (visit www.diabetes.org.uk for more information [accessed 24.08.2006]):

- the nature of diabetes
- the day-to-day management of diabetes
- 'specific issues'
- living with diabetes and 'sick day' rules.

Other education programmes centred around the person with diabetes have been developed by diabetes teams around the UK in order to impart knowledge and educate their local populations with diabetes in order for them to successfully self-manage the condition. Examples of these include the Bournemouth Type 1 Intensive Education (BERTIE) programme and the Oxford Centre for Diabetes, Endocrinology and Metabolism's skills training course InSight.

Patient education groups have also been established to focus on particular facets of diabetes treatment, for example, insulin initiation. In order to facilitate such groups effectively, educators and healthcare professionals need the correct skills. Consequently the availability of training sessions and workshops on empowerment, group work and facilitation skills have grown (such as those provided by In Balance Healthcare UK and Warwick Diabetes Care).

Networking

The National Service Framework for diabetes sets out 12 standards for diabetes care and education (DoH, 2001). The *National Service Framework for diabetes: Delivery Strategy* (DoH, 2002) emphasises the importance of networking for the success of local diabetes projects. This theme is continued in the most recent document from June 2006 *Turning the Corner: Improving Diabetes Care* (DoH, 2006b). Networks are, in the author's opinion, most successful when all stakeholders are involved and they are clinically led (Hainsworth, 2006).

Patient centred?

Empowerment

Empowerment is a complex concept. In the author's opinion empowerment is a term used to suggest a more patient-centred model of care. When first introduced to the literature by Funnell and colleagues (1991) 'empowerment' was described as the person with diabetes having 'the knowledge, skills, attitudes and self awareness necessary to influence their own behaviour'. Funnell and Anderson (2005) have more recently suggested that 'empowered individuals' equate to those who are fully responsible for their condition. This, they say, is 'non-negotiable' and 'inescapable'. This changes the traditional roles and responsibilities of both the people with diabetes and the healthcare professionals with the emphasis being more on self-management skills.

Despite widespread acceptance that the empowerment model is a good one to follow,

healthcare professionals still, in the author's experience, find themselves falling back into traditional styles of education delivery. Thompson and Kohli (1997) observed that traditionally trained nurses have not had the benefit of formal health promotion or health education pre-registration programmes. Traditional training programmes for healthcare professionals were based on a model that had a strong didactic 'do as I say' component. They were designed to treat acute health problems – not deal with the management of chronic conditions and the multiple psychological and psychosocial factors that are recognised today. For years instructive education had been the norm in the education system (Beers, 2005); however, the majority of currently practising nurses in the UK have been trained in this way. More recently trained nurses are now emerging from educational institutions having experienced more modern learning models; for example, one university has now included a diabetes module in their pre-registration training (Butler and Watt, 2004).

Following training in self-empowerment strategies, Anderson and colleagues (1991) observed that diabetes educators can show significant improvement in supporting and counselling people with the condition. The change of the educator's delivery style has been shown to have a greater impact in the consultation with the patient than the traditional style (Anderson et al, 1991). However, despite training, research-based knowledge and a desire to practice effectively, healthcare professionals still, in the author's opinion, seem to find it difficult to maintain a changed delivery style.

The idea that it is novel to include the individual with diabetes in the care of his or her own health has passed. However this change of role for the educator, from one of imparting information to the supporter of self-care, remains challenging to many practitioners (Knight et al, 2006).

Health promotion

The World Health Organization defines health promotion as the process of enabling people to both increase control over and to improve their health (WHO; 1986). By coupling health promotion with education, less emphasis is placed on how people assimilate knowledge into their lives, rather more is placed on making sure that people with diabetes understand the knowledge required to manage their condition; and how the healthcare professional rises to the challenge of changing his or her education style (Pill et al, 1999).

Self-care

In the 1980s and early 1990s diabetes education was seen as the imparting and improvement of knowledge among people with diabetes – it was assumed that by doing this individuals would be able to and subsequently want to take more care of their health. Healthcare professionals believed that by providing information to people with diabetes it would be enough to help them improve their glycaemic control. However, it became apparent that knowledge alone was not enough to maintain any improved clinical outcome (Knight et al, 2006; however, Knight and colleagues emphasise the absence of empirical support for this).

Often, the ability of individuals to adhere to their regimen of diet, insulin, oral medications or blood testing is used as a surrogate measurement of how well they are doing (Funnel and Anderson, 2005). Cooper and colleagues (2003) found that not all healthcare professionals are ready to work in partnership with people who have diabetes. A philosophy of practice, which supports the patient-centred approach, is well described in chapter 3 of the DoH publication *Structured Patient Education in Diabetes: Report from the Patient Education Working Group* (DoH, 2005).

Blending the need for a baseline level of knowledge about his or her own condition and recognising that the individual knows him or herself best led to the development of the eXpert Patient Education versus Routine Treatment (X-PERT) programme (Deakin et al, 2002). This 6-week patient-centred programme covers weight management in type 2 diabetes and encourages individuals to

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3. The change of the educator's delivery style has been shown to have a greater impact in the consultation with the patient than the traditional, more didactic style.
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1. The recently published White Paper *Our health, our care, our say: a new direction for community services* offers people with diabetes an opportunity to take an active role in contributing to progressing diabetes services, it also reinforces the move towards healthcare professionals supporting self-care.
2. Examples of health care being delivered outside of the normal healthcare setting are growing – privately-run GP surgeries, for example.
3. By ignoring the contribution of nursing to the changing delivery of health care the Government risks lowering the morale of the nursing community, therefore having a direct and negative impact on the care of people with chronic conditions such as diabetes.
4. Enabling true patient-centred diabetes care is still a challenge to many of our colleagues who may still resist the effectiveness of group-based work or slip back into the didactic presentation style in their consultations.

set their own goals. The programme recognises the important role that 'expert patients' can play in the management of their condition, as well as providing peer support. It has won four national awards for excellence (visit http://www.xpert-diabetes.org.uk/artman/publish/cat_index_31.php for more details [accessed 10.08.2006]).

The recently published White Paper *Our health, our care, our say: a new direction for community services* (DoH, 2006a) offers people with diabetes an opportunity to take an active role in contributing to progressing diabetes services, it also reinforces the move towards healthcare professionals supporting self-care. Commitment to this theme by the Government is reinforced by the joint DoH and Patient Education Working Group's report on structured education in diabetes (DoH, 2005).

The following two structured diabetes education development tools are also currently being developed by the DoH.

- A service development tool to help local programme coordinators to assess whether the programmes they are delivering meet NICE criteria.
- An educator assessment tool to allow diabetes educators to reflect on their current practice and to further enhance their skills.

(*Editor's note*: since this article was written, these developments have been published. The document can be downloaded from www.dh.gov.uk/assetRoot/04/13/80/35/04138035.pdf [accessed 30.08.2006].)

Concluding remarks

Examples of health care being delivered outside of the normal setting are growing – privately run GP surgeries, for example. In his speech on healthy living, Prime Minister Tony Blair referred to the NHS being not only a provider of services but also a commissioner of services (visit http://www.number10.gov.uk/output/Page9921.asp for a full transcript [accessed 10.08.2006]). The commissioned services could be from, for example, established healthcare firms from the independent sector or charities. The challenges for those healthcare professionals entrenched in the traditional model of the NHS will be enormous.

In reply to Mr Blair's speech the Royal College of Nursing (RCN) commented that it was disappointing that he had not recognised the input of nursing in the development of new models of care (RCN, 2006). By ignoring the contribution of nursing to the changing delivery of health care the Government risks lowering the morale of the nursing community, therefore having a direct and negative impact on the care of people with chronic conditions such as diabetes (RCN, 2006).

The complexity of issues facing the delivery of diabetes health care in the 21st Century should not be underestimated: all aspects of healthcare delivery should be considered. There is no mistaking the contribution of effective educational interventions in diabetes care; the challenge is to make them available to the many populations that coexist within the UK today.

> ***'Diabetes belongs to the patient. Knowing what is best for a patient's diabetes is not the same as knowing what is best for that person'.*** (Funnell and Anderson 2005)

The author would suggest that enabling true patient-centred diabetes care is still a challenge to many of our colleagues who may still resist the effectiveness of group-based work or slip back into the didactic presentation style in their consultations. However, only time will tell if this model is suitable for all. It would be interesting to predict the shape of diabetes education in 10 years' time. Will it be led by the person with diabetes? Will group-based education be the only type of face-to-face education available? Another generation of nurses will be trained who will bring with them new styles and ideas. What would the crystal ball say?

Possible scenarios for education in 10 years from now

The following are two scenarios that briefly illustrate how the education of people with

diabetes may develop over the next 10 years.

Scenario 1

Patient-led education is the norm. The role of the DSN has become redundant with it being incorporated into community-based nursing, and only those who are critically ill due to diabetes are seen in hospitals. The one-to-one contact between the DSN and the person with diabetes is a thing of the past, and the role has become supervisory and administrative: the practice or community nurse gives day-to-day care and advice.

Scenario 2

Funding for community-based nursing has dried up and diabetes is now pandemic; consequently, there are too many people to treat and community nursing is swamped with work and has had to refer most, if not all, patients back to secondary care. Group-based education has become too controversial because patients have led them with their own agendas. The one-to-one didactic consultation style has triumphed as those who resisted all along said it would! ■

'Following training in self-empowerment strategies, [a study has] observed that diabetes educators can show significant improvement in supporting and counselling people with the condition. The change of the educator's delivery style has been shown to have a greater impact in the consultation with the patient than the traditional style.'

Anderson RM, Funnell MM, Barr PA, Dedrick RF, Davis WK (1991) Learning to empower patients. Results of professional education program for diabetes educators. *Diabetes Care* **14**(7): 584–90

Beers GW (2005) The effect of teaching method on objective test scores: problem-based learning versus lecture. *The Journal of Nursing Education* **44**(7): 305–10

Berger M (1984) Evaluation of a teaching and treatment programme for type I diabetic patients. *The Diabetes Educator* **10** SPEC NO: 36–8

Butler J, Watt B (2004) Tomorrow's diabetes practitioners – where do we start? *Journal of Diabetes Nursing* **8**(7): 259–61

Cooper HC, Booth K, Gill G (2003) Patients' perspectives on diabetes health care education. *Health Education Research* **18**(2): 191–206

DAFNE Study Group (2002) Training in flexible, intensive insulin management to enable dietary freedom in people with type 1 diabetes: dose adjustment for normal eating (DAFNE) randomised controlled trial. *British Medical Journal* **325**(7367): 746–51

Deakin TA, Cade JE, Williams DRR, Greenwood DC. (2002) EXpert Patient Education versus Routine Treatment (X-PERT): process evaluation. *Diabetologia* **45**(suppl 2): 317

Department of Health (DoH; 2001) *National Service Framework for Diabetes: Standards*. DoH, London

DoH (2002) *National Service Framework for Diabetes: Delivery Strategy*. DoH, London

DoH (2005) *Structured Patient Education in Diabetes. Report from the Patient Education Working Group*. DoH, London

DoH (2006a) *Our health, our care, our say: a new direction for community services*. DoH, London

DoH (2006b) *Turning the corner: Improving diabetes care*. DoH, London

Funnell MM, Anderson RM, Arnold MS, Barr PA, Donnelly M, Johnson PD et al (1991) Empowerment: an idea whose time has come in diabetes education. *The Diabetes Educator* **17**(1): 37–41

Funnell MM, Anderson RM (2005) Patient Empowerment. *In*: Snoek FJ, Skinner TC (eds) *Psychology in Diabetes Care*. John Wiley and Sons, Chichester

Hainsworth T (2006) Progress and challenges in the delivery of the diabetes NSF. *Nursing Times* **102**(26): 23–4

Knight KM, Dornan T, Bundy C (2006) The diabetes educator: trying hard, but must concentrate more on behaviour. *Diabetic Medicine* **23**(5): 485–501

National Institute for Clinical Excellence (NICE; 2003) Technology Appraisal Guidance 60. Guidance on the use of patient education models for diabetes. NICE, London

Pill R, Rees ME, Stott NC, Rollnick SR (1999) Can nurses learn to let go? Issues arising from an intervention designed to improve patients' involvement in their own care. *Journal of Advanced Nursing* **29**(6): 1492–9

Royal College of Nursing (2006) *RCN response to Prime Minister's speech on public health*. Available at http://www.rcn.org.uk/news/display.php?ID=2105&area=Press (accessed 24.08.2006)

Shearer A, Bagust A, Sanderson D et al (2004) Cost-effectiveness of flexible intensive insulin management to enable dietary freedom in people with Type 1 diabetes in the UK. *Diabetic Medicine* **21**(5): 460–7

Thompson P, Kohli H (1997) Health promotion training needs analysis: an integral role for clinical nurses in Lanarkshire, Scotland. *Journal of Advanced Nursing* **26**(3): 507–14

World Health Organization (WHO; 1986) *Ottawa Charter for Health Promotion*. WHO, Geneva. Available at http://www.euro.who.int/AboutWHO/Policy/20010827_2 (accessed 24.08.2006)