

Editorial

Diabetes: a public health issue for the twenty-first century

Paula McGee PhD RN RNT MA BA Cert Ed

Editor, *Diversity and Equality in Health and Care*; Professor of Nursing, Faculty of Health, Birmingham City University, Birmingham, UK

Mark RD Johnson MA PhD Dip HE (Warwick)

Editor, *Diversity and Equality in Health and Care*; Professor of Diversity in Health and Social Care, Mary Seacole Research Centre, De Montfort University, Leicester, UK

Diabetes is a long-term condition that arises because of changes in the way in which insulin is produced and used. Insulin is a hormone that facilitates the uptake of glucose, by cells, to produce energy; it also promotes the storage of glucose as glycogen, and plays an important role in lipid metabolism. Lack of insulin causes the levels of blood glucose to rise, with potentially life-threatening results. In type 1 diabetes the pancreas stops producing insulin, causing excessive thirst, frequent urination, fatigue and acute illness that requires immediate treatment and daily injections of insulin to maintain life. Type 2 diabetes develops when the pancreas cannot produce enough insulin for the body's needs. Obesity, genetics, ageing and ethnicity are all cited as possible reasons for inadequate levels of insulin, and treatment is usually concerned with encouraging lifestyle and dietary changes and the use of medication to either increase the secretion or promote the uptake of insulin. Other types of diabetes can occur, for example, during pregnancy, and recent reports suggest that insulin may also play a part in the development of Alzheimer's disease (see, for example, Craft *et al*, 2013; Trivedi, 2012).

Thus diabetes does not seem to be a single disease, but rather a cluster of conditions linked to the multiple roles of insulin. What is more, it is clear that there is an inescapable link between this condition and inequalities with causation, apparently in both directions – inequality can cause or exacerbate diabetes and having diabetes can cause conditions that lead to inequality. The causes, especially of type 1 diabetes, are not clear, but there is no doubt about the consequences of raised levels of blood glucose, which include heart disease, stroke, kidney malfunction, retinopathy, neuropathy, sexual dysfunction, and ultimately multi-organ failure. Diabetes occurs everywhere; an estimated 371 million people worldwide have been diagnosed with the disease. Millions more, especially

those with type 2 diabetes, do not realise that they have the disease until symptoms associated with the condition arising from high levels of blood glucose cause them to seek help (www.idf.org). Diabetes accounted for nearly five million deaths in 2012 alone. Most of these deaths (80%) occurred in low-income countries; 50–80% were due to heart disease and 50% of all diabetes-related deaths occurred among younger adults, under 60 years of age, who would otherwise be economically active (World Health Organization, 2013). There is also no doubt that type 2 diabetes seems to be associated with increasing affluence. Societies in transition from traditional ways of life to modern lifestyles that are frequently more sedentary 'experience the dual impact of communicable diseases and rising levels of chronic conditions such as heart and lung problems, diabetes, cancer and arthritic problems' (Khaliq, 2012, p. 59). China, India, the Gulf States, the western Pacific nations and many others are all experiencing a rise in the incidence of type 2 diabetes, and African nations are expected to follow suit. Developed countries face similar problems. Three million people in the UK, 25.8 million Americans (American Diabetes Association, www.diabetes.org) and 898,000 Australians (Australian Institute of Health and Welfare, www.aihw.gov.au) are known to have the disease; most of them have type 2 diabetes. It is anticipated that, by 2030, diabetes and its attendant consequences will be the seventh leading cause of death worldwide (World Health Organization, 2013). The cost to societies and health services across the world is already huge, and it is still increasing. In 2007, health services spending on diabetes was estimated to be US\$421.7 billion, with North America and European countries being the largest spenders (Diabetes Atlas, <http://da3.diabetesatlas.org>). The UK alone spends nearly £10 billion on diabetes, and it is anticipated that this figure will have doubled by 2035 (Diabetes UK, www.diabetes.org.uk).

Diabetes is therefore a disease that causes serious health problems, permanent disability, considerable suffering and untimely deaths. The already high individual, social and economic costs are escalating. The incidence of diabetes is now a worldwide epidemic, but it is one that is largely of our own making. We may not yet know the causes of type 1 diabetes, but we certainly do know why so many of us have type 2. Attempts to bring about change at an international level are encapsulated in the World Health Organization's Diabetes Programme, which aims 'to prevent diabetes whenever possible and, where not possible, to minimize complications and maximize quality of life. Our core functions are to set norms and standards, promote surveillance, encourage prevention, raise awareness and strengthen prevention and control' (www.who.int/diabetes). In the UK, the National Institute for Health and Clinical Excellence (NICE) (2011, p. 8) states quite clearly that 'being overweight or obese is the main contributing factor for type 2 diabetes.' Losing weight and taking more exercise are essential, and NICE recommends a national strategy that incorporates a range of interventions at government, community, local and individual levels. Preventing type 2 diabetes is an issue for the whole population, but some groups, such as South Asians, are at particularly high risk of developing this disease, and therefore require particular attention. Like the WHO, NICE advocates a mixture of prevention and surveillance. The International Diabetes Federation has named Thursday 14 November 2013 World Diabetes Day (www.idf.org). This event marks the culmination of a 5-year campaign to raise awareness about the disease and encourage people to take action through a series of symbolic steps. Wearing a blue badge for diabetes awareness represents 200 symbolic steps, moderate physical activity represents 1000 steps, and a group activity involving over 100 people is equivalent to 10 000 steps. The more steps you take in your own physical daily life, the less likely you are to contract diabetes, which means there is a clear link here.

Inherent in all these plans and recommendations is the wish to educate people about diabetes. The problem is that faced by all health promotion campaigns, namely how to persuade people to voluntarily change their lifestyles. This is not an easy task. Individuals may be willing to make adjustments while they feel ill, but once their symptoms improve they go back to their old ways. Motivation to make permanent changes depends on the individual's perception of their likely susceptibility to the specific condition (*Will it happen?*), the severity of the specific condition (*How bad will it be?*), the consequences for their personal life (*How will it affect me?*), the benefits of action (*Will it really make any difference to my life?*), obstacles to be overcome (*How difficult is it? Can I keep it up?*), and the

ability to do what is needed (*Can I do it? Can I afford it? Can I be bothered?*) (Ogden, 2001). The diagnosis of any long-term condition immediately sets up a series of concerns about control (*Do I live with diabetes or does diabetes live with me? And whose diabetes is it anyway – the clinic's or mine?*). Professionals, with the best of intentions, educate and encourage, and they may try their best to tailor their advice to each individual. Weight loss and increased exercise will restore blood glucose to normal or near normal levels, but the effort required to maintain these changes is not easy to sustain. Motivation wanes and people take holidays from their diabetes (Kinmond *et al*, 2003). Moreover, for some individuals, no amount of effort seems to yield the required results and they eventually stop trying. Allied to this is the incidence of depression. People with diabetes are twice as likely to experience depression as members of the general population (Diabetes UK, 2010). This depression is bidirectional, that is, a diagnosis of diabetes and the possible complications, which may already be evident, can lead to depression, and depression itself may lead to reduced levels of activity and increased comfort eating (Pan *et al*, 2010). Motivation to engage in regular exercise and weight loss is important for managing both diabetes and depression.

However, motivation is not the only factor that needs to be considered. The western media in developed societies produce a constant barrage of information about 'lifestyle.' Changing one's lifestyle by adopting, for example, the latest exercise craze is portrayed as the key to happiness, eternal youth and success. An 'unhealthy lifestyle', which may refer to anything from using the 'wrong' face cream to any feature of modern life, is now regarded as a principal contributor to sickness and disease, precipitating a range of initiatives aimed at informing the public about the perils of living as they do and the risks that they incur. People are saturated with 'advice', some of which is correct but not always easily distinguishable from the lunatic or just plain wrong. In this context, information about the perils of type 2 diabetes is just one more message about 'lifestyle', and is greeted with cynicism. It also encourages superficiality. Running a marathon for cancer or dancing for diabetes will not change anything; the real hard work of living with diabetes and every other long-term condition is often a long and lonely process of sifting through 'advice' from multiple sources to find out what works and what does not. Diabetes is a complex disease that we have barely begun to understand, so we urge our readers to support efforts that really help sufferers to find the best solutions. We hope that World Diabetes Day 2013 will not be the end but rather the beginning of a way forward in preventing the misery of this disease.

In this issue

We begin this issue with another long-term condition, cardiovascular disease. Elizabeth McGibbon *et al* (2013) highlight the relationship between the stressors of racism and colonialism and the onset of this disease. She acknowledges the influence of factors we have discussed, such as obesity and diabetes, but argues that colonialism inflicts grievous psychological damage that continues over generations like an ever-present memory. The withdrawal of the colonising power is not enough; the mindset induced by colonialism must also be addressed (Chinweizu, 1987; Fanon, 1952; Silverman, 2006). This issue is rarely formally addressed, particularly in western discourses, and we hope that this editorial will spark interest in this subject.

Several of our research papers highlight the complexity of help seeking undertaken by patients. First, Miriam Delphin-Rittmon and her colleagues (Delphin-Rittmon *et al*, 2013) present an examination of clients' experiences of healthcare. Those accessing culturally specific services reported feeling more secure and able to build trusting relationships with professionals. The desirability or otherwise of culturally specific services certainly deserves more attention, but also of interest here are the ways in which clients selectively engage with professionals in any setting by providing or withholding information. Our second paper continues the theme of cultural specificity. Joan Koss-Chioino and Jesus Soto Espinosa (2013) interviewed Puerto Rican doctors about the ways in which they draw on both their medical knowledge and their spiritual beliefs in their practice with patients. Their aim is to treat each individual holistically in ways that are congruent with local values and beliefs.

Our third paper focuses on another long-term condition, namely mental ill health among members of Black and other minority ethnic groups in the UK and other developed countries. There is overwhelming evidence of the multiple ways in which they experience disadvantage at every step of their way through mental healthcare systems. Roiyah Saltus and colleagues (Saltus *et al*, 2013) add to this literature with their analysis of data about Wales. Until recently Wales received very little attention in its own right; data about the country were always included with information about England. Since the referendum of 1997, which began the process of devolution, Wales has received more attention from researchers. This paper presents baseline data about Black and other minority mental health service users which is expanded in our Continuing Professional Development paper that will be of use to those wishing to pursue further research in this field.

Our last two papers focus on education topics. Margaret Stone and her colleagues (Stone *et al*, 2013)

take us back to diabetes and the importance of insulin in the management of this disease. Injecting oneself every day can be a challenging experience, but it seems that people of South Asian origin are particularly reluctant to accept insulin treatment, possibly because of a combination of factors, including lack of understanding about the disease, fear of what relatives will say, or fear of being mistaken for an illegal drug user and/or squeamishness about injecting. This particular paper outlines one attempt to train professionals and other care providers to address the need for insulin injections more effectively with South Asian people. In our final paper, Mary-Anthea Row and her colleagues (Row *et al*, 2013) report an investigation of exercise for postpartum women who are members of minority groups, and reveal the complexity in what first appears to be a straightforward issue. Their findings reinforce the message that, where exercise is concerned, one size does not fit everyone. At the same time they reveal how, through an apparently simple issue such as exercise, traditional social structures are used to curtail women's lives and the choices that they can make. Although this paper could be used to argue for culturally specific exercise classes of some kind, it also points to the dangers of shoring up outmoded ideas and power structures that undermine the welfare of women worldwide.

Finally, in this issue we have our usual features. In the *Practitioner's Blog* Hannah Headden provides a sensitive account of caring for a man with dementia, care that we might all wish to receive in later life. *Did You See?* reviews an interesting paper about the treatment of psychosis and, as usual, *Knowledgeshare* includes the usual mixture of reviews, news and resources of interest to our readers.

REFERENCES

- Chinweizu (1987) *Decolonising the African Mind*. Pero Press.
- Craft S, Cholerton B and Baker LD (2013) Insulin and Alzheimer's disease: untangling the web. *Journal of Alzheimer's Disease* 33 (Suppl. 1):S263–75.
- Delphin-Rittmon M, Bellamy CD, Ridgway P *et al* (2013) 'I never really discuss that with my clinician': US consumer perspectives on the place of culture in behavioural healthcare. *Diversity and Equality in Health and Care* 10:143–54.
- Diabetes UK (2010) *Diabetes in the UK. Key statistics on diabetes*. www.diabetes.org.uk
- Fanon, F (1952) *Peau Noire, Masques Blancs*. France: Editions du Seuil.
- Khaliq A (2012) The Saudi health care system: a view from the minaret. *World Health and Population* 13:52–64.
- Kinmond K, McGee P, Gough S *et al* (2003) "Loss of self": a psychosocial study of the quality of life of adults with diabetic foot ulceration. *Journal of Tissue Viability* 13:6–8, 10, 12, 14, 16.

- Koss-Chioino JD and Espinosa JS (2013) Science and spirituality in the clinic: medical doctors in Puerto Rico. *Diversity and Equality in Health and Care* 10:155–64.
- McGibbon E, Waldron I and Jackson J (2013) The social determinants of cardiovascular disease: time for a focus on racism. *Diversity and Equality in Health and Care* 10:139–42.
- National Institute for Health and Clinical Excellence (2011) *Preventing Type 2 Diabetes: population and community interventions (PH35)*. www.nice.org.uk/ph35
- Ogden J (2001) Health psychology. In: Naidoo J and Wills J (eds) *Health Studies: an introduction*. Basingstoke: Palgrave. pp. 69–100.
- Pan A, Lucas M, Sun S *et al* (2010) Bidirectional association between depression and type 2 diabetes mellitus in women. *Archives of Internal Medicine* 170:1884–91.
- Row MA, Nevill AM, Bellingham-Young D *et al* (2013) Promoting positive postpartum mental health through exercise in ethnically diverse priority groups. *Diversity and Equality in Health and Care* 10:185–95.
- Saltus R, Downes C, Jarvis P *et al* (2013) Inpatients from black and minority ethnic backgrounds in mental health services in Wales: a secondary analysis of the *Count Me In* census, 2005–2010. *Diversity and Equality in Health and Care* 10:165–76.
- Silverman, M (2006) *Frantz Fanon's 'Black Skin, White Masks': New Interdisciplinary Essays*. Manchester: Manchester University Press.
- Stone M, Patel N, Amin S *et al* (2013) Developing and initially evaluating two training modules for healthcare providers, designed to enhance cultural diversity awareness and cultural competence in diabetes. *Diversity and Equality in Health and Care* 10:177–84.
- Trivedi B (2012) Eat your way to dementia. *New Scientist* 215:32–7.
- World Health Organization (2013) *World Diabetes Day 2012*. www.who.int/diabetes/en