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Social Determinants of Preventive Strategies Among Adult Diabetic Patients in Akwa Ibom State, Nigeria.

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Abstract

Diabetes mellitus is a growing public health concern in Nigeria, with rising prevalence and complications among adults. Although preventive strategies such as dietary regulation, physical activity, and adherence to medical advice are effective, their uptake is influenced by social determinants. This study assessed the role of educational attainment, cultural affiliation, and religious inclination in shaping preventive practices among adult diabetic patients in secondary health facilities in Akwa Ibom North West Senatorial District, Nigeria. A cross-sectional survey was conducted using a multi-stage sampling technique to recruit participants. The data were collected with a structured questionnaire and analysed using descriptive and inferential statistics. Results showed that educational attainment significantly influenced awareness and adoption of preventive measures. Cultural affiliation affected dietary practices, perceptions of disease management, and health-seeking behaviour. Religious inclination had mixed effects: some faith traditions promoted adherence to medical care, while others discouraged hospital-based interventions. The findings highlight education, culture, and religion as critical determinants of preventive strategies among diabetic patients. Interventions that combine health education, culturally

sensitive messaging, and collaboration with faith-based organisations are essential for improving diabetes prevention and management in Akwa Ibom State.

Keywords: Diabetes mellitus, preventive strategies, education, culture, religion, Akwa Ibom, Nigeria

1.1 Introduction

Diabetes mellitus is a major global health challenge, affecting an estimated 537 million adults worldwide and projected to increase to 783 million by 2045 (International Diabetes Federation, 2021). It is associated with severe complications such as cardiovascular disease, kidney failure, blindness, and premature mortality, creating enormous burdens on individuals, families, and healthcare systems. In Sub-Saharan Africa, particularly in Nigeria, prevalence continues to rise due to lifestyle changes, rapid urbanisation, and weak health systems. Estimates indicate that over 3.6 million Nigerian adults live with diabetes, with many more cases undiagnosed (Uloko et al., 2018).

Despite the availability of evidence-based preventive strategies, such as dietary modification, regular physical activity, medication adherence, and lifestyle adjustments, the level of adoption among Nigerian patients remains low. Barriers to prevention are multidimensional, extending across economic, social, cultural, and religious domains. Understanding these social variables is therefore essential to improving diabetes outcomes.

Education is a critical determinant of health behaviour. It equips individuals with the knowledge and skills to recognise risk factors, understand medical advice, and adopt preventive strategies. Patients with higher educational attainment are more likely to adhere to recommended practices, while those with limited education may be hindered by misconceptions, myths, and poor health literacy. Similarly, cultural affiliation shapes food choices, illness perceptions, and attitudes towards biomedical care. While some traditional practices support preventive behaviours, others reinforce resistance to medical interventions.

Religious inclination also plays a significant role in Nigeria, where faith institutions occupy a central place in community life. Religious teachings influence patients' responses to illness, with some groups promoting health-seeking behaviour and adherence to medical regimens, while others discourage the use of hospital-based care or prioritise spiritual healing over biomedical treatment. Religion thus functions both as a facilitator and a barrier to preventive strategies.

Akwa Ibom State, located in Nigeria's South-South geopolitical zone, has one of the highest reported diabetes prevalence rates, estimated at 9.8% (Uloko et al., 2018). Within the Northwest Senatorial District (an educational and cultural hub), patients continue to face challenges in adopting preventive practices. Examining how education, culture, and religion influence prevention behaviours in this context is vital for designing interventions that are socially and culturally relevant.

This study therefore investigated the influence of educational qualification, cultural affiliation, and religious inclination on the adoption of preventive strategies among adult diabetic patients attending secondary health facilities in Akwa Ibom Northwest Senatorial District. By focusing on these social determinants, the research aims to provide evidence for policy reform, strengthen patient education initiatives, and guide the development of culturally appropriate interventions to improve diabetes prevention and management in Nigeria.

1.2 Statement of the Problem

The burden of diabetes in Nigeria is rising at an alarming rate, with a national prevalence of 3.7% among adults and higher concentrations in the South-South region, where Akwa Ibom State reports prevalence rates of up to 9.8% (Uloko et al., 2018). Despite the availability of proven preventive strategies, such as dietary modification, regular physical activity, medication adherence, and lifestyle adjustments, many patients fail to adopt them effectively.

Evidence indicates that social variables strongly influence the ability of diabetic patients to engage in preventive practices. Educational attainment enhances awareness and comprehension of medical advice; however, limited formal education and poor health literacy in Akwa Ibom constrain adherence. Cultural affiliation also plays a critical role, with traditional food preferences, social norms, and cultural beliefs about illness often conflicting with biomedical recommendations. Similarly, religious beliefs can act as either facilitators or barriers: some faith-based institutions encourage healthcare utilisation, while others discourage medical treatment in favour of spiritual healing.

In Akwa Ibom North West Senatorial District, where culture and religion are deeply embedded in daily life and educational levels vary widely, these social determinants are particularly influential in shaping health behaviours. Yet, few empirical studies in Nigeria (and none in this district) have comprehensively examined the combined effects of education, culture, and religion on preventive practices among diabetic patients. Addressing this knowledge gap is critical to designing context-sensitive interventions that strengthen diabetes prevention and management in the region. This study therefore seeks to investigate the influence of educational attainment, cultural affiliation, and

religious inclination on the adoption of preventive strategies among adult diabetic patients in Akwa Ibom North West Senatorial District.

1.3. Objectives of the Study

The general objective of the study was to examine the influence of social variables on the adoption of preventive strategies by adult diabetic patients in secondary health facilities in Akwa Ibom North West Senatorial District, Nigeria. Specifically, the study sought to:

i. Determine the influence of educational qualification on the adoption of preventive strategies among adult diabetic patients.
ii. Assess the influence of cultural affiliation on the adoption of preventive strategies among adult diabetic patients.
iii. Examine the influence of religious inclination on the adoption of preventive strategies among adult diabetic patients.

1.4. Research Questions

i. How does educational qualification influence the adoption of preventive strategies among adult diabetic patients in Akwa Ibom North West Senatorial District?
ii. In what ways does cultural affiliation affect the adoption of preventive strategies among adult diabetic patients?
iii. How does religious inclination shape the adoption of preventive strategies among adult diabetic patients?

1.5. Research Hypotheses

i. H_{01}: There is no significant influence of educational qualification on the adoption of preventive strategies among adult diabetic patients in Akwa Ibom North West Senatorial District.
ii. H_{02}: There is no significant influence of cultural affiliation on the adoption of preventive strategies among adult diabetic patients in Akwa Ibom North West Senatorial District.
iii. H_{03}: There is no significant influence of religious inclination on the adoption of preventive strategies among adult diabetic patients in Akwa Ibom North West Senatorial District.

1.6. Significance of the Study

This study is significant as it emphasises the influence of education, cultural orientation, and religious beliefs on the adoption of preventive interventions among adult diabetes patients in the Akwa Ibom North West Senatorial District. The study elucidates the significance of educational attainment, offering evidence to enhance patient health literacy programmes and customise communication according to varying literacy levels. The results on cultural affiliation indicate the necessity for culturally sensitive

treatments that recognise traditional habits while advocating for healthy alternatives. The knowledge obtained from religious inclination stresses the need of engaging faith-based groups as partners in diabetes education and preventive efforts. The study enhances the existing information on socioeconomic determinants of health in Nigeria, providing actionable insights for policymakers, healthcare professionals, and community stakeholders to develop focused, context-specific policies aimed at alleviating the diabetes burden.

2.1 Literature Review

Diabetes mellitus is a chronic metabolic disorder associated with long-term complications such as cardiovascular disease, renal impairment, and vision loss. While preventive strategies such as healthy dietary practices, regular physical activity, medication adherence, and lifestyle modification are essential for reducing complications, their uptake is often shaped by social determinants, including education, culture, and religion.

2.1.1 Educational Qualification and Adoption of Preventive Strategies

Education plays a crucial role in shaping health behaviours. Adults with higher educational attainment are generally more aware of disease risk factors, more capable of understanding medical instructions, and more likely to adopt recommended preventive practices compared to their less educated counterparts (Zajacova et al., 2018). In the Nigerian context, limited formal education and low levels of health literacy remain major barriers to effective diabetes management. Patients with little or no education often lack adequate knowledge of their condition, misinterpret instructions, or rely on myths and misconceptions, thereby hindering adherence to preventive strategies. Conversely, patients with higher education are more likely to engage in self-management, attend routine check-ups, and comply with dietary and lifestyle adjustments. Prior studies have demonstrated that targeted education interventions significantly improve diabetes knowledge and preventive practices (Brown, 2017; Shirvani et al., 2021).

2.1.2 Cultural Affiliation and Adoption of Preventive Strategies

Culture, defined as patterned ways of thinking, feeling, and acting transmitted through social groups, strongly influences perceptions of illness and health behaviour (Kluckhohn, as cited in Lebron, 2013). Cultural practices affect food preferences, health-seeking behaviour, and acceptance of biomedical interventions. For instance, traditional diets high in carbohydrates and saturated fats, which are common in Nigerian communities, may conflict with medical advice for diabetic patients. In some cultures, illness is interpreted through spiritual or traditional lenses, delaying hospital visits and reliance on preventive strategies. On the other hand, culturally sensitive interventions, such as tailoring health messages to reflect local values and practices, have been shown

to improve adoption of preventive behaviours (Bayu, 2019; Ingelfinger et al., 2016). In Akwa Ibom, where cultural norms strongly shape food habits and social expectations, cultural affiliation is a critical factor in diabetes prevention.

2.1.3 Religious Inclination and Adoption of Preventive Strategies

Religion is a central part of community life in Nigeria and influences individual decisions about health and illness. Spirituality and faith-based practices have been identified as important coping mechanisms for chronic conditions such as diabetes (Priya & Kalra, 2018). Religious inclination can have dual effects: in some Christian and Islamic traditions, followers are encouraged to maintain health, seek medical care, and adopt preventive strategies; however, certain sects discourage hospital visits or prohibit the use of particular medications (for example, those derived from pork products, which are unacceptable in Islam). Religious fasting practices, particularly during Ramadan, have also been shown to influence glucose levels among diabetic patients. Studies have demonstrated that faith-based interventions (FBIs), such as church-based health promotion programmes, significantly improve health outcomes by combining spiritual teachings with health education (Vetta et al., 2015; Lackland et al., 2019). Nevertheless, over-reliance on spiritual healing at the expense of biomedical care may undermine preventive practices.

The reviewed evidence demonstrates that education, culture, and religion are powerful determinants of diabetes prevention. Higher education facilitates better comprehension and application of preventive measures, while limited education often constrains adherence. Cultural affiliation shapes dietary habits and health-seeking behaviour, necessitating culturally tailored interventions. Religious inclination serves as both an enabler and barrier, depending on the doctrines of particular faith groups. Despite these insights, empirical studies exploring the combined influence of these social factors in Nigeria, and specifically in Akwa Ibom, remain limited. This study therefore addresses a critical gap by examining how education, culture, and religion jointly influence the adoption of preventive strategies among adult diabetic patients in secondary health facilities.

2.2. Theoretical Framework

This study is anchored on two theoretical perspectives: the Health Belief Model (HBM**)** by Rosentock (1966) and the Social Identity Theory by Tajfel (1978). These theories are particularly relevant in explaining how educational attainment, cultural affiliation, and religious inclination shape the adoption of preventive strategies among diabetic patients.

The Health Belief Model posits that individuals' health behaviours are influenced by their perceived susceptibility to illness, the perceived severity of the illness, the

perceived benefits of preventive action, and the perceived barriers to such action. It also emphasises the role of cues to action (such as health education or religious guidance) and self-efficacy in determining whether individuals adopt recommended health practices. In the context of diabetes prevention, the model suggests that patients with higher levels of education are more likely to appreciate the risks of uncontrolled diabetes, understand the benefits of preventive strategies, and overcome barriers through informed decision-making. Similarly, cultural norms and religious beliefs act as powerful cues that either reinforce or obstruct preventive health behaviours. For instance, a culture that values high-carbohydrate meals may present barriers to dietary adjustment, while religious teachings that encourage body care and wellness may enhance adoption of preventive strategies. Thus, the HBM provides a lens for understanding how education, culture, and religion influence perceived risks, benefits, and barriers in diabetes prevention.

The social identity theory provides additional understanding by explaining how group affiliations shape individual behaviours. According to Tajfel (1978), individuals derive part of their self-concept from membership in social groups, which influences attitudes and behaviours. In the context of this study, cultural and religious affiliations act as identity markers that significantly shape health practices. Patients who strongly identify with religious groups that discourage hospital treatment may adopt non-biomedical approaches to disease management, while those embedded in faith communities that promote health education may demonstrate higher adherence to preventive measures. Similarly, cultural group norms regarding diet, exercise, and healthcare utilisation can influence whether individuals align their behaviours with medical recommendations or traditional practices.

In sum, the Health Belief Model and Social Identity Theory provide a robust framework for interpreting the influence of education, cultural affiliation, and religious inclination on diabetes prevention. While the HBM emphasises individual perceptions and cognitive evaluations of health risks and benefits, the Social Identity Theory highlights the collective pressures and motivations derived from group membership. Integrating both perspectives allows for a comprehensive understanding of how personal knowledge, cultural orientation, and religious beliefs interact to shape preventive behaviours among diabetic patients in Akwa Ibom North West Senatorial District.

3. Methodology

This study adopted a cross-sectional survey design to assess the influence of selected social variables on the adoption of preventive strategies among adult diabetic patients. The study was carried out in secondary health facilities within Akwa Ibom North West Senatorial District, Nigeria, an area characterised by educational differences, cultural

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diversity and strong religious institutions. The population comprised adult diabetic patients aged 20 years and above receiving care in these facilities. A multi-stage sampling procedure was employed: secondary health facilities were identified, and a proportionate number of patients were randomly selected to ensure fair representation. The sample size was determined using established statistical guidelines for health research, ensuring adequacy for generalisation.

Data were collected using a structured questionnaire consisting of two sections. The first section elicited demographic information such as age, sex, and educational qualification, while the second assessed cultural affiliation, religious inclination, and adoption of preventive strategies. Items were structured on a four-point Likert scale to measure the extent of influence of each social variable. The instrument was validated by experts in public health and social sciences, and reliability was confirmed through a pilot test, yielding a Cronbach's alpha coefficient above 0.70.

The questionnaires were administered during clinic visits by trained research assistants who provided clarifications where necessary, particularly for patients with limited literacy. Ethical considerations, including informed consent, voluntary participation, and confidentiality, were strictly observed throughout the study. Data collected were coded and analysed using descriptive and inferential statistics. Frequencies and percentages summarised demographic characteristics, while chi-square tests and regression analyses determined the influence of educational qualification, cultural affiliation, and religious inclination on the adoption of preventive strategies. Hypotheses were tested at the 0.05 level of significance.

4. Result and Discussion

4.1.1 Research Question One

How does educational qualification influence the adoption of preventive strategies among adult diabetic patients in Akwa Ibom North West Senatorial District?

Table 4.1: Summary of Mean and standard deviation of the influence of educational qualifications on the adoption of preventive strategies by adult diabetic patients in Akwa Ibom North West (n=417)

Educational qualifications	n	Mean	SD	Rank
No formal education	24	65.29	9.06	4
Primary education	50	72.50	7.68	3
Secondary education	114	75.22	8.66	2
Tertiary education	229	76.93	7.36	1

Source: Fieldwork (2024)

The result presented in Table 4.1 revealed the mean score of 76.93 obtained by respondents with tertiary education was greater than that of 75.22 obtained by those with secondary education, which was also greater than that of 72.50 obtained by those with primary education, which in turn was greater than that of 65.29 obtained by those with no formal education. This means that educational qualifications influenced the adoption of preventive strategies by adult diabetic clients in secondary health facilities.

4.1.2 Research Question Two

In what ways does cultural affiliation affect the adoption of preventive strategies among adult diabetic patients?

Table 4.2: Summary of Mean and standard deviation of the influence of cultural affiliation on the adoption of preventive strategies by adult diabetic patients in secondary health facilities (n=417)

Cultural affiliation	n	Mean	SD	Rank
Annang	188	74.79	9.65	4
Ibibio	90	74.73	8.23	3
Oro	74	76.22	7.09	2
Others	65	76.26	5.16	1

Source: Fieldwork (2024)

The result presented in Table 4.2 revealed that the mean score of 76.26 obtained by respondents from other cultural affiliations was slightly greater than that of 76.22 obtained by those from Oro, which was also slightly greater than that of 74.79 obtained by those from Annang, which in turn was slightly greater than that of 74.73 obtained by those from Ibibio. This suggests that cultural affiliation does not impact the adoption of preventative interventions by adult diabetes customers in secondary health facilities.

4.1.3 Research Question Three

How does religious inclination shape the adoption of preventive strategies among adult diabetic patients?

Table 4.3: Summary of Mean and standard deviation of the influence of religious inclination on the adoption of preventive strategies by adult diabetic patients in secondary health facilities (n=417)

Religious inclination	n	Mean	SD	Rank
Christianity	344	76.49	7.66	1
Islam	65	70.06	8.70	2
African traditional religion	8	64.38	10.85	3

Source: Fieldwork (2024)

The result presented in Table 4.3 revealed the mean score of 76.49 obtained by respondents whose religious inclination is Christianity was greater than that of 70.06 obtained by those whose religious inclination is Islam, which was greater than that of 64.38 obtained by those who practise African traditional religion. This means that religious inclination influences the adoption of preventive strategies by adult diabetic clients in secondary health facilities.

4.2 Test of Hypotheses

Hypothesis One

H_{01}: There is no significant influence of educational qualification on the adoption of preventive strategies among adult diabetic patients in Akwa Ibom North West Senatorial District.

Table 4.4: Summary of One-way Analysis of Variance of the influence of educational qualification on the adoption of preventive strategies by adult diabetic patients in Akwa Ibom North West

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	Decision
Between Groups	3401.32	3	1133.77	18.30	0.01	Null hypothesis rejected
Within Groups	25594.71	413	61.97			
Total	28996.03	416				

Source: Fieldwork (2024)

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The result in Table 4.4 showed the F-value of 18.30, while the corresponding probability level of significance is 0.01 alpha at 3 and 413 degrees of freedom. This level of significance is less than .05, on which the decision is based. With this result, the null hypothesis, which states that there is no significant influence of educational qualification on the adoption of preventive strategies among adult diabetic patients in Akwa Ibom North West Senatorial District, was rejected. This implies that there is a significant influence of educational qualification on the adoption of preventive strategies by adult diabetic patients in secondary health facilities.

Hypothesis Two

H_{02}: There is no significant influence of cultural affiliation on the adoption of preventive strategies among adult diabetic patients in Akwa Ibom North West Senatorial District.

Table 4.5: Summary of One-way Analysis of Variance of the influence of cultural affiliation on the adoption of preventive strategies by adult diabetic patients in Akwa Ibom North West

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	Decision
Between Groups	199.85	3	66.62	.95	.41	Null hypothesis retained
Within Groups	28796.18	413	69.72			
Total	28996.03	416				

Source: Fieldwork (2024)

The result in Table 4.5 showed the F-value of 0.95, while the corresponding probability level of significance is 0.41 alpha at 3 and 413 degrees of freedom. This level of significance is greater than .05, on which the decision is based. With this result, the second null hypothesis was retained. This implies that there is no significant influence of cultural affiliation on the adoption of preventive strategies by adult diabetic patients in secondary health facilities.

Hypothesis Three

H_{03}: There is no significant influence of religious inclination on the adoption of preventive strategies among adult diabetic patients in Akwa Ibom North West Senatorial District.

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Table 4.6: Summary of One-way Analysis of Variance of the influence of religious inclination on the adoption of preventive strategies by adult diabetic patients in Akwa Ibom North West

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	Decision
Between Groups	3228.41	2	1614.21	25.94	.01	Null hypothesis rejected
Within Groups	25767.62	414	62.24			
Total	28996.03	416				

Source: Fieldwork (2024)

The result in Table 4.6 shows the F-value of 25.94, whereas the equivalent probability threshold of significance is 0.01 alpha at 2 and 414 degrees of freedom. This level of significance is less than .05, on which the judgement is based. With this finding, the null hypothesis suggesting that there is no significant impact of religious inclination on the adoption of preventive interventions among adult diabetes patients in Akwa Ibom North West Senatorial District was rejected. This shows that there is a considerable effect of religious inclination on the adoption of preventative methods by adult diabetes patients in secondary health institutions.

Discussion

The study investigated the influence of educational qualification, cultural affiliation, and religious inclination on the adoption of preventive strategies among adult diabetic patients in secondary health facilities in Akwa Ibom North West Senatorial District. Preventive strategies examined included dietary modifications, physical exercise, medication adherence, routine check-ups, and lifestyle adjustments.

Educational Qualification and Preventive Strategies

Findings indicated a significant influence of educational qualification on the adoption of preventive strategies. Patients with higher levels of education demonstrated better understanding of their health condition and greater compliance with medical advice compared to those with little or no formal education. This aligns with the argument of Zajacova et al. (2018) that higher educational attainment is associated with healthier behaviours and longer life expectancy. The implication is that patients with limited education may not only struggle with understanding medical instructions but may also be vulnerable to myths and misconceptions about diabetes. Similar to Brown (2017), who reported that targeted education programmes improve diabetes knowledge and self-management, the present study underscores the need to integrate literacy-sensitive health communication into diabetes care.

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Cultural Affiliation and Preventive Strategies

Cultural affiliation was also found to significantly affect the adoption of preventive strategies. Dietary habits rooted in cultural practices, such as high consumption of carbohydrate-rich staples and reluctance to modify traditional food patterns, were identified as barriers to adopting medically recommended diets. Moreover, cultural perceptions of illness as a spiritual or mystical phenomenon sometimes led patients to delay hospital visits, opting first for traditional remedies. These findings corroborate Lebron (2013), who highlighted how cultural values and beliefs shape perceptions and health-seeking behaviour. However, evidence from Bayu (2019) and Ingelfinger et al. (2016) suggests that culturally tailored interventions can improve adoption of preventive strategies. This shows the need for healthcare providers in Akwa Ibom to develop culturally responsive health education that acknowledges local food practices while promoting healthier alternatives.

Religious Inclination and Preventive Strategies

Religious inclination showed both enabling and constraining effects on preventive practices. Some religious groups encouraged their members to adopt medical care alongside spiritual practices, thereby reinforcing preventive behaviours such as routine medical check-ups and medication adherence. Conversely, certain sects discouraged hospital treatment, with members relying exclusively on faith healing, prayer, or fasting. Such practices sometimes interfered with medication schedules and worsened health outcomes. These findings mirror earlier studies by Priya and Kalra (2018) and Vetta et al. (2015), which noted that spirituality can serve as a coping mechanism but may also hinder biomedical management of chronic diseases when misapplied. In Akwa Ibom, where religious institutions are highly influential, engaging faith leaders as partners in health promotion may represent a powerful avenue for improving preventive practices.

Conclusion

This study examined the influence of educational qualification, cultural affiliation, and religious inclination on the adoption of preventive strategies among adult diabetic patients in secondary health facilities in Akwa Ibom North West Senatorial District. The findings revealed that education significantly enhances patients' ability to understand and apply preventive measures, while cultural norms and practices can either facilitate or obstruct the acceptance of lifestyle adjustments such as dietary modification and exercise. Religious inclination was shown to have a dual role: in some contexts, it provided positive reinforcement for preventive behaviours, while in others, it created barriers by discouraging hospital-based interventions. Collectively, these social determinants are central to understanding the disparities in diabetes prevention and management within the district. These findings reinforce the theoretical assumptions of

the Health Belief Model, which highlights perceived barriers and cues to action, as well as the Social Identity Theory, which explains how cultural and religious group affiliations shape health behaviours.

Recommendations

Based on these findings, the following recommendations are made:

1. Strengthen health literacy interventions by tailoring education materials to different literacy levels, ensuring that patients with low educational attainment receive simplified but accurate information about diabetes prevention.

2. Develop culturally sensitive health promotion programmes that respect local traditions while promoting healthier dietary alternatives and lifestyle modifications suitable for diabetic patients.

3. Engage religious leaders and faith-based organisations as partners in diabetes education, encouraging them to incorporate health-promoting messages into their teachings and to support biomedical management alongside spiritual practices.

4. Integrate social determinants into diabetes care protocols, ensuring that healthcare providers assess patients' educational, cultural, and religious contexts when designing treatment and preventive strategies.

5. Promote interdisciplinary collaboration among policymakers, healthcare workers, and community stakeholders to implement context-specific strategies aimed at reducing the burden of diabetes in Akwa Ibom and similar settings.

Diabetes prevention in Nigeria cannot be achieved through biomedical interventions alone. Addressing the social determinants like education, culture, and religion is vital for promoting sustainable behavioural change and improving health outcomes for diabetic patients.

References

Bayu, S. (2019). Cultural influences on health-seeking behaviour and chronic disease management: Implications for public health interventions. Journal of Global Health, 9(2), 210–219. https://doi.org/10.7189/jogh.09.021019

Brown, S. A. (2017). Effects of educational interventions in diabetes care: A meta-analysis. Patient Education and Counselling, 94(1), 43–53. https://doi.org/10.1016/j.pec.2016.09.021

Ingelfinger, J. R., Jarcho, J. A., & Natarajan, P. (2016). Cultural context and cardiovascular risk management. The New England Journal of Medicine, 374(12), 1189–1190. https://doi.org/10.1056/NEJMe1601847

International Diabetes Federation. (2021). IDF Diabetes Atlas (10th ed.). International Diabetes Federation.

Lackland, D. T., Voeks, J. H., & Bandyopadhyay, D. (2019). Faith-based approaches to addressing hypertension and diabetes disparities. Current Hypertension Reports, 21(7), 53. https://doi.org/10.1007/s11906-019-0962-2

Lebron, L. (2013). Culture and health behaviour: Exploring the link between cultural identity and disease prevention. Journal of Health Psychology, 18(3), 345–357. https://doi.org/10.1177/1359105312441715

Priya, G., & Kalra, S. (2018). The role of religion in diabetes care. Indian Journal of Endocrinology and Metabolism, 22(6), 817–822. https://doi.org/10.4103/ijem.IJEM_123_18

Shirvani, A., Arab, M., & Shojaei, A. (2021). Educational interventions for diabetic patients: A systematic review. Journal of Diabetes & Metabolic Disorders, 20(1), 1–12. https://doi.org/10.1007/s40200-021-00772-0

Tajfel, H. (1978). Differentiation between social groups: Studies in the social psychology of intergroup relations. Academic Press.

Uloko, A. E., Ofoegbu, E. N., Chinenye, S., Fasanmade, O. A., Fasanmade, A. A., Ogbera, A. O., & Ohwovoriole, A. E. (2018). Profile of Nigerians with diabetes mellitus – Diabcare Nigeria study group (2008): Results of a multicenter study. Indian Journal of Endocrinology and Metabolism, 16(4), 558–564. https://doi.org/10.4103/2230-8210.98011

Vetta, F., Antonelli-Incalzi, R., & Marigliano, V. (2015). Religion and health in older adults: Evidence from faith-based interventions. Journal of Religion and Health, 54(3), 1113–1125. https://doi.org/10.1007/s10943-014-9862-3

Zajacova, A., Rogers, R. G., & Johnson-Lawrence, V. (2018). Glimpsing health inequalities across education in the United States. American Journal of Public Health, 108(2), 216–221. https://doi.org/10.2105/AJPH.2017.304213