

Muili Lawal | University of West London, UK

DIABETES EDUCATION AT A CROSSROADS

*Perspectives of practitioners about barriers to
attendance in diabetes education centres*



Several studies have identified the beneficial effects of diabetes education in promoting patient outcomes. However, non-attendance in Diabetes Education Centres remains a big challenge to the implementation of a national diabetes education policy for all newly diagnosed patients with diabetes in the UK.

Background

Structured patient education (SPE) for patients with diabetes is the ongoing process of facilitating the knowledge, skills and ability to improve self-care and clinical outcomes (Lawal, 2016). This involves delivery of education to an individual, or a group of patients, on key areas such as blood glucose control, dietary management and exercise. Numerous studies have identified the beneficial effects of diabetes education in promoting self-care knowledge, illness beliefs, and coping ability, and in reducing complications and hospitalisations (Gucciardi et al, 2009; Lawal 2016). The National Institute for Health and Care Excellence (NICE, 2015) and the World Health Organisation emphasise the importance of structured patient education for people affected by diabetes because of the required life changes involved. Consequently, this has led to the establishment of various Diabetes Education Centres that deliver structured patient education to the affected patients.

Although, international and national guidelines have recommended diabetes education as a key component of diabetes management, non-attendance in Diabetes Education Centres remains a problem and evidence on how to promote attendance is weak in the UK. A systematic review of 14 primary research studies on the phenomenon revealed that all the studies were from countries outside the UK. These countries have a different funding and patient education system, therefore, this established the need for a UK study. The Health and Social Care Information Centre (2016) states that commissioners and providers should investigate the reasons for non-attendance at Diabetes Education Centres. Owing to the identified practice gap and a lack of primary research in this area within the UK, this study examined the perspectives of practitioners about barriers to patient attendance in Diabetes Education Centres and explored ways to break the barriers to attendance.

Research design and methods

This study used a focus group approach with one-to-one semi-structured interviews with healthcare practitioners who could not attend the focus group session but were willing to participate in the study. A purposive sample of 10 practitioners

delivering education to patients with type 2 diabetes who consented to the study was selected in four areas within a Primary Care Trust (PCT) in England: Diabetes Specialist Nurses (DSN) (n=5), Podiatrists (n=3) and Dieticians (n=2). Four practitioners refused to participate in the study for various reasons. The focus group interview comprised seven people. The three consenting participants who could not attend the focus group took part in individual face-to-face semi-structured interviews on different days in October 2013. The settings were chosen because of the rate of non-attendance at Diabetic Education Centres and its demographical differences. The populations of two areas were predominantly white whilst the other two areas comprised a multi-ethnic population.

Seven open-ended questions were used as a guide to collect data for the study. Questions were generated based on the NHS Institute for Innovation and Improvement (2008) guidance in improving attendance in practice and other literature. The question template was pre-tested to ensure its appropriateness by piloting it with a group of practitioners from a different Primary Care Trust and this resulted in amendments to the question guide. A senior colleague, an experienced researcher, acted as a moderator and recorded the key points on a flip chart, assisted with facilitation of the group discussion and helped to cross-validate the thematic analysis codes. Ethical approval was obtained through the Central Office for Research Ethics Committees (COREC).

From an interpretivist perspective, a descriptive approach was undertaken using thematic analysis. The data from the focus group and semi-structured interviews were transcribed and coded following the process outlined by Braun & Clarke (2006). This involved using verbatim transcriptions of the raw data to establish codes; developing codes into sub-themes and identifying major themes which were used for interpretation and discussion of the findings.

Results

Theme 1. System related factors

(a) Attitudes and priorities of the practitioners

The participants felt that the attitudes of general practitioners may affect the way they raise the level of awareness of the education among patients affected by diabetes:

The General Practitioners (GPs) are quite vague in referring patients to the education centre (Participant 7, Area C, DSN)

In my personal view, I think some GPs don't emphasize the importance of attending the session (Participant 1, Area D, DSN)

Some participants considered that structured patient education was not a key priority for the GP:

*Because I think the practices are driven by all the targets and the rest of it... it is all about target (Participant 1, Area D, DSN)
... a quick fix to get the HbA1c levels down is going to be much higher on their priority list (Participant 1, Area D, DSN)*

b) Referral/Appointment system

Three of the participants stated that an inappropriate referral system and a rigid appointment system constitute a barrier:

It is not held at suitable times for instance we don't offer weekends, lunch time, evenings, it potentially means that people taking time out of work. They may not have told their employer that they have diabetes or they may not want anyone to know (Participant 3, Area A, Podiatrist)

A participant felt that the waiting time between referral and date of education may have a role to play:

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 (Participant 6, Area C, DSN)

A participant stated a contrary opinion:

On the other hand, if you've got time they can rearrange work. I think if you have a couple of months then you are more likely to take the time off to go to the education (Participant 5, Area D, Dietician)

Although, the patients are routinely referred, some participants thought that poor provider-patient communication is part of the problem:

The GPs and the practice nurses who are at the point of diagnosis are obviously not giving them (the patients) the information that they should and need to be having (Participant 3, Area A, Podiatrist)

It is about understanding as well, do they (the patients) understand the terminology (Participant 4, Area A, DSN)

c) Availability of funding

Funding is also seen as a barrier. Two quotations on this barrier are:

Lack of resources and the booking system is part of the problem (Participant 7, Area C, DSN)

The other thing is that the Government put their funds in 10 years or maybe 20 years ago when there were fewer patients and now there are more diagnoses, more resources are needed so they haven't really taken that into consideration either (Participant 4, Area A, DSN)

In contrast, a participant stated that lack of enough 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 in the NHS (Participant 1, Area D, DSN)



Theme 2. Patient associated factors

a) Perceptions of diabetes

Whilst some participants viewed that some patients just choose to ignore the letter of invitation, a poor understanding of the nature of diabetes among the patients was also seen as 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 (Participant 5, Area D, Dietician)

Another participant corroborated that view:

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, it's still a mild condition (Participant 2, Area D, Dietician)

b) Individual Preference

Some of the participants indicated that patient preference for individual education is a barrier:

Some patients do not feel comfortable in a group setting, may be a bit shy and therefore not a benefit (Participant 10, Area B, Podiatrist)

I think a group session can sometimes be a little intimidating or they think so initially (Participant 6, Area C, DSN)

Regardless of the possible negative aspects of group education, a participant offered a broader view on this issue by 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 patient may be helpful, they may not feel they are on their own (Participant 8, Area D, Podiatrist)





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, it's still a mild condition



c) Cultural influences

Another recurrent statement was the issue of socio-cultural background of the patients and the need to consider festivals like Ramadan and Diwali:

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 'do not attend' rate would decrease (Participant 4, Area A, DSN)

There was a view that different cultural background has different expectations:

... and of course for lots of people who have the condition they've been born and brought up or come here and been 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 (Participant 4, Area A, DSN)

d) Patient's responsibility

Some participants believed that patients with diabetes need to take more responsibility for their health or be subjected to sanctions:

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 (Participant 2, Area D, Dietician)

Some participants opined that patients need to call to cancel their appointment as a matter of courtesy:

I think as long as people have the opportunity to telephone to make some form of contact if they are not able to attend (Participant 2, Area D, Dietician)

The tone of voice of a participant at this particular time was high suggesting her passion for imposing a penalty:

If patients have to pay for their health, maybe they would take more effort to look after themselves (Participant 2, Area D, Dietician)

e) Motivation

Another participant stated that painting frightening pictures of diabetes is necessary to scare and motivate patients to engage with structured patient education. In contrast, three participants did not concur with this approach and one stated:

Sometimes, it can have the opposite effect (Participant 1, Area D, DSN)

f) Personal circumstances

Personal circumstances were seen as a major problem:

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 (Participant 1, Area D, DSN)

In agreement with the previous statement, another participant stated:

Younger patient may not come due to inability to get out of work, some may be on annual leave and travelled on holiday (Participant 9, Area B, DSN)

Theme 3. Strategies to improve attendance

Some participants believed that offering a 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 – employer may not allow them to leave at that particular time. We have to be flexible about time like morning, afternoon, weekend or evening (Participant 10, Area B, Podiatrist)

A participant summarised her own views on what can be done to reduce non-attendance thus:

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 (Participant 8, Area D, podiatrist)

Another participant suggested delivering the diabetes education in the community:

Does the current high rate of non-attendance demonstrate the need to go out into the community to deliver the education (Participant 4, Area A, DSN)

A participant suggested the use of health activists to contact patients. In her opinion:

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 chronic 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 (Participant 5, Area D, Dietician)

This view was echoed by another participant:

It's certainly improved our uptake of attendance because when we use 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. So I think in a way we need to be sensitive as well to the culture (Participant 1, Area D, DSN)

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 the nursing staff trying to push the blame onto other medical 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 patient 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), there is limited empirical evidence of the effectiveness of targets and rewards (Gallagher et

al, 2015). Our findings suggest that Government targets is 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 such as introducing a fine as a measure to motivate patients and Upton (2010) states that praise and reward have been found to play a role in motivating certain behaviours and to aid self-efficacy in patients. Although this is an unusual finding in comparison to studies of non-attendance conducted in other countries, 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, 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 conducted outside the UK, which found that personal problems such as work, school, and holiday were contributory factors to non-attendance in clinical practice (Gucciardi et al, 2012). 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 potential barrier to attendance. The link between culture and health beliefs is well documented (Upton, 2012); therefore, this finding is not surprising. However, it is interesting to note that some people may keep their diabetes a secret and therefore 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 (Lawal, 2016). 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 nonattendance at diabetes education (Gucciardi et al, 2012). Our study revealed that a better provider-patient communication system, more resources, flexible delivery of education, offering the education service in the community and the use of health activists may be part of the solution to this. Other non-UK studies (Gucciardi et al, 2009) have also identified a rigid appointment system, distance and timing of the sessions as barriers to attendance among diabetes patients. 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 (Hadley-Brown, 2013; Lawal, 2016), 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, this phase of the study captured the opinions of practitioners who are responsible for delivering education to people with type 2 diabetes. The views of the patients are presented in subsequent phases of the study. 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 funding and this study is important due to the limited empirical evidence on factors that are responsible for non-attendance in the UK.

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. 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 coupled with system related barriers to attending structured diabetes education exist. The healthcare practitioners indicated that 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 of sessions, 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 as opposed to only type 2 diabetes education.



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

References

- Braun, V. & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* 3 (2): 77-101
- Gallagher, N., Cardwell, C., Hughes, C. & O'Reilly, D. (2015) Increase in the pharmacological management of type 2 diabetes with pay-for-performance in primary care in the UK. *Diabetic Medicine* 32: 62-68
- Gucciardi, E., et al (2012) Patients perspectives on their use of diabetes education centres in Peel-Halton region in Ontario. *Canadian Journal of Diabetes* 36: 214-217
- Gucciardi, E., DeMelo, M., Booth, G., & Stewart, D. E. (2009) Individual and contextual factors associated with follow-up use of diabetes self-management education programmes: a multisite perspective analysis. *Diabetes Medicine* 26 (5): 510-517
- Hadley-Brown, M. (2013) Is the quality outcome framework achievement for diabetes set to fail? An English perspective. *Diabetes and Primary Care* 15 (2): 66-68
- Health and Social Care Information Centre (2016) National Diabetes Audit 2013-2014 and 2014 and 2015. Online: <http://content.digital.nhs.uk/catalogue/PUB19900/nati-diab-rep1-audi-2013-15.pdf> [accessed 10 January 2017]
- Lawal, M. (2016) *Implementation of diabetes education policy: prospects and barriers*. Germany: Lambert Academic Publishing
- NHS Improvement (2008) Reducing did not attend (DNAs). Online: <https://improvement.nhs.uk/documents/2108/reducing-dna.pdf> [accessed 25 November 2012]
- NICE (2015) Type 2 diabetes in adults: management. NICE guideline [NG28]. Online: <https://www.nice.org.uk/guidance/ng28/chapter/1-Recommendations#individualised-care> [accessed January 2017]
- Procter, S., Wilson, P. M., Brooks, F. & Kendall, S. (2013) Success and failure in integrated models of nursing for LTC: Multiple case studies of whole systems. *International Journal of Nursing Studies* 50: 632-643
- Upton, D. (2012) *Introducing psychology for nurses and healthcare professionals*. Essex: Pearson Education Limited
- Webb, L. (2011) *Nursing: communication skills in practice*. Oxford: Oxford University Press

About the author

Dr Muili Lawal is Senior Lecturer & Clinical Link Tutor in the College of Nursing, Midwifery and Healthcare at the University of West London.

Key words

Structured patient education, self-management, non-attendance, diabetes control