



# “What’s the Point?”: Understanding Why People With Type 2 Diabetes Decline Structured Education

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Structured diabetes education (SDE) is an evidence-based intervention that supports self-management in people with type 2 diabetes. In the United Kingdom, health care providers working in primary care settings are responsible for referring people with type 2 diabetes to SDE programs. However, national audits record a high percentage of nonattenders. We explored the personal experience of living with type 2 diabetes that led to individuals declining invitations to attend SDE programs. The themes suggested that emotional, cognitive, and social issues related to diagnosis and living with diabetes may be responsible for declining to attend SDE and that these factors may be masked by explanations of practical barriers. A person-centered approach to understanding the personal meaning of being diagnosed and living with type 2 diabetes may help to identify individuals’ psychosocial barriers to attending SDE.

Type 2 diabetes is a serious, progressive condition associated with insulin resistance and hyperglycemia that can lead to long-term microvascular and macrovascular complications, including blindness, renal failure, amputation, and premature cardiovascular disease. Structured diabetes education (SDE) is a key intervention that supports diabetes self-management in the United Kingdom. Health care providers (HCPs) working in primary care are mainly responsible for referring people with type 2 diabetes to SDE (1). A systematic review and meta-analysis demonstrated that group-based educational interventions improve clinical, lifestyle, and psychosocial outcomes in people with type 2 diabetes compared with usual care (2).

The 2016–2017 National Diabetes Audit (in England and Wales) demonstrated that, although up to 90% of people with type 2 diabetes and 50% of those with type 1 diabetes were offered structured education, <10% of those who

received an offer were recorded as having attended (3). This low attendance is thought to result in part from inconsistent recording of this information on electronic health records within primary care practices, with local evidence suggesting that attendance is higher, at ~30% (4). In Northern Ireland, there is no national audit, but local evidence suggests an attendance rate of ~60% (P. McKee, personal communication).

A recent systematic review examining patients’ reasons for declining to attend SDE suggested a combination of those “who could not go” for logistical, medical, or financial reasons and those “who would not go,” citing reasons related to knowledge, emotional issues, cultural issues, or no perceived benefit (5). All studies in that review cited practical barriers for nonattendance such as sessions being too long, the venue being too far away, no available transportation, inability to take time off work, other family responsibilities, or other health issues (6–17). Some of the studies gave other reasons, including patients perceiving no benefit (7,11–13), already being knowledgeable (9,10,12), not viewing diabetes as serious (15), feeling shame and stigma (7), doubting the value of SDE (6,7,9–17), being unclear about the purpose of the program (7,9), believing attendance was optional (15), feeling that the doctor met their needs (9,10,14), lacking interest (6,11,16,17), feeling negative about group education (9,12,17), exhibiting avoidance and refusal (8), and experiencing fear of being overwhelmed or not understanding (16,17).

In relation to diagnosis of type 2 diabetes, a systematic review of emotional, cognitive, and behavioral responses concluded that patients underestimate the seriousness of diabetes, overestimate their ability to manage it, and show limited engagement in the management of their disease (18).

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People develop personal models of diabetes comprising their beliefs about diabetes symptoms, treatment effectiveness, and consequences, and their emotional responses to future complications. These models are associated with and influence self-care (19). A longitudinal study investigated the development of personal models in people with type 2 diabetes from diagnosis and found that the communication of information and the way type 2 diabetes is perceived at diagnosis determines patients' view of their diabetes. Significantly, these views persisted over the 2 years of the study (20).

There is some literature hinting that reasons for nonattendance at SDE may relate to difficulty in adjusting psychologically to the diagnosis of type 2 diabetes. Therefore, the aim of this study was to gain an in-depth understanding from participants of what living with type 2 diabetes meant to them and how this meaning might relate to personal reasons for not attending SDE. Low attendance at SDE programs remains a matter of concern, and studies continue to suggest that practical reasons are the main causes of low attendance. The literature speaks of patients' difficulties in making a psychosocial adjustment to their diagnosis and to living with type 2 diabetes. This study investigates the possible links between adjusting to the diagnosis of and living with type 2 diabetes and nonattendance at SDE.

## Research Design and Methods

### Study Sample

Twenty adults with type 2 diabetes who participated in the first phase of a larger study examining why adults with type 2 diabetes decline to attend SDE and who consented to be recontacted were purposively sampled (21). As in the larger study, those sampled came from two culturally different countries within the United Kingdom: England and Northern Ireland. Demographic data collected were minimal because the intention of this study was to collect rich descriptions of participants' lived experience of type 2 diabetes and their perceived barriers to attending SDE.

### Data Collection

A topic guide developed by the steering group and informed by the results of the first phase of the larger study was used to carry out in-depth interviews either face to face or by telephone (Table 1). After training, coauthors M.S. and M.E.C. carried out the interviews, which were 30–90 minutes long, with face-to-face interviews lasting

longer than telephone interviews. Questions were open-ended to enable participant-led responses, thus capturing the unique experiences of each participant's life with diabetes. Interviews were digitally recorded and transcribed verbatim. Field notes were made by the interviewers reflecting on points of interest and later used in researchers' discussions.

All those who participated in the interview received a £15 voucher. One interview was excluded after it became apparent that the participant had only attended 3 hours of a 6-hour program.

### Data Analysis

A realist/essentialist thematic analysis approach was used to find repeated patterns of meaning within the data (22). Researchers listened to and read transcripts of interviews repeatedly to acquire a deep familiarity with the data. During this process, they assigned codes to topics as they emerged. An inductive approach to the analysis allowed researchers to formulate meaningful categories and themes from the codes (22). A coding matrix was constructed using a framework approach to organize the findings (23). This process enabled a robust and transparent method of analyzing cross-sectional descriptive data (22). Initial categories and themes led to refined categories, final themes, and the development of core concepts.

The researchers, who were from a variety of backgrounds (i.e., clinical nursing, academic nursing, social science, and biomedical science) independently analyzed data and met regularly to reflect on findings, identify preconceptions and biases, and reach consensus.

### Rigor

Throughout the study, authors attended to issues of trustworthiness, including credibility, transferability, dependability, confirmability, and reflexivity (24). Credibility was enhanced by collecting data from two different countries with separate cultures within the United Kingdom (data triangulation); using multiple methods of data collection, including in-depth interviews and field notes (method triangulation); and researchers conducting interviews after receiving joint training, with all researchers contributing to the analysis (investigator triangulation). Transferability was intended by providing detailed descriptions of the data to ensure that readers will gain a meaningful understanding of participants' experience and will know if it is transferable to their or others' settings. Dependability and confirmability were demonstrated by using a framework approach to manage

**TABLE 1** Topic Guide

Introduction	<ul style="list-style-type: none"> <li>• Tell me a little bit about yourself?</li> </ul>
Life with diabetes	<ul style="list-style-type: none"> <li>• When were you diagnosed with diabetes?</li> <li>• What is life with diabetes like for you?</li> <li>• How much attention do you pay to your health in general?</li> <li>• Who is responsible for buying food and planning meals in the house?</li> <li>• Do family members help or hinder your diabetes management in any way?</li> <li>• What, if anything, do you think caused you to get diabetes?</li> </ul>
Experience of being invited	<ul style="list-style-type: none"> <li>• It might have been a while ago, but can you remember receiving an invitation to diabetes group education?</li> <li>• What education and advice had you received prior to the invitation?</li> <li>• Do you feel your understanding of your diabetes has increased since diagnosis?</li> <li>• How do you like to learn? (e.g., group education, one to one, or online)</li> </ul>
Reasons for not attending	<ul style="list-style-type: none"> <li>• Would you mind telling me why you didn't go to the education program?</li> <li>• How do you feel about not being able to go/not going?</li> <li>• What would have encouraged you to go at the time you turned it down?</li> <li>• What would have to happen in the future for you to want to/be able to attend an education program?</li> <li>• What would you think if I said that many of the things you shared about your life with diabetes are part of the education programs?</li> <li>• If you had known that diabetes education could answer your questions, how would that have affected your decision about attending?</li> </ul>
Closing	<ul style="list-style-type: none"> <li>• How could education be provided in a way that makes it easy for people to attend?</li> <li>• What advice would you give to health care professionals to get more people to attend diabetes education?</li> <li>• Is there anything else that you would like to share about not attending group education?</li> <li>• Is there anything you feel is really important for us to know?</li> </ul>

the data, providing transparency of the process from coding through to the development of the core concept. Records of researcher meetings were also kept as an audit trail. Reflexivity was very much part of the process during researcher meetings to discuss findings, especially in addressing preconceptions and bias.

## Results

### Demographics

Demographic data are summarized in Table 2. The age range of participants was 32–79 years. Duration of diabetes ranged from 1 to 28 years. Race/ethnicity of the participants was predominantly white, despite efforts to recruit from racial/ethnic minorities. All participants had been invited to attend SDE within the previous 2 years. Those with a shorter duration of diabetes had been invited to SDE closer to their diagnosis, whereas those with a greater duration had been invited to SDE when they had established diabetes.

### Core Concept, Themes, and Categories

Researchers identified six themes and 19 categories (Figure 1). No new points were being raised by the time 20 interviews had been completed, and so it was considered that data saturation had been attained at that point.

### Core Concept: “What’s the Point?”

“What’s the point?” was the core concept, as well as one of the themes, identified by researchers; each significant statement within each interview could be qualified with that statement. This concept can be illustrated by this quotation:

*“If I just went to the doctors, and they said, ‘Right, here are the results. Actually, nothing’s changed: it hasn’t improved; it hasn’t deteriorated. Steady as you go, just carry on taking this medication, and, by the way, go and do this course,’ I’d say, ‘Well, what’s the point?’ or, if it’s improved, ‘What’s the point of going? I’m on the right path’” (LC1062).*

### Theme 1: “What’s the Point?”

This theme applied to 18 of the 19 participants. Within this theme are four categories: “feels well; must be well,” “fatalistic attitude,” “I’m being looked after,” and “I know enough.”

The first category (“feels well; must be well”) illustrates the difficulty most participants had in understanding that type 2 diabetes could be doing silent damage in the form of vascular complications. As one participant said, “I felt great, probably as good as I felt for 9, 10 months, you know, so that was probably another reason why I felt

**TABLE 2** Demographics of 19 Participants

Identifier	Sex	Age, years	Race/ Ethnicity	Duration of Type 2 Diabetes, years
LC1051	M	55	Pakistani	20
LC1062	M	49	White	8
LC1073	F	79	White	6
LC1084	M	73	White	28
LC1095	F	73	White	4
LC1106	F	68	White	2
LC1117	M	56	White	5
LC1128	M	55	White	1
LC1139	M	70	White	2
LC1610	F	41	White	8
T2057	F	49	White	8
T2185	F	50	White	4
T2090	F	76	White	3
T2143	M	59	White	2
T2062	M	51	White	3
T2002	M	68	White	4
T2020	F	32	White	3
T2137	F	38	White	4
T2010	M	42	White	6

F, female; M, male.

I didn't need to go" (T2143). Most participants said they thought they would attend SDE if things started to go wrong and they developed complications, indicating that they had a limited concept of prevention and their own role in their diabetes management. One participant stated, "Maybe if my toes started to fall off or something, something devastating like that started to happen, I'd think, 'Oh my goodness, maybe I do need to be educated,' but for me it's all positive" (T2185).

The second category ("fatalistic attitude") was expressed in varying guises. For example, one person expressed fatalistic religious beliefs, saying "The Lord has your life laid out for you. You're born the day you die. Your life is laid out in front of you, so no matter what you do, you'll go, so . . . I suppose I grew up with all them philosophies, but still . . ." (T2090). Another spoke of her family history, saying, "It didn't bother me for the simple reason that it was in the family. . . . Can't do anything about it. You can't turn back the clock. . . . You know, you just forget about it" (T2002).

Fatalism is defined as a belief that something is pre-determined and therefore one is powerless to change that thing. Fatalism has been recognized as a barrier to self-care in people with type 2 diabetes (25). Someone with a fatalistic view of their diabetes diagnosis may not see the point of attending SDE, especially if they believe their personal influence is limited.

The participants who contributed to the third category ("I'm being looked after") showed an interest in being on the receiving end of diabetes care. However, they did not recognize that diabetes care involves self-management and an active partnership between patients and their HCPs. As one participant put it, "I went to the nurse last week, and she takes your blood pressure, goes through all the tests that have been done, the diabetes and all the rest of it, and everything was fine" (LC1139). Being looked after could also relate to the involvement of other members of the family. For example, one participant said, "The last thing you want to do is go and sit down and be lectured to for 2 or 3 hours, probably being told stuff, because again, my wife being what she is, is on the Internet and checking everything right through, the dos and don'ts, and they give you a lot of literature that my wife read from cover to cover" (T2143). This man's comment suggested an aversion to didactic education—being "lectured to"—and his happiness in relinquishing responsibility to his wife.

In the fourth category ("I know enough"), participants described receiving education at diagnosis from their primary care nurse or dietitian or through family members who also live with diabetes. Others reported using the Internet or reading leaflets to obtain information. As one said, "The nurse, when I was diagnosed, told me everything about diabetes and gave me all the information I needed" (T2010). These participants felt informed, which, for them, negated the need to attend an education program.

### Theme 2: "What I Don't Know Won't Annoy Me."

Six participants either denied, avoided, or minimized negative feelings about having type 2 diabetes. This theme included three categories: "don't want to think about it," "don't want to hear about it," and "don't want to know about it."

Avoidance is recognized as a coping strategy that protects an individual from the stress of an external experience—in these cases, being diagnosed and living with diabetes. Three quotations demonstrate the breadth of avoidance behavior expressed by participants.

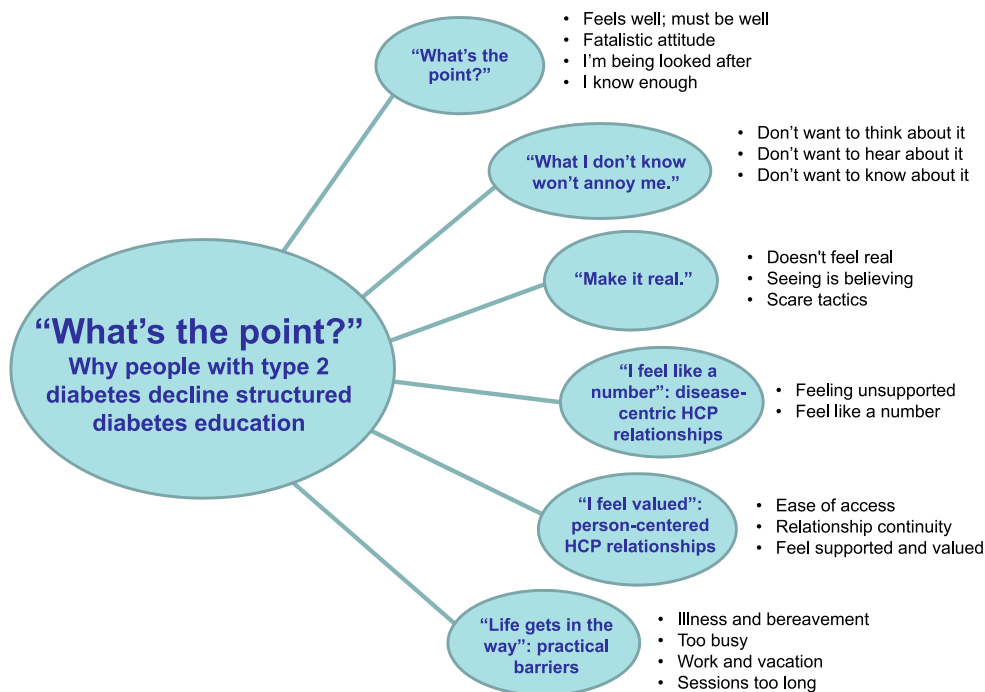


FIGURE 1 Core concept, themes, and categories.

One participant demonstrated not wanting to think about diabetes by saying, “Now it just doesn’t bother me. I never think about it . . .” (T2010). Another expressed not wanting to hear about it, saying “. . . and I wasn’t going to sit in a room and listen to possibly some people crying in their milk that they’d got diabetes . . .” (LC1128). A third described not wanting to know about diabetes, saying, “It gets shoved to the back, and what happens is you drift and drift, and then something has to bring you back. Now you could argue that when my doctor said did I want to do it [attend SDE], then that was the time to say yes, but you’re sitting there at the time thinking, ‘Well, what are they going to tell me that’s new? Nothing.’ It’s a self-denial job that is, really” (LC1084).

Attending group education for some might challenge this personal coping strategy if there is a perception that they will be exposed to the reality of their own stress or subjected to the distress of others. Avoidance coping is considered maladaptive. A recent study examining the effects of various coping profiles in people with type 2 diabetes found that avoidance and suppression were consistently and significantly associated with the presence and severity of depression (26).

**Theme 3: “Make It Real.”**

Eleven participants struggled with believing the reality that they had a serious condition that could be damaging to them in the long term. Three categories contributed to this theme: “doesn’t feel real,” “seeing is believing,” and “scare tactics.”

Type 2 diabetes is a condition with which many people are diagnosed in the absence of symptoms, which requires trusting that the clinician has made the correct diagnosis. As one participant put it, “You know, pain and disability is a motivator. And the snag with type 2 diabetes is it doesn’t particularly give you any. As I say, the principal problem with it is that it’s a score on a machine” (LC1117).

To make diabetes real, some participants expressed a wish for themselves and others with type 2 diabetes to receive threatening messages. They believed being confronted with frightening facts about diabetes would make their condition more tangible and consequently encourage them to attend SDE. They suggested that visual representations of complications, especially amputations, could achieve the necessary effect in making type 2 diabetes feel real. One person explained, “I think they should give you full information to maybe scare you. . . . They say, seeing is believing. . . . The things you’re told is a bit wishy washy. . . . It’s not hard-hitting enough” (T2057). However, other participants said verbal threats could be perceived as persecutory. The following quotation starts off mimicking the doctor and suggests that using “scare tactics” can be met with skepticism.

*“Aw, you know, you’re going to have to take them, [medications] ‘cos if it goes on, this can happen, and that can happen. . . . You know, he [the doctor] just throws the worst-case scenario at you. But, to me, they were all scare tactics so . . .” (T2010).*



This theme (“make it real”) speaks to the difficulties people have first in believing that they have diabetes and second in believing that they could develop diabetes-related complications. Participants made suggestions about education being “hard-hitting” and using photographs or other means that might explicitly drive home the reality of diabetes complications. The SDE program known as DESMOND (Diabetes Education and Self-Management for Ongoing and Newly Diagnosed) was designed to make sure that “threat messages,” defined as information about the complications of diabetes, were followed up by providing the opportunity for attendees to develop action plans to limit their personal risks (27).

#### Theme 4: “I Feel Like a Number”: Disease-Centric HCP Relationships

The two categories in this theme were “feeling unsupported” and “feel like a number.” Eight participants described relationships with HCPs that were limited in terms of support, both professionally and at a personal level. Feeling unsupported included not being acknowledged for the achievement of losing weight or quitting smoking. One participant, for example, was angry about a lack of follow-up when he had stopped taking medication:

*“Like, in 6 or 7 months, I haven’t applied for any new prescriptions for any new medication or anything, and nobody’s following up, nobody’s checking up or nothing. . . . Whereas, if it was my previous health care team, they’d have been straight on the ball, ‘Why have you not ordered your medication?’” (T2010)*

The phrase “feel like a number” reflected the sense some participants had that HCPs do not consider individuals’ diabetes within the context of their lives. Many referred to the focus on test results rather than on how a person might be feeling about living with type 2 diabetes, as illustrated in the following quotation:

*“. . . The one thing I do notice when you go in there is, again, it’s a case of, ‘What’s your scores? What’s the numbers? Your blood sugar level is x. Your cholesterol level is y.’ The one question that doesn’t seem to get asked is, ‘How do you feel?’ you know? ‘What’s your actual well-being quotient? How do you rate your personal health?’” (LC111).*

There was a sense of hurt feelings and underlying anger from participants who described this distant and impersonal relationship with their HCP, further illustrating the core concept of “What’s the point?”

#### Theme 5: “I Feel Valued”: Person-Centered HCP Relationships

Conversely to Theme 4, nine participants felt well supported by their HCPs. The three categories contributing to this theme were “ease of access,” “relationship continuity,” and “feel supported and valued.”

Ease of access to the HCP was exemplified by this quotation: “It gives me a bit of confidence, I suppose. Anything slightly wrong, and all I need to do is pick up the phone and leave a message for her, and she’ll ring me straight back” (LC1073). Providing ease of access communicates a message that HCPs take type 2 diabetes seriously and invites patients to also take it seriously.

Relationship continuity between patients and their HCPs can engender trust and lead to more effective partnerships as both get to know each other as individuals. As one participant said, “She’s my nurse, and you see the same girl every time, which is great. . . .” (T2185). Another said, “She saw me every time. . . . She would always have kept me right with my medication and stuff” (T2010).

The category “feel supported and valued” was exemplified by nine participants who spoke warmly of their health care provision. One example was, “. . . they gave me the impression that you’re important. . . . If it [diabetes] did change in the future . . . first thing I would do is ring Dr. \_\_\_\_\_” (T2143).

However, this level of support detracted from the impetus to attend SDE because participants were invited to contact their HCPs when and if problems arose. Others received one-to-one education during routine clinic visits. Many HCPs aspire to provide person-centered care, the accounts by these participants indicated that they certainly valued this approach. However, participants did not see the point of attending SDE when their needs were being met directly through their HCP.

#### Theme 6: “Life Gets in the Way”: Practical Barriers

The four categories within this theme came from comments from 14 participants. The categories included “illness and bereavement,” “too busy,” “work and vacation,” and “sessions too long,” which was the most frequently mentioned practical barrier.

Well recognized and described elsewhere are the many practical barriers that befall everyone from time to time (6–17). In our study, such practical barriers included illness and bereavement, as exemplified by the following participant quotations: “. . . but because I was ill, I couldn’t get to the DESMOND place” (LC1610) and “It wasn’t long after my brother had died” (T2057).

Some participant comments offered hints that some practical barriers might imply a lack of prioritization, especially because there seemed to be little aspiration to seek future education classes. The second category in this theme acknowledged that some participants described themselves as too busy. For example, “. . . but every time I wanted to go to learn, it was just the wrong time, and things were happening. . . .” (T2137). Others discussed work or vacations getting in the way, the third category. One participant said, “A bit of work came in at that time, and I just went to work” (T2011). Another said, “. . . and then I went on holiday, so I missed that, and that was that, then” (LC1106).

This lack of prioritization is noted not to be judgmental, but rather to further emphasize the core concept of “What’s the point?” and the important role of HCPs in helping patients make sense of their type 2 diabetes and understand what they would gain by attending SDE. If practical barriers do prevent attendance, the option to attend SDE at a future date should be offered and supported.

“Sessions too long” was the final category within this theme and has been noted in other studies (20). Attending two 3-hour sessions may be an issue for individuals who have other responsibilities related to their work or home lives. The quotation below, however, suggests a lack of confidence about managing “3 hours of information” and that the program is envisioned as being like school.

*“. . . but you think to yourself [that] maybe 3 hours of information would be too much to take in at one time. You know, if they could spread it out an hour at a time. . . .It’s like going back to school again. . . .”* (T2002)

Within any cohort of adult learners, there will be a diversity of age and educational attainment. Previous educational experience, if negative, may also contribute to resistance to attending SDE. If patients imagine a didactic form of education delivery, they may be negatively reminded of school. The sessions may be perceived as too long, but for some, this concern may reflect internal concerns about their ability to cope with new information and skills.

## Discussion

Nearly all studies examining why people with type 2 diabetes do not attend SDE cite practical and logistical reasons. However, we suggest that, for most of those interviewed, practical reasons mask underlying

emotional, cognitive, and social issues connected to the experiences of being diagnosed and living with diabetes. This notion suggests that there are more complex barriers to attending SDE than previously acknowledged.

The systematic review of emotional, cognitive, and behavioral responses to the diagnosis of diabetes cited above (18) concludes that psychological adjustment to the diagnosis of type 2 diabetes is variable and relates to symptom experience, prior knowledge, and information and treatment provided. The authors also suggest that lack of overt emotional distress may be a marker of avoidance behavior, as illustrated in our second theme of “What I don’t know won’t annoy me.”

Lack of symptoms at diagnosis, prior knowledge, and information and treatment provided may also be reasons why most of those interviewed in our study had no real understanding that preventing complications requires action prior to complications developing, and many thought that attending SDE might be something they would do if complications were to develop. The category “feels well; must be well” suggests health beliefs that minimize the seriousness of the condition and vulnerability to complications (18).

Themes 4 and 5 describe opposite types of relationships with HCPs, although both types can unintentionally affect patients’ willingness to attend SDE. Recent results of the large IntroDia survey showed that 73% of 6,753 physicians surveyed agreed that the conversation at diagnosis of type 2 diabetes affects patients’ acceptance of their condition and subsequent quality of self-care (28).

In our study, there was an undercurrent of anger and rebellion from participants who felt “like a number” because of limited engagement with their HCPs. Participants expressed a sense of being told what to do in a paternalistic way, possibly reminding them negatively of a teacher-student relationship. This perception made attendance at SDE programs unlikely if they perceived that they would be experiencing more of the same.

One of the traps in a person-centered approach can be to inhibit patients’ problem-solving skills rather than facilitating problem-solving by equipping patients, through SDE, with the knowledge, skills, and confidence to self-manage effectively (29). Participants who experience a person-centered approach from their HCPs still require clear messages about the importance of attending SDE.

Our final theme addressed some of the practical barriers to attending SDE such as work, holidays, and illness, which have also been well documented elsewhere (6–17). The perception of unduly long SDE sessions has also been observed in other studies (20). The issue of session length may be a real consideration for individuals who have practical challenges arising from other responsibilities; however, it was clear that many participants declined SDE because they perceived a didactic delivery of education, which reminded them of negative school experiences.

Throughout all of the participant narratives in this study was the possibility of a lack of sufficient explanation, description, and justification of SDE from referring clinicians with regard to what participants would gain and should expect from attending an SDE program. This finding has also been highlighted by authors of another recent study calling for more effective clinician promotion of SDE (30).

### Strengths and Limitations

A strength of this qualitative study was that it gave voice to people with type 2 diabetes who declined SDE and who are traditionally considered difficult to engage.

The participants, from two U.K. countries that have different cultures, expressed similar concerns despite their divergent life experiences. The themes were spread more or less equally across participants from both countries.

Three limitations of this study must be addressed. First, we were not able to identify emotional issues that prevented engagement with SDE; however, an underlying sense of anxiety, fear, or shame was suggested. One recent qualitative study elicited the experience of shame and stigma among some people with type 2 diabetes who chose not to attend SDE. These negative feelings manifested as not wishing to let anyone know about their diagnosis (7). Another study has described avoidance and refusal, which included diabetes being a low priority, patients' unwillingness to change their behaviors, and patients not wanting to meet others with type 2 diabetes (8).

Second, despite our best efforts to engage participants for various races and ethnicities, only one participant was of Pakistani origin, and the remainder were white. Subsequent research needs to address the engagement of a more diverse group within this already difficult-to-reach population of people with type 2 diabetes.

Third, we did not systematically collect exhaustive demographic information such as patients' A1C,

comorbidities, or diabetes complications. This information would undoubtedly have added an extra dimension to our research. However, a strength of this study is that the qualitative investigation enabled individuals to freely express their thoughts and feelings about living with diabetes and how those feelings relate to their decision to decline SDE. Some of this demographic information may have risen naturally during interviews as part of the lived experience.

### Future Research

Additional research is needed to more specifically identify the underlying emotional aspects of being diagnosed and living with diabetes such as shame, anxiety, and stigmatization and how those emotional issues relate to the decision to decline SDE. This research should be linked to efforts to determine how HCPs can best explain type 2 diabetes, diabetes complications, and the importance of self-management, as well as the need for SDE. The extent to which patients understand such issues, especially at their first consultation, also needs to be evaluated.

### Conclusion

Facilitating the attendance of people with type 2 diabetes at SDE programs requires a collaborative, person-centered dialogue between referring HCPs and their patients. This approach can address underlying emotional, cognitive, and social issues related to living with diabetes, preferably around the time of diagnosis, to positively influence patients' personal model of diabetes. This dialogue should include discussion of the seriousness of type 2 diabetes and some of the difficulties patients experience, such as diabetes not "feeling real" without symptoms. Such an effort can lead to more successful promotion of SDE programs. This approach may have implications for professional training.

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F.F.-W. was employed part-time by Diabetes UK in an HCP role. She carried out this research independently on her own time. No other potential conflicts of interest related to this article were reported.



**AUTHOR CONTRIBUTIONS**

F.F.-W. and V.C. wrote the manuscript. All of the authors researched the data, contributed to discussion, and reviewed and edited the manuscript. F.F.-W. is the guarantor of this work and, as such, had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the analysis.

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