



Discussion of Challenges in Engaging Urdu/Punjabi Speak People with Type 2 Diabetes in Structured Group Patient Education Using Interpretation and Established Educational Tools in Two Health Boards in Scotland

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Abstract

Aim: Structured patient education is one aspect of supporting self-management for people with diabetes. People from the black and minority ethnic groups who live in upper-middle and high income countries are at higher risk of developing type 2 diabetes mellitus than white Caucasians and providing structured patient education in a multicultural society can be challenging for practitioners. To promote a sustainable model of care, with language support, this paper discusses the use of culturally appropriate structured patient education with established tools within routine care.

Methods: Structured patient education was provided for people with type 2 diabetes from the Urdu/Punjabi speaking communities in two Health Boards in Scotland during 2013 with language support. Diabetes Nurse Specialists and Practice Nurses with expertise in delivering structured patient education delivered Conversation Maps™, as part of routine care, using Linkworkers in Lothian Health Board and Interpreters in Greater Glasgow and Clyde Health Board to people with type 2 diabetes from the Urdu/Punjabi speaking communities.

Results: Three issues were identified that are discussed in this paper. There were challenges in recruitment, working with interpreters and the health literacy of the people attending the education. Diabetes Nurses, who are at the forefront of patient education, need to work with interpreters prior to a group education session to ensure that the interpreters are: familiar with health related concepts; able to translate these concepts into culturally appropriate terminology; familiar and competent in interpreting within a group setting as opposed to one-to-one.

Conclusion: Recruiting Urdu/Punjabi speaking people with type 2 diabetes to group education routinely provided in Health Boards is challenging. There are issues around recruitment, working with interpreters in a group setting and health literacy.

Keywords

Type 2 diabetes, South Asians, Structured patient education, Diabetes Nurse Specialists

Introduction

People from black and minority ethnic (BME) communities who live in upper-middle and high income countries [1] are at higher risk of type 2 diabetes than white Caucasians and they develop this at lower clinical points than white Caucasians [2,3]. A Scottish survey found that Scottish Pakistani and Indian people with type 2 diabetes were more likely to have poor diabetes control compared to white Scottish people with type 2 diabetes [4] and the Scottish Diabetes Action Plan (2010) aimed to address these inequities [5].

Scotland's health is managed through 14 Boards and each Board has a disease specific Managed Clinical Network (MCN). The BME population in Scotland is concentrated mainly in the large cities of Glasgow, Edinburgh, Aberdeen and Dundee, spanning 4 of the 14 MCNs with smaller numbers dispersed across the rest of Scotland. The BME Scottish population is 4% [6] and the largest category is from Asia (3%) [6].

Education and information, as well as being tailored to individuals' culture and beliefs, have been identified as two of the key themes necessary to support self-management for people with long-term-conditions [7]. MCNs within each Health Board are responsible for ensuring that culturally appropriate care is provided for people from the BME communities.

Culturally appropriate care is defined as 'health education tailored to the cultural or religious beliefs and linguistic and literacy skills of the community being studied' [8]. A literature review identified two aspects to culturally appropriate care: one focuses on values, beliefs, traditions and language of a people group that may not meet the specific needs of individuals [9]. The second approach explains an individual's health status according to their social status rather than by their beliefs and behaviours. This second approach is considered as cultural safety and there is limited evidence of its use in health care. This paper considers culturally appropriate care within the context of language, beliefs and traditions.

Citation: McDowell J, Grant S (2016) Discussion of Challenges in Engaging Urdu/Punjabi Speak People with Type 2 Diabetes in Structured Group Patient Education Using Interpretation and Established Educational Tools in Two Health Boards in Scotland. Int Arch Nurs Health Care 2:038

Received: December 24, 2015; **Accepted:** February 22, 2016; **Published:** February 26, 2016

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A scoping exercise to determine examples of best practice in BME care in all 14 MCNs identified several, unsustainable, one-off initiatives [10]. Grant (2012) also identified that there was no evidence of plans to integrate BME diabetes care within MCNs organisational vision. Concurrent with this, the Scottish Diabetes Action Plan identified the need to increase the quantity and quality of structured patient education for all people with diabetes [5]. Structured patient education has a specific definition as being a programme that has a philosophy of education; has identifiable aims and learning outcomes; is delivered by a trained educator; is audited and quality assured [11]. Scotland has developed a process whereby patient education is reviewed to determine whether it meets the NICE criteria [11] and is then defined as being structured patient education [12].

A Cochrane review found that where there was culturally appropriate health education, there was an improvement in diabetes knowledge and short term diabetes control up to two years [13]. A systematic review of Asians in the United States showed that culturally appropriate diabetes education programmes improve people's clinical and psycho-social behavioral outcomes [14].

There is little data regarding the uptake of services from BME groups [15] and there are difficulties with engaging BME groups in addition to the need to factor in time to pilot new initiatives [16]. One study of African Americans attending a diabetes education programme suggested that effective retention strategies include: using culturally appropriate curricula; focusing on inter-personal relationships and incorporating social support [17].

Some BME communities have strong oral traditions and it is common for people to speak one language but read a different script or none at all e.g. a Punjabi speaking person may read an Urdu script rather than a Punjabi Gurumukhi script. A recent study concluded that patient education based on story telling that encourages minority ethnic people to share their knowledge and experience supports self management [18]. Patient education must therefore take such cultural differences into account.

Background

Structured diabetes education should be available to all, but is not readily available to those from BME groups due to specific challenges in the adaptability of current programmes to accommodate language and cultural aspects of care. Conversation Maps™ have been reviewed and, in Scotland, meet the criteria for structured diabetes patient education [19,20]. Conversation Maps™ are based on oral communications between group participants facilitated by a trained educator. They are flexible, adaptable, and the visual aspects are very appropriate for people with linguistic challenges.

Greater Glasgow and Clyde (GGC) Health Board uses Interpreters who translate information which may include some 'interpretation', especially of clinical information, into a culturally understandable format. Lothian utilizes both Interpreters and Linkworkers (Table 1) who fulfill quite different roles. Interpreters fulfill the function of translating words into the language of the hearer. Linkworkers are team members and build a rapport with patients to ensure that there is a trusting relationship between them. Linkworkers find commonalities with their patients that support cultural identity and address any power imbalances between professionals and patients [21]. The role involves health promotion and health improvement and hence they work very closely with communities. Linkworkers bridge linguistic, cultural, conceptual and knowledge barriers that could hinder patients with professional communications. The role varies between Health Boards. The Lothian Linkworker is an Urdu/Punjabi speaking Pakistani who understands her culture and the impact of diabetes on people's lives.

GGC and Lothian Health Boards encompass 37% of Scotland's total population [22]. There is a high density (32%) of Scotland's ethnic minorities living within these Board areas [23]. The south side of Glasgow has the highest density of South Asians [15]. GGC's total population had 2.34% (n = 28374) people of Pakistani origins and 1.2% (n = 13,318) of Indian origins in 2011. Lothian also has a large number of the population from South Asia with 0.95% (n =

Table 1: Role of interpreters and link workers

Interpreter and Translation Services	Link workers
To relate factual information in another language	Will provide telephone advice or, when required, attend to provide support in health settings.
Interpreters will convert speech from one language to another	Support staff to deliver culturally sensitive care and build staff capacity to support patients from minority ethnic communities
They will maintain confidentiality at all times	Tackle barriers to access and facilitate holistic person-centred care. Support patients and professionals to arrive at a shared understanding, which facilitates assessment, treatment and discharge processes.
They will have no contact with the patient out-with the interpreting session	Work with staff and patients on personal care needs, cultural concepts of mental health and information on any additional services to support patients/ carers to improve lifestyles and life circumstances
They may provide no guarantee of continuity with the same interpreter	Source culturally appropriate translated information resources or support the patient to understand English information resources
	Focus on empowering individuals/communities and reduce health inequalities and the stigma of mental ill-health
	Ensure the minority ethnic communities have equitable access to anticipatory healthcare and health promoting information
Available 24 hours a day, 7 days a week	Available Monday- Friday 09.00-17.00
Source: Lothian Health Board Minority Ethnic Health Inclusion Service	

7936) Pakistani people and 0.91% (n = 7566) in 2011 [23]. The Urdu/Punjabi speaking population was indentified for this project as they are the highest proportion of the South Asian population in these Health Boards sharing the same language, ethnicity and cultural mores that may have made the initiative more sustainable.

Data Sources

It was decided to pilot culturally appropriate structured patient education using an orally based education model and compare the use of an Interpreter service with a Linkworker service (Table 1) during 2013. The project aimed to use routine tools, Conversation Maps™, in their normal way except with the use of Interpreters or Linkworkers as the only deviation from usual practice to support a sustainable model of care. The NHS Research and Development department advised that ethical approval was not required as patient education is part of routine practice.

One key aspect of the project was to provide established structured patient education using normal delivery methods, with the exception of using two different ways of language support: Interpreters and Linkworkers. It was postulated that normal delivery methods may support the sustainability of providing structured patient education and ensuring equal access for all. By using normal methods, any adaptations that would be necessary prior to recommending these methods for implementation within each Health Board would be readily identified.

Funding was acquired from the Scottish Diabetes Group to undertake a one year pilot study. GGC and Lothian, the two Health Boards with the largest population of BME people, were the pilot sites. GGC and Lothian are both urban areas with some rural communities within their boundaries. The methodology was to compare one mixed gender white Caucasian control group with type 2 diabetes from GGC with two gender specific groups (10 people in each: one with men and one with women) of Urdu/Punjabi speaking people with type 2 diabetes in both GGC and Lothian giving a total of 40 South Asians.

Inclusion Criteria

Participants were to be either people newly diagnosed with type 2 diabetes, within the past year, or else people with type 2 diabetes who had not ever received group education, within the previous year. Identification of participants was by GP practices. Participants were not included if they were on insulin.

Table 2: Numbers of invited participants

Participants	Lothian Health Board	Greater Glasgow and Clyde Health Board
Men: invited to attend	27	6
Men: attended	3	0
Women: invited to attend	13	10
Women: attended	6	3

Discussion

The project had very mixed outcomes due to three areas of challenges that will be discussed further. The first challenge related to recruitment and attendance of Urdu/Punjabi speaking people for participation in structured education. The second challenge encountered related to the use of Interpreters in GGC. The third challenge related to the general health literacy of the Urdu/Punjabi speaking people with type 2 diabetes.

Recruitment and Attendance

There were several staff involved in recruiting people to this project including the two MCN Managers in GGC and Lothian, two Diabetes Nurse Specialists, one Diabetes Facilitator and one Practice Nurse. All staff was supportive of the project. Despite this, recruitment proved to be very difficult for the following reasons:

- Identifying appropriate participants
- Determining the best way to contact the appropriate participants
- The time factor to recruit people
- Securing attendance at education by participants
- Language issues
- Health perspectives.

First, there were difficulties in identifying people who met the inclusion criteria partly due to the fact that the information technology systems did not readily identify Urdu/Punjabi speaking people or the date when they were diagnosed with type 2 diabetes. Data bases were not set up for such specific purposes [24]. Secondly, in the rural area of Lothian, the total ethnic population was 2.44% of which 0.81% were Pakistani and 0.37% Indian and very few were diagnosed with type 2 diabetes which is worthy of further study.

We extended the time since diagnosis of type 2 diabetes from 1 year to 5 years to expand the number of possible recruits but it still proved difficult to identify such people from databases. Databases maintain clinical records and ethnicity may be recorded but spoken language is not normally recorded. Therefore, staff involved in recruiting people with such specific criteria had to trawl manually through databases and case records that also involved phoning people to ascertain the languages spoken that proved to be very time consuming.

From the above process, the Practice Managers, Linkworkers and bi-lingual staff, identified patients who met the criteria and invited them to attend the Conversation Maps™ education sessions. Participants were recruited initially through telephone conversations in the language of the person with diabetes as all staff involved in recruitment were Punjabi speaking.

People recruited by telephone conversations were then sent translated invitations and further information on where the educational sessions would be conducted. From our collective experience, it was suggested that letters should be signed by the General Practitioner (GP) as South Asians perceive them as having more status than other professionals and that the education sessions should be held within the GP practices. We ensured that we did both of these.

After the written invitations had been sent, invited participants were reminded of the sessions by reminder telephone calls (Table 2) by Urdu/Punjabi speaking staff. Telephone reminders in GGC had

no effect on recruitment, a finding which is contrary to another study [25]. Lloyd et al. [25] contacted and recruited twice as many people using telephone contact than face-to-face methods in a busy clinic setting. It was thought that the close relationship between Linkworkers and patients would enhance recruitment in Lothian however this was not the case and recruitment was still poor (Table 2).

The expertise of the group indicated that recruiting participants by telephone had been successful for other health related research with South Asians [26]. However, in our project, this consumed a lot of time due to poor recording of ethnicity and language. On reflection, the inclusion criteria could not be readily determined through the computer records that may have been part of the difficulties in recruiting to our project.

Attendance was also poor, in keeping with what has been found in another study [27]. Education was provided during the day: comments from participants indicated that they did not want to close their shop or could not find anyone to cover for them; students had classes and others were working. A previous USA study found that men of African American origins [28] were able to take time away from work for GP appointments, normally of shorter duration than an education session, but not for education for self management. We had planned to use two of the Conversation Maps™ over different sessions but this did not occur due to participants' comments that they were not able to return for a second session.

There was also an issue relating to the fact that some of those newly diagnosed with Type 2 diabetes spoke English (GGC) and indicated that an Interpreter was not required. However, it was agreed to include English speaking South Asians as there may have been issues with understanding, especially in relation to health issues and culturally appropriate care. This was difficult for the healthcare professionals as they had to cope with a mixed group in terms of linguistic ability, rather than a group where everyone needed interpretation. Mixed linguistic ability is probably the reality when working with any migrant or minority ethnic group.

Guo et al. [29] described the impact of Asian culture on health seeking behaviours in that the responsibility for disease management is seen to lie with the healthcare professionals, not people themselves. Culturally, the patient would not find out information but would rely on family members and healthcare professionals telling them what to do and the patient's role is only to comply with instructions. In our project, participants were invited by their GP so it could be implied that the GP was 'recommending' education. On reflection, we should have indicated that the education was 'prescribed' by the GP which may have increased the response rate to the invitation to attend for education.

This externalisation of responsibility has been previously identified [30]. Therefore, while there may be the perception that South Asians are not interested in education, it may be that it is not a high priority for them, it is not provided at a suitable time or in a suitable venue or in an accessible manner. It was also suggested that as diabetes is a predominantly invisible condition until side effects are obvious, South Asians may not give it the attention that is needed for self management. A recent systematic review has highlighted the complexities of interventions to support self-management [7].

Overall, recruitment to the project proved to be very difficult in a way that we had not anticipated, despite our collective experience (in excess of 100 years) working with South Asian people with diabetes and recruiting people to patient education and other research studies. A large part of this was due to our very specific criteria for the project but, despite extending the time span of diagnosis of diabetes, this did not increase both the pool of potential participants nor recruitment. Also, the databases did not contain the specific criteria stipulated for the study that made identifying the population for sampling difficult.

We considered whether the group nature of the education was off-putting to some, despite the South Asian context of family support networks and group cohesion around cultural issues. Groups come

together for a variety of reasons and we would suggest that there are three reasons relevant within healthcare.

First, people who are motivated to find out more about their health will attend structured patient education [31,32] that focuses on teaching them skills in self-management of their condition. The participants may be strangers who meet through the particular educational initiative relating to a specific disease. The key focus of the group is to promote learning and understanding of a condition with a view to supporting someone self-manage. The group normally ends when the formal education is completed although on-going support may be required [33]. The education is predominantly health care profession led although the method of delivery of education is very variable. Group dynamics are around participation, self-reflection and applying knowledge to an individual's own particular situation. One study has found that group interactions supported social adjustments to another long term condition that may be transferrable to people with diabetes [34].

Secondly, people may attend groups where they wish to change their behaviors within a group accountability context for example, attending a weight reduction group [35,36], or a smoking cessation group. Here the group dynamics focuses on one particular aspect of lifestyle. There is accountability to the group for an individual's own self-management, the group is not time limited and, as a consequence, friendships and social support may develop.

The third form of groups is where a group forms round cultural norms. Cultures that have a strong extended family network create large groups and may feel threatened attending an external group with strangers and a previous study focused on families as opposed to individuals [36]. Hence, there may be a place for education being offered to a cultural group, even although all attendees might not actually benefit from the specific education. However, the extended group would provide the much needed social support normally required to embed changes in self-management [33]. Hence the group provides the social support that is needed [16].

We would recommend that any future projects are based around cultural norms to encourage and promote recruitment, attendance and thereby sustainability. This would include accommodating both timings of education groups and the venue to address convenience of attendance. While we were aiming to compare the impact of Interpreters with Linkworkers within routine, normal care pathways, this may not be appropriate for those from a South Asian background. A recent review of the literature found that there are very few educational programmes that support self-management in the long term in South Asians and that ethnic specific interventions are needed [37] although there is some emerging evidence from a national programme [38].

Using Interpreters and Linkworkers in Group Settings

Joo *et al.* [14] found that patients were very satisfied where their education programmes were provided bilingually and by bilingual health care professionals. Barron *et al.* [39] found that women prefer not to use family members as Interpreters and to use female

Interpreters. For our study, all Interpreters and Linkworkers were women which may have impacted on the men's groups although this was not obvious. Linkworkers have been found to have beneficial effects although the evidence base is still weak [27].

Interpreters are brought in to translate within a particular context and GGC's service was recently commended as being excellent for supporting patients [40]. Interpreters have no contact with the person for whom they are interpreting either before or after the consultation. Interpreters were briefed prior to commencement of the group education programme in GGC. Linkworkers, in Lothian, work autonomously and maintain contact with individuals and their families throughout their health care journey.

GGC reported that, compared with the control group, the presence of the Interpreter changed the group dynamics and appeared to restrict group processes. The Interpreter was competent for one-to-one communications but it was felt needed more guidance on how to interpret in a group setting. At times, the Interpreter became a participant. There were robust dynamics between participants, with participants interpreting for one person with no English and not waiting for the Interpreter. There were issues around different levels of language ability and confusion on the part of the Interpreter. Despite the groups having an experienced facilitator, conducting a group discussion proved to be very difficult. Peer evaluation of one session by a bi-lingual professional identified specific negative issues with the Interpreter not maintaining her role as she actively participated in the discussion and several times did not translate.

Interpreters are challenged within a group setting to interpret cross flowing conversations. This project highlighted the need for training and quality assuring Interpreters for diabetes education for Urdu/Punjabi speaking people whose first language is not English. They are also challenged in translating clinical language on the spot. This may be particularly difficult where Urdu/Punjabi people who derive from diverse countries and require different vocabulary for the same term.

Recommendations for preparing Interpreters have been identified (Table 3). Standards in group interpreting need to be developed as the Interpreter role does not accommodate group working. South Asians are increasingly bi-lingual. However, there are still culturally specific aspects about diabetes care that need addressing regardless of language to ensure that the education is culturally appropriate. It was noted that the participants would move in and out of various languages and hence the need for interpretation was not fully determined.

In Lothian, the venue and Linkworker were familiar to the women who attended. A dynamic tone was set for the group discussions. One session was peer-reviewed by another bi-lingual worker who stated that there was a very good atmosphere present and the translation worked well as the facilitator and Linkworker knew each other and were comfortable working in this way.

The need for an Interpreter or Linkworker to translate information brings different dynamics to group education. Group dynamics both facilitated and hindered the education sessions and it is recommended

Table 3: Briefing Interpreters for group work

Observe at least one group session prior to working as an interpreter
Provide a glossary of ready translated words or provide a copy of the Conversation Map™
Provide cards to allow them to familiarise themselves with the content
Pass on all questions asked by the facilitator and do not attempt to answer them without first asking participants to respond.
Train interpreters in:
specific medical terminology used to facilitate translation
how to manage group conversations and not just one-to-one
how to promote cross discussion within groups
actively interpreting and not participating in discussions

that ground rules are established for any future sessions. While group education is cost effective from the professional's perspective, group dynamics can promote or hinder discussions. The role of the educator or facilitator is vital in ensuring that all attendees actively participate within a group education setting. It is not known what aspect of group education promotes engagement whether it is attributes of the attendees or skills and attributes of the facilitators [38,41].

Where interpretation is required for group education, it is suggested that there is specific preparation of the Interpreter (Table 3) by the Education Facilitator to ensure the free flow of conversation and appropriate communication of information. The role of the Interpreter should be clarified and the Interpreter should not become an active participant in the education session.

An issue was also raised around health literacy of the participants, which is discussed below, but also relates to the abilities of the Interpreter to conceptualise and make appropriate language choices in a speedy manner.

Linkworkers were generally more comfortable in the education sessions as they predominantly had a relationship with the participants, knew their language and were quickly able to translate concepts appropriately. The Linkworkers were from a similar ethnic background and so were very familiar with the cultural norms and how to relate new knowledge into the cultural mores and moreover, relay this in an appropriate manner.

In this project, peer review by Punjabi speaking Indians and reflection by the educators elicited that the Linkworkers appeared to perform more effectively in the group education sessions than Interpreters. However, with further preparation, Interpreters could be equally as effective. Interpreters are independent practitioners and are normally utilized in health care where there are one-to-one consultations. Questions arise about who has the responsibility to invest in the skill of Interpreters for group education for patients and who will carry the costs of developing Interpreters for this role.

Health Literacy

Organisations have a responsibility to ensure health literacy of its users [42,43] and this is essential to support self-management [44]. Tools to identify health literacy needs are required [45] and outcome measures of how these are integrated into care models need to be developed and used [44]. A recent paper has identified that health literacy is still only marginally addressed in different aspects of work [46].

Low literacy is related to poor knowledge and may impact on health outcomes [47,48]. A study of 280 adults with poor glycaemic control showed that those with low health literacy perceived that their diabetes control was good when it was not [49]. Language and oral communication are the vehicles for transferring care aspects; however, people need a basic understanding of their bodies and of the health related aspects of their care, to support the use of the spoken word as the medium for transferring information. Health literacy relates not only to knowledge but also to the understanding and application of knowledge to inform decision making that also involves health prevention and promotion [50].

In our project, we identified that there was evidence of low health literacy. Some participants did not understand what was meant by 'cells' or 'the pancreas' or had an understanding of 'how insulin works', for example. To overcome this, more visual aids were needed to illuminate clinical aspects of care. One example is that a Diabetes Nurse talked about how a key opens up a door which is similar to how insulin opens up the door in our bodies for glucose to go into the cells. Hence, medical terminology may need to be simplified by Diabetes Nurse Specialists to remove conceptual and linguistic barriers for both Interpreters and Linkworkers.

Healthcare professionals cannot assume that participants will understand health related language and professionals need training and support in providing information at an appropriate level, in a culturally competent way and in a linguistically competent manner.

While the Interpreters had been briefed prior to the Conversation Map™ sessions, more work could have been done to identify the words and concepts that the participants needed to understand. To develop such resources would require a considerable investment by both the Diabetes Nurse Specialists and the Interpreters prior to undertaking the education.

First, using Fawcett's framework [51], the specific aspect of translation would need to be identified by the Diabetes Educator. Work would need to be done between the Educator and Interpreter to ensure that the specific words, meanings and concepts were appropriately translated and translation would need to be appropriate within both a health and cultural context. The current system of Interpreters being employed only for a consultation would not facilitate this type of working although this aspect needs to be addressed.

While Conversation Maps™ are pictorially presented with oral communications, more aspects around type 2 diabetes and how the body works needs to be developed using visual aids. Most of the South Asians on this project were unfamiliar with how their internal body works; the anatomical position of certain organs and their purposes, and how their malfunction had caused type 2 diabetes.

Implications for Nursing

Diabetes Specialist Nurses (DSNs) are at the forefront of providing patient education in both an informal manner and also through structured patient education. Structured patient education can improve both clinical outcomes [52] as well as knowledge on diabetes [1]. The challenge is to transfer these findings, derived from randomized controlled trials, into routine practice and care. Most Health Boards utilize either Interpreters or Linkworkers to support the engagement of people from black and minority ethnic groups interface with health care professionals for health related consultations and decision making. Such communications are normally on a one-to-one basis although they often include family members as well.

Using Interpreters and Linkworkers for structured patient education is therefore sustainable if integrated into routine care. However, this project identified that there is a need for DSNs to work with interpreters prior to a group education session. It is important that Interpreters are: familiar with health related concepts; able to translate these concepts into culturally appropriate terminology; familiar and competent in interpreting within a group setting as opposed to one-to-one. There are resource implications in this as normally Interpreters are employed only for the time period of the actual interpretation.

Conclusion

This discussion article has highlighted some key clinical challenges in caring for Urdu/Punjabi speaking people with type 2 diabetes in two Health Boards in Scotland during 2013. These challenges relate to providing structured patient education in a group format using Interpreters and Linkworkers and with established educational tools within standard care.

There were challenges in recruiting Urdu/Punjabi speaking people with type 2 diabetes from the databases utilized. Databases did not all have the date of diagnosis of type 2 diabetes, a record of the language spoken or a record of any group education previously attended. All these factors made identifying the population difficult. Those who indicated their willingness to attend an education session, few actually did.

Working with Interpreters within a group setting poses particular challenges for Interpreters. Work needs to be done to prepare Interpreters for group education; in assisting them with medical language, and placing this within the appropriate cultural context. Diabetes Specialist Nurses need to facilitate the preparation of Interpreters and they also need to be sensitive and responsive to where their learners are in terms of health literacy. DSNs should commence their education using the most simplest of terms with regard to

anatomy, physiology and how the body works. Using Conversation Maps™ is an appropriate method of delivering structured patient education to Urdu/Punjabi speaking people with type 2 diabetes provided there is appropriate translation and interpretation delivered by appropriately trained Interpreters.

Lastly, the lack of health literacy was a challenge as participants had little understanding of how their body works and the impact of type 2 diabetes and its management on their day to day living and health. More work needs to be done in supporting Urdu/Punjabi speaking people with type 2 diabetes in understanding how their body works so that they can make educated decisions about lifestyle choices. The oral concept of Conversation Maps™ are standard educational tools, still needs great explanation about health concepts for Urdu/Punjabi speaking people with type 2 diabetes to understand.

Acknowledgements

The steering and implementation group are acknowledged for all their support:

Elaine Hand^a, Rubina Iqbal^b, Phil Mackenzie^c, Anne Morrison^d, Annette Rankin^e, Sunita Wallia^f

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Drs C Macpherson and A O'Neil are thanked for their peer review and comments on the article.

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