## Choosing to Take Control in Type 2 Diabetes









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### **About the Choose Control Survey**

The data included in this report was derived from a survey commissioned by Lilly and coordinated by an independent research organisation, GfK Healthcare. The survey involved quantitative research and qualitative interviews of 787 subjects in 5 countries (France, Germany, Italy, Spain, UK). Data was collated by GfK Healthcare between August and December 2006. Further data information can be provided upon request.

### **Choosing to Take Control in Type 2 Diabetes**

### Foreword from the International Diabetes Federation (IDF) Europe

For many people, the concern about diabetes is based on rising numbers of people affected by Type 2 diabetes. It seems that prosperity brought to many countries in postwar Europe, accelerated by participation in the European Union, has brought health and lifestyle problems with it, most notably obesity and Type 2 diabetes.

The E.U. and national governments have focussed almost exclusively on our growing understanding of the potential to delay or prevent diabetes; in fact I think many politicians and administrators have reached a convenient conclusion that all Type 2 diabetes can be prevented by implementing healthy lifestyle advice and promoting healthy food choices. Sadly, this is not the case.

It is a reality that at best, around 50% of Type 2 diabetes can be prevented by lifestyle measures. For most of these people, diabetes is only delayed. In addition, since the age of onset of Type 2 diabetes appears to be falling rapidly, the long-term consequences of this disease are becoming more severe, and the need for complex therapies including insulin has grown. Type 1 diabetes, representing around 13% of all diabetes and usually commencing in childhood, is completely unpreventable, and for these reasons politicians cannot escape the real need for steady investment in diabetes care alongside their efforts at prevention.

The long-term risks of Type 2 diabetes now include eye problems and blindness, kidney failure, nerve problems and adverse pregnancy outcomes more than ever. Our response includes increased efforts to attain life-long, optimum control of blood glucose levels. This survey has taken a look at people in a 'twilight zone' of diabetes care, with inadequate control despite living in developed European nations.

It is a fascinating exploration of the psychological, emotional and practical difficulties faced by people with diabetes in their daily lives, and demonstrates clearly that narrow approaches to people with this condition will not work, because they are people with so many other priorities besides their diabetes. To capture these people we need more flexible approaches, greater support, more choice, better information and consistent education from trained healthcare providers. In that sense, this survey joins a growing body of evidence favouring education and empowerment approaches and a sense of partnership, in contrast to a traditional medical model.

Dr Tony O'Sullivan President, IDF Europe

### 1. Introduction

Diabetes is escalating across Europe with more than 53 million people currently diagnosed with the condition. The burden of poor diabetic control is evident for individuals, reducing their quality of life and for healthcare systems which are faced with spiralling costs. This European survey has explored the issue of poorly controlled diabetes and most importantly delved into the reasons why so many people with Type 2 diabetes are poorly controlled.

Diabetes is a serious condition, poor control of which is linked to long-term complications and death.<sup>2</sup> Despite this, a significant proportion of people have poorly controlled diabetes\*. As highlighted by this survey the reasons are complex but include:

- People with Type 2 diabetes do not know what HbA1c targets they should meet to ensure diabetes is well controlled.
- People with Type 2 diabetes seem confused about their diabetes – they have a false sense of security, believing they have 'good control', but are worried about long-term complications.

Professor Jean-François Gautier, PUPH, Diabétologue, Hôpital Saint-Louis, Paris

"Type 2 diabetes accounts for 85%-95% of all diabetes."

- People with Type 2 diabetes struggle to meet lifestyle targets such as weight control.
- People with Type 2 diabetes are concerned about insulin viewing it as a 'last resort'.

\* Good diabetes control is defined as an HbA1c level [glucose in the blood attached to haemoglobin] below a target level of 6.5% to 7.5%.

### 1.1 The Diabetes Timebomb – a huge and growing burden to society

Described as an 'epidemic' or 'timebomb', diabetes currently affects more than 246 million people worldwide<sup>1</sup> and more than 53 million in Europe alone – this is set to increase to 64 million by 2025 (Figure 1).<sup>3</sup>

Diabetes is a burden not only on people with Type 2 diabetes but also healthcare systems across Europe. The burden arises because of direct costs of treating diabetes and also costs associated with long-term complications (e.g. blindness, kidney disease, heart attacks). <sup>4,5</sup> People with Type 2 diabetes who have complications cost healthcare systems 3.5 times more than people who have no evidence of complications. <sup>6</sup>

Professor Jean-François Gautier, PUPH, Diabétologue, Hôpital Saint-Louis, Paris

"People with Type 2
diabetes have a shorter
life expectancy – as much
as 10 years less."



Figure 1. Most European countries will see a dramatic increase in diabetes by 2025.3

UK 2007 = 1,709,400 2025 = 2,160,600 Germany 2007 = 7,379,200 2025 = 8,144,900

France 2007 = 3,616,000 2025 = 4,766,100

Spain 2007 = 2,497,800 2025 = 3,241,700

Italy 2007 = 3,850,200 2025 = 4,425,500 Professor Jean-François Gautier, PUPH, Diabétologue, Hôpital Saint-Louis, Paris

"Diabetes costs are high and rising – the average cost of €2,834 per patient with Type 2 diabetes per year in Western Europe is far higher in France and Germany – CODE-2 study."

### 1.2 Escalating costs of diabetes

As the number of people with Type 2 diabetes increases, so does the incidence of complications and cost burden. This has the potential to put already pressured healthcare systems and economies under greater strain. Currently approximately 5% of healthcare budgets across Europe are spent on treating diabetes and its complications. 6,8,9 In the eight countries surveyed in Western Europe (in the CODE-2 study), expenditure on diabetes is highest in Italy at €5 billion and lowest in Spain at €2 billion per year; conservative estimates suggest an average cost in Western Europe of €2,834 per person per year.9

## 1.3 Burden of diabetes – a journey through Europe

It has been known for some time that many people across Europe with Type 2 diabetes are poorly controlled (Figure 2)<sup>10,11,12,13</sup> with the UK identified as the country with the worst control.<sup>10</sup> While the reasons for poor control were not questioned, the potential impact on people with Type 2 diabetes is clear – diabetic complications and shorter lives.

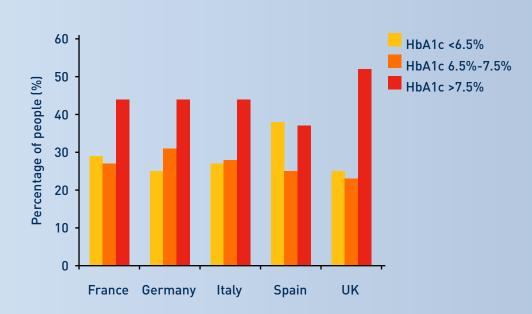
Simon O'Neill, Director of Care, Information & Advocacy Services, Diabetes UK

Despite growing media attention and awareness of the breadth of the problem of Type 2 diabetes across Europe, particularly as the spotlight on obesity grows, the impact on people living with the condition and the burden on healthcare systems continues to increase unabated.

Jo Butler, Diabetes Nurse Consultant, UK

"Increasing patient numbers, coupled with poor control of blood glucose has seen the number of people with Type 2 diabetes with complications increase – if this trend continues it will result in devastating patient and economic consequences."

Figure 2. Despite country guidelines across countries in Europe a significant number of people with Type 2 diabetes have blood glucose levels (HbA1c) above those recommended that places them at risk of complications and death.<sup>10</sup>



Dr Gerry Rayman, Consultant Physician Diabetes & Endocrinology, Ipswich Hospital, UK

In an era of increasingly pressured healthcare budgets and spiralling rates of Type 2 diabetes – much of it poorly controlled – there is an urgent need across Europe for people with Type 2 diabetes and healthcare professionals to achieve better diabetic control if we are to prevent the enormous economic and social and personal costs of the long-term complications.

# 2. Choosing control – understanding people with Type 2 diabetes

The understanding of what people with Type 2 diabetes want from their diabetes management has never been properly explored and people with diabetes are

seldom asked to explain why their control of diabetes is so poor. The Choose Control survey has been undertaken among people with Type 2 diabetes whose diabetes is known to be poorly controlled (as defined by their country recommendations for HbA1c), and who have been unable to achieve control despite treatment with oral antidiabetic drugs. Looked at from the patients' perspective this survey explores the impact diabetes has on their lives and provides insight into why people with Type 2 diabetes do not, or cannot take control.

2.1 People with Type 2 diabetes want to take control of diabetes

For people with Type 2 diabetes with poorly controlled diabetes the consequences include a shortened life due to diabetes-related complications plus a reduced quality of life. 14,15,16,17 Among the survey population there appears to be a high level of despondency as more than 90% of

Professor Massimo Massi Benedetti, Vice President International Diabetes Federation, Universitá di Perugia

We have known for some time that people across
Europe do not have their diabetes controlled as much as we would like, or as recommended by guidelines – however, until now, we have not always known the reasons behind such poor control. "10

them clearly say recovery is 'impossible' and diabetes cannot be 'cured'.<sup>18</sup> Many people with Type 2 diabetes do not make the link between improving control and improving their lives – including reducing their risk of complications.

Within the survey population it was clear that more than 80% of people with Type 2 diabetes across the 5 surveyed European countries <u>want</u> to take control of their diabetes<sup>18</sup> – a number that is significantly higher in the UK (94%) and Germany (91%) but much lower in Spain (74%) and France (67%).<sup>18</sup> Unfortunately, some people do struggle to take control of aspects of their life with diabetes, in particular weight control,<sup>18</sup> leaving them feeling negative and unhappy.<sup>18</sup> The struggle to control diabetes exerts a negative emotional and physical toll for almost half of respondents (45%),<sup>18</sup> particularly the restrictions that diabetes places on their lives.<sup>18</sup>

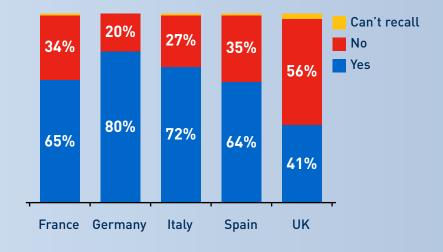
For people with Type 2 diabetes to be in control, they need to know what 'control' really means. To achieve this they need better guidance to understand what blood glucose and HbA1c targets they should be achieving (Figure 3).<sup>18</sup>

- A third of people with Type 2 diabetes surveyed did not recall receiving advice from their healthcare professionals about the frequency of blood glucose testing so that they could determine whether or not their diabetes was controlled. In addition, testing frequency recommendations were inconsistent across Europe factors that could confound those eager but unable to reach their target glycemic levels. Is
  - In Germany 80% of those surveyed remembered being given specific testing frequency guidance, comparable to Italy.
  - More than 60% of those surveyed in Spain recalled being given guidance, whilst the UK only 41% of people with Type 2 diabetes remembered being given guidance.

Professor Brian Frier, Royal Infirmary of Edinburgh, Scotland

"This survey highlights the importance of educating and informing people with Type 2 diabetes about the nature of this serious condition and its treatment, and by motivating them to achieve good control, help them to avoid the potentially devastating vascular events and long-term complications."

Figure 3.<sup>18</sup> There is significant variation across Europe in the guidance or recommendations that people with Type 2 diabetes receive from healthcare professionals about blood glucose testing. Between 20% and 56% responded that they received no recommendations about how often they should test. Across nearly all countries a very small percentage could not remember whether or not they received guidance.

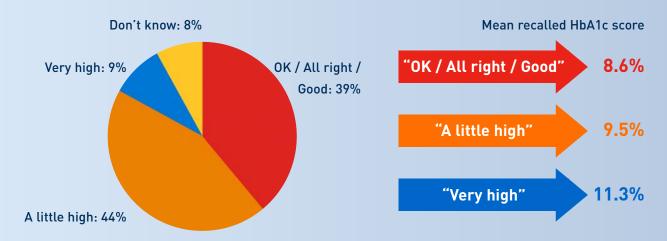


Q. Has your doctor given you any specific recommendations about how often you should test your blood sugar levels?

- Despite HbA1c targets being a recognised priority, 40% of respondents polled had not heard of HbA1c or were unsure of what HbA1c meant. Of those who recalled having an HbA1c test 31% did not know what their most recent HbA1c score was. This would suggest that people with Type 2 diabetes even if aware of HbA1c do not make the link between HbA1c and control of their diabetes, or the consequences of missing targets.
  - Responders from Spain had the highest levels of unawareness of the HbA1c test (including those who answered 'no' and 'don't know') at 55% and Germany the lowest at only 11%.<sup>18</sup>
  - France, the UK and Italy had a similar number of people with Type 2 diabetes who recalled having a test for HbA1c (range 52% to 62%), but fewer people with Type 2 diabetes in Spain (45%) could recall their score compared with Germany (89%).<sup>18</sup>
- Across Europe, people with Type 2 diabetes are also poorly informed about what constitutes a good HbA1c level with 83% of those surveyed believing that their HbA1c level was 'OK' or a 'little high' even though all participants in this survey had poor control of their diabetes (Figure 4).<sup>18</sup>
  - In the UK 14% of those surveyed knew what the recommended HbA1c target should be or quoted an answer that was below country recommendations, compared with 3% in Italy, 7% in Germany, 9% in Spain and 13% in France.<sup>18</sup>
  - Further, the mean HbA1c score that they believed to be a good score highlighted poor awareness of HbA1c among this poorly controlled population with Spanish respondents quoting an average of 7.07% as a good HbA1c, French respondents 7.59%, German and Italians 8.12% and 8.08%, respectively and UK respondents 8.41%.18

A third of all people with poorly controlled Type 2 diabetes in this survey across Europe received no advice regarding the recommended frequency of blood glucose testing from their healthcare professional.<sup>18</sup>

Figure 4.<sup>18</sup> Many of those surveyed perceived their HbA1c levels to be 'OK' or 'a little high' even though all participants had HbA1c levels above those recommended in their own country-specific guidelines.



Q. Which of the following do you think best describes your last HbA1c test score?

### Summary: People with Type 2 diabetes want to take control of their diabetes

The lack of guidance about glucose testing, low recollection and awareness of HbA1c seems to suggest for many of the people, with poorly controlled Type 2 diabetes surveyed here, healthcare professionals are not communicating effectively how glucose and HbA1c levels relate to control of diabetes.

It is not known if ineffective communication to people with Type 2 diabetes is because:

- Healthcare professionals do not believe in the utility of HbA1c.
- Their messages regarding HbA1c are misunderstood by people.
- Healthcare professionals feel they cannot communicate something so complex to their patients.
- Healthcare professionals' lack of time.

It is possible that people with Type 2 diabetes who are unaware of the significance of HbA1c and what their individual HbA1c levels are, may be less able to realise their desire to 'take control' compared with those who are more aware.

## 2.2 Gaining control over weight, diet and exercise, becoming motivated, taking control

There is a well established link between weight gain (obesity) and diabetes<sup>19</sup> and controlling/managing weight is essential to improving the short-term and long-term health of people with diabetes.

On average, people with Type 2 diabetes surveyed outlined weight, diet and exercise as aspects of their diabetes management that they struggle to control the most. Of those patients in the survey recommended by their doctor to reduce their weight, nearly a third (31%) were classified as obese (i.e. a Body Mass Index – BMI >30 kg/m²) and a further 16.4% as either extremely or morbidly obese and a further third (36.9%) were classified as overweight. More than 40% of people surveyed found it difficult to get enough exercise and a similar proportion (37%) felt guilty as they did not stick to a diet appropriate for their diabetes. Across Europe only 39% of respondents lost weight. Overall, nearly a fifth of participants gained weight (approximately 9kg), but more than a quarter of participants classified as obese gained a significant amount of weight since being diagnosed with diabetes (on average, >10kg).

For people with Type 2 diabetes in this survey who do lose weight though, the benefits are far-reaching. People with Type 2 diabetes who lose weight feel happier and motivated. They have a sense of achievement and feel pride that they are 'winning the battle', <sup>18</sup> and this is particularly true of Italy and the UK. Similarly, 81% of people in this survey felt proud of themselves if they stuck to their management plan of diet, exercise and weight control. <sup>18</sup> This enthusiasm could be channelled to other areas of diabetes control to help them to improve control of their diabetes.

## Summary: Gaining control over weight, diet and exercise, becoming motivated, taking control

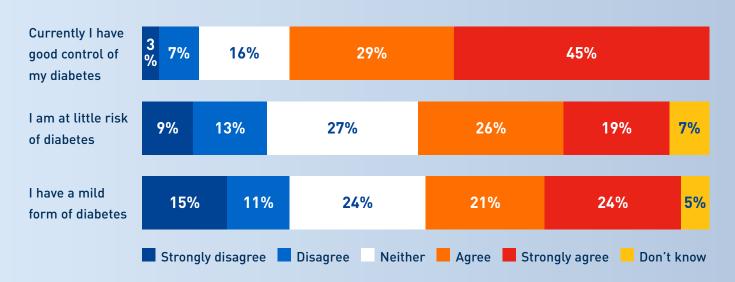
Weight control, exercise and diet are difficult for people with Type 2 diabetes and causes a strong sense of frustration. People with Type 2 diabetes who lose weight appear to feel motivated and proud, and these emotions could be used to improve other areas of diabetes control such as exercise. For patients to lose weight, they will need practical support to help them achieve this and recognise the benefits of doing so.

# 3. The information and understanding gap – failing people with Type 2 diabetes who want to take control

### 3.1 Some people with Type 2 diabetes do not take their diabetes seriously

From the survey it is clear that many people with Type 2 diabetes <u>do not understand</u> that they have a serious condition.<sup>18</sup> Almost half of patients across all countries surveyed say they have a 'mild' form of diabetes – a misapprehension that has the potential for serious, life-limiting, even life threatening consequences – in the UK this proportion is 52%, France 48%, Italy 54%, Spain 68%.<sup>18</sup> Only those surveyed in Germany recognised their condition as serious as only 7% of people indicated their diabetes was mild.<sup>18</sup> Nearly three-quarters of participants (74%) believed they had good control of diabetes, despite the fact that their HbA1c levels were not 'in control', and many felt they were at little risk of complications.<sup>18</sup>

Figure 5. In this survey of people with poorly controlled Type 2 diabetes it would seem that many are poorly informed about their diabetes and the potential consequences with many believing they have 'good control' of their diabetes, that they have a 'mild' form of diabetes and that they are at low risk of long-term complications.



Q. I am now going to read out a series of statements which have been made by patients with Type 2 diabetes about how they feel about their current control of their diabetes. Please can you tell me, on a scale of 1-5 where 1 = Strongly agree and 5 = Strongly disagree, the extent to which you agree or disagree with each statement

Where do people with Type 2 diabetes get their information from? The majority of participants in this survey do seek out information about their diabetes with more than half asking their physician<sup>18</sup> for information or seeking out as much information as they can using a variety of information sources (Figure 6).<sup>18</sup>

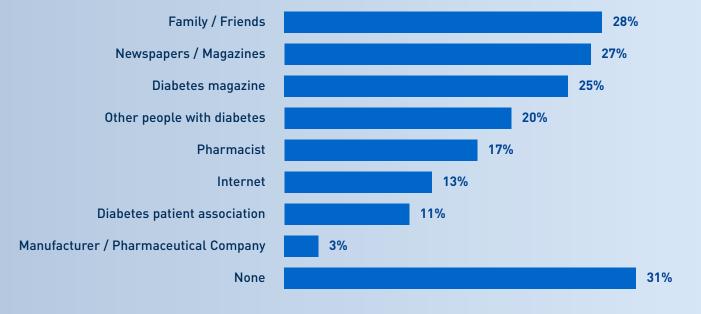
However, nearly a third outlined that they rarely ask their healthcare professional specific questions about their diabetes suggesting they are either disengaged about their condition, are unwilling/frightened to ask questions or have had diabetes for a long time and feel 'they know enough'.

To overcome ignorance of diabetes it is vital that people with Type 2 diabetes have access to good information from a variety of sources and that they engage with their healthcare professional so that they feel able to ask questions.

Figure 6. People with Type 2 diabetes obtain diabetes information from a wide variety of information sources

Professor Jose Antonio Vazquez, President F.E.D. (Federación Española de Diabetes), Spain

We have to recognise that people with Type 2 diabetes who do not understand the long term consequences of their disease are less able to gain control over their diabetes, making them more vulnerable to suffer long term complications. It is necessary to make them aware that they have to be an active and participative component in their diabetes management.



Q. Which of the following sources have you used in the past 12 months to obtain information or support about diabetes?

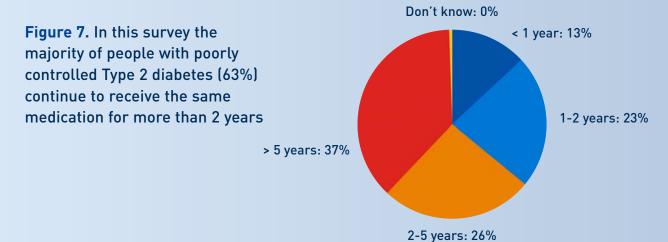
## Summary: Some people with Type 2 diabetes do not take their diabetes seriously

People with Type 2 diabetes get information about diabetes from a wide variety of sources, yet despite this many people surveyed still do not understand the significance of their diabetes, believing it to be a 'mild' form of the condition. They also felt they had 'good control' of their diabetes and were at a low risk of long-term complications, despite having poor control of their diabetes.

# 4. Insulin 'the last resort' – patient fears and healthcare professional reluctance

### 4.1 Patient fears

Many people with poorly controlled Type 2 diabetes polled in this survey had received the same therapy for more than 2 years although the dosing during that period may have changed (63%) [Figure 7].18 There is clearly a need for patients to have their diabetes reviewed regularly, and if current treatments provide inadequate control they should explore more effective disease management options with their healthcare professional.18



Type 2 diabetes is a progressive condition that will require more intensive treatment as time goes on. It is clear that within 6 years of diagnosis more than 50% of people with Type 2 diabetes receiving sulfonylureas (an oral antidiabetic agent) will require supplementation with other options, to provide good diabetes control.<sup>20</sup> When faced with a patient with Type 2 diabetes whose diabetes is poorly controlled despite receiving treatment with oral antidiabetic drugs, a clinician needs to discuss other options e.g. insulin.

Previous research demonstrated that switching to insulin creates fear for people with Type 2 diabetes and highlighted four key areas of fear.<sup>21</sup>

- People with Type 2 diabetes associate insulin with a loss of control over their lives
- People with Type 2 diabetes feel they won't be able to manage the demands of insulin therapy.
- They perceive that insulin is required for a 'more severe disease'.
- They are anxious about the prospect of daily injections.

These results were consistent with the findings in this Choose Control survey which showed that nearly half of people with Type 2 diabetes (41%) said that for them insulin would be the 'next step' 18 and when prompted 31% of respondents 18 wanted to stall this step by taking a higher dose or more tablets. People with Type 2 diabetes were asked their views on insulin therapy and they highlighted four major reasons for concern: 18

- They view insulin as a 'last resort'.
- Insulin is 'just too big a step'.
- Insulin would restrict their lives further.
- Administering insulin would be too complicated.

Professor Oliver Schnell, Institut für Diabetesforschung, München

"In this survey of people with poorly controlled Type 2 diabetes many viewed insulin as the 'last resort'. And despite the evidence, few believed that insulin can give them better glycaemic control."

These views and the concern people with Type 2 diabetes have about switching to insulin are reflected in this survey consistently across Europe, with the proportion of those surveyed being 'concerned' or 'very concerned' about switching to insulin. The overall figure is 68% and ranges from 61% of patients in Germany to 76% in Italy (France 63%; Spain 67%; UK 71%).<sup>18</sup>

People with Type 2 diabetes in this survey who have concerns about insulin can be divided into two major groups:<sup>18</sup>

- Those who, if they were presented with insulin treatment, feel they would "have no choice but to accept it even if they didn't want to" (44%).
- Those who would stall the switch to insulin by negotiating with their healthcare professional to take a higher dose or more tablets (31%) a proportion that was far higher in the UK and Germany (41% and 40% respectively). Other respondents within the survey population would also not willingly accept their physicians recommendations to commence insulin, with 3% who would refuse to take insulin whatever happened and 13% would weigh up the pros and cons of insulin before deciding.

Even though insulin can offer people with Type 2 diabetes better glycaemic control<sup>22,2,23</sup> and nearly a quarter in this survey answered that it would give them better control of their diabetes (22%),<sup>18</sup> 76% of patients surveyed were concerned that it would restrict their lives more than tablets<sup>18</sup> and 55 % were concerned that administering insulin would be complicated.<sup>18</sup>

Why do people with Type 2 diabetes have concerns about insulin? Ignorance about insulin appears to be the key driver of fear. People with Type 2 diabetes outlined their fears and concerns as:<sup>18</sup>

- Fears around injections.
- Their lives will be further restricted.
- Their diabetes is deteriorating.
- And some are 'just afraid'.

This survey has revealed that people with Type 2 diabetes failing to gain control need to work with their healthcare professional to explore all remaining treatment options. Working together can reduce the fear of the 'next step' if poorly controlled on oral antidiabetic drugs and help people with Type 2 diabetes make active decisions in their diabetes management to empower them to gain control of their diabetes.

Professor Baptist Gallwitz, Leitender Oberarzt Medizinische Klinik Iv, Universitätsklinikum Tübingen

People with Type 2 diabetes are often unaware of the benefits that treatments after oral antidiabetic drugs, such as insulin, can give them – including better glycaemic control or a reduced risk of complications. And many patients do not know that insulin injections are likely to be less painful than the finger prick test they already do for blood glucose testing.

### Summary: Insulin the 'last resort'

People with Type 2 diabetes have concerns about insulin. There is a need for improved education for people with Type 2 diabetes and enhanced communication skills and materials for healthcare professionals to help them work together to explore all treatment options so people with Type 2 diabetes can receive the best chance of achieving control.

### **Time for Action**

### What does this all mean?

People with Type 2 diabetes want to be in control of their diabetes. However, their poor understanding of what it means and its consequences and the perceived lack of effective communication from healthcare professionals prevents them from gaining control of their condition.

Worryingly, the survey results show that healthcare professionals may inadvertently substantiate a poor awareness of diabetes among participants. These survey results indicate that:

- Healthcare professionals may not have enough time to explain diabetes to patients.
- Healthcare professionals may be maintaining patients on oral antidiabetic therapy despite their condition being poorly controlled.
- Healthcare professionals may need to adapt the way in which they
  communicate aspects of the condition even though the patients in this
  survey were defined as poorly controlled by their healthcare professional,
  almost half of people surveyed believe they have 'mild' diabetes.

People with Type 2 diabetes in this survey are already poorly controlled, despite receiving oral treatment, and need improved disease management strategies to reduce their long-term risks of complications.

This survey of people with poorly controlled Type 2 diabetes with HbA1c scores above recommended levels has clearly shown that:

- People with Type 2 diabetes in this survey were largely unaware that their diabetes is poorly controlled.
- Many of these people surveyed did not understand the seriousness of diabetes, believing it to be 'mild' and that they were at a low risk of complications.
- Healthcare professionals do not appear to be effectively communicating to people with Type 2 diabetes in this survey about their condition, long-term outcomes and HbA1c targets.
- People with Type 2 diabetes in this survey clearly want to be in control of their diabetes, but struggle with it, particularly with regards to weight control.
- In this survey people with Type 2 diabetes are concerned about commencing insulin viewing it as the 'last resort' despite the proven health benefits it might provide them.

### What can be done?

Diabetes clearly has a negative impact on the lives of people with Type 2 diabetes, both physically and psychologically, and many find tackling their diabetes difficult. To help people with Type 2 diabetes it will be key to:

- Provide practical intervention strategies which enable them to change behaviour – for example, weight loss.
- Increase awareness and understanding about HbA1c.

Patient education, information and awareness must go hand-in-hand with strategies for healthcare professionals which could include:

- Increasing awareness amongst patients about HbA1c – value and utility – thereby empowering them to take appropriate action when their diabetes is poorly controlled.
- Educating people with Type 2 diabetes about insulin discuss patient fears and help them to understand how insulin treatment fits in to the treatment pathway.
- Providing them with improved disease management strategies that can help them gain effective control of their diabetes.

For the sake of people with Type 2 diabetes better education and implementation of treatment strategies are clearly required now and in the future.

Dr Tony O'Sullivan, IDF Europe

This survey implies that an abrupt change of direction is needed, since education and empowerment are more important for many people than simple prescribing. People with diabetes need a whole person approach to the condition, and in most European countries, we are not getting that yet.

### **Summary: Time for action**

To achieve better control, healthcare professionals and people with Type 2 diabetes need to act now to help stop the 'diabetes time-bomb' currently escalating in Europe and work together to take control. For people with Type 2 diabetes it is key to engage with them directly, informing and empowering them to choose to control their diabetes and providing practical, realistic vehicles to achieve this. For healthcare professionals, there is an urgent need for them to work with people with Type 2 diabetes to bridge the information gap to eliminate misunderstanding and improve patient outcomes.

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