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## Perceptions and knowledge of diabetes in poor urban communities in Accra, Ghana

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### ABSTRACT

Diabetes is a major public health concern, leading to costly and life-threatening complications while significantly impacting quality of life. However, limited evidence exists on how diabetes is understood in poor urban communities in Africa, including Ghana. Evidence suggests that community beliefs about disease can shape health outcomes and influence intervention strategies. This cross-sectional qualitative study assessed perceptions and knowledge of diabetes in two poor urban communities in Accra, Ghana. Thirteen focus group discussions were conducted, involving ninety-four participants segmented by sex, age, and diabetes status. Participants frequently cited unhealthy diets, alcohol consumption, and smoking as primary causes of diabetes. Knowledge of prevention was primarily focused on maintaining a healthy diet and engaging in physical activity. Managing diabetes was associated with adopting healthy lifestyles and seeking care at a health facility. Additionally, covert diabetes-related stigma was observed in the communities, with implications for illness disclosure and overall quality of life. Community-wide interventions are needed to increase awareness on the causes and consequences of diabetes, address negative social norms, and expand screening programmes to facilitate early detection and guidance for effective disease management.

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### SUSTAINABLE DEVELOPMENT GOALS

SGD 3: Good health and well-being

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## Introduction

Diabetes is a major public health issue with an estimated one in ten adults aged 20–79 years living with the condition globally (International Diabetes Federation, 2021a). In 2021, about 6.7 million people were estimated to have died from diabetes worldwide, with many others having to deal with the social, economic and health consequences of living with the condition (IDF, 2021a). As urbanisation accelerates and unhealthy lifestyles become more widespread, the prevalence of type 2 diabetes (T2D) – the most common form – is expected to rise sharply (Guan et al., 2023). Without effective management, diabetes can result in costly, life-threatening complications that significantly impact quality of life (Sun et al., 2022). Additionally, diabetes places a heavy financial strain on communities and health systems (Yang et al., 2019).

In Africa, about 24 million people aged 20–79 years had T2D in 2021 – a number expected to rise to about 55 million by 2045 (International Diabetes Federation, 2021b). The increase in the number of T2D cases in the region – many of whom are undiagnosed – is a major concern for countries like Ghana where an estimated 5–6% of the population live with the condition (Asamoah-Boaheng et al., 2019). Additionally, people living with T2D in Ghana not only struggle with complications from the condition but also face challenges in accessing health services and are stigmatised, which has a detrimental impact on quality of life (Akyirem et al., 2023; Akyirem & Ekpore, 2024; de-Graft Aikins, 2006).

A systematic mapping of peer-reviewed studies in Africa identified multiple factors – at the individual, household, community, and national levels – that influence the experience and management of diabetes (Klu et al., 2022). Additionally, a community-based study underscored the impact of lifestyle choices, social influences, and environmental contexts – such as access to physical activity facilities – on diabetes prevention (Manyara et al., 2024). Complementing these findings, a scoping review of studies in Africa revealed that diabetes symptoms were often unrecognised, leading individuals to adopt both biomedical and non-biomedical approaches in managing their condition (Zimmermann et al., 2018).

In Ghana, previous studies on T2D have primarily focused on the experiences of individuals living with the condition (de-Graft Aikins, 2003, 2006; de-Graft Aikins et al., 2014; de-Graft Aikins et al., 2019; Korsah et al., 2022). One such study, conducted in the same communities as this study, found that the management of T2D was shaped by biomedical and cultural models of diabetes, with poverty playing a central role in influencing disease management (de-Graft Aikins et al., 2014).

However, limited evidence exists on how different segments of the community perceive and understand diabetes, particularly in poor urban settings. This gap is important, as individuals with diabetes live within broader social environments where community beliefs influence perceptions of risk, prevention, and management. Their support systems often include both those diagnosed with diabetes and those without the condition, further shaping health-related behaviours and responses. With the expected rise in T2D prevalence, understanding community-wide perspectives is essential for developing effective preventive and management strategies, particularly in high-risk, low-resource urban communities. Evidence suggests that community perceptions, knowledge and beliefs about disease – including its description, risks, and prevention – not only affect disease prevalence but also play a decisive role in the success or failure of intervention efforts (Kahissay et al., 2017).

Poor urban communities often bear a disproportionate burden of diabetes, largely due to limited access to healthy foods and restricted opportunities for physical activity. Evidence suggests that poverty and urbanisation are key contributors to unhealthy lifestyles which increases the risk of diabetes (Alor et al., 2024). In addition to these challenges, residents in such communities often face challenges in affording healthcare, leading to delayed detection of diabetes and other non-communicable diseases, inadequate disease management, and life-threatening complications (Gassasse et al., 2017).

To address the identified gap, this study assessed community perceptions and knowledge on diabetes, including causal attributions, prevention, and management, to inform potential intervention strategies. Additionally, it explored the presence of diabetes-related stigma in the communities, highlighting its potential influence on disclosure and management of the condition.

## Materials and methods

### Setting

This study was conducted in two poor urban communities in Accra, Ghana – James Town and Ussher Town – collectively referred to as Ga Mashie. These communities are densely populated and generally characterised by poor environmental conditions. Additionally, poorly regulated health outlets, such as medicine shops and itinerant drug peddlers, coexist alongside formal health facilities in and around the communities, which may impact health outcomes (Auwah et al., 2018).

### Study design

This study was part of the ‘Contextual Awareness, Response and Evaluation: Diabetes in Ghana’ (CARE Diabetes) project, which has been described in detail elsewhere (Baatiema et al., 2024; Lule et al., 2024). The CARE Diabetes project utilised a mixed methods design to examine the burden, socio-ecological drivers, impact, and narratives of diabetes, with the aim to identify opportunities for community-based interventions. Within this framework, this study conducted focus group discussions (FGDs) with different demographic groups in the communities to assess perceptions and knowledge of diabetes.

### Participants sampling and data collection

Study participants were recruited by trained field assistants and community facilitators through local clinics, social groups, and community spaces, including households and places of worship. To ensure representation across different demographic groups – including those living with diabetes – the recruitment process combined purposive and snowball sampling methods.

FGDs were structured according to sex, age, and diabetes status. A total of 13 FGDs, involving 94 participants, were conducted. The groups consisted of males and females aged 25 years and older with a prior diabetes diagnosis by a medical professional, males and females aged 25 years and older without a prior diagnosis of diabetes, and male and female youth aged 18–24 years without a prior diabetes diagnosis (Table 1).

To facilitate participation, FGDs were scheduled at convenient times and locations. The discussions were moderated by the field assistants under the supervision of CARE Diabetes project team members (RBA, IAK, LB). Involvement in the FGDs was based on availability and willingness to take part. A topic guide – developed by the project team and informed by the project’s objectives – guided the discussions. The discussions were conducted in Ga – the native language of the residents of James Town and Ussher Town – and lasted between 50 and 80 minutes.

**Table 1.** Type and number of group discussions and participants.

FGD type	No. of FGDs	No. of participants
Males with diabetes	2	12
Males without diabetes	2	17
Male youth without diabetes	2	16
Females with diabetes	3	17
Females without diabetes	2	16
Female youth without diabetes	2	16
Total	13	94

## Data analysis

The consolidated criteria for reporting qualitative research (COREQ) guidelines (Tong et al., 2007) were used in this study. The FGDs were audio-recorded, translated from Ga to English, and transcribed by trained research assistants following best practices in qualitative research (Helmich et al., 2017). The transcripts were cross-checked by members of the project team (RBA, SA and HMJ) for accuracy by comparing each with the corresponding audio file.

The transcripts were uploaded into Atlas.ti software for analysis. Two members of the project team (RBA and HMJ) conducted the analysis using the thematic analysis approach (Lochmiller, 2021; Naeem et al., 2023). Data analysis began with independent coding of the data which was guided by an initial list of codes from previous studies along with open-ended codes, context-specific codes. Initial codes were then grouped into potential organising and sub-organising themes based on the study's objectives. The themes were reviewed and relabelled where necessary to ensure they accurately represented the data. The project team (RBA, PA, OAS, SBK, AAM, IAK, SA, AB, MV, LB, EF and HMJ) reviewed the findings to ensure credibility and reliability of the analysis.

Attention was paid to the responses from the different demographic groups – particularly those living with diabetes – during analysis to assess potential differences in the views expressed. Additionally, there was consideration for areas of consensus, conflict, and absence on established causes and preventive mechanisms in the group discussions. The themes are described in detail, with supporting excerpts from the data to ensure robustness and transparency in the presentation of the findings. Quotes that best represent shared ideas are presented for illustration to corroborate the themes.

## Ethics

This study, as a component of the CARE Diabetes project, received approval from the Noguchi Memorial Institute for Medical Research Institutional Review Board (NMIMR-IRB CPN 060/21-22 IORG 000908), Ghana Health Service Human Research Ethics Committee (Protocol ID No: GHS-ERC 017/02/22), and the University College London Research Ethics Committee (Study ID No: 21541/001). Informed consent was obtained from all participants prior to the group discussions. The audio recordings and anonymised transcripts were securely stored on a password-protected device, with access granted to only members of the CARE Diabetes project team.

## Results

Among the participants, 44% were aged 50 years and older, 52% were female, 87% had a high school education, 62% were unmarried, and 86% were Christians. About one-third (31%) of the participants had a prior diagnosis of diabetes. Characteristics of the study participants are presented in Table 2.

The organising themes generated from the analysis centred around the study's objectives – namely, descriptions or definitions of diabetes, perceived causes, knowledge on prevention and management, and perceived diabetes-related stigma. Details of the codes under these themes, along with representative quotes from the group discussions, are outlined below.

### Descriptions/definitions of diabetes

In all the group discussions, diabetes was generally described as a “sugar disease”, reflecting participants' perception of the risk of excessive sugar intake.

For diabetes, the elders say it is called ‘sugar disease’. We know that when you eat a lot of sugar you would get the disease (FGD with males living with diabetes, James Town).

**Table 2.** Characteristics of the study participants.

Characteristic	Number (Percent)
Age	
18–30 years	35 (37%)
31–49 years	18 (19%)
50 + years	41 (44%)
Sex	
Male	45 (48%)
Female	49 (52%)
Educational level	
No education	5 (5%)
Primary	5 (5%)
High school	81 (87%)
Pre-tertiary/tertiary	3 (3%)
Relationship status	
Not married	58 (62%)
In a union/married	27 (29%)
Divorced/separated	5 (5%)
Widowed	4 (4%)
Religious affiliation	
No religion	5 (5%)
Christian	81 (86%)
Muslim	7 (8%)
Traditionalist	1 (1%)
Community of residence	
James Town	51 (54%)
Ussher Town	43 (46%)
Diabetes status	
Confirmed diagnosis	29 (31%)
No diagnosis	65 (69%)

In the FGDs with participants who had a prior diagnosis of diabetes, the condition was described by referencing specific body signals or cues. These included dizziness, palpitations, loss of taste, burning sensations, feeling of hunger, thirstiness, body weakness/pains, and frequent urination.

When we talk about diabetes, it is through the symptoms you exhibit. I did not know I had the disease till I started urinating frequently one day. So, when we talk about diabetes, you may not know that you have it, but if you know the symptoms, then you may be fine. But if you do not know this, it [diabetes] will take you by surprise (FGD with males living with diabetes, James Town).

In addition, for those without the condition, diabetes was described through the presentation of complications. These were often physical complaints such as loss of appetite, weakness, pain and general discomfort.

What is known about diabetes is that it can lead to blindness, discomfort, pains in the flesh, loss of appetite, insomnia, weakness, swollenness in the limbs, and sores around the genitals. This is what is known about the illness (FGD with females without diabetes, Ussher Town).

### ***Perceived causes/risks of diabetes***

In ten FGDs, participants mentioned unhealthy diets or poor dietary practices as causes of diabetes. Specifically, they highlighted the consumption of sugary foods, carbohydrates, fatty or oily foods, eating late or undigested food, gluttony, eating cold food, and monotonous diets (i.e. consumption of diets lacking in variety and diversity).

Excessive intake of sugary foods and drinks can cause diabetes. Now, we see children with diabetes because of the intake of ice cream which contains sugar. Children who are around six to ten years are getting diabetes because of candies, sweet beverages and the like which contain too much sugar (FGD with males living with diabetes, James Town).

Eating too much carbohydrate foods generate excess sugar in your body, and the excess sugar then leads to diabetes (Females without diabetes, Ussher Town).

When you eat foods such as fried eggs, and oily foods, you can get diabetes (FGD with females without diabetes, Ussher Town).

Similarly, in twelve FGDs, participants identified other lifestyle behaviours (besides diet), such as smoking, and alcohol consumption as causes of diabetes.

Smoking tobacco can cause diabetes. There are warnings on the box which spell out the side effects. So, if you turn a deaf ear, then you are likely to get the disease (FGD with females living with diabetes, James Town).

Alcohol is the main cause of diabetes; and I mean any kind of alcohol. If you take alcohol regularly, you will get diabetes (FGD with males living with diabetes, James Town).

In seven FGDs, participants noted that the built environment influences the uptake of unhealthy lifestyles, such as consumption of unhealthy diets and dietary habits, which predispose residents to diabetes. They emphasised the ease in accessing alcohol, cigarettes, and unhealthy foods in the community.

People drink and smoke a lot in this community. You would find people say that they are going to supplement what they have smoked with alcohol. People often drink and smoke with friends because these things are easily accessible in the community. You can also easily find foods that are unhealthy here. All these bring about diabetes (FGD with females without diabetes, Ussher Town).

Other less frequently mentioned causes of diabetes were family history (from five FGDs), high blood pressure (two FGDs), obesity (two FGDs), ageing (one FGD), physical inactivity (one FGD), and physical stress (one FGD).

Diabetes is hereditary. There is a high possibility of getting it [diabetes] if you come from a family with this disease (FGD with females living with diabetes, James Town).

High blood pressure could also be a cause of diabetes (FGD with male youth, James Town).

Obesity can also cause diabetes; gaining too much weight prevents one from exercising. Obese people also tend to eat the same food for a long period of time hence exposing them to diabetes (FGD with female youth, James Town).

In addition, in one FGD with female youth, diabetes was mentioned as potentially sexually transmitted. In two other FGDs – one with male youth and another with adult males without diabetes – participants mentioned that diabetes could be acquired spiritually.

People can get it [diabetes] through intimacy with men (FGD with female youth, Ussher Town).

The existence of the disease is known here, and it is thought that it [diabetes] can be spiritually orchestrated even though that is not the will of God but out of the wickedness of man (FGD with males without diabetes, James Town).

### ***Knowledge of diabetes prevention and management***

Participants commonly mentioned avoiding intake of fatty foods, reducing the consumption of sugary foods and engaging in physical activity as the main ways to prevent the onset of diabetes.

We are to avoid eating things like meat and food which contain fat. We should not eat them to avoid getting this disease [diabetes] (FGD with females living with diabetes, James Town).

It is important to not consume excessive amounts of sugar. Lowering your sugar intake can help prevent the development of diabetes (FGD with male youth, James Town).

Regarding management of diabetes, adherence to medication (mentioned in three FGDs), healthy dietary behaviour (three FGDs), avoiding alcohol intake (two FGDs), frequent hospital visits (two



FGDs) and use of herbal medication (one FGD) were identified as important strategies. These insights primarily emerged from the FGDs with participants who had diabetes.

I used to feel unwell, was not able to sleep well, and had weight loss. I also realised that my urine became foamy. I was prescribed drugs at the hospital which I take, and it is helping me to manage the disease (FGD with females living with diabetes, James Town).

To manage diabetes effectively, it is important to have an early breakfast, possibly by 6am, take medication and have your last meal by 6pm in the evening. If one does not adhere to this plan, you will not be effective in managing it [diabetes] (FGD with females living with diabetes, Ussher Town).

Interestingly, participants noted a gendered dimension in diabetes management within the communities. In five FGDs, it was suggested that females were better at managing diabetes than males.

Females with diabetes often tend to go to the hospital to manage the disease than males. The males are always found in the neighbourhood showing less concern about their condition which is so uncomfortable (FGD with females without diabetes, James Town).

However, in two FGDs involving participants with diabetes, it was noted that management of the disease was influenced by individual perceptions rather than a gendered element.

The effects of diabetes are the same for all sexes. Therefore, managing it depends on the individual's perception of the disease (FGD with females living with diabetes, James Town).

### ***Diabetes-related stigma***

The study explored diabetes-related stigma in the communities, considering its potential implications for disease management and overall quality of life. Participants in the group discussions alluded that there exists diabetes-related stigma in the communities. The stigma was often expressed in the form of body shaming, maltreatment, and neglect for those living with the condition.

Someone will make degrading comments such as 'look at how you have changed, just look at your face'. They will use the changes to your body as an insult against you. I tell them that God should have mercy on them for insulting me because I have diabetes. I wasn't born like this (FGD with females living with diabetes, James Town).

People with diabetes are maltreated and discriminated against. They often avoid social gatherings because when they go to public places, people will query them for coming there because of their foot ulcers or sores. Family members, especially children, also avoid getting close to people suffering the disease; the family also maltreats them (FGD with female youth, Ussher Town).

Additionally, in six FGDs, participants mentioned that diabetes is perceived as contagious by some community members, which influences their interaction with those who exhibit signs of the condition.

People don't like getting too close to those suffering from diabetes because they fear they might contract it (FGD with male youth, James Town).

It was also noted in three FGDs that diabetes-related stigma was often expressed covertly.

Nobody is stigmatised unless the person has a wound or discusses their condition with another person. In this case, people will not buy from such a person if he/she happens to sell food or any other item (FGD with females living with diabetes, James Town).

Given the perceived stigma, those with diabetes shared that they often do not want to disclose their diabetes status to others.

When you tell people you have the 'sugar disease', they will say all manner of things such as 'this sickness kills', to scare you. So, because of these statements, when you have the sickness [diabetes], you don't want to let people know (FGD with females living with diabetes, James Town).



## Discussion

This study assessed perceptions and knowledge of diabetes, including its description, causes, prevention, and management strategies in two poor urban communities in Accra. Additionally, it explored the presence of diabetes-related stigma, highlighting its potential influence on overall well-being. The findings suggest that while general awareness of diabetes causes, prevention and management was relatively strong, it was not comprehensive. Furthermore, individuals living with diabetes experience stigma in various forms, affecting their social interactions and negatively impacting quality of life.

A key finding was that community members commonly referred to diabetes as a ‘sugar disease’, reflecting the perception that excessive sugar intake is a primary cause. This belief has been widely documented in studies on diabetes in both urban and rural Ghana (de-Graft Aikins, 2003, 2004; de-Graft Aikins et al., 2014; de-Graft Aikins et al., 2019), suggesting that this characterisation persists across communities and remains unchanged over time, despite increased access to health information. Similar beliefs have been reported in other low – and middle-income countries. For example, a community-based study in Indonesia found that diabetes was described as a ‘visible and scary sugar disease’, with affected individuals often blamed for developing the condition (Puji-lestari et al., 2014).

Additionally, in the FGDs involving individuals living with diabetes, the disease was described through its physical impact on the body – highlighting the interaction between the body, mind, and emotions in shaping narratives of disease manifestation in Ghanaian communities (Atobrah, 2012; de-Graft Aikins, 2004). Studies from other similar settings also support this perspective, demonstrating that individuals with diabetes often describe the condition based on symptom manifestation (Islam et al., 2017; Widayanti et al., 2019). The description of diabetes based on body cues may also indicate the presence of complications or uncontrolled disease progression.

Dietary habits emerged as a central theme in community perceptions of diabetes causation. Many participants associated the condition with excessive consumption of sugar and fatty foods, highlighting the need for targeted interventions to promote healthier eating behaviours. Promoting sustainable dietary changes within communities requires more than awareness – it demands social acceptance and empowerment, ensuring individuals feel supported and capable of making meaningful adjustments despite systemic challenges (Serrano-Gil & Jacob, 2010).

Beyond dietary factors, participants linked diabetes to excessive alcohol consumption, smoking, and family history. However, physical inactivity and stress were less commonly recognised as risk factors. Importantly, the built environment was recognised as a significant contributor to unhealthy lifestyles, particularly dietary habits. Participants noted the widespread availability of unhealthy food, largely due to the prevalence of street food vendors in the community. A previous study in both communities found that vendors offering healthier food options were limited, further highlighting the presence of an obesogenic food environment characterised by an abundance of out-of-home foods, convenience stores, and restricted access to fresh fruits and vegetables (Dake et al., 2016). These findings underscore the urgent need for strategies that promote healthy eating habits within the built environment while introducing practical measures to reduce obesity risk. Such efforts should be integrated into broader diabetes prevention and management initiatives to improve long-term health outcomes (Pasala et al., 2010).

Furthermore, while not a dominant factor, insights from the discussions linking spirituality to diabetes occurrence could help shape institutional and community-based interventions. A previous study in James Town and Ussher Town found that people with diabetes attributed the disease to supernatural causes, including witchcraft, sorcery, or evil forces (de-Graft Aikins et al., 2014). Similar perspectives have been observed in other African countries where beliefs linking diabetes risk to spiritual elements contribute to misunderstandings and worsen health complications (Metta et al., 2015). Additionally, evidence suggests that such beliefs may reinforce stigma surrounding diabetes which could affect outcomes of those with the condition (Mogre et al., 2019). It is important to

understand why some community members hold these associations while also recognising that spiritual interpretations of illness do not necessarily prevent individuals from seeking biomedical treatment or following medical advice. Many people integrate multiple perspectives – blending spiritual explanations with medical approaches to manage their health.

Regarding diabetes prevention, participants demonstrated a reasonable level of awareness, though their knowledge was not comprehensive. Most of the discussions centred on healthy diets and physical activity as primary prevention strategies, yet other established interventions – such as maintaining a normal body weight and avoiding tobacco use to reduce the risk of T2D – were notably absent (Uusitupa et al., 2019; Weber et al., 2021). Specifically, regarding weight management, a previous study in these communities identified several barriers in maintaining a healthy body weight. Participants cited challenges such as perceptions that healthier foods are expensive and unsatisfying, limited time for physical activity, and social norms favouring overweight or obese body types (Afrifa-Anane et al., 2022). These findings underscore the importance of addressing structural and cultural influences on health behaviours.

Knowledge of diabetes management – primarily expressed by participants living with the condition – aligned with established recommendations and guidelines, which emphasises a multifaceted approach that combines lifestyle modifications and pharmacological interventions to maintain controlled diabetes, mitigate complications, and support overall well-being (Borse et al., 2021; Sibony et al., 2023). Additionally, mention of herbal medicine as a diabetes management strategy in one of the FGDs reflects the existence of non-conventional health-seeking practices within the communities.

The findings also suggest a gendered dimension to diabetes management in both communities, with the perception that women tend to better manage the condition than men. This belief is supported by evidence indicating that women generally exhibit greater concern about diabetes, are more likely to perceive symptoms early, follow a healthy diet, utilise diabetes services more frequently, and engage in broader social networks where medical concerns can be discussed (Anderson et al., 1993; Gisinger et al., 2023; Siddiqui et al., 2013).

The findings further revealed the presence of diabetes-related stigma, which is often covert but significantly impacts affected individuals. Globally, estimates suggest that four in five people living with diabetes experience stigma, with one in five facing outright discrimination (Speight et al., 2024). At the community level, individuals with diabetes are frequently subjected to stereotyping, negative social judgments, and subtle forms of exclusion or blame – all of which adversely affect their quality of life (Manyara et al., 2024; Pujilestari et al., 2014; Speight et al., 2024). Evidence suggests that experiencing diabetes stigma is associated with higher average blood sugar levels, poor self-glucose control, and an elevated body mass index (Liu et al., 2017).

In this study, individuals living with diabetes shared personal experiences of stigma, often manifested through feelings of shame, maltreatment, and neglect. These experiences were largely linked to misconceptions about diabetes risk factors. Previous studies have shown that the stigma associated with diabetes can mirror that of communicable diseases such as HIV/AIDS (de-Graft Aikins, 2006; Zimmermann et al., 2018). People living with diabetes in the study communities were often reluctant to disclose their condition – likely due to fears of social judgement and exclusion. Findings from a study in South Africa showed that people with diabetes tend to self-isolate due to stigma (Masupe et al., 2022). Social isolation due to diabetes-related stigma is often associated with poorer health outcomes, reduced access to care, and diminished overall well-being (Kato et al., 2016). While evidence suggests that addressing stigma in communities can be challenging (Speight et al., 2024), efforts to educate residents about reliable sources of diabetes information and dispel misconceptions – such as the belief that diabetes is contagious or spiritually caused – may serve as viable solutions.

As with similar studies, one limitation of this study is the possibility that some participants may have been hesitant to share personal experiences or thoughts in a group setting. For example, men

living with diabetes may have been reluctant to discuss complications such as sexual dysfunction, especially given the perceived diabetes-related stigma in the communities.

Additionally, the use of purposive and snowball sampling may have introduced selection bias in recruiting participants. Despite these limitations, the responses across the FGD categories provide valuable insights for context-specific interventions.

## Conclusion

The study's findings provide an opportunity to develop strategies that integrate local cultural knowledge and beliefs about disease occurrence with supportive policies for diabetes prevention and management. Community-wide intervention strategies are essential to enhance understanding of the causes and consequences of diabetes. Raising awareness about diabetes risks, prevention and management at the individual level – while addressing social norms and behaviours such as stigma – represents a relatively accessible and achievable approach in the short term (Shubrook et al., 2024). This approach is likely to foster a deeper understanding of diabetes across demographic groups and encourage greater support for individuals living with the condition.

Additionally, implementing free or low-cost screening programmes is key for preventing and managing diabetes effectively (Sharma et al., 2022). Local healthcare facilities, community social centres and religious institutions could serve as accessible venues for expanded community-based health screenings. These initiatives would facilitate early detection and provide guidance on lifestyle modifications, ensuring more effective disease management. Furthermore, given the influence of the built environment in diabetes risk in the communities, interventions that regulate food vendors to ensure healthier options, alongside those that restrict the sale of alcohol and cigarettes, can help shift dietary behaviour and encourage healthier lifestyle choices overtime.

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