The impact of religion and culture on diabetes care in Nigeria

H Adejumo, O Odusan, O Sogbein, N Laiteerapong, M Dauda, and O Ahmed

Abstract
This study aimed to relate the psychosocial effects of religion and culture with the awareness, knowledge and attitude of Nigerians regarding diabetes prevention and care. Data was collected from a sample of 1500 individuals in communities where secondary and tertiary health care centres are situated from 12/02/2012 to 25/03/2012. The study population included a higher proportion of females (65%), with the majority between 19 and 29 years old (56%). Most were unemployed (67%) or in the teaching profession (24%). Over half (58%) respondents were Christian; while 41% were Muslim, and 1% were traditional worshippers. Over 25% believed that diabetes was due to witchcraft or a punishment from God. Also, 28% believed that diabetes was caused by an infection; and 16% and 10% believed diabetes could be caused by witchcraft or by God, respectively. Nearly all (90%) believed that diabetes was potentially fatal. We conclude that many diabetic patients have inadequate knowledge about the causes of diabetes and its complications.

Introduction
Nigeria is the most populous African country and the tenth largest country by population in the world. Nigeria is rich in diversity with multiple ethnic groups, languages, states, traditional and modern cultures, affluence and poverty, education and ignorance. The population of Nigeria was more than 140 million people in 2006.

A belief about the causes and care of illness is identified as one of the five essential dimensions of commonsense understanding and representation of illness. All cultures and religions have systems of health beliefs to explain what causes illness, the cure or treatment, and who should be involved in the process. The extent to which the populace perceive diabetes education as having cultural and religious relevance to them can have profound effects on their reception of information and willingness to use it. Ethnicity is one of the keys to understanding Nigeria’s pluralistic society. It distinguishes groupings of people who, for historical reasons, have come to be seen as distinctive on the basis of locational origins and other cultural markers. Generally, studies have focused on the extent to which people believe that the cause of their illness is internal versus external, global versus specific, or stable versus changing.

People’s beliefs about the causes of illness probably entail more dimensions than the three (internal/external, global/specific, and stable/changing) investigated to date. Studies from medical anthropology and sociology have demonstrated that many people believe that illness may be caused by exposure to cold, wet weather; a form of punishment for violating moral and religious taboos, a mystical retribution for offending God, ‘bad blood’, ‘witches’ or the ‘evil eye’. Also, illness can be considered a failure to maintain inter and intra-personal harmony. Studies suggest that culture and religion have a strong influence on different health behaviours. In spite of advances in diabetes care, desired outcomes are not good; and linked to this, patient satisfaction is not optimal. According to the ‘Rule of Halves’, only half of people living with diabetes have been diagnosed, and only half of those diagnosed receive professional care.

The prevalence of diabetes has continued to increase in Nigeria. With the current trend of transition from communicable to non-communicable diseases, it is projected that the latter will soon equal or even exceed the former in developing nations, including Nigeria, thus culminating in a double burden of disease.

Why is patient satisfaction and desired outcome not adequate? The reasons are multiple and include inadequate attention to biological aspects of diabetes, inadequate or inappropriate pharmacology, and also psychosocio-cultural reasons. This study has sought to relate the psychosocial effects of religion and culture to the awareness, knowledge and attitude of Nigerians regarding diabetes prevention and care. Our enquiry also focused on the belief of respondents on supernatural (mystical retribution) causes of illness, and the belief that illness is God’s will or punishment, and/or is caused by bad blood, witches, or the evil eye. We hypothesised that religious and cultural beliefs may influence the awareness, knowledge and attitude of people to diabetes.

O Odusan, Consultant Endocrinologist and Associate Professor of Medicine, Olabisi Onabanjo University Teaching Hospital, Medicine and Surgery, Sagamu, Nigeria; H Adejumo, O Sogbein, M Dauda, and O Ahmed, Medical Intern, Olabisi Onabanjo University, Medicine and Surgery, Sagamu, Nigeria; N Laiteerapong, Associate Professor of Medicine, University of Chicago, Department of General Internal Medicine, Chicago, USA. Correspondence to: Adejumo Olamide Hakeem. Email: hakeem_adejumo@yahoo.com or hadejumo@gmail.com. Telephone: +234 703 123 7385
prevention and care, and that health behaviour would be related to the dimension of belief.

**Patients and methods**

This study was multi-centred (Lagos and Ogun States). Data were collected from a sample of 1500 individuals in communities where secondary and tertiary healthcare centres were situated from 12 February to 25 March 2012. It was assumed that communities where secondary and tertiary healthcare facilities were situated may be more enlightened about diseases of public health importance than communities that did not have healthcare facilities.

Data collection was by written questionnaire and in-person interview for participants unable to read. Survey questions asked about individual’s awareness, knowledge of, and attitude towards diabetes; as well as questions regarding cultural and religious beliefs. Other specific questions included individual’s awareness of diabetes, previous knowledge, family history, socio-demographic data, and where their diabetes-related information originated from (e.g. media, health workers, friends, or family).

Further questioning concerned knowledge, fundamental definitions, complications, and whether diabetes was believed to be curable. Also explored were attitudes to prevention and care of diabetes, general attitudes to health prevention and care, who is consulted when ill, whose opinions matter to them when ill, and how religion and culture influence such decisions.

**Results**

Our study population included a higher percentage of female respondents (65%), with the majority aged between 19 and 29 years (56%); 6% of the respondents were traders by profession, 24% were in the teaching profession, 3% were professionals (bankers, doctors, engineers, and others working in offices apart from teachers), and 67% were unemployed. Religious beliefs were as follows: Christian (58%), Muslim (41%), and traditional (1%).

Doctors (42%) and nurses (37%) were the commonest sources of information about diabetes among our respondents. Parents were the most frequent source of information about diabetes among family members (48%), reflecting the important influence of parents in information dissemination. Indeed, the home (45%) was the majority’s choice of place of information followed by open campaigns (24%).

The main findings are as follows:

1. Knowledge of diabetes: 35% believed that diabetes was due to the presence of excess sugar in the blood and/or drinking excessive fluids, while 15% believed it was the presence of too much sugar in the urine and/or passing large amounts of urine.
2. Financial burden: 55% considered diabetes to be a collective burden on patient, family, and society; while 18% thought the burden lay with the patient alone and 12% with society alone.
3. Curability: 66% thought that diabetes could be cured, with the rest understanding that it was incurable. Of this latter 34%, most (85%) believed that treatment and control was possible, while the rest felt it could not be controlled.
4. Neglecting diabetes: 42% thought that if diabetes was neglected it could lead to kidney failure, and 23% thought it could lead to heart failure. Only 0.3% thought that neglecting diabetes could result in limb amputation – this is a worryingly low figure, as according to the International Diabetes Federation (IDF), diabetes is responsible for over 1 million amputations yearly worldwide, and that a limb is lost to diabetes every 30 seconds.
5. Attitudes to illness: 49% of patients would consult a doctor if they were ill, 43% would talk to family members, and 5% to their religious leaders. There were 51% who said they would comply with a doctor’s advice and opinions, 40% with family, and 7% with religious leaders. In terms of disease prevention, 57% would value their doctor’s opinion, 33% the opinion of family members, and 7% their religious leaders.
6. Care and screening availability: 54% had access to regular diabetes follow-up in their community, while 46% did not. There were 82% who felt that screening for diabetes and hypertension was worthwhile, and 18% were not interested in such screening.

**Discussion**

According to traditional widely held beliefs, every illness has a cure. In the context of these beliefs, the scientific description of diabetes as a chronic non-communicable disease exposes the limitations of biomedical medicine and motivates people who subscribe to these widely held beliefs to consult traditional healers. In traditional belief systems, diabetes is classified into three categories: naturally occurring, man-made, and ancestral. The first category fits the biomedical explanation, while the second and third point to causal agents such as witchcraft or supernatural beings (ancestral or a deity). A cure is believed to be available for each of these types of diabetes. The biomedical ‘incurability’ of diabetes is often interpreted within a traditional framework. It is believed that this ‘incurability’ is a temporary issue, and that ancestors or deity will eventually provide a cure.

Within the traditional model, diabetes is recognised as having its origin in the history of a person’s family, but this is not the same as the ‘family history’ that is recorded in orthodox healthcare facilities. The traditional family history refers to the interpretation of issues, including conflicts and misdeeds, which might date back to several previous generations. Beliefs about the causes of illnesses may entail emotional, punitive, natural, or supernatural (mystical retribution) dimensions.

Among our respondents, the home was for most the place where information regarding diabetes was ob-
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Obtained, followed by open campaigns. The open campaign is a popular method of information dissemination in Nigeria; religious, cultural, and communal organisations utilise this method mostly for information dissemination. Awareness is the key to diabetes health, and the platform for creating awareness in our community include masquerades (eyo from Lagos, lisabi from OgunState), festivals (oro, ereke, ojude-oba), and the traditional weekly markets (awolowo, falawo, itoku) where all and sundry attend, providing a mass forum for communication. According to ‘The use and interpretation of Diabetes Conversation Maps’ (a socio-educational tool), community awareness is highly recommended; splitting the ohanaeze (communal assembly) into small groups of 3–10 people.12,13

In their proper spheres, orthodox and traditional medicines are mutually independent and autonomous, each serving the personal and health needs of Nigerians. The more they co-operate reasonably, the more effectively they will perform this service to the advantage of Nigerians living with diabetes. Gradual co-operation between orthodox and traditional healers, as recommended by the World Health Organization (WHO), is perhaps the most promising policy. Mutual respect between care providers in both fields (traditional and modern) is a pre-requisite for this approach.12 It would also engender evidence-based research, which would in turn trigger reforms to permit the regulated incorporation of traditional healers into healthcare systems. If, under this approach, traditional healers were provided with education on the symptoms and complications of diabetes, they might be able to act as frontline players, especially in primary diabetes care.

While a number of the practices in traditional medicine can have negative health consequences, and constitute a poor alternative to modern medical treatment, the traditional healers themselves, if their knowledge and skills can be properly recognised and harnessed, might prove to be effective partners in the fight against diabetes. Furthermore, with stakeholders’ involvement – namely traditional, religious and medical authorities – psycho-social13 or management guidelines may be drawn up; focusing on initiatives related to diet, physical activity, stress management, and positive attitudes towards modern healthcare and insulin usage. Such a co-operative system may improve diabetes education and knowledge, and reduce some of the factual inaccuracies in the knowledge of some patients that were found in this study.

Author Declaration
Competing interests: none.

References