

Screening for glucose intolerance and development of a lifestyle education programme for prevention of type 2 diabetes in a population with intellectual disabilities: the STOP Diabetes research project

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Declared competing interests of authors: Mike Gillett has undertaken consultancy work for NHS England and Public Health England (PHE), for the National Diabetes Prevention Programme. Thomas Yates has been a member of National Institute for Health and Care Excellence (NICE) public health guidance on preventing type 2 diabetes. Sabyasachi Bhaumik has been a member of the Health Services and Delivery Research (researcher-led) panel for the last 3 years and before that he was a member of the Community and Psychological Therapies panel of the National Institute for Health Research (NIHR) for 3 years. He is the chairperson of the Diaspora Committee of the Royal College of Psychiatrists and was the chairperson of the Faculty of Psychiatry of Learning Disability for 4 years. He is also a co-editor of the only prescribing guidelines in intellectual disability nationally, and the third edition of this book, *The Frith Prescribing Guidelines for People with Intellectual Disability*, was published in 2015 by Wiley. Chloe Thomas has undertaken consultancy work for NHS England and PHE, for the National Diabetes Prevention Programme. Susannah Sadler has undertaken consultancy work for NHS England and PHE, for the National Diabetes Prevention Programme. Sally-Ann Cooper has received grants from NIHR during the conduct of the study, and grants from NIHR and from the Scottish Government outside the submitted work. Melanie Davies is a member of NICE public health guidance on preventing type 2 diabetes and an advisor to the UK Department of Health for the NHS Health Check Programme. She has acted as a consultant, an advisory board member and a speaker for Novo Nordisk, Sanofi Aventis, Eli Lilly and Company, Merck Sharp & Dohme Corp., Boehringer Ingelheim, AstraZeneca and Janssen Pharmaceutica, and as a speaker for Mitsubishi Tanabe Pharma Corp. She has received grants in support of investigator and investigator-initiated trials from Novo Nordisk, Sanofi Aventis and Eli Lilly and Company. She received grants and support from NIHR during the conduct of this study. Kamlesh Khunti (chairperson) is a member of the NICE public health guidance on preventing type 2 diabetes and an advisor to the UK Department of Health for the NHS Health Check Programme. He has acted as a consultant, served on advisory boards and been a speaker for Novartis, Novo Nordisk, Sanofi Aventis, Eli Lilly and Company, Janssen Pharmaceutica, Boehringer Ingelheim and Merck Sharp & Dohme. He has received grants in support of investigator and investigator-initiated trials from Novartis, Novo Nordisk, Sanofi Aventis, Eli Lilly and Company, Roche, Boehringer Ingelheim and Merck Sharp & Dohme. He also received grants and support from NIHR during the conduct of this study.

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Plain English summary

The STOP Diabetes research project

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Plain English summary

Adults with intellectual disability (ID) have more health problems than the general population. They are less likely to access help, and are more likely to be overweight and not get enough exercise. This may increase their chances of getting diabetes.

Type 2 diabetes (T2DM) is a long-term condition that can cause damage to blood vessels and nerves. Impaired glucose regulation (IGR) happens when blood sugar levels are higher than normal but not high enough to be T2DM. People with IGR are more likely to develop T2DM, heart disease and stroke, but they can make changes to their lifestyle to prevent this.

Our research aimed to:

1. screen people with ID for T2DM and IGR
2. develop a lifestyle education programme to help people with ID stay healthy.

We recruited 930 people and collected blood samples from 675 of them to test for diabetes. We found that about 1 in 100 people had undiagnosed T2DM and 5 in 100 had IGR. More than two-thirds (68%) were overweight or obese.

We developed a lifestyle education programme. We asked a few small groups of people with ID (and carers) to come to the 8-week programme. Attendance at the education sessions was good. Overall, people felt positive about the education.

To conclude, fewer people had T2DM or IGR than we expected. However, we found that many people with ID were overweight or obese. We succeeded in developing a lifestyle education programme to help people do more physical activity, eat healthier and lose weight.

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