New perspectives and persisting inequality

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At this point in the year most of us are taking stock of the pounds lost from our wallets, and the pounds gained around our waists as a result of the festive season. Hopefully the people we look after with diabetes and chronic diseases are thinking similarly – and are, therefore, motivated to take action, including seeking our advice. But how can we capture their motivation and what advice should we provide?

Looking at TV and media coverage early in 2017, I was concerned by the confusing messages and short-term, often bizarre, "diets" featured. Rather than harnessing motivation and sharing positive messages that weight loss is achievable and worthwhile, the focus was often on negativity and lack of practical, sustainable, advice relevant to the general population.

We are all committed to individualising drug therapy for people with diabetes, yet we often forget or do not have the skills to individualise when motivating people to think about diet and lifestyle changes. Historically, our messages were didactic and revolved around things to remove from the diet, often recommending that people stop eating many of their favourite foods. Perhaps we should instead encourage people to add beneficial foods to their diet. So this year I will be encouraging people to add more colour to their plates, to add more nuts, oats, olive oil and vegetables to improve cardiovascular disease (CVD) risk and to add fruit, vegetables and low-fat dairy to reduce blood pressure. If I only have time for one message as people leave my consulting room, it will be encouraging them to add "real foods" to their diet each day – fresh foods that don't come out of a packet or a box. Jane Diggle's comment on page 10 shares how her perspective on diet advice has also changed recently, and we will be exploring in the Journal how we can support people with diabetes to make lifestyle changes throughout 2017.

Chronic kidney disease

The National Chronic Kidney Disease Audit (Healthcare Quality Improvement Partnership [HQIP], 2017) published in January 2017 contains data from 911 practices (around 74% of practices in Wales and 8% of practices in England), with the final data extracted in June 2016. The pilot study (HQIP, 2015) looked at practices in June–December 2014, testing the software and QI tools for the full audit. Key findings from this pilot were that only around 50% of those with estimated glomerular filtration rate (eGFR) evidence of CKD stage 3–5 had this coded in their record. As a result, the prevalence was 2.6%, which matched the captured Quality Outcomes Framework (QOF) prevalence for that time. QOF and other agencies calculate and report CKD prevalence differently, with QOF prevalence figures often slightly lower.

The final audit report covers 1.5 million people with CKD or risk factors for CKD, making it the largest audit of primary care management of CKD ever undertaken globally. It highlights that most CKD management is now undertaken in primary care and reminds us of the importance of prompt diagnosis and management to slow progression of CKD, to reduce impact on CVD risk and to increase care when prescribing. Often forgotten is the increased risk of acute kidney injury (AKI) in those with CKD, as well as AKI causing or worsening CKD.

The overall prevalence of CKD in the UK is 5.5%, with increasing prevalence with advancing age. According to the final audit (HQIP, 2017), around 4.2% were coded and the remainder either met diagnostic criteria and were not coded, or only had one reading <60 mL/min/1.73 m^2 and none >60 mL/min/1.73 m^2. The report outlines the key risk factors for CKD – those with diabetes or receiving treatment with lithium or calcineurin inhibitors requiring annual testing, and those with hypertension, CVD, kidney stones, prostatic disease, connective tissue diseases and family history of kidney disease are recommended to receive 5-yearly testing. The report makes three recommendations for improving care. Firstly, we are reminded, as with the NICE (2014) guideline, to use both blood (eGFR, creatinine) and urine (albumin:creatinine ratio [ACR]) tests in those at risk to identify and to monitor CKD. Of those with diabetes in the audit, 80% had eGFR and only 30% had ACR within the last

Quick guide

- Remember to multiply the eGFR of people of African and Caribbean origin by 1.159 to account for their increased muscle mass.
- The Patient Kidney Care Card can be accessed, personalised for each patient and downloaded from **http://bit.ly/2j9YSr6**

year. ACR testing was much more likely in those with diabetes than those with hypertension. Secondly, teams are encouraged to review their practice to improve coding (70% of those meeting biochemical parameters for CKD 3–5 were coded; 11% coded CKD 3–5 had no current biochemical evidence of CKD). Finally, once coded, patients should have reviews at appropriate intervals, management of blood pressure and cholesterol and appropriate vaccinations (75% of those with CKD had had flu immunisation but less than a quarter of those with CKD 4–5 had the recommended pneumococcal immunisation).

This audit demonstrates high levels of good practice in diagnosing, coding and managing those with CKD in primary care, with significant increase in coded prevalence since the pilot in 2014. However, there is still room for improvement, as wide variations between practices persist. Those of us who participated in the audit received feedback on our achievements, as well as useful tools to improve coding and management. We will be tidying up our coding and undertaking more testing, improving our ethnicity recording and reviewing those in Black minority groups to ensure we have multiplied eGFR readings by 1.159 to account for increased muscle mass. Even if you did not participate in the audit, these are worthwhile steps to improve care. One of the most important things we can all do is to keep reminding patients with CKD, as well as our frail elderly, to stop potentially damaging medications when they are at risk of fluid depletion, such as when they develop diarrhoea or vomiting. The Patient Kidney Care Card can be personalised and downloaded from http://bit.ly/2j9YSr6.

On page 13, you will find the first of our new "How to..." series on how to diagnose, monitor and manage microalbuminuria. These articles are designed to provide a quick reference guide to clinical procedures and aspects of diabetes care that we undertake frequently in the clinic setting. We hope you will tear them out and pin them on your wall to refer to during consultations. Let us know what topics we should cover in future issues (**dpc@omniamed.com**).

New perspectives

Ralph Waldo Emerson warned us that "The mind, once stretched by a new idea, never returns to its original dimensions." Reading *Busy* by Tony Crabbe changed my perspective, making me realise just how potentially dangerous current levels of "busyness" may be for patients and ourselves. Two recent papers likewise made a significant impact on my perspectives on obesity and pregnancy, and diabetes prevention.

Cundy and Holt (2017) in their commentary on gestational diabetes in *Diabetic Medicine*, remind us that all the common morbidities attributed to gestational diabetes are also associated with maternal obesity and excessive weight gain during pregnancy, even when these occur in normoglycaemic women. Pregnant women with obesity are at increased risk of pre-eclampsia, respiratory, wound and urinary tract infections, deep vein thrombosis, shoulder dystocia and higher rates of caesarean section than those with lower BMIs. Since obesity is much more prevalent than gestational diabetes, the authors highlight that the overall impact is significant – for example more than 97% of deliveries complicated by shoulder dystocia occur in women without gestational diabetes, as do more than 95% of cases of pre-eclampsia. In primary care, we would benefit from widening our focus from the small numbers with gestational diabetes, to helping women avoid excessive weight gain during pregnancy, and very actively encouraging weight reduction preconception and in the post-natal period in those who are obese or overweight, in preparation for subsequent pregnancies.

Those who do develop gestational diabetes have seven times higher risk of progressing to type 2 diabetes than those without (Bellamy et al, 2009), with 70% developing the disease within 10 years (Kim et al, 2002), so annual testing and intensive lifestyle advice are clearly important for these women. The pregnancy continuing professional development module on page 35 provides practical advice on all aspects of managing diabetes before, during and after pregnancy.

Professor Waugh's (2017) editorial in the *BMJ*, and the linked systematic review and meta-analysis on diabetes prevention (Barry et al, 2017), remind us that HbA_{1c} has poor sensitivity and specificity in diagnosing those with non-diabetic hyperglycaemia or pre-diabetes, while fasting glucose levels are specific but not sensitive. Most of the prevention

studies analysed by Barry et al (2017) used 75-g oral glucose tolerance test for diagnosis and focused on those with impaired glucose tolerance who have higher rates of progression to type 2 diabetes than those identified by either HbA_{1c} or impaired fasting glycaemia. These screening tests, as we know, identify different populations with only some overlap. So although the interventions recommended for those diagnosed at high risk can be effective in reducing or slowing progression to type 2 diabetes, using such a screening approach to target interventions, as recommended by NICE (2012) may mean they do not reach all who would benefit. Two-thirds of those who developed type 2 diabetes in the EPIC Norfolk study (Chamnan et al, 2011) had baseline HbA_{1c} of <42 mmol/mol (<6%) meaning they would not have qualified for the intensive lifestyle intervention. Screen and treat programmes, such as the NHS Health Checks and Diabetes Prevention Programme (DPP), may only identify and target some of those at high risk, leaving others falsely reassured and with less support. The alternative of a population programme, where we use brief intervention to encourage healthy lifestyle changes across the whole population, would be prohibitively more labour intensive. NICE (2012) does recommend brief advice to those at lower risk, and this could offer significant long-term benefits, particularly if combined with the intensive lifestyle programmes currently being rolled out. Clearly further research is needed, but perhaps in the meantime we should consider broadening our approach to discuss behaviour change with those who do not meet the criteria for intensive programmes.

Inequality

In England, diabetes prevalence is 50% higher in the quintile with greatest deprivation compared to the quintile of least deprivation. An English longitudinal study published in 2016 (Fleetcroft et al, 2016) shows that although HbA_{1c} levels improved across all groups in England between 2004/5 and 2011/12, unlike what is happening in the US, inequalities remained between deprived and non-deprived groups. The amenable mortality (mortality in those <75 years) from diabetes-related causes fell amongst all groups over this time, falling faster in areas of high deprivation, despite the rise in diabetes prevalence in England from 3.3% to 5.8%. There was, however, a faster rise in the number of emergency diabetes hospitalisations in neighbourhoods of high deprivation compared to those with little deprivation, with an increase in both hypoglycaemia and ketoacidosis. This is attributed to improved survival of "'unhealthy" cohorts with coronary heart disease (CHD) and other conditions, more aggressive glucose lowering, and treatment with newer drugs. The overall mortality reduction, despite increasing prevalence, is touted as a success of initiatives such as the Equitable Access to Primary Medical Care programme, which provided additional GPs and health centres to the bottom quartile of under-doctored areas of England from 2008, and funding provided to target support for disadvantaged adults with chronic conditions including diabetes, provided in 2007–2009.

Continuing our discussion about inequality, smoking contributes around half the differences in life expectancy between those in the highest and lowest quintiles of deprivation (Leon, 2011). Brief intervention greatly increases the likelihood of smoking cessation (odds ratio [OR] 1.74; confidence interval [CI] 1.48–2.05; number-needed-to-treat [NNT], 55 [NICE, 2006]), increasing unassisted quit rates from 2–3% by a further 1–3% (Stead et al, 2013). Documenting smoking status and smoking cessation advice, along with other aspects of quality diabetes care, are incentivised by the QOF "pay for performance" scheme. It will be interesting to explore how smoking cessation advice rates and diabetes care have changed in Scotland under the new "value-based quality" post QOF, and how care might fare under the planned changes being developed in England for implementing the Five Year Forward View after April 2017. The biggest shake up in funding for primary care since 2004 and the inception of QOF has started in Scotland, been temporarily offered in Wales as a response to the winter workload crisis, and may be implemented in England in 2017. What impact will this have on diabetes care? Will it increase inequality, with those least proactive in their own care, neglected? Please share your reflections on how changes impact your delivery of care throughout 2017. ■

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Get in touch with the Journal at **dpc@omniamed.com**

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