# **Denialism and diabetes**

he year 2015 will see a general election looming in the UK. Already politicians are jockeying to make vapid "sound-bite policies", which may resonate with their electorate but are not grounded in evidence or evidence-based policy. The latest of these has been the UK Health Secretary's promoting of screening for dementia (Kmietowicz, 2014), an unnecessary distraction as he ducks a more difficult intervention to counter the rising tide of obesity. It would also appear that the current Government's management of the NHS in England is emerging as a key election agenda. Many people would argue that all democratic governments have very short time horizons once in office, and so few are prepared to take bold initiatives to improve public health, as such recommendations will inevitably be painful for their electorate in the short term.

Some have described this strategy as based on denialism (Diethelm and McKee, 2009). The concept of denialism is the employment of rhetorical arguments to give the appearance of legitimate debate where there is none, an approach that has the ultimate goal of rejecting a proposition on which a scientific consensus exists. This was well illustrated by a previous Government's approach to passive smoking until public opinion became overwhelming.

However, we need to be careful to avoid denialism ourselves in areas of diabetes care in which evidence and guidance do not support our everyday practice. I would argue that the Quality and Outcomes Framework (QOF) of the past 10 years, as well as clear evidence-based guidance from NICE and SIGN, has served us well as a diabetes community. We are better than many at applying everyday evidence to our patients; however, we can fall short in other areas in which QOF does not offer practices a resource. In this editorial I will examine areas in which evidence is being applied less enthusiastically.

#### Impaired glucose handling

Epidemiological trends tell us that within our practices we are certain to have large numbers of people with problems of glucose handling,

be they with or without obesity (Mainous et al, 2014). Most of us choose not to seek out this cohort of patients because, although the DPP (Diabetes Prevention Program) studies may offer us robust evidence for an intervention in this group (DPP Research Group, 2009), there is no financial support for what is an expensive and life-long treatment requiring considerable patient education, empowerment and engagement. Fortunately, in the UK, we have avoided the "prediabetes" term used by the American Diabetes Association, the value of which has recently been debated by Yudkin and Montori (2014) in the BMJ, in which they argue convincingly that we should not be drawn into treating non-illness as a distraction from engaging robustly with people with diabetes.

Staying in the sphere of prevention of diabetes, an editorial in the last edition of Diabetes & Primary Care highlighted the increasing trend to normalise obesity in children (Pryke, 2014). No one is denying this, but many will find a robust conversation with a parent about an obviously overweight child difficult, not least given that, as the article suggests, evidence-based interventions are multifaceted and complex and not available to many practices. However, there is clear emerging evidence of harm from obesity, as a child who arrives in adolescence with obesity runs a considerable lifetime risk of both diabetes (Ganz et al, 2014) and cancer (Bhaskaran et al, 2014). Once again, faced with clear evidence, Government strategies are high on rhetoric but low on specifics when they require meaningful engagement with the prolific food industry.

Obesity and diabetes go hand in hand. There is very clear emerging evidence of benefit from bariatric surgery in people with diabetes and obesity. Are we denying this evidence or are our clinical commissioning groups and health boards denying our patients access to this important intervention? The evidence indicates that bariatric surgery is an important intervention both in obese people and in those with type 2 diabetes, and a much more successful intervention than conventional oral treatment (Schauer et al., 2014).



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Unfortunately, there is considerable selection bias in the studies. Many were American studies conducted in specialist centres in younger people with lower BMIs than we might consider referring for such a significant procedure. Studies of people who undergo bariatric surgery are telling us a lot about the emerging science of gut hormones and their role in diabetes (Thomas and Schauer, 2010). It appears that bariatric surgery will emerge as a very important intervention in the future for people with diabetes, particularly if less invasive techniques are found to be ineffective. From the point of view of politicians, bariatric surgery highlights a recurring NHS problem of short-term financial horizons where intervention could prevent long-term costs.

### The person with type 2 diabetes

We have repeatedly evaluated the role of QOF for diabetes on the pages of this Journal, concluding that it initially helped a lot of general practices to develop a robust approach to the management of diabetes, although its initial impetus plateaued in the subsequent decade. QOF remains our principal funding stream and benchmark for delivering diabetes care. One of its chief benefits was the rewarding of a multifactorial approach to diabetes, as described in the Steno-2 study (Gaede et al, 2008), by which treatment of hypertension and cholesterol to target are rewarded almost equally to addressing HbA, levels. However, we also know that the most important time to apply a robust glucose-lowering strategy is within the initial phase after the illness is diagnosed (Nathan et al, 2009). This is only indirectly rewarded by QOF. We know from studies such as ACCORD (Action to Control Cardiovascular Risk in Diabetes), VADT (the Veterans Affairs Diabetes Trial) and ADVANCE (Action in Diabetes and Vascular disease: Preterax and Diamicron MR Controlled Evaluation) that intensive glucose-lowering interventions later in the time course of diabetes offer little advantage to the patient in terms of cardiovascular outcomes. These findings were reinforced by ADVANCE-ON (the ADVANCE Post Trial Observational Study), which was reported recently and emphasised the importance of tight blood pressure control but found no longterm macrovascular benefit resulting from the strategy of intensive glycaemic control (Zoungas et al, 2014).

Equally lost within our audit systems are a number of individuals with very poor diabetes control, many of whom are in a much younger age group and often have type 1 diabetes. They represent a lost but significant tribe in all practices and should certainly be considered hard-to-reach groups. The problem with QOF would appear to be that the rising tide of diabetes means that many people are entering diabetes registers in practices at relatively low HbA<sub>1c</sub> levels, making it easy to achieve QOF HbA<sub>1c</sub> targets without actively seeking out and treating hard-to-reach groups. It is wrong to deny that we are letting these groups down, and it is quite clear we are. Recently in this Journal, we looked at the phenomenon of postcode lotteries in diabetes care in the NHS (Kenny, 2014). These differences within regions of England make for uncomfortable reading but there is no clear direction on how these deficiencies are to be addressed.

#### Time and tide

In his poem Tam O' Shanter, Robbie Burns said, "Nae man can tether time or tide." There is no denying the passage of time, and I am recognising this by finishing my tenure as Editor-in-Chief of Diabetes & Primary Care at the end of 2014. It has been a very interesting, challenging but ultimately very rewarding 8 years. The Journal has sought to reflect on emerging evidence in diabetes care, and how it applies in primary care. Diabetes policies, practices and guidance have changed, and we have tried to reflect this in a balanced way. Many more pharmaceutical agents and classes have emerged, and others have declined in popularity. Diabetes prescribing is an important part of the healthcare prescribing budget, and this is reflected in this edition of the Journal (on page 286). The Journal has also sought to report the growth and business of the Primary Care Diabetes Society, which has emerged as an important and influential charity supporting education in diabetes.

Primary care's function as a gatekeeper to more specialised care is dependent on a division between care levels, and there is no denying that closer "There is no denying that closer collaboration between primary and secondary care would benefit people with diabetes, especially if it placed them at the focus of care."

collaboration between primary and secondary care would benefit people with diabetes, especially if it placed them at the focus of care. It is a matter of regret that better examples of collaborations have not emerged.

So as I close this chapter of work, it is with great pleasure that I look back on the active collaborations with editors and authors who made the past 8 years so enjoyable, and I am happy to leave the job of Editor-in-Chief in the capable hands of Dr Pam Brown. I also look forward to continuing my pledge to deliver important emerging evidence to healthcare professionals working in primary care, through my work with Diabetes Distilled.

Bhaskaran K, Douglas I, Forbes H et al (2014) Body-mass index and risk of 22 specific cancers: a population-based cohort study of 5.24 million UK adults. *Lancet* **384**: 755–65

Diabetes Prevention Program Research Group (2009) 10-year follow-up of diabetes incidence and weight loss in the Diabetes Prevention Program Outcomes Study. *Lancet* **374**: 1677–86

Diethelm P, McKee (2009) Denialism: what is it and how should scientists respond? Eur J Public Health 19: 2–4

Gaede P, Lund-Andersen H, Parving HH, Pedersen O (2008) Effect of a multifactorial intervention on mortality in type 2 diabetes. N Engl J Med 358: 580–91

Ganz ML, Wintfeld N, Li Q et al (2014) The association of body mass index with the risk of type 2 diabetes: a case–control study nested in an electronic health records system in the United States. Diabetol Metab Syndr 6: 50

Kenny C (2014) Diabetic foot disease: politics, podiatrists and postcode lotteries. Diabetes & Primary Care 16: 167–70

Kmietowicz Z (2014) Doctors condemn "unethical" £55 payment for every new dementia diagnosis. *BMJ* **349**: g6424

Mainous AG, Tanner RJ, Baker R et al (2014) Prevalence of prediabetes in England from 2003 to 2011: population-based, cross-sectional study. *BMJ Open* **4**: e005002

Nathan DM, Buse JB, Davidson MB (2009) Medical management of hyperglycemia in type 2 diabetes: a consensus algorithm for the initiation and adjustment of therapy: a consensus statement of the American Diabetes Association and the European Association for the Study of Diabetes. *Diabetes Care* 32: 193–203

Pryke R (2014) It is time for urgent action on childhood obesity. *Diabetes & Primary Care* **16**: 240–1.

Schauer PR, Bhatt DL, Kirwan JP et al (2014) Bariatric surgery versus intensive medical therapy for diabetes – 3-year outcomes. *N Engl J Med* **370**: 2002–13

Thomas S, Schauer P (2010) Bariatric surgery and the gut hormone response. *Nutr Clin Pract* **25**: 175–82

Yudkin JS, Montori VM (2014) The epidemic of pre-diabetes: the medicine and the politics. BMJ 349: g4485

Zoungas S, Chalmers J, Neal B et al (2014) Follow-up of bloodpressure lowering and glucose control in type 2 diabetes. N Engl J Med 371: 1392–406

## A note from the publisher

I would like to take this opportunity to offer my sincere thanks on behalf of the Journal and its readers to Colin Kenny and Gwen Hall, both of whom will be stepping down after this issue. Colin has served as Editor-in-Chief for *Diabetes & Primary Care* for 8 years, while Gwen has been Associate Editor-in-Chief for the past 14 years. We are indebted to their leadership and their efforts in helping make the journal what it is today.

I am also delighted to be able to announce that Pam Brown (GP, Swansea) and Jane Diggle (Practice Nurse, West Yorkshire) will be stepping into the roles of Editor-in-Chief and Associate Editor-in-Chief, respectively. Pam and Jane are long-time supporters of the Journal, both as regular contributors and as editorial board members.

**Simon Breed,** Publisher *Diabetes & Primary Care*