

Diabetes In The UK - 2019

Position Statement (Published: November 2019)

Why have we produced this position statement

Diabetes UK collates information about diabetes from diverse sources. These are presented as our “Facts and Stats” to enable our staff to give consistent and reliable information about diabetes. This paper synthesises these data to create a national report.

How did we develop this position?

Our Knowledge and Insight Team review and update data from diverse sources such as the National Diabetes Audit, Research studies, Surveys and Registries. This data has been reviewed externally and will be written for publication, on an annual basis, in Diabetic Medicine to enable clinicians and researchers to access these data in one place.

What we say about this issue

It is important that evidence based data is used to describe the current state of diabetes and diabetes care in the UK. By creating this position statement, we hope to ensure consistency of reporting of these data.

Introduction

In the United Kingdom (UK) someone is diagnosed with diabetes every two minutes and one in 15 people now have diabetes. Sensationalist headlines report more than 500 people with diabetes die prematurely every week, the NHS spends £19,000 a minute on diabetes and diabetes causes an amputation every hour¹. While these shocking statistics rightly grab our attention, there are many more facts and figures concerning all aspects of living with diabetes that deserve consideration, for example, over two thirds of people with diabetes do not fully understand their diagnosis. Every year, Diabetes UK collates information about diabetes from diverse sources and the intention of this paper is to provide a state of the nation report mainly using data from 2017-2018 unless specified. The intention is that this reported will be updated yearly to describe how the situation is changing and allow comparisons with previous reports.

Prevalence and type of diabetes

4.7 million people in the UK have a diagnosis of diabetes of whom 90% have type 2 diabetes^{2,3}. This number has more than doubled in the past 20 years and Diabetes UK predicts that by 2030 this number will exceed 5.5 million^{2,4}. The number of people living with diabetes equates to 7% of the UK population and this is broadly the same across the

four nations (table 1)⁵. About 8% of people currently living with a diagnosis of diabetes have type 1 diabetes with other types such as monogenic diabetes accounting for the remaining 2%³. In 2013 six in ten people were asymptomatic at time of a diagnosis of type 2 diabetes and it is estimated that around one million people have undiagnosed type 2 diabetes².

Risk of type 2 diabetes

12.3 million people in the UK are at increased risk of type 2 diabetes⁷. South Asian and African-Caribbean people are two to four times more likely to develop type 2 diabetes than white European people⁸. Overweight and obesity are responsible for 80-85% of an individual's risk of developing type 2 diabetes. 68% of men and 59% of women were overweight or obese in the UK in 2015⁹. In England and Scotland only 67% of men and 55% of women are meeting recommended physical activity levels - two and a half hours a week of moderate activity such as swimming, cycling or walking on the flat¹⁰. In June 2016 the roll out of the Healthier You: NHS Diabetes Prevention Programme (DPP) began and the programme is now available nationwide. Between 2017/18 the DPP enrolled 103,000 individuals and programme model estimates that by the fifth year of the programme 18,000 cases of type 2 diabetes will have been prevented or delayed amongst the five year cohort¹¹.

Children and diabetes

Around 40,000 children under 18 years of age have diabetes in the UK and more than 3,000 children are diagnosed every year^{3,12-14}. The majority are between the ages of 10 and 14 years of age at diagnosis¹². 90% of children have type 1 diabetes and 18% of these children are diagnosed in diabetic ketoacidosis (DKA)¹². The first children with type 2 diabetes were diagnosed in the UK in 2000. These, along with monogenic diabetes, cystic fibrosis related diabetes or undefined diabetes make up the remaining 10%¹². A survey done at the turn of the millennium suggested around 20 children were known to have monogenic diabetes in the UK but this number has steadily grown with the introduction of reliable diagnostic services¹⁵.

14% of the issues raised with the Diabetes UK advocacy service in 2017 were to do with schools. Anecdotally these include school staff refusing to take responsibility for insulin injections, children with diabetes not being allowed to attend extra curricula activities such as school trips or sporting events and in some cases children being excluded from school when first diagnosed until a full time care assistant can be employed. These major issues led to the Diabetes UK Schools Campaign.

Management and access to technology

People with diabetes spend around three hours with a healthcare professional each year; for the remaining 8,757 hours they must manage their diabetes for themselves. People who go on diabetes education courses have lower blood glucose levels, improved health and fewer complications¹⁶. DAFNE, a diabetes education course for people with type 1 diabetes, reduces blood glucose levels and serious hypoglycaemic episodes¹⁶. The X-PERT and DESMOND courses for type 2 diabetes increase attendees' self-management skills and confidence, lower blood glucose levels and reduce cardiovascular risk factors¹⁶. The diabetes transformation fund has led to 94,000 additional places on education courses being available¹¹. 49% of people with type 1 diabetes were offered structured education with 7.6% attending while 90% of people with type 2 diabetes were offered structured education with 10.4% attending³.

It is concerning that 28% of people with diabetes reported having issues obtaining the medication or equipment necessary for self-management. In particular, one in four people are not being prescribed the required number of glucose test strips¹⁶. One in 20 of the problems addressed by the Diabetes UK advocacy service in 2017 related to access to strips. The 2017-18 NHS Digital: National Diabetes Insulin pump audit states that 12,900 people with type 1 diabetes and 1,760 people with type 2 diabetes are using pump therapy¹⁷. The Freestyle Libre became available through the NHS in November 2017 in certain geographical areas for people with type 1 diabetes who met clinical criteria. National arrangements were made in England from March 2019 to reduce the regional variation in availability. Since then the number of Freestyle Libre prescriptions in England have increased by 50%¹⁸.

NICE recommends that people with diabetes require eight annual basic health checks but 57% of people with type 1 diabetes and 42% of people with type 2 diabetes do not receive all eight each year³. Fewer than one in five people with type 1 diabetes and two in five with type 2 diabetes are meeting the recommended treatment targets for these eight areas³. People of working age and younger are almost half as likely to achieve treatment targets as their older counterparts³. There has been a greater than 10% improvement in HbA1c in people with type 1 diabetes and in blood pressure control in people with type 2 diabetes between 2011-12 and 2016-17³.

Life with diabetes

Diabetes is a chronic disease and affects multiple aspects of a person's life. Here we will discuss how living with diabetes can affect individuals' mental health, work and personal lives.

Mental health

Around 40% of people with diabetes struggle with their psychological wellbeing with seven in ten reporting feeling overwhelmed by the demands of living with diabetes¹⁹. Three quarters of those who have felt overwhelmed by their diabetes said this affected how well they could manage their condition¹⁹. When asked, 64% sometimes or often feel down because of their diabetes but almost eight out of ten people said that their diabetes team rarely or never helped them to talk about their emotional wellbeing^{16,19}. Less than a quarter of people with diabetes feel they receive the emotional and psychological treatment they need from the NHS and 30% of GPs agreed that current resources to support the mental health of people with diabetes are currently inadequate¹⁹. Three quarters of people living with diabetes who wanted specialist mental health support could not access it¹⁹. It is therefore not surprising that 33% of people contacting the Diabetes UK helpline in 2017 and 2018 were doing so for emotional support. The NHS spends an extra 50% treating the physical health of someone who has type 2 diabetes and poor mental health compared to someone with type 2 diabetes and no mental health problems¹⁹.

Work and driving

37% of people with diabetes feel diabetes has caused them a problem at work¹⁶. People with type 1 diabetes are twice as likely as people with type 2 diabetes to experience this with one in five people with type 1 diabetes reporting discrimination at work. The Diabetes UK advocacy service helped deal with 1,593 practical work related problems in 2017¹⁶. This accounted for 30% of all problems that went through the service with driving relating issues accounting for another 17%. In the next Diabetes In The UK report we aim to report on the number of DVLA refusals/revocations for licences.

Sex and pregnancy

Both men and women with diabetes are more likely to have sexual problems yet only 15-20% of men are asked about their sexual health during their annual review²⁰. 5% of the 941,349 pregnancies in the UK in 2016 were in women with diabetes²¹. 3,500 pregnancies were in women with type 1 diabetes and 2,400 in women with type 2 diabetes²¹. 41,000 pregnancies had gestational diabetes which is increasing in line with the prevalence of obesity and more pregnancies in older women²¹. Compared to women without diabetes, women with diabetes are five times more likely to have a pre-term baby, three times more likely to have a caesarean section and twice as likely to have a baby weighing more than 4 kg²². Babies of women with diabetes are five times more likely to be stillborn and three times more likely to die in their first three months of life²².

Complications

Complications may start to develop five to six years before a diagnosis of type 2 diabetes and currently one in three people have a microvascular complication at the time of a diagnosis of type 2 diabetes. This compares with the up to 50% with complications at diagnosis reported by the United Kingdom Prospective Diabetes Study in 1999⁶.

Cardiovascular disease

Each year in the UK, diabetes causes more than 27,000 myocardial infarctions (530 per week) and 100,000 cases of heart failure (~2000 per week)²³. Cerebrovascular accidents are twice as likely in people with type 2 diabetes and 3.5 times more likely in people with type 1 diabetes²³. Diabetes causes more than 35,600 strokes each year in the UK which equates to one in five of all strokes²³. 25% of people in hospital for a stroke, myocardial infarction or heart failure have diabetes²³. Compared to people without diabetes, people with type 2 diabetes are 2.5 times more likely to have a myocardial infarction and develop heart failure²³. People with type 1 diabetes are four times more likely to have a myocardial infarction and 4.5 times more likely to experience heart failure²³.

Foot disease

Studies suggest that between 70,000 and 90,000 people with diabetes in the UK have a foot ulcer in any given week²⁴. Diabetes is responsible for 175 amputations every week and this adds up to more than 9000 leg, toe or foot amputations every year²⁵. Someone with diabetes is 20 times more likely to experience an amputation than someone without diabetes²⁶. In one year the diabetes transformation fund has led to 185 staff appointed to foot care teams across 80 hospitals¹¹. It is hoped that this will lead to improved numbers of proper foot checks for people with diabetes. Currently less than two thirds of people with serious foot problems have a foot check within 24 hours of being admitted to hospital²⁷. Four out of ten people with a foot ulcer will die within five years and around half of all people who experience a major amputation will die within two years²⁴.

Retinopathy

Diabetes is a leading cause of preventable sight loss and more than 1,700 people have their sight seriously affected by diabetes every year in the UK²⁵. Diabetes is responsible for 5% of all sight loss in the UK and 7% of people who are newly registered blind in England and Wales have lost their sight because of diabetes²⁸. 14% of working age people with severe visual impairment have diabetes²⁹. Almost half of people with type 1 diabetes and a quarter of people with type 2 diabetes have some form of diabetic retinopathy. After living with the disease for 20 years almost all people with type 1 diabetes and two thirds of

people with type 2 diabetes will have some degree of retinopathy^{28,30}. As well as diabetes specific eye disease, diabetes increases the risk of glaucoma by 1.5 times and doubles the risk of cataract³¹.

Kidney disease

At least 10,300 people in the UK have end stage renal disease (ESRD) primarily because of diabetes as reported on the renal registry³². A further 12,350 have ESRD and diabetes, but diabetes is not listed as being the main cause. There are more than 22,650 people with diabetes in the UK who need dialysis or a kidney transplant¹³. In other words, more than one in three people who need dialysis or a kidney transplant have diabetes and one in five people with diabetes will need treatment for their kidney disease during their lifetime¹³. People with diabetes are five times more likely to need dialysis or transplantation than the general population¹³.

Health Service Delivery

Diabetes and the NHS

When last reviewed, the NHS was spending at least £10 billion a year (£27 million a day) on diabetes equivalent to 10% of its entire budget¹. 80% of this is spent treating complications. In 2018/19 there were 55 million items prescribed for people with diabetes, compared with 33 million a decade ago³³.

Diabetes care in hospital

People with diabetes are twice as likely to be admitted to hospital and one in six people in a hospital bed has diabetes^{27,34} but in some hospitals people with diabetes make up 25% of all inpatient beds²⁷. The diabetes transformation fund has led to 96 additional inpatient specialist nurse and related staff in hospitals¹. This should improve the current situation where more than a fifth of hospitals do not have a dedicated diabetes inpatient specialist nurse²⁷. Nearly two fifths of people treated with insulin experience an insulin error during their hospital stay and 1 in 25 in-patients with type 1 diabetes develop DKA during their hospital stay²⁷. Almost one fifth of people with diabetes have a hypoglycaemic episode and 1.3% have a severe hypoglycaemic episode during their hospital stay²⁷. 28% of people who felt they needed to see a specialist diabetes team whilst in hospital reported that they did not²⁷.

Conclusion

The number of individuals, their families and carers affected by diabetes continues to increase across the UK and more than 13 million people are thought to be at risk of or have undiagnosed type 2 diabetes. Diabetes is impacting multiple aspects of individuals' lives and a significant proportion of people with diabetes are also managing diabetes complications. Greater access to education, technology and inpatient diabetes teams is being seen thanks to transformation funding and it is hoped that this will result in less of the NHS's budget being spent on complications and instead spent on care to prevent these in the first place.

Table 1: Prevalence of diabetes in the four nations of the United Kingdom⁵

Country	Prevalence of diabetes	Estimated numbers living with undiagnosed type 2 diabetes	Estimated numbers at risk of type 2 diabetes
England	>3,222,500	>860,000	10,300,000
Northern Ireland	>96,100	>11,000	340,000
Scotland	>295,700	>35,000	1,000,000
Wales	>194,600	>60,000	600,000

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