

# Healthcare professionals' versus patients' perspectives on diabetes

Marie Clark

## Introduction

Diabetes is a lifelong chronic illness, in which patients deliver over 95% of their care. Understanding the behaviour of people with diabetes requires some knowledge of their beliefs and attitudes towards diabetes and its treatment. These beliefs and attitudes also influence the behaviour of healthcare professionals. In the second article in our psychology series, Marie Clark explores the perspectives on diabetes of people with diabetes and healthcare professionals and considers how the beliefs of people with diabetes can best be addressed to encourage them to change their behaviour to improve diabetes outcomes.

Diabetes is a lifelong chronic illness, where people with diabetes deliver over 95% of their care. Type 2 diabetes in particular is a serious and growing health problem affecting all sectors of the population, and accounts for approximately 85% of diagnosed cases.

Effective management of diabetes requires complex, continual and demanding self-care behaviour:

- Diet control
- Exercise
- Self-monitoring of blood sugar levels
- Taking medication several times a day.

However, achieving effective management of type 2 diabetes has proven to be difficult. Although extensive research has attempted to address this issue, achieving adequate control of glucose levels in people with type 2 diabetes remains elusive (Kurtz, 1990; Johnson, 1992; United Kingdom Prospective Diabetes Study [UKPDS] Group, 1999; UKPDS Group, 1998).

## Psychological models

Understanding the behaviour of people with diabetes requires some knowledge of their beliefs and attitudes towards diabetes and its treatment (Anderson et al, 1988). Psychological models such as the Health Belief Model and the Self-regulation Model of Illness Behaviour emphasise that attitudes and beliefs are a major component of health behaviour, and

constructs from these models have been associated with diabetes management.

Cerkoney and Hart (1980) found that beliefs about the seriousness of diabetes and responding to cues to action were associated with adherence to treatment. Polly (1992) reported that perceived severity was associated with metabolic control, and perceived barriers were associated with adherence to treatment in older people with type 2 diabetes. Fitzgerald et al (1995) found that people with type 2 diabetes with higher adherence acknowledged the seriousness of diabetes and recognised the relation between glucose control and complications. Hampson and Glasgow (1996) suggest that beliefs about treatment effectiveness, followed by beliefs about seriousness, appear to be most strongly associated with self-management, and that people's personal models of diabetes are useful predictors of self-care behaviour.

Beliefs and attitudes to diabetes also influence the behaviour of healthcare professionals (Ajzen and Fishbein, 1980; Weinberger et al, 1994). As education of people with diabetes is largely a process of communication between healthcare professionals and people with diabetes, it is important to understand the similarities and differences in their attitudes towards diabetes and its treatment.

## ARTICLE POINTS

**1** Education of people with diabetes is largely a process of communication between healthcare professionals and people with diabetes.

**2** Understanding similarities and differences in attitudes towards diabetes and its treatment is important.

**3** Healthcare professionals' primary means of evaluating control of diabetes is on objective clinical indicators.

**4** People with diabetes focus on how they feel, how the illness disrupts their normal life and the impact of their behaviour on their illness.

**5** An acceptable treatment plan is only possible with open communication and when treatment is seen as logical, acceptable and feasible within the daily life of each person.

## KEY WORDS

- Beliefs and attitudes
- Health models
- People with diabetes
- Healthcare professionals

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**PAGE POINTS**

**1** The healthcare professional's world view may differentiate professionals from people with diabetes with respect to diabetes management goals and expectations.

**2** A better understanding of the behaviour of people with diabetes might well result from finding out their attitudes and beliefs about the illness, and the psychosocial contexts in which they care for their diabetes.

**3** There is growing evidence that differences in the concepts and perspectives of people with diabetes and healthcare professionals exist and may be important factors affecting treatment behaviour.

**4** A number of studies have examined these differences in terms of the understanding of common terms and concepts used in diabetes care.

Healthcare professionals bring to their encounters a professional world view that influences the way they interpret diabetes, explain its causes and progression, understand its symptoms and orchestrate methods of treatment. This professional perspective may also differentiate professionals from people with diabetes with respect to diabetes management goals and expectations.

Although differences in perspective are not inherently problematic, they frequently become so when either the person with diabetes or the healthcare professional does not meet the goals and expectations of the other.

**The perspective of the person with diabetes**

A better understanding of the behaviour of people with diabetes might well result from finding out their attitudes and beliefs about the illness, and the psychosocial contexts in which they care for their diabetes. For example, the choices that people make appear quite sensible if one understands the demands of their environment (Anderson et al, 1998). In this way we can shed light on the causes of undesirable diabetes care and therapeutic outcomes, as well as the

dissatisfaction that often results from a healthcare professional's or patient's failure to meet the other's diabetes management expectations.

There is growing evidence that differences in the concepts and perspectives of people with diabetes and healthcare professionals exist (Lang et al, 2000; Snoek, 2000; Clark and Hampson, 2003) and may be important factors affecting treatment behaviour (Kleinman, 1980; Hernandez, 1995; Golin et al, 1996). This evidence is highlighted in a synopsis of the study by Clark and Hampson (2003) (see *Study 1*).

A number of studies have examined differences in concepts and attitudes in terms of the understanding of common terms and concepts used in diabetes care. Aufseesser et al (1995) examined the understanding of eight medical terms concerning retinopathy in people with diabetes. Results indicated that their understanding of the terms was quite diverse, and that most people had a poor understanding of terms commonly used in an ophthalmology consultation. Furthermore, both the healthcare professional and the person with diabetes were certain that the person with diabetes understood these terms. Importantly in

**Study 1. Comparison of patients' and healthcare professionals' diabetes beliefs and attitudes (from Clark and Hampson, 2003)**

**Method**

- 104 healthcare professionals (HCPs; nurses, dietitians, general practitioners) and 100 of their patients with type 2 diabetes completed the Diabetes Attitude Scale – 3rd version (DAS -3; Anderson et al, 1998)
- HCPs also answered questions about their provision of diabetes care

**Results**

- HCPs viewed type 2 diabetes as more serious than their patients
- HCPs viewed diabetes harder to treat than other chronic conditions
- HCPs felt they did not have adequate time and resources to treat their patients with diabetes effectively
- Doctors believed there was less need for HCPs to have special training to care for individuals with type 2 diabetes than did the nurses or dietitians
- All of the healthcare professionals believed significantly more strongly in the value of tight blood glucose control for people with type 2 diabetes than did the patients
- People with diabetes did not perceive their diabetes as having a strongly negative psychosocial impact
- Nurses and dietitians expressed strongest agreement with the need for patient autonomy in diabetes self-management compared to doctors

## Study 2. Patients' understanding of terminology and adherence (from Aufseesser et al, 1995)

This study dealt with eight terms (fundus, retina, hemorrhage, red dots, etc) related to an ophthalmologic examination, and revealed that people with diabetes understood only one-third of the medical terms used correctly.

The prevalence of diabetic retinopathy varies between 40% to 70% after 15 years' evolution of the disease. However, for 30% of people with diabetes, the term 'retina' is not understood correctly. They understand it to be located in the exterior part of the eye. These people confuse the retina with the pupil, the cornea, or the sclera. With such a misunderstanding, people with diabetes imagined that they would be able to see retinal damage when looking in a mirror, which may have harmful consequences with regard to prevention and early ophthalmologic treatment of diabetic retinopathy.

The results of this study have important implications for practice because understanding the vocabulary used in the consultation may play a determining role in both the level of adherence and the therapy to which the person with diabetes will adhere.

this study, sociodemographic factors did not have an effect on the understanding of the person with diabetes. The findings of Aufseesser et al (1995) are summarised in Study 2.

In a qualitative study (which uses interviews to collect data) contrasting the perspectives of people with diabetes and healthcare professionals in diabetes management, Hunt et al (1998) indicated that the concept of 'diabetes control' had different meanings for both groups. Healthcare professionals' primary means of evaluating control of diabetes is on objective clinical indicators, such as HbA<sub>1c</sub>. People with diabetes, on the other hand, are much more complex in their assessments and focus more on how they feel, how much the illness disrupts their normal life and the impact of their actual behaviour on their illness.

### Explanatory models

Other studies have focused on differences in explanatory models of diabetes between healthcare professionals and patients. Kleinman (1980) has argued that individuals vary in their explanatory models of illness and health, which are based on distinct sets of meanings, and that these meanings importantly influence how individuals act regarding treatment. He has argued that by learning to elicit patients' explanatory models, healthcare professionals can work towards negotiating the discrepancies between

their models and patients' models, thereby improving adherence, satisfaction and subsequent use of the healthcare system.

Based on this framework, Cohen et al (1994) have characterised explanatory models of diabetes for healthcare professionals and people with diabetes. They found the models of professionals and people with diabetes were least congruent regarding cause, physiology and symptom onset. They concluded that people with diabetes and healthcare professionals focus on different domains: people with diabetes were found to emphasise difficulties in the social domain and the impact of diabetes on their lives; healthcare professionals see diabetes as a pathophysiological problem and are most concerned with its physical impact. Cohen et al suggest that this difference between perspectives may be an important contributory factor to poor management of diabetes.

### The healthcare professional's perspective

A related concern is that, while there is some literature on the beliefs and attitudes that affect adherence of the person with diabetes to recommended treatment regimens (Cox and Gonder-Frederick, 1992; Hampson and Glasgow, 1996), little is known about healthcare professionals' beliefs and attitudes that may interfere with their adherence to current standards of care

## PAGE POINTS

**1** People with diabetes were found to emphasise difficulties in the social domain and the impact of diabetes on their lives.

**2** Healthcare professionals see diabetes as a pathophysiological problem and are most concerned with its physical impact.

## PAGE POINTS

- 1 It has been shown that increasing the knowledge of a person with diabetes does not necessarily lead to enhanced diabetes self-management.
- 2 Beliefs and attitudes, not knowledge deficits, may be the major barriers to effective practice and therapeutic outcomes for people with diabetes.
- 3 There is a growing body of research that is calling for healthcare professionals to shift from attempting to dictate behaviour in an authoritative mode to forming collaborative alliances with patients, with jointly identified goals and strategies.
- 4 An important part of forming such collaboration will be to recognise the distinction between the perspectives of healthcare professionals and people with diabetes.

(Marteau and Baum, 1984; Weinberger et al, 1994; Anderson et al, 1991, 1992). Contradictions noted in the literature on the diabetes-related beliefs and behaviour of healthcare professionals merit further inquiry.

Although healthcare professionals generally agree that tight glucose control is important in diabetes (Anderson et al, 1991), their practice behaviours are inconsistent with this belief (Jacques et al, 1991; Kenny et al, 1993; Stolar and the Endocrine Fellows Foundation Study Group, 1995).

Belfiglio et al (2001) conducted a survey to investigate the relationship between target fasting blood glucose (FBG) levels adopted by healthcare professionals and the level of metabolic control obtained in people with type 2 diabetes in their charge. Results suggest that healthcare professionals adopt extremely heterogeneous target FBG levels in people with type 2 diabetes, which in turn represent an important independent predictor of metabolic control. This study demonstrates the crucial role of healthcare professionals' attitudes and beliefs in determining outcomes. The risk of poor metabolic control was strongly related to healthcare professionals' beliefs, and more than one-third of people achieving HbA<sub>1c</sub> levels >7.0% could be attributed to healthcare professionals' FBG target levels.

These findings may be related to the different perception about the risk of hypoglycaemia in an aged population, and to the belief that even low levels of metabolic control could exert a positive effect in preventing complications of diabetes. On the other hand, lack of adherence to guidelines for both glycaemic control and complication screening may relate to the belief that diabetes complications are inevitable and cannot be prevented (National Institute of Health, 1994), or that type 2 diabetes is not a serious disease requiring aggressive treatment. In fact, Kenny et al (1993) report that healthcare professional adherence to consensus recommendations for complication screening is lower for

people with type 2 diabetes than for people with type 1 diabetes.

## Knowledge versus behaviour

It has been shown that increasing the knowledge of a person with diabetes does not necessarily lead to enhanced diabetes self-management (Griffin et al, 1999; Norris et al, 2001). The above findings would suggest that it is equally true that increasing the knowledge base of healthcare professionals through continuing medical education programmes and/or guidelines (e.g. UKPDS), which are generally based on the transfer of new medical knowledge, is unlikely to result in a significant improvement in the diabetes care they provide (Larme and Pugh, 1998; Belfiglio et al, 2001). Beliefs and attitudes, not knowledge deficits, may be the major barriers to effective practice and therapeutic outcomes for people with diabetes. Addressing these, in addition to knowledge, is likely to be more effective in changing practice behaviour and improving diabetes outcomes.

## Conclusion

There is a growing body of research that is calling for healthcare professionals to shift from attempting to dictate behaviour in an authoritative mode to forming collaborative alliances with people with diabetes, with jointly identified goals and strategies (Martinez, 1993; Glasgow et al, 1996; Department of Health, 2001). An important part of forming such collaboration will be to recognise the distinction between healthcare professionals' and patients' perspectives. In the case of chronic illnesses such as diabetes, behavioural choices may be better understood as multiple and ongoing, highly dependent on the life circumstances of the person with diabetes and with an impact on disease status that is diffuse and often uncertain, rather than straightforward.

The healthcare professional's concept of diabetes is often different to that of the person with diabetes. The implementation of a treatment plan acceptable to both is only possible when open communication

fosters discussion and patient autonomy, and treatment is seen as logical, acceptable and feasible within the daily life of each individual person with diabetes. ■

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## PAGE POINTS

**1** The implementation of a treatment plan acceptable to people with diabetes and healthcare professionals is only possible when open communication fosters discussion and patient autonomy, and treatment is seen as logical, acceptable and feasible within the daily life of each individual person with diabetes.