

Three Dimensions of Care for Diabetes: A pilot service

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For some people, significant social or psychological issues act as barriers to effective self-management of diabetes. Research has found that psychological therapy leads to improvements in glycaemic control (Ismail et al, 2004), although the role of social input in supporting people with diabetes has been largely neglected in both literature and clinical practice.

Method

The 3 Dimensions for Diabetes (3DFD) Multidisciplinary Team was established at King's College Hospital Diabetes Centre in August 2010 to bring together medical, psychological and social care for people with diabetes, and was funded as a pilot project for 18 months. The team consists of a consultant diabetologist, a consultant psychiatrist, a clinical psychologist and a project officer; as well as a couple and family psychotherapist, and community support worker, both from third sector organisations. The team works with people to improve diabetes care as well as to address psychological and social issues. HbA_{1c} is used as the primary outcome measure for the project.

Referrals are received from both primary care and the King's Diabetes Centre. Referral criteria include being aged 18 years or over, having a diagnosis of diabetes with HbA_{1c} of 75 mmol/mol (9%) or over; and having significant psychological and/or social issues

to address. Exclusion criteria include severe mental illness.

The input provided varies according to individual needs. The interventions offered are: medical review of diabetes status; psychological interventions; psychotropic medication management and social welfare support. Patients are also linked in to the main King's diabetes team for medical, nursing and dietitian input as required. Patient-led multidisciplinary team meetings are held during which an individual patient shares their personal goals around their diabetes care and discusses how the team might best support them to reach these.

Results

There were 107 referrals accepted into the 3DFD service between August 2010 and January 2012. The mean age was 46 years (standard deviation [SD] = 14.2, range 19–80) and 48% of referrals were male. The ethnic distribution was 55% Black African and Caribbean, 7% Asian and 34% Caucasian. The mean baseline HbA_{1c} was 97 mmol/mol (11%; SD=2.0). Thirty-four per cent had type 1 diabetes and 66% had type 2 diabetes. Only 19% of referrals were in full-time employment. Of those who completed the nine-item depression scale of the Patient Health Questionnaire (PHQ-9; Kroenke et al, 2001) and the Generalised Anxiety Disorder Seven-item Scale (GAD-7; Spitzer

et al, 2006) at baseline, mean depression and anxiety scores were in the moderate range (PHQ-9: mean=13.3; SD=7.5, n=45; GAD-7: mean=11.3; SD=6.5, n=47).

Data collection is ongoing. To date, people who engaged with the service (defined as attending two or more appointments) were found to have a statistically significant reduction in HbA_{1c} six months after initial appointment, with a mean reduction of 10 mmol/mol (0.9%; n=37). In contrast, those referred who did not attend any appointments with the team had a mean increase in HbA_{1c} of 8 mmol/mol (0.7%) over the same follow-up period, although this did not reach statistical significance due to small sample size (n=7).

Conclusion

To our knowledge, the 3DFD team is the first to integrate medical, psychological and social care for complex adults with diabetes. Preliminary findings showed a significant improvement in HbA_{1c} in those who engaged with the service. In addition to extremely poor glycaemic control, there were also high levels of depression and anxiety, and low levels of employment amongst those referred. ■

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Ismail K et al (2004) *Lancet* **363**: 1589–97

Kroenke K et al (2001) *J Gen Intern Med* **169**: 606–13

Spitzer RL et al (2006) *Arch Intern Med* **166**: 1092–7

The IMPROVE™ Control Campaign

The Global Task Force on Glycaemic Control is a group of physicians and specialists in the field of diabetes from around the world that is working in collaboration with Novo Nordisk with the ultimate aim of identifying and developing practical solutions to the global problem of poor glycaemic control in people with diabetes. Since early 2008, the *Journal of Diabetes Nursing* has featured articles and submissions under the banner of IMPROVE™ Control – a global public awareness campaign focused on the need for improved control, as part of the Task Force's work. Throughout 2012, the journal will continue to bring you articles on the barriers to good glycaemic control, and submissions from you, our readers, outlining the strategies you have used to help people with diabetes improve their control.

For example, perhaps you have implemented a new educational session in your area that has helped break down barriers to control, or maybe you have set up a new referral pathway that has helped improve HbA_{1c} levels. The *Journal of Diabetes Nursing* would like to help you share your practical solutions for improving control, no matter how big or small, with other nurses working in diabetes. We encourage you to take part in this global initiative by calling 020 7627 1510, or emailing jdn@sbcommunicationsgroup.com.

