

Barriers to attendance at diabetes education centres: Perceptions of education providers

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A key global policy initiative in the management of diabetes is empowerment through education. However, implementation of policy in the real world may be challenging at times, and the delivery of multidisciplinary education is not an exception. This qualitative study was conducted to explore practitioners' views about factors associated with non-attendance at structured diabetes education, and to identify ways to break some of the barriers to advancing Government policy to provide education for all people with diabetes. Focus groups and interviews were conducted with ten practitioners in four hospital sites in the south-east of England. Thematic analysis was used to analyse the data. The findings indicated a need for improved appointment systems, more resources and more choices for people with diabetes. In addition, practitioners must consider the cultural needs and background of their patients. While some participants felt that non-attendance should attract a sanction, such as a fine, others disagreed.

Globally, structured patient education is considered a vital aspect of diabetes management (Diabetes UK, 2015; World Health Organization, 2016). NICE (2015) guidelines emphasise the importance of structured patient education for people with type 2 diabetes because of the life changes required to self-manage this condition. Consequently, various diabetes education centres have been established which deliver structured patient education to the affected people. Although international and national guidelines have recommended structured education as a key component of diabetes management, non-attendance at diabetes education centres remains a problem, and evidence to promote attendance is weak in the UK. The latest National Diabetes Audit report states that commissioners and providers should investigate the reasons for non-attendance at diabetes education centres (NHS Digital, 2016). Owing to the low rate of attendance at structured diabetes education,

and in order to determine whether operational policy can be adequately translated into practice in this area, this study was conducted to explore factors influencing non-attendance among people with type 2 diabetes.

Research design and methods

This study used a focus group, a paired interview and a one-to-one interview of healthcare practitioners who could not attend the focus group session but were willing to participate in the study.

Settings

The settings were four separate diabetes education centres in the south-east of England. These centres were chosen because of the recorded rate of non-attendance at the diabetes education sessions (around 33% of referred patients) and their demographic differences (areas 1 and 2 are predominantly white, while areas 3 and 4 comprise a multi-ethnic population).

Citation: Lawal M, Woodman A, Fanghanel J, Ohl M (2017) Barriers to attendance at diabetes education centres: Perceptions of education providers. *Journal of Diabetes Nursing* 21: 61–6

Article points

1. Non-attendance in diabetes education centres remains a problem, while evidence to promote attendance is weak in the UK.
2. Barriers to attendance at diabetes education centres include both practitioner- and patient-related factors.
3. The use of negative reinforcement to motivate patients' attendance remains a grey area.
4. Organisation of care should be based on the needs of patients rather than meeting targets.

Key words

- Non-attendance
- Patient empowerment
- Self-management
- Structured education

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Table 1. Themes and sub-themes identified in the focus group and interviews.

Major themes	Sub-themes
Practitioner-associated factors	Communication
	Meeting targets
	Introducing sanctions/penalties
	Referral and appointment systems
	Resources
Patient-associated barriers	Perceptions and beliefs of patients
	Preference for group learning
	Patients' socio-cultural background
	Personal circumstances (employment, school, holiday, language problem)
Strategies to improve attendance	Flexible delivery
	Use of health activist
	Adaptive official protocol

Sample

A purposive sample of 10 out of 14 practitioners delivering education in the four localities was selected and consented to participate in the study (71% participation rate). Half of the participants were DSNs, three were dietitians and two were podiatrists. All had a minimum of 5 years' experience.

Ethics statement

The main ethical issues of significance for this research were informed consent, voluntary withdrawal and confidentiality. Ethics approval was granted by the Berkshire Research Ethics Committee.

Data collection

A focus group was conducted with seven participants who were gathered in a private seminar room in one of the four selected hospital sites in south-east England. The group discussion lasted 75 minutes. The three participants who consented but could not attend the focus group were interviewed separately, one individually and the other two together, on different days. The format was an open-ended question-and-answer session, and seven questions were used as a guide to collect data.

The first author took field notes, the moderator recorded the key points on a flip chart and the conversation was recorded on tape.

Data analysis

The investigators interpreted the data, using a descriptive approach with thematic analysis. Following the focus groups, respondents engaged in a semi-structured, face-to-face interview. Individual narratives were coded in three stages and data were organised and grouped into sub-themes, which were later categorised into major themes.

Results

The results are presented under the three major themes listed in *Table 1*.

**1. Practitioner-associated factors
Communication with patients**

The participants felt that the attitudes of practitioners may affect the way they raise awareness of structured education with their patients with type 2 diabetes. Examples from two participants are:

“They are quite vague in referring patients to the education centre.”

“In my personal view, I think some GPs don't emphasise the importance of attending the session.”

Some participants felt that the use of inappropriate terminology to explain the condition, which some patients would not understand, may be another reason for non-attendance.

Two participants thought that the responsibilities for providing successful education lie with all practitioners involved in diabetes care:

“I think it is not emphasised enough by all the staff either, whether it is the nurse practitioners or whether it is the general practitioners themselves.”

Importance of meeting targets

Some participants felt that structured education was not seen as a key priority for GPs, many of whom have other targets imposed on them:

“Because I think the practices are driven by all the targets and the rest of it... it is all about targets.”

“A quick fix to get the HbA_{1c} levels down is going to be much higher on their priority list.”

Introducing sanctions/penalties

Some participants believed that people with diabetes need to take more responsibility for their own health or be subjected to sanctions, as in the two examples below:

“I think that people should make more of an effort for their health. I think we are doing too much for the patients in our care with the way we work at the moment.”

“If patients have to pay for their health, maybe they would take more effort to look after themselves.”

In contrast, three participants stated:

“Sometimes, [sanctions] can have the opposite effect.”

One participant felt strongly about the issue of being strict, and her body language showed disagreement with the statement that sanctions could be counterproductive. She said:

“Perhaps we should be putting pictures of three deaths per minute, or this or that might happen...”

In contrast, another participant stressed that individual differences should be considered:

“I mean, it’s like any disease. Look at the smokers – they’ve been told its going to kill you, it will give you cancer, but I’m still smoking away my life.”

Inappropriate referral system and a rigid appointment system

Three of the participants stated that:

“It is not held at suitable times; for instance, we don’t offer weekends, lunchtime, evenings – it potentially means that people are taking time out of work. They may not have told their employer that they have diabetes or they may not want anyone to know.”

One participant felt that the waiting time between referral and the actual education sessions may also be a factor:

“I don’t know if waiting time has a role to play. I mean, if you are waiting two months for education,

you are going to either not bother or get it somewhere else yourself.”

Another participant had a contrary opinion, however, suggesting that the long waiting time could allow patients to take the time off work and make other arrangements. One participant believed that the length of the sessions may be too long for some people.

Resources

Funding is also seen as a barrier to providing structured education; however, one participant stated that lack of money and resources will always be a problem:

“I think it’s a fact that there is never going to be enough resources, not enough money.”

Although some practitioners identified the need to seek more funds, they felt they lacked the knowledge, skills and time to pursue this idea. For example:

“We need to develop business plans and go and knock on the door of the board to build a case why we need the money and, unfortunately, we haven’t got those business skills or necessarily the time to do that.”

2. Patient-associated factors

Perception and beliefs of patients

Whilst some participants felt that some patients just choose to ignore the invitation letter, poor understanding of the nature of diabetes is an issue:

“I think there is also a perception that diabetes is very much around eating a healthy diet and keeping active, and people probably feel quite defensive and may think that they are actually doing those things already and don’t want to come and perhaps feel that they are being told off.”

Another participant corroborated this statement:

“I think that a lot of patients don’t recognise diabetes as a serious condition and I think that their actual awareness, especially in type 2 diabetes, [is that] it’s still a mild condition.”

Preferences for or against group learning

A number of participants felt that group sessions were not popular with all patients:

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1. Barriers to providing structured education identified by these 10 healthcare professionals included lack of funding.
2. Inflexible referral systems and inconvenient timing of education sessions were also highlighted as obstacles for patients.
3. Illness beliefs and poor understanding of diabetes were suggested as other reasons why patients would not accept invitations to attend education.
4. The suggestion that patients should be penalised for not attending structured education was controversial.

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1. Group sessions, as opposed to one-on-one education, may be helpful for some people in terms of moral support and learning from others with diabetes, but they may be intimidating and uncomfortable for others.
2. Patients' personal circumstances and cultural or religious views should be taken into account when scheduling education.
3. Suggestions for ways to improve attendance include making the service more flexible, providing structured education in the community setting and using health activists to contact and support patients.

"Some patients do not feel comfortable in a group setting, may be a bit shy and therefore not a benefit."

"I think a group session can sometimes be a little intimidating, or they think so initially."

Regardless of the negative aspects of group education, one participant offered a broader view on this issue, saying:

"Both have got its benefits – in groups, questions may be asked from others; there is a staffing benefit; delivery to more than one person at a time; interaction among patients may be helpful, they may not feel they are on their own."

Patients' sociocultural background

Another common statement was the issue of patients' cultural backgrounds and the need to consider religious events and ceremonies:

"I was just thinking, for example, if they have got ceremonies like Ramadan or Diwali or some other events going on. I think we need to be sensitive not to send the appointments on a particular month or whatever; at least the [non-attendance] rate would decrease."

Differences in the way people from different backgrounds relate to health were also raised:

'...and of course, for lots of people who have the condition, they've been born and brought up in a culture where they just go to the doctor and get the cure, get the fix, get the tablet. It is changing the whole way that people relate to health.'

Personal circumstances

A number of personal barriers to attendance were identified:

"Reasons that may affect attendance are inadequacy of letters, patient relatives with diabetes, work/studies may prevent them, because it is in the hospital – I mean concerned/nervous to discuss in the hospital setting and language barriers."

"Younger patients may not come due to inability to get out of work, some may be on annual leave and travelled on holiday."

3. Strategies to improve attendance

Some participants believed that offering a more

flexible service might help:

"I think work could be a problem and because there is a trend of younger patients coming to the session and they are unable to get out of work – employers may not allow them to leave at that particular time. We have to be flexible about times like morning, afternoon, weekend or evening."

In response to this, one participant suggested the idea of delivering diabetes education in the community. Others suggested the use of health activists to contact patients:

"I think there might be a role for the health activists here, because [area A] had some health activists working with them in their locality. These are people who may have diabetes themselves or who have an interest in long-term conditions, who may actually be able to act as an advocate and they would have the time to ring up and speak to the person – this can help."

"It's certainly improved our uptake of attendance because, when we used the health activist who was a patient with diabetes herself, and because she speaks the lingo, she stressed what would be discussed at the education centre and the attendance did improve."

Finally, one participant summarised her own views on what can be done to reduce non-attendance:

"We need to consider one-to-one education if they don't like group – offer a flexible approach. Start roll-on education with an option to opt in and out."

Discussion

This study demonstrates that poor provider-patient communication constitutes a barrier to attendance. It is important to give complete information in a clear and concise manner, considering that English may not be the first language for some patients. Webb (2011) states that patients are often unfamiliar with the medical terminologies used by their practitioners. Our findings raised the issue of interprofessional relationships, with one group of professionals trying to push the blame onto other colleagues. This is in concordance with Lawal (2016), who states that having a separate benchmark for several

professionals working to achieve a common goal may create some tension in the delivery of services such as patient education. Nevertheless, successful delivery of structured education relies on all the professionals that are involved in the process.

Although the possible impact of Government targets and incentives on patient outcomes is well documented in the literature (Hadley-Brown, 2013; Kenny, 2013), there is limited empirical evidence of the effectiveness of targets and rewards (Kiess et al, 2008; Gallagher et al, 2015). Our findings suggest that Government targets are one of the drivers for the attitudes of GPs towards structured education. Procter et al (2013) suggested that organising services based on the Quality Outcomes Framework, which determines the standard required and funding mechanisms, may have hindered effective delivery of care, and that organisation of care should be based on the need of patients as opposed to targets.

Opinions on using sanctions and painting frightening pictures of diabetes to motivate patients are a unique finding in our study. Based on these data, some patients are regarded as unmotivated, and being tough or imposing a penalty may help. However, introducing sanctions was seen as a grey area and there was no agreement as to whether it would lead to negative or positive health outcomes. The literature also presents a controversial argument on the use of negative reinforcement as a measure to motivate patients (Rana and Upton, 2008; Marks et al, 2015). Although this is an unusual finding in comparison to similar studies, it merits further exploration.

Group education is perceived to be cheaper than one-to-one sessions, and attendees can support and learn from each other through group education. Nevertheless, our study showed that some people may not feel comfortable with group learning. However, both individual and group education sessions have their merits and drawbacks (Lawal and Lawal, 2016). Based on this finding, education should be tailored to the needs of the individual, in line with the NICE guideline, which states that structured education can be given individually or in groups (NICE, 2015). Our findings were similar to other studies, which found that personal problems such as work, school, and holiday leave were contributory factors to non-attendance in

clinical practice (Gucciardi et al, 2012; Schäfer et al, 2013). Regardless of these practical reasons, our participants felt that patients should call to cancel their appointment as a matter of courtesy.

Different cultural backgrounds with different expectations were also identified as a hindrance to attendance. The link between culture and health beliefs is well documented (Leever, 2011; Upton, 2012); therefore, this finding is not surprising. However, it is interesting to note that some people may keep their diabetes a secret and thus would not like to seek permission to take leave from work. Excerpts from our participants reflect that the healthcare approach may not be consistent with the upbringing of some patients, and it is important to recognise these differences (Lawal, 2016). Type 2 diabetes is an insidious condition, and many people go undiagnosed for some time (Brown, 2012). The observation of lack of adequate understanding of the seriousness of diabetes may be partly due to the insidious nature of the condition.

The role of organisational structure in the delivery of diabetes health education is seen as crucial to promoting attendance. The findings of inappropriate referral systems and holding the sessions at unsuitable times and locations are consistent with those of other studies on non-attendance at diabetes education (Gucciardi et al, 2012). Our study revealed that a better appointment system, more resources, flexible delivery of education, offering the education service in the community and the use of health activists are part of the solution to this. Although a follow-up call or sending a reminder letter is seen as a possible way to motivate attendance, it is fraught with organisational barriers, such as a lack of personnel and funding. Other authors have indicated the spending challenge confronting the healthcare service (Baggott, 2010; King's Fund, 2011), and some of our participants believed that funding would always be an issue in the NHS.

Study limitations and strengths

The small sample size and the sampling technique limit the transferability of these findings. Furthermore, we captured the opinions of practitioners who are responsible for delivering education to people with type 2 diabetes, and these findings present only one side of the debate.

“This study demonstrates that poor provider–patient communication constitutes a barrier to attendance. It is important to give complete information in a clear and concise manner, considering that English may not be the first language for some patients.”

“It is clear from these findings that strategies to increase attendance rates could include improving referral and appointment systems, allocating additional resources, increasing flexibility in terms of time and location, and the use of volunteers such as health activists.”

Despite these limitations, the study has thrown more light on barriers to attendance at diabetes education centres and has highlighted some measures that can be used to promote engagement. It is important to reduce waste in the NHS to maximise the efficient use of taxpayers’ money, and this study is important due to the limited empirical evidence on the topic.

This study benefited from the collection of in-depth information from four localities with different demographic characteristics. As the practitioners were willing to talk and share their views openly in the group, the level of participation was good through effective coordination. Hence, data saturation was achieved during the process of conducting the research, suggesting that sampling more data would not uncover more information related to this research (Polit and Beck, 2012). In addition, the use of a co-researcher who acted as a moderator has proved beneficial in other studies.

Conclusion

It can be concluded from these results that both practitioner- and patient-associated barriers to attending structured diabetes education exist. People with diabetes often have genuine reasons for non-attendance, including personal circumstances such as lack of time, work-related issues, feelings about group education and the location of the session. In addition, patients’ cultural backgrounds, organisational structures within the health service, the need to meet Government targets and professional–patient communication may aid or hinder attendance.

It is clear from these findings that strategies to increase attendance rates could include improving referral and appointment systems, allocating additional resources, increasing flexibility in terms of time and location, and the use of volunteers such as health activists. Looking ahead, we recommend conducting a further, large-scale study covering several Trusts across the country and, possibly, involving practitioners who are involved in educating people with type 1 diabetes. ■

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