

Why are clinics so bad at teaching diabetic patients?

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Most patients with diabetes do not achieve good metabolic control of their disease, with a consequent increased risk of microvascular complications. The authors discuss psychological strategies for involving patients in their care so that they are motivated towards better control. The general practitioner has an important role to play in helping to develop the patient's self-help skills.

Diabetes mellitus is a complex metabolic disease affecting several thousand people in every Health District in Britain. It is a chronic, debilitating disorder with a high incidence of life-disabling complications.

Therapeutic regimens for diabetes are becoming more complex

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Figure 1. Self-management requires an educated, motivated person.

and demanding, with increasing evidence for a causal relationship between poor control and increased risk of microvascular complications, including retinopathy, neuropathy and nephropathy.^{1,2} Active participation in their treatment by knowledgeable, committed patients who

To date, patient education programmes have been unsuccessful in improving metabolic control.

maintain a close partnership with their doctors is thought to be the fundamental prerequisite for good metabolic control.

In a recent study of nearly 4,000 outpatients from a typical clinic Peacock and Tattersall report that about 15% are well controlled on measures of glycosylated haemoglobin.³ Although the authors acknowledge that normoglycaemia will not be the aim of treatment for all patients, there is clearly scope for improvement.

The advent of home blood glucose monitoring methods described by Day,⁴ and the formation of specialist hospital teams that include a diabetologist augur well for the future. However, maximum utilization of services and day-to-day self-management requires an educated and motivated person, not the passive recipient of the ministrations of others that the word 'patient' implies. Hill has recently suggested that the person with the diabetes is probably the most important member of the health care team.⁵

Effects of educational programmes

Despite the proliferation of educational programmes, several controlled studies have shown that efforts to improve metabolic control have been unsuccessful.⁶⁻¹⁰ The current vogue for automated computer teaching has been as disappointing as traditional educational methods.^{11,12} It is clear that if further

attempts to 'educate' patients are to remain a high priority, there must be a thorough examination of the traditional education goals, processes and models.¹³ The existing evidence compels us to question the assumption that 'knowledge of diabetes' leads to sustained deliberate action by the person with the disease.

The motivation problem

Is the missing link 'patient motivation'? The diabetes literature is swamped with references to this psychological concept, and many physicians use it to explain poor control, or indeed to select patients for home blood glucose monitoring programmes. There is a serious problem here and we will attempt to describe it.

At one time, 'motivation' was thought to be a fixed entity within the individual. Current evidence suggests that, not only can motivation change (in either direction), but also it is influenced both by the beliefs of the individual and in interaction with other individuals.

Two models of medical care need to be described—the 'acute disease model' and the 'chronic disease model', as 'motivation' is often reported as a clinical problem by the dominant model.

The acute disease model

This traditional model is one in which the patient presents symptoms of clear-cut acute illness, the physician makes a diagnosis of specific cause, and the condition is cured rather promptly by the administration of reliably effective medication or by other specific intervention. Patients are generally passive recipients of care. Progress is measured by monitoring the return to normal levels of well-defined laboratory and clinical parameters.

In this model there is an explicit premise that the illness is exclusively biological in origin and expression. The health care providers are concerned only with the physiological status of the patient. Indeed, one

leading physician in North America has called his diabetes education programme 'the beta cell'. One can imagine him beckoning "the next pancreas please" into his outpatient clinics. Other aspects of the patient's life are considered outside the sphere of influence of this model of care.

The chronic disease model

The 'chronic disease' model acknowledges that the burden of illness seen in most hospitals and in the community has shifted to chronic degenerative disease and long-term care. Motivation is seen as a major problem in long-term disorders. Engel, a leading medical educator, calls our attention to the psychological and social dimensions of the patient in addition to the biological systems involved in both health and disease.¹⁴ This biopsychosocial model becomes a vital comprehensive framework with which to understand the person and the disease. Human motivation can be more easily understood within this model.

The 'acute disease' model removes disease from its psychological and social contexts and tries to explain all abnormalities as the result of disordered biochemical events. Engel argues that this view is so dominant that it is the 'folk model of medical care'. It is not surprising that this biophysiological model of medical care ('acute disease') silently operates in every doctor-patient interaction. It is particularly pervasive in large, impersonal hospital outpatient clinics where pressures of time and resources further limit the roles and expectation in each consultation.

Motivation and the patient with diabetes

For the small minority of patients who are doing well, the clinic staff would attribute this outcome to the effectiveness of their programme. For the large majority, who are not doing so well, attributions vary from 'failure to become involved in treatment' to 'failure to comply with

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the regimen', or simply 'no motivation'. At the same time, it is thought quite inconceivable that those who have done well are positively motivated, persistent and have a strong desire for change. The patient cannot win.

Attribution is the process of assigning responsibility for a condition or change. We need to realize that when we attribute poor control to 'motivation' the beliefs of the patient and/or the physician are actually involved. King has recently provided a clear account of the role of the patient's beliefs and the importance of these beliefs in the doctor-patient alliance.¹⁵ It seems that the attributions of both parties play an important role in the interaction, which is far from problem-free in the crowded diabetes clinic. Warnings, threats, labels and anger are not uncommon where dedicated staff try to change the 'poorly controlled diabetic'. The person and the diabetes are treated as the same phenomenon. The model of care

(biological) may impede the change process (psychological and social) and, being a well established model, its influence is likely to be pervasive.

Some positive strategies

Attribution research is beginning to throw new light on understanding how human behavioural change occurs.¹⁶ If we attribute the clinical

If individuals see themselves as being responsible for having accomplished change, it is more likely that the change will be maintained.

problem of very frequent hypoglycaemic attacks (after persistent attempts to resolve the problem have failed) to stable internal characteristics, such as personality or IQ, resignation and loss of hope will follow. This kind of attribution is

clearly not helpful and is unlikely to lead to change. On the other hand, if the same clinical problem were attributed to unstable factors (either internal or external) the possibility of change and action thus exists.

For example, an unstable (and internal) attribution would involve the skills, priorities or effort of the patient. Or, an unstable (and external) attribution would potentially involve education, priorities or effort on the part of the medical or nursing staff. In both these cases, the possibility of change engenders hope and leads to action. Attributions of these kinds are clearly helpful. If individuals see themselves as being responsible for having accomplished change, it is more likely that the change will be maintained. If, on the other hand, a change (in any direction) is perceived as occurring because of accident, chance, someone else's action, medication, or some other factor outside the individual, then the person tends to feel less responsibility

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QUESTIONS FOR STRUCTURING A MOTIVATION-ENHANCING INTERVIEW

- Q1** What have you noticed about your diabetes that concerns you? Anything else?

- Q2** What do you think may have caused the problem?

- Q3** What would one do about a problem like this?

- Q4** Would you like to see the results of the laboratory investigations?

- Q5** Do you want evidence about the effects of this problem in the long term?
or:
Do you have any questions about this evidence?
or:
Do you want any specific information?

- Q6** Are you ready to consider one or two ways we might be able to tackle these problems?
Would you like to think about it?

Figure 2. A sequence of enquiry aimed at establishing formal therapeutic collaboration between the clinic staff and the patient with diabetes.

for it and consequently the change may not be maintained.¹⁷

There is, then, a strong case for measuring the actual pattern of attributions being used by each patient and physician. This is now an empirical reality in diabetes management since specific scales have been developed by Bradley and her co-workers in Sheffield,¹⁸ and these scales are being used in a major study promoted by the World Health Organization. This reformulation of the concept of motivation, in modern psychological terms, from a fixed entity to a changing interpersonal and cognitive process, suggests a systematic series of strategies intended to help the patient to move toward personal responsibility, active participation and sustained action. A sequence of enquiry aimed at establishing formal therapeutic collaboration is shown in Figure 2.

Enhancing motivation

The first three questions in Figure 2 about the problems and causes set the scene for the clinician. They invoke responsibility from a fellow adult, a member of the team. Sensible, changeable, constructive attributions are strongly reinforced. The physician can offer alternatives for unrealistic or destructive at-

Motivation needs to be viewed not as a fixed entity, but as a changing interpersonal and cognitive process.

tributions and encourage the patient to consider another view.

Question 4 provides an opportunity to share objective measures of the nature and severity of the patient's diabetes. These could in-

clude recent blood glucose values, and long-term measures of control such as HbA1, etc. This allows the patient as an adult to check various dimensions of evidence in relation to problems previously elicited.

Question 5 is the long-awaited opportunity to "teach and consult". Within the context of a sensitive personal interaction, specifically requested information or relevant questions are likely to be more effective than earlier unsuccessful 'package deals'. In effect, you are sharing information with the patient that is likely to be useful to that individual now.

With the right sort of strategies, diabetic patients can be helped towards personal responsibility, active participation and sustained action.

In question 6 (possibly at a second or even a third interview) you are beginning to tip the balance of the scales in favour of deliberate action by a responsible adult. It is useful, if the answer is yes, to offer options to the patient. One challenging option is "to do nothing", but if the patient makes a deliberate choice of an "active option" the chances of securing a formal therapeutic collaboration with the patient are higher.

This therapeutic sequence of open-ended questions and empathic listening precedes educational information specifically requested by the patient. Collaboration with more intensive treatment regimens are more likely to improve both patient satisfaction and metabolic control.

By integrating these basic psychological strategies with periods of home blood glucose self-monitoring, the patient will have an opportunity to discover the upper limits of his or her self-management skills. The physician will be able to differentiate insulin errors from dietary problems, specific educational needs from other life stresses (work and family are often held responsible

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for periods of poor control by patients). This information is part of the attributional style unique to each patient.

Primary care and diabetes

The whole ethos and framework of general practice encourages a comprehensive conceptual grasp of the patient in both health and disease. The primary health care team offers a model of care that can readily integrate these perspectives of the individual with diabetes. The organizational effort to link up with specialized hospital clinics will be repaid by producing better outcomes for most people with diabetes. □

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PRACTICAL POINTS

- When patients participate in decision-making in the consultation, not only is compliance improved, but there is increasing evidence of a better outcome in diabetics.
- Motivation can actually be improved during the general practice consultation.

BOOKS IN BRIEF

The value of preventive medicine. Ciba Foundation Symposium 110. Pitman (London) 1985. viii + 258 pages, price £27.95.

The Ciba Foundation's symposia are high powered, with highly eminent participants. This one is also highly practical and topical. The symposium was held in April 1984 and this book includes the prepared papers and discussion. The chairman was Professor A. G. Shaper of the Royal Free Hospital, and there are papers by Sir Richard Doll, Professor David Weatherall, Dr Tom Meade and Professor Geoffrey Rose.

The case for prevention is put, and examples given of successful exercises, but there is also questioning of attempts to put well-meant ideals into practice. The best suggestions for effective prevention are cessation of smoking, reduction of alcohol consumption, avoidance of certain foods, full immunization and cervical cytology.

This most challenging book includes honest discussions between experts on the dilemmas of con-

vincing the public and the medical profession that, while prevention is possible, it is not always technically feasible or economically worthwhile; it is certainly worth reading.

Culture, health and illness, by Cecil G. Helman. Wright (Bristol), 1985. xi + 242 pages, price £9 (paperback).

The author is Clinical Lecturer in General Practice at Middlesex Hospital Medical School and Honorary Research Fellow in Anthropology at University College, London. His book is readable, clear and practical, and makes anthropology relevant to the practising clinician. It provides background cultural definitions of anatomy and physiology, explains public attitudes to diet and nutrition, and discusses care and cure, medication, rituals and doctor-patient involvements. The book makes a worthy contribution to better understanding of our multi-racial society.