Challenges of empowering older people with type 2 diabetes: A review

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Article points

- 1.Older people with diabetes present unique challenges for diabetes care providers.
- Learning new behaviours is an ongoing process influenced by psychological, social and economic variables as well as personality factors.
- 3. DSNs and practice nurses are well-placed to aspire towards a more empowering style of delivering diabetes care.
- 4. Educational and training programmes for staff and carers of older people with diabetes in nursing homes needs to be prioritised.

Key words

- Empowerment
- Older people
- Psychological factors

Belinda Watt is a Senior Lecturer in Diabetes, Kingston University and St George's University of London. Maria Ponto is a Principal Lecturer in Nursing and Applied Psychology, Kingston University and St George's University of London, and Visiting Professor to Kemi-Torno University, Finland. The third standard of the *National Service Framework for Diabetes: Delivery Strategy* (DoH, 2003) states that the empowerment of people with diabetes is a key initiative that promotes personal control over the condition and optimal quality of life. Empowerment is a reflexive activity with a number of interpretations as discussed by Henshaw et al (2006). This article discusses some of the psychological variables that influence this concept and explores the appropriateness of the concept of empowerment to the care of older people with diabetes and offers some recommendations for practice.

There has been a substantial population growth of 8% between 1971 and mid-2006 that is not been evenly spread through different age groups (National Statistics, 2007). The proportion of those aged 85 years and over has increased at a faster rate than that for any other age group in the UK. Population growth in this age range is reported to have been 5.9% from 1971 to mid-2006 (National Statistics, 2007). Indeed, the National Service Framework for Older People (DoH, 2001) has stated that numbers of people in the older age range are predicted to continue to expand as people are now living longer into their eighties and nineties. The document goes on to remind us that older people should be treated as individuals and given the opportunity to make their own choices about their health. This will provide unique challenges for diabetes care providers.

The definition of old age is subjective – for the purposes of this article is defined as people who

are over 75 years old. There are great variations in the health status, physical abilities and independence of this population. Those whose self-care abilities are compromised may live in residential or nursing care-homes and this sector cares for greater numbers of people with diabetes than in the general population, with 1 in every 10 residents having diabetes (Croxson, 2000).

Type 2 diabetes is more common in those over 40 years of age and the risk of developing it increases with every decade of life; it therefore presents unique challenges in the management of diabetes in older people (Rizvi, 2007). In addition to the increasing ageing population, the prevalence of diabetes is also rising and it is estimated by Peck (2003) that it affects 10–25% of our older population in the UK.

Managing diabetes in partnership

The management of type 2 diabetes requires the individual to acquire and apply a daily and ongoing understanding about the effects of the condition on their health, together with the ownership of an individually tailored management plan for which they can take personal responsibility with the assistance of carers and family (Rizvi, 2007). In the simplest, most practical terms this relates to healthy eating, the management of physical activity, medication (possibly including administration of insulin) and glucose testing as well as the need to develop and sustain an ongoing professional relationship with the health care providers (Sinclair & Finucane, 2001). Through this relationship the older person with type 2 diabetes needs to acquire new knowledge and understanding which may require a change in previously held beliefs and attitudes and to adopt new behaviours.

Psychological factors

The successful learning of new behaviours is an ongoing process and is influenced by psychological, social and economic variables, as well as personality factors. Theories of personality can also provide some explanations for human behaviour in different circumstances (Furnham & Heaven, 1999) and this also applies to the diagnosis of a chronic condition such as diabetes.

Specific psychological factors include motivation, perception of control, health beliefs, attributions about health-related behaviours, self-concept, coping style, thinking style and self-efficacy. All of these influence the extent to which individuals are motivated to take control over their condition and whether they are able to integrate the meaning of a diagnosis of diabetes into their self-concept so that they can comfortably live with the demands it makes (Anderson, 1986).

Coping

Coping style influences how we deal with life events and, although it is acquired much earlier in life, it becomes prominent with age (Santrock, 2006). The integration of the personal meaning of a chronic condition, such as type 2 diabetes, into the self-concept may be difficult to achieve late in life and is likely to be influenced by individual health beliefs and attributions made about illness and health-related behaviours. Both the meaning of the diagnosis and emotional acceptance of the

condition have to be negotiated intrapersonally by each individual.

Locus of control

A useful concept to consider in this context is that of locus of control. The word 'locus' means a centre of control and in relation to this concept it explains how we perceive control over what happens to us (Ponto, 2006). People who believe that they can control outcomes which affect them are considered to have an internal locus of control. Conversely, those who perceive that doctors, nurses, fate or luck control what happens to them have an external locus of control. Attributing responsibility for a condition to others can negatively influence coping style. This is particularly relevant to older people; if they are not encouraged to be involved in monitoring their condition they may adopt a passive acceptance of adverse health outcomes. This in turn can lead to helplessness, frustration and depression, all undesirable states if older people are to be actively involved with their condition and treatment (Nagelkerk at el, 2006).

Another useful concept to consider is that of concrete or abstract thinking. Concrete thinkers like to have the information which is literal, obvious and immediately relevant as opposed to abstract thinkers who can understand generalisations and see shared patterns by different concepts (Santrock, 2006).

Patient scenarios

A hypothetical example which demonstrates the influence of an external locus of control with consequent lack of motivation and the effects of concrete thinking is shown in *Box 1*.

This example shows how the traits described above may be providing a useful initial defence mechanism but over time may serve to compound health problems. Mrs Jones' concrete-thinking style and external locus of control have affected her motivation, which in turn has reinforced her preference for letting others be in control of her diabetes care. This has not assisted her in making important connections between diabetes and the health benefits of understanding treatment and has adversely affected her wish to become a

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partner in her own diabetes care.

If people believe that they have control of their diabetes, they are more likely to pay attention to healthy eating, the timing of their meals and be more receptive to education about diabetes. It has been found that positive beliefs, even when these are based on false perceptions, can still be helpful in motivating people to manage their condition (Taylor & Brown, 1994).

The example in *Box 2*, while similar to that of Mrs Jones, attempts to illustrate the positive influence of an internal locus of control upon both motivation and learning from experience.

Despite sharing a similar life situation with Mrs Jones, Mr Pearce clearly shows an internal locus of control and strong motivation. His abstract thinking style has enabled him to grasp general concepts which may be applied to his unique

Box 1. A hypothetical case study demonstrating the influence of an external locus of control, lack of motivation and the effect of concrete thinking.

Mrs Jones is a 75 year old, slightly deaf widow who has some arthritis of her hands and knees and who has been recently diagnosed with type 2 diabetes. She lives alone and gets out to the local shops twice a week. Mrs Jones attended the local group education session for people with newly diagnosed type 2 diabetes over one half day and this gave her a partial insight into the condition. However, she was quite unused to learning and found aspects of the session difficult to follow. In view of her age and arthritis she did not feel much enthusiasm to make the needed lifestyle changes. She performs blood glucose monitoring intermittently so that she has blood glucose results to take to her diabetes clinic appointments where she expects to receive interventions to control the condition. She occasionally receives a different or additional tablet but is not really interested in knowing exactly what they are all for. She takes her medications most of the time because she knows they are good for her.

Six months later Mrs Jones is admitted to hospital to investigate her angina and says that she cannot believe her bad luck in now developing another health problem. However, Mrs Jones then expresses resignation and says she accepts this as all part of the natural course of her health in old age.

Box 2. A hypothetical case study demonstrating the influence of an internal locus of control on motivation and learning.

Mr Pearce is a 75 year old retired man with a BMI of $32\,\mathrm{kg/m^2}$ who has been newly diagnosed with type 2 diabetes. Mr Jones is a widower, is rather deaf and has some arthritis of his left hip. When he was diagnosed with type 2 diabetes he attended the local group education session for people with newly diagnosed type 2 diabetes over one half day. This gave him an insight into what having diabetes means and the need for healthy eating. He has also learnt how to monitor his blood glucose, why to do so and how to avoid complications. Mr Pearce had not been in a learning situation like this for some time but he sought information for himself about diabetes, its care and who provides it. He has been asking questions from friends and also rang his practice nurse. Since his diagnosis he takes a bit more exercise, chooses foods with more care and has attended appointments with his practice nurse so that his self-monitored blood glucose readings can be discussed.

When he developed some foot numbness a year later he saw the podiatrist as soon as possible who explained the dangers of sensory neuropathy. Mr Pearce was quite shocked to learn about this but used it as a positive educational experience for himself and now includes foot and shoe inspection in his daily routine.

health circumstances and health care needs. This has also given him the advantage of being able to foster a good relationship with his primary healthcare team who have responded positively.

Is the empowerment approach achievable?

There is no doubt that the empowerment approach is vital when working with people with diabetes. A blend of information-giving, psychological support and education needs to be sensitively offered and appropriately reoffered in an ongoing, facilitating and empathic professional relationship (Ewles and Simnett, 2003). The empowerment approach is not easily crafted and requires knowledge, confidence and practice experience as well as time. It is certainly in contrast with the philosophy of general nursing care delivery that predominates in modern secondary care settings where, by necessity, the medical model is used in the nurse-led delivery of hands-on care to assist sick people to get better.

Moreover, the empowerment approach is in conflict with the perspective and expectations of many older people who, being better acquainted with the traditionally distributed powerbase of the professional consultation where they are told what to do, find an invitation to create a partnership with their healthcare professional to be both initially unexpected and uncomfortable (Ogden, 2004). In addition, some older people may not be familiar with the demands of learning – they may have auditory, visual, cognitive or other physical deficits, as well as depression or other psychological difficulties that make engagement in the partnership problematic for both the individual and the healthcare professional.

But the difficulties are not just confined to individual personality traits and behavioural responses. The use of the medical model within nurse education has been the dominant influence during the 20th century. However, since the 1990s nurse education, under Project 2000, has promoted the empowerment approach to patient care (UK Central Council, 1986). This is consistent with current guidelines (DoH, 2003) but it provides a challenge to both qualified and unqualified nurses and carers who have not had earlier opportunities to practice these concepts

who may inadvertently reinforce concrete-thinking, external locus of control, helplessness and subsequent depression.

Going forward

DSNs and practice nurses are well-placed to aspire towards this professional ideological position and it is true to say that many clearly work with a facilitative and empowering style. They serve as excellent role models and currently disseminate good practice by example.

In order to provide appropriate care for older people with diabetes a regular and ongoing assessment of the individual's psychological needs should accompany the assessment of their diabetes and its control. This should include some careful exploration of feelings and emotions that the person with diabetes might have about their condition and should be done with the use of a robust and validated psychological tool that is tailored specifically for this purpose. An example of such a tool is the Brief Stress and Coping Inventory (Rahe, 1998; Rahe et al, 2000). Through talking to patients with the use of such a tool, health professionals can gain an insight into people with diabetes' unique personal meaning of the condition and how it affects their self-image (Hörnsten et al, 2004). Respect for the extent to which patients wish to express their autonomy must then guide the interventions that nurses plan with people with diabetes and their carers so that care includes appropriate goals and aspirations for all involved (Moser et al, 2006).

Recommendations

National nurse-education programmes need to actively promote the empowerment approach to a much greater extent and provide educational opportunities for nurses and healthcare assistants to practise working with an empowering style so that they may become skilled in assisting people with diabetes to develop confidence with their own self-care skills. There should also be a greater emphasis upon behavioural and social psychology within pre-registration and continuing professional development nurse education programmes to provide nurses with the ability to use such assessment tools and to interpret them confidently.

Additionally, there should be greater use of health psychologists when working with people with diabetes as they can offer expertise and support to both staff and patients in interpreting and managing assessment findings (Skinner, 2003; Clark, 2006). This view is shared by the DoH who believe that psychological support to promote self-management is important to diabetes care (DoH, 2003).

Nursing homes

Older people in nursing homes are one group who necessarily require active input by healthcare professionals to manage their

diabetes in order to maintain good health. Yet, as Richmond (2003) has stated, care home staff training in diabetes is lacking and Benbow et al (1997) have described older people in care homes as the 'forgotten population'.

Educational and training programmes for trained staff and carers of older people in nursing homes need to be urgently prioritised in the form of study days, workshops and other training opportunities within both the NHS and the private sector. The learning outcomes for these should include diabetes care in older people with an understanding of the physical and psychosocial variables which affect motivation, locus of control, self efficacy and thinking style later in life. Staff may then incorporate consideration of these variables into the goals they seek to achieve for each individual with diabetes within their care. To assist in meeting this challenge both sectors should employ nurse educators with teaching qualifications and experience who can devote their time to identifying trained and untrained staff learning needs and creating educational programmes to meet them. Specialist input for specialist needs such as those related to diabetes care and psychological support should be similarly prioritised with the involvement of DSNs in such education provision where possible (Diabetes UK, 1999).

One such initiative driven by DSNs within a PCT known to the authors is currently being developed. The DSNs have investigated the interest of local care homes in educating staff about diabetes but have found completion of their questionnaire to be lacking, with only 30% of targeted care homes responding. Such a poor response rate may be due to disinterest, negative reaction to the need to fill in a questionnaire or may be due to ignorance about the importance of providing optimal care for residents. Response rates for postal surveys vary and can be low if the topic is considered sensitive by the respondents, (Breakwell et al, 2000).

This PCT is aiming to stimulate interest in diabetes education by establishing an information day aimed at carers and healthcare assistants which would be followed by in-house training as demand arises.

Conclusion

There is considerable research linking perception of control, clear motivation, empowerment, and an abstract thinking style with positive outcomes in life in general and in the management of diabetes (Eiser et al, 2002; Ogden, 2004; Ponto, 2004) – as illustrated in the example in *Box 2*. On the other hand, the example in *Box 1* illustrates some of the difficult but surmountable challenges that a lack of psychological assessment within diabetes care presents for healthcare professionals.

Empowering older people is on the EU agenda (Tamsma, 2004) and boosting confidence of older people rather than

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encouraging dependency was identified by the DoH in 2006 as a priority for health care workers (DOH, 2006). As our ageing population grows, healthcare professionals need to reconsider their behavioural response that makes the didactic approach to patient education to be the common norm.

Clearly ethical issues emerge from these points which will challenge all who work with older people. Further research needs to be done to examine these and the wider social, political and economic forces which impact upon the clinical practice of diabetes care so that our dream may be experienced as reality for a greater number of older people with diabetes.

- Anderson RM (1986) The personal meaning of having diabetes: implications for patient behaviour and education or kicking the bucket theory. *Diabetic Medicine* 3: 85–9
- Benbow SJ, Walsh A, Gill GV (1997) Diabetes in institutionalised elderly people: a forgotten population? *BMJ* **314**: 1868–9
- Breakwell GM, Hammond S, Fife-Schaw C (2000) Research Methods in Psychology. Sage, London
- Clark M (2006) The long and winding road... Practical Diabetes International 23: 69–74
- Croxson S (2000) Diabetes in United Kingdom care homes. *Practical Diabetes International* 17: 70–1
- Diabetes UK (1999) Guidelines of practice for residents with diabetes in care homes. Diabetes UK, London
- DoH (2001) The National Service Framework for Older People. DoH, London
- DoH (2003) The National Service Framework for Diabetes: Delivery Strategy. DoH, London
- DoH (2006) Supporting people with long term conditions to self care: A guide to developing local strategies and good practice. DoH, London
- Eiser JR, Eiser C, Riazi A et al (2002) Interpretations of risk and expectations of change among individuals with types 1 and 2 diabetes. *Journal of Health Psychology* 7: 701–11
- Ewles L, Simnett I (2003) Promoting Health: A Practical Guide. 5th ed. Elsevier. London

- Furnham A, Heaven P (1999) Personality and Social Behaviour. Hodder Arnold, London
- Henshaw L (2006) Empowerment, diabetes and the National Service Framework: A systematic review. Journal of Diabetes Nursing 10: 128–35
- Hörnsten A, Sandström H, Lundman B (2004) Personal understandings of illness among people with type 2 diabetes. Journal of Advanced Nursing 47: 174–82
- Moser A, van der Bruggen H, Widdershoven G (2006) Competency in shaping one's life: autonomy of people with type 2 diabetes mellitus in a nurse-led, shared-care setting; a qualitative study. International Journal of Nursing Studies 43: 417–27
- Nagelkerk J, Reick K, Meengs L (2006) Perceived barriers and effective strategies to diabetes self-management. *Journal of Advanced Nursing* **54**: 151–8
- National Statistics (2007) Ageing. Office for National Statistics, Newport (Available at: http://www.statistics.gov.uk/CCI/nugget. asp?ID=949&Pos=&ColRank=1&Rank=326: accessed 11.01.08)
- Ogden J (2004) Health Psychology: A Textbook. 3rd ed. Open University Press McGraw-Hill, Maidenhead
- Peck G (2003) Community diabetes nursing in our ageing population. *Journal of Diabetes Nursing* 7: 181–3
- Ponto MT (2004) Locus of Control, an Exploration of Nursing Students' Views of Control, Autonomy and Satisfaction. Unpublished PhD Thesis. London South Bank University, London
- Ponto MT (2006) Psychology of Human Ageing. In Redfern S, Ross F (eds) Nursing Older People: A guide to practice in care homes. 4th ed) Churchill Livingstone, Edinburgh
- Rahe RH (1998) *Brief Stress and Coping Inventory.* Health Assessment Programs Inc., Reno, NV
- Rahe RH, Veach TL, Tolles RT, Murakami K (2000) The Stress and Coping Inventory: An educational and research instrument. Stress Medicine 16: 199–208
- Richmond (2003) Time to take stock of our care of older people with diabetes. *Journal of Diabetes Nursing* 7: 180
- Rizvi A (2007) Management of diabetes in older adults. The American Journal of Medical Sciences 333: 35–47
- Santrock JW (2006) *Life-Span Development.* 10th ed. Open University Press McGraw-Hill, Maidenhead
- Sinclair A, Finucane P (2001) *Diabetes in Old Age.* 2nd ed. John Wiley & Sons, Chichester
- Skinner C (2003) The role of the psychologist in diabetes care. $\it Modern\, Diabetes\, Management\, 4: 11-3$
- Tamsma N (2004), Advancing integrated care for older people through EU policy. European Health Management Association, Dublin
- Taylor SE, Brown JD (1994) Positive illusions and well-being revisited: separating fact from fiction. Psychological Bulletin 116: 21–7
- UK Central Council (1986) Project 2000 A new preparation for practice. UKCC, London