

Latest news: Cardiac benefits despite weight regain; NHS Diabetes Prevention Programme data; and a record number with diabetes

Stay abreast of the latest news that could impact diabetes nursing.

Cardiometabolic benefits remain despite weight regain after weight-loss programmes

New analysis of data indicates that, despite subsequent weight regain, participants in behavioural weight-management programmes (BWMPs) show improvements in several cardiovascular risk factors for at least 5 years after the intervention ends.

Largely driven by cardiovascular disease, obesity is a major risk factor for premature morbidity and mortality. BWMPs enhance weight loss in the short term, but are typically followed by weight regain. Their longer-term cardiometabolic effects are uncertain. This large systematic review and meta-analysis, by Hartmann-Boyce and colleagues, assessed whether weight regain after the end of interventions was associated with changes in cardiometabolic risk and incident disease.

The investigators analysed data from 124 randomised controlled trials of BWMPs with adult participants with overweight or obesity, that reported changes in cardiovascular risk factors, diabetes or cardiovascular disease following the end of the programme. The median follow-up was 28 months. Differences were assessed between these intensive interventions and comparator groups.

At 1 year and 5 years after the BWMPs ended, total cholesterol/high-density lipoprotein (HDL) ratio was 1.5 points lower both times (82 studies; $n=19\,003$); systolic blood pressure was 1.5 and 0.4 mmHg lower (84 studies; $n=30\,836$);

and HbA_{1c} was 0.38% lower both times (94 studies; $n=28\,083$).

There were also indications that cardiovascular disease and type 2 diabetes incidence were lower at 5 years in the intervention arms (10 studies; $n=4\,202$), but the evidence was too sparse to draw high-certainty conclusions.

There was clear evidence that BWMPs lowered cardiovascular risk compared to comparator groups, and that the improvement was apparent for at least 5 years (although gradually eroding as weight was regained).

While acknowledging a number of study limitations, the authors concluded that support for weight management reduces the risk of premature morbidity, and that weight regain is unlikely to erode the lifetime benefits.

The full study can be read [here](#).

Referral to NHS Healthier You programme reduces type 2 diabetes risk

A new study has linked the NHS “Healthier You” Diabetes Prevention Programme (NDPP) to a significant reduction in the risk of developing type 2 diabetes in adults with raised blood glucose levels.

In England, the NDPP behaviour-change programme is offered to adults with non-diabetic hyperglycaemia (NDH), as they are at high risk of developing type 2 diabetes. Funded by the National Institute for Health and Care Research (NIHR), the study examined the association between referral to the programme and reducing conversion of

NDH to type 2 diabetes.

Using Practice Research Datalink data, 18 470 patients referred to the programme were matched to 51 331 patients from non-referring practices. Analysis was adjusted for a number of parameters, including age, sex, time from NDH diagnosis, BMI and HbA_{1c}.

The rate of conversion to type 2 diabetes was significantly lower in those referred to the NDPP compared to those not referred, with an adjusted HR of 0.80. At 36 months, the probability of not converting to type 2 diabetes was 87.3% for those referred and 84.6% for those not referred. For a group of 1000 people referred to the NDPP, the researchers would expect 127 conversions to type 2 diabetes, while for 1000 receiving usual care, they would expect 154 conversions.

The findings support continuation of the NDPP in England, and the introduction of similar lifestyle-modification programmes in other parts of the UK. The authors suggest further research be conducted on longer-term outcomes, the distinction between delay and prevention of type 2 diabetes, and whether certain populations benefit more from the programme.

They also emphasise that the focus of the study was on the evaluation of referral to the NDPP, rather than on attendance or completion.

The study results can be read in full [here](#).

Number with diabetes in UK tops 5 million

Following analysis of data from the four home countries, Diabetes UK has estimated

that, for the first time, over 5 million people in the UK have diabetes. The charity describes a “rapidly escalating diabetes crisis” and warns that millions more are at risk of developing type 2 diabetes.

Of the 4.3 million people now living with a diagnosis of diabetes, around 90% of cases are of type 2 diabetes. About 8% are type 1 diabetes, while other types of the condition make up the remaining 2%. With an estimated 850 000 living with diabetes but without a diagnosis, the overall figure for the UK is over 5 million.

Diagnoses are up by 148 951 for 2021–22, compared to the previous period, with more than 2.4 million at risk of developing type 2 diabetes. The high

prevalence of overweight and obesity in the UK – currently 64% of adults in England – is driving the increase, and there is concern over the acceleration of the increase in the under-40s. Other risk factors for type 2 diabetes include age, family history, ethnicity and social deprivation.

Diabetes UK has called for the Government and local health leaders to address this public health emergency by putting the right care and support in place. It states that there should be a continued focus on identifying those at risk and on referring them to the NHS Diabetes Prevention Programme, so that more cases of type 2 diabetes can be prevented or put into remission. It also argues that

the Government needs to push ahead with its obesity strategy measures, such as those to stop people being pushed towards unhealthy food options.

The report concludes with a reminder that personal risk of developing type 2 diabetes can be understood by using their free online Know Your Risk tool.

The piece from Diabetes UK can be read [here](#). ■

Citation: Latest news: Cardiac benefits despite weight regain; NHS Diabetes Prevention Programme data; and a record number with diabetes. *Journal of Diabetes Nursing* 27: JDN283
