Delivering grassroots diabetes education in the South Asian community

Samina Ali, Alia Gilani, Vinod Patel

People of South Asian ethnic origin are three to four times more likely to develop type 2 diabetes compared to the Caucasian population, and the prevalence of the disease is increasing. South Asian people with type 2 diabetes have a more rapid rate of progression through pre-diabetes to diabetes, develop type 2 diabetes at a younger age and are more likely to develop complications. They also tend to have poorer knowledge and awareness of type 2 diabetes compared with their Caucasian counterparts. Culturally tailored education has been shown to be effective in promoting empowerment. This article covers how healthcare professionals can successfully deliver culturally tailored education at the grassroots level to help tackle health inequalities.

With the increasing epidemic of type 2 diabetes, education and empowerment are paramount in the awareness, management and prevention of the condition. In the UK, people of South Asian ethnic origin (hereafter referred to as South Asians) from Bangladesh, India, Pakistan, and Sri Lanka represent 4.9% of the total UK population and are the second largest ethnic group (South Asian Health Foundation [SAHF], 2014).

In the UK, type 2 diabetes is three to four times more common in South Asians than in the non-South Asian population (Fischbacher et al, 2009). Furthermore, South Asians comprise 11.9% of the diagnosed and undiagnosed type 2 diabetes population (SAHF, 2014). This community is a hard-to-reach group (Bellary et al, 2008) and, therefore, is less likely to access healthcare services (Szczepura, 2005) and, consequently, faces poorer outcomes (Hawthorne et al, 2010).

Knowledge of the condition in South Asians with type 2 diabetes

Several studies conducted in the UK have shown that South Asian people with type 2 diabetes have poorer knowledge and awareness of the condition and its complications than their white Caucasian counterparts (Hawthorne, 2001; Baradaran and Knill-Jones, 2004; Pardhan and Mahomed, 2004). A good understanding of type 2 diabetes is required to empower individuals to manage their condition and, thereby, improve health outcomes.

Empowerment is a process that enables people with diabetes to make informed decisions about the management of the condition (Meetoo et al, 2005). People who are empowered are more likely to adhere to self-care management decisions, thus minimising the risk of diabetes-related complications by achieving and maintaining good control of blood glucose and other risk factors, such as hypertension and dyslipidaemia (Ahmad et al, 2014).

Culturally tailored education interventions

Education that has been culturally tailored to South Asian people with type 2 diabetes has been shown to result in individuals being more empowered to take control of their diabetes. Recipients became more aware of the importance of a healthy diet, how to interpret their blood glucose readings and the implications of poor glycaemic control and associated complications (Hawthorne and Tomlinson, 1997).

Such interventions can be relatively simple: depicting pictorial flashcards and one-to-one education can increase knowledge of type 2 diabetes and improve self-care behaviours and HbA_{1c} (Hawthorne and Tomlinson, 1997). Furthermore, carrying out group education

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Article points

1. People of South Asian ethnic origin with type 2 diabetes have a more rapid progression through pre-diabetes to diabetes, develop type 2 diabetes at a younger age and are more likely to develop complications than non-South Asian people.
2. The South Asian community is a hard-to-reach group. They are less likely to access healthcare services and, therefore, they face worse outcomes.
3. Applying a culturally competent approach to those with health inequalities is important to raise awareness of diabetes in South Asian communities.

Key words

- Cultural barriers
- Cultural competence
- Grassroots community education
- South Asian Health Foundation

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1. Initiatives to increase knowledge and empowerment in South Asian people with type 2 diabetes have often proved unsuccessful in the past unless tailored to South Asian culture.
2. Any interventions should be structured, encompassing language, culture, religion and health literacy skills tailored to the specific community.
3. Traditional South Asian diets can be a barrier to good glycaemic control, and healthy eating needs to be a key focus within communities to promote good health.
4. Involving family members in education on diet may be useful, as the person with diabetes may not be the one who cooks regularly and the strong family networks in South Asian communities may help to spread and implement the information.

classes, consisting of a lecture session to provide culturally tailored advice and group interactive sessions, can improve knowledge and attitudes towards the seriousness and complications of type 2 diabetes (Baradaran et al, 2006).

Research has shown that culturally adapted interventions have a more tangible impact on diabetes care and outcomes; however, the long-term positive impact of culturally tailored interventions is unknown. In one study, attempts to improve diabetes knowledge, awareness and self-management in South Asians had no impact after a year of follow-up, despite a mean of four visits by either a diabetes specialist nurse, podiatrist or dietitian (Vyas et al, 2003). The authors concluded that this may have been attributable to the lack of cultural sensitivity and the intervention not being held in relaxed conditions. They have advocated future studies to be more culturally specific.

These findings are supported by Grace et al (2008), who showed that interventions designed for the indigenous UK population will need to be culturally adapted before applying to the South Asian community. Providing culturally adapted advice has been shown to remove patients' perceived barriers (Natesan et al, 2015).

The role of culture and cultural competence

Sedentary lifestyle and the cultural health beliefs held by the South Asian community play a role in their poor health outcomes (Patel et al, 2015). Before any educational intervention is provided to South Asians, the impact of cultural and religious influences on this community needs to be understood.

Hanif and Karamat (2009) define culture as "a complex interaction of multitudes of factors that give people an ethnic belonging and also have an impact on their lifestyle and chronic disease". Therefore, to understand the impact of culture on diabetes, a number of factors need to be taken into account, such as diet, physical activity, religious beliefs, language barriers, access to health services and attitude towards medical treatment (SAHF, 2014).

To overcome the cultural factors that impact on diabetes self-management, there needs to be a healthcare system that acknowledges the importance of culture and incorporates it in practice. Any interventions by healthcare professionals should be structured, encompassing language, culture, religion and health literacy skills tailored to the individual minority ethnic group (Zeh et al, 2012).

Approaches to overcoming cultural barriers

Diet

The traditional South Asian diet consists of high amounts of saturated fat, sugar and salt, which are detrimental to good glycaemic control. Many South Asians are unaware of the link between a healthy diet and good glycaemic control (Carr, 2012). Diet may be a neglected area of education in healthcare practice, so it is imperative for healthcare professionals to put more emphasis on the importance of following a healthy diet (Carr, 2012).

Pragmatically, South Asian people with diabetes need to be taught how to cook their traditional foods using healthier methods, and then they will be more likely to adhere to a healthy diet (Carr, 2012). Including the family cook in education sessions is helpful, as the person with diabetes may not be the one who does the cooking (Lucas et al, 2013). Furthermore, relaying healthy lifestyle education to the family of a person with diabetes will also have a positive impact owing to the existence of strong South Asian family networks (Stone et al, 2005).

Feasting is central within the South Asian culture, and many South Asians with diabetes find it difficult to refuse food at such times or to choose healthy options, as there are often no or few healthy options available. Overall, the importance of healthy eating needs to be a key focus within communities to promote good health (Lawton et al, 2008).

Fatalism

Fatalism, the belief that health, illness and death is preordained by God/Allah, is a key theme in the management and understanding of disease within South Asian communities, particularly in the older generations. However, to reject the importance of self-care and rely on God/Allah

to protect one's health is a misinterpretation of Islamic teachings (Grace et al, 2008). Although health conditions are viewed as the will of God/Allah, the individual still has a responsibility to look after his or her health (Lucas et al, 2013).

Religious leaders involved in a study by Grace et al (2008) agreed that fatalism was a misinterpretation of Islamic teachings and must be addressed through religious education. Religious leaders have a pivotol role in the community, as they are seen as a key source of information and support. Healthcare professionals can liaise with religious leaders to address the issue of fatalism and promote awareness of type 2 diabetes. Including religious leaders in community education events is a powerful way to convey key messages.

Medicine-taking behaviour

There is a lack of understanding of the importance of adhering to antidiabetes therapy (Sohal et al, 2015). Some South Asians self-regulate and believe that oral hypoglycaemic agents work instantly, and thus alter the doses of their therapy depending on the food types they have consumed (Lawton et al, 2005). Others give more credence to Ayurvedic medication (a traditional system India comprising combinations of certain foods, herbs, massage and special physical exercises) than to conventional medication (Sohal et al, 2015).

Within the South Asian community, the role of antidiabetes medication and its long-term benefits need to be highlighted. Concordance to medicines should also be addressed, as it has been shown that South Asians have poorer concordance compared to other ethnic groups (Chong et al, 2014).

Physical activity

South Asians have a more sedentary lifestyle compared to non-South Asians in the UK, perhaps because there is belief that exercise exacerbates illness by causing physical weakness. Cultural reasons for limited physical activity include family responsibilities and household chores, which are given more impetus by women in the community, and the view that mixed-sex gyms are inappropriate (Koshoedo et al, 2015). However, walking is an exercise deemed acceptable within the South Asian community (Lucas et al, 2013).

There is a lack of awareness of the role of physical activity in both preventing diabetes and improving glycaemic control (Koshoedo et al, 2015). South Asians require culturally appropriate advice on physical activity rather than simply being told to "do more exercise" (Lucas et al, 2013).

Grassroots community education

To improve the knowledge and empowerment of South Asians with type 2 diabetes, education sessions should be held at the grassroots level in the heart of the community. This will improve access for hard-to-reach communities, especially South Asians, and help break down cultural barriers. Sessions held in venues that are easily accessible and culturally sensitive, such as community centres, GP practices, town halls and places of worship, may result in a higher uptake of participants.

An example of a grassroots education programme: SACHE

SAHF is a charity that was founded in 1999 to promote good health and highlight health inequalities in the UK's South Asian communities. One of SAHF's many initiatives was the South Asian Community Health Education and Empowerment (SACHE) programme, targeted at South Asian people with type 2 diabetes (Gill et al, 2016). Educational events took place in schools, community centres and places of worship. Local pharmacists were recruited as diabetes education champions. The events were advertised in health centres, through the networks of community leaders and through direct contact with people diagnosed with diabetes.

The education session began with an introduction from a bilingual SAHF healthcare professional and a specialist guest speaker. The topics covered were the nature of type 2 diabetes and its complications, screening services, medicine concordance and the importance of diet and exercise. There was an opportunity for a question and answer session, which aimed to dispel myths surrounding diabetes. All of the support materials were available in English and the main South Asian languages, such as Punjabi, Gujarati, Urdu

Page points

1. Fatalistic religious beliefs are common in South Asian people and may encourage people with diabetes to neglect their self-care. Including religious leaders in diabetes education may help to reinforce the Islamic teachings that people are responsible for looking after their own health.
2. The benefits of antidiabetes medication and the need for concordance should be emphasised, as South Asians are more likely to self-regulate their medication and believe in alternative medicines.
3. Lifestyle advice should include explanation that exercise will not exacerbate illness and that physical activity such as walking is important in both preventing and managing the condition.
4. Education should be held in the heart of South Asian communities, using accessible and culturally sensitive venues.

Read more online

The South Asian Community Health Education and Empowerment (SACHE) in diabetes programme

Paramjit Gill and colleagues outline the development and results of the SACHE programme.

Journal of Diabetes Nursing **20**: 178–81

Available at: **https://is.gd/sachejdn**

Summary of advice

- Provide education in the heart of South Asian communities, including town halls and places of worship, and consider linguistic barriers.
- Emphasise the importance of a healthy diet, and incorporate family members in education on diet.
- Consider cultural beliefs that may be barriers to physical activity and exercise, and explain that exercise is necessary in diabetes prevention and will not exacerbate any illness by causing physical weakness.
- Explain the long-term benefits of antidiabetes medication and ensure that patients understand the need to take it regularly and at the prescribed dose.
- Involve religious and community leaders in education to overcome religious and cultural beliefs that lead to poor self-care.

and Hindi. A short film produced by SAHF, "Meethi Baatein" (which means "Sweet Talk"), was also shown in both English and Hindi. The film portrayed the risk factors and complications of type 2 diabetes, and is available to order via the SAHF website (www.sahf.org.uk).

Pre- and post-event questionnaires were completed by the participants to discern whether the event was effective in increasing knowledge and dispelling common myths. The questionnaire results highlighted that the sessions were a success and there were consistent and positive learnings throughout the event. For example, there was a 33% reduction in the belief that people are destined to die once prescribed injections for diabetes.

SAHF received the 2015 *BMJ* Diabetes Team of the Year award for the SACHE programme, described as an innovative project to break down cultural barriers by taking important diabetes education out into the communities, to achieve powerful attitudinal changes in areas of significant educational need. The outline of the programme is reproducible with other hard-to-reach communities.

SAHF education leaflets

Current national health promotion materials may not be suitable for all population groups. SAHF has produced culturally sensitive education leaflets: "Tips to prevent type 2 diabetes in South Asians" and "Fasting with diabetes during Ramadan" (*Figures 1* and *2*). The diabetes prevention leaflet provides practical tips for South Asians on how to follow a healthy diet and increase exercise. The Ramadan leaflet provides advice on how Muslims with diabetes can fast safely. These leaflets are an example of how healthcare professionals can tailor education materials for a specific population group in order to support those with diabetes.

Conclusion

South Asians are an important population to target, as they are at higher risk of developing type 2 diabetes and it has been shown that they have less knowledge and awareness of the condition than the non-South Asian UK population. Providing culturally tailored advice on diabetes management in easily accessible venues has been shown to improve the understanding of the condition and allow empowerment.

For the educational intervention to be successful, it is essential for the healthcare professionals who are providing the advice to understand their patients' culture. As South Asians are known to be a hard-to-reach group, grassroots community education sessions are an approach that can have a tangible impact on reducing health inequalities. As the diabetes prevalence rises and it is estimated that ethnic diversity will increase, healthcare professionals will be required to adopt a more culturally competent approach to tackle health inequalities.

Figure 1. Type 2 diabetes prevention leaflet produced by the South Asian Health Foundation.

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"South Asians are an important population to target, as they are at higher risk of developing type 2 diabetes and it has been shown that they have less knowledge and awareness of the condition than the non-South Asian UK population."

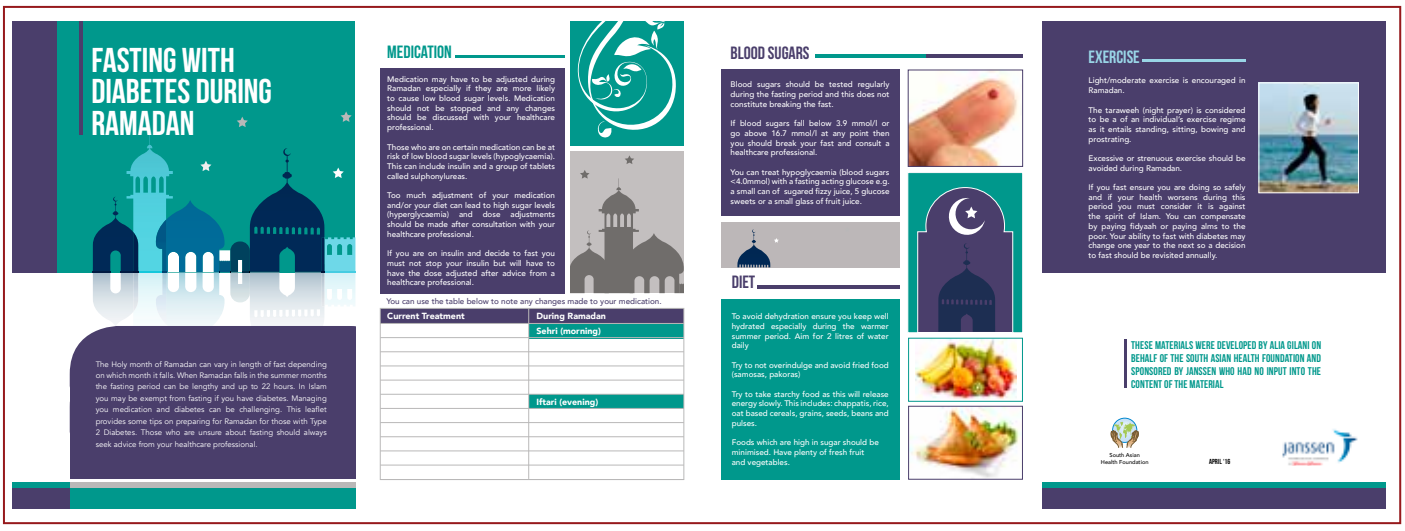

Figure 2. Diabetes and Ramadan leaflet produced by the South Asian Health Foundation.