

## RESEARCH ARTICLE

### COMMUNICATION IN DIABETES MANAGEMENT: A REVIEW OF PRACTICES, PROVIDER-PATIENT INTERACTIONS AND BARRIERS, INFORMING THE CAMEROONIAN CONTEXT

Eyong Manyiyong Queenta<sup>1</sup> and Egbe Derick Agbor<sup>2</sup>

<sup>1</sup>Experiential Higher Institute of Science and Technology (EXHIST), Yaoundé, Cameroon; Texila American University, School of Public Health; <sup>2</sup>University of Port Harcourt, School of Public Health (UPHSPH), Nigeria

#### ARTICLE INFO

##### Article History

Received 30<sup>th</sup> January, 2025

Received in revised form

17<sup>th</sup> February, 2025

Accepted 26<sup>th</sup> March, 2025

Published online 30<sup>th</sup> April, 2025

##### Keywords:

Communication practices, Diabetes management, Health communication, Patient-provider interaction, barriers.

#### ABSTRACT

Effective communication between healthcare providers and patients is vital for successful diabetes management, particularly in low-resource settings like Cameroon where the prevalence of diabetes is rising. This systematic review explored existing literature on communication practices in diabetes care, focusing on the types of communication used, the quality of provider-patient interactions, and barriers that hinder effective communication. Evidence from both high- and low-income settings consistently shows that strategies such as patient-centered care, shared decision-making, motivational interviewing, and the teach-back method improve treatment adherence, self-management, and glycemic control. However, in Cameroon, these practices are often poorly implemented due to systemic limitations. Language discordance, low health literacy, and cultural beliefs frequently disrupt communication, particularly in rural and underserved communities. Unlike high-income countries where interpreter services and culturally tailored training are more common, Cameroon lacks the infrastructure to consistently support such approaches. Overburdened healthcare systems, high patient loads, and limited time for consultations further reduce opportunities for effective provider-patient engagement. These communication challenges not only contribute to poor treatment adherence and diabetes-related complications but also increase healthcare costs and deepen health inequities. The review highlights an urgent need for context-specific interventions that strengthen provider training, promote culturally appropriate health education, and embed communication strategies within national health policy. Addressing these gaps is essential for improving outcomes and equity in diabetes care. Future research should prioritize exploring communication dynamics from both patient and provider perspectives to guide more effective and sustainable interventions in Cameroon.

##### \*Corresponding author:

Eyong Manyiyong Queenta

Copyright©2025, Eyong Manyiyong Queenta and Egbe Derick Agbor. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Eyong Manyiyong Queenta and Egbe Derick Agbor. 2025. "Communication in diabetes management: a review of practices, provider-patient interactions and barriers, informing the cameroonian context, *International Journal of Recent Advances in Multidisciplinary Research*, 12, (04), 11088-11094.

## INTRODUCTION

Diabetes mellitus (DM) is one of the most widespread chronic non-communicable diseases, marked by prolonged high blood sugar levels caused by insufficient insulin production or impaired insulin function. The global burden of diabetes continues to rise, with the International Diabetes Federation (IDF) estimating that 537 million adults were living with diabetes in 2021, a number projected to climb to 643 million by 2030 (1). This rise is particularly concerning in low- and middle-income countries (LMICs), where urbanization, changing diets, inactivity, and limited healthcare access drive the disease's spread and severity. (2). Cameroon exemplifies this growing crisis. National data show that diabetes affects about 5.8% of the adult population across both rural and urban settings (3). Complications such as diabetic retinopathy, kidney failure, and lower-limb amputations are becoming more common; adding to the strain on the country's already

challenged health system (4). While national non-communicable disease (NCD) programs have been introduced, large gaps remain in screening, diagnosis, treatment, and especially communication between patients and healthcare providers (5–7). Effective communication is essential for successful diabetes management. It empowers patients to understand their diagnosis, take ownership of their treatment plans, and maintain long-term behavioral changes. Globally studies have repeatedly shown that quality provider-patient communication improves medication adherence, glycemic control, and overall patient satisfaction (8, 9). This communication, however, is not limited to relaying facts. It involves empathy, active listening, respect for cultural values, and inclusion of the patient in decision-making processes (10). Despite its importance, these ideals are often difficult to realize in real-world clinical settings, particularly in LMICs like Cameroon where systemic limitations prevail. In

Cameroon, multiple factors hinder communication quality in diabetes care. With over 250 local languages, consultations often occur in French or English, which many patients do not fully understand. (11). Cultural beliefs about disease causation, especially in rural areas, can clash with biomedical explanations, further complicating care. In addition, provider workloads, short consultation times, and the absence of formal communication training leave little room for meaningful dialogue or patient engagement (4, 12). Existing literature in Cameroon has primarily focused on treatment adherence and patient knowledge, offering limited insight into the interpersonal and structural dynamics of communication from both patient and provider perspectives. This represents a critical gap, as understanding communication from both sides is essential to improving care delivery. Additionally, few studies have explored how communication barriers contribute to poor diabetes outcomes or identified effective strategies for addressing them. This review therefore aims to examine the existing body of literature on communication in diabetes management. It focuses on three key areas: the communication practices used in diabetes care; the quality of provider–patient interactions; and the barriers that hinder effective communication. By integrating global evidence with region-specific findings, particularly from Cameroon, this review seeks to highlight existing gaps and generate insights that can inform future empirical research, training programs, and policy initiatives. The goal is to develop context-appropriate communication strategies to improve outcomes for people living with diabetes in Cameroon.

### **Communication Practices in Diabetes Management:**

Effective communication between healthcare providers and patients is central to successful diabetes care, given the chronic, self-managed nature of the disease. Patients must adhere to medications, adjust diets, stay active, and monitor blood glucose, tasks that require both medical guidance and interpersonal support. Studies show that communication quality significantly influences patients' understanding, treatment adherence, and satisfaction with care. Studies across diverse settings have demonstrated that patient-centered communication significantly improves glycemic control, enhances self-management behaviors, and reduces diabetes-related complications (8, 9). In Cameroon, communication effectiveness is limited by contextual challenges such as linguistic diversity and cultural beliefs. With over 250 indigenous languages, mutual understanding between providers and patients is often compromised. Traditional views on disease causation may also conflict with biomedical explanations, reducing patients' willingness to engage with formal care and contributing to poor diabetes outcomes. These cultural and linguistic dynamics contribute to communication breakdowns that ultimately affect diabetes outcomes (11,4). Therefore, any effort to improve communication in diabetes care must consider the social, cultural, and structural realities of the Cameroonian healthcare system. Patient-centered care is a widely endorsed communication approach in diabetes management, emphasizing patients' values, culture, and experiences in care planning. It promotes collaboration, making patients active participants rather than passive recipients. When effectively implemented, it improves self-confidence, adherence, and quality of life. (9,5). In Cameroon, applying this model effectively requires providers to be sensitive to varied levels of health literacy and to address locally held beliefs about illness. Culturally competent training for healthcare workers, particularly those in community and

outpatient settings, is essential to achieving this kind of interaction (4,12). Closely linked to patient-centered care is shared decision-making which involves patients and providers collaboratively choosing treatment options based on clinical evidence and patient preferences. This interactive process promotes trust, transparency, and a sense of agency among patients. Research from high- and low-resource settings alike has shown that shared decision-making enhances adherence, satisfaction, and overall diabetes outcomes (5,13). However, in resource-limited environments like Cameroon, factors such as time constraints, heavy provider workloads, and patients' limited familiarity with medical terminology often impede this process. Nonetheless, even simplified versions of shared decision-making can foster better understanding and alignment between patients and their care plans (4,12).

To strengthen communication, several evidence-based strategies have emerged in the field of diabetes care. One such method is motivational interviewing, a counseling style designed to explore and resolve patients' ambivalence toward behavioral change. This technique relies on open-ended questions, reflective listening, and affirmations to guide individuals toward self-motivated change. Systematic reviews have confirmed its effectiveness in improving medication adherence, encouraging lifestyle modifications, and reducing HbA1c levels (15,16). Within the Cameroonian context, motivational interviewing offers an important opportunity to address culturally grounded health beliefs and promote engagement without judgment. Training healthcare providers in this approach could substantially improve the quality of interactions between clinicians and patients (11, 4).

Another practical strategy is the teach-back method, where clinicians ask patients to restate care instructions in their own words. This approach helps confirm whether the patient has accurately understood the information provided and offers an opportunity to clarify any misunderstandings. The method has been shown to improve patient knowledge, self-care practices, and hospital readmission rates in various settings (17, 18). In Cameroon, where disparities in literacy and language proficiency are common, the teach-back method presents a low-cost, high-impact tool for reinforcing education during clinical encounters. Its application can make a meaningful difference in patient engagement and adherence, especially in rural and low-resource clinics (12, 4).

### **Quality of provider patient Interactions in Diabetes Care:**

The management of diabetes mellitus relies not only on biomedical interventions but also on the quality of communication and relational dynamics between healthcare providers and patients. Effective interactions are built on foundations of mutual trust, empathy, active listening, and collaborative decision-making. These elements are central to encouraging patients to take an active role in their care, adhere to recommended treatment regimens, and maintain healthy behaviors over the long term. Empirical studies highlight the importance of patient-centered communication in improving clinical outcomes. Heisler et al. found that inclusive, empathetic provider communication increased adherence to medications and lifestyle changes (19), while Arora et al. reported that involving patients in decision-making and clarifying treatment goals enhanced self-management and glycemic control (9). These findings support the broader evidence linking high-quality provider–patient interactions to better chronic disease outcomes. In Cameroon's culturally and

linguistically diverse health system, fostering meaningful provider–patient communication is especially crucial. Cultural sensitivity and language concordance are not just ideal—they are essential for effective diabetes care. (11, 4). However, limited healthcare resources and structural constraints pose challenges to achieving consistent quality interactions. A key determinant of interaction quality is the strength of the provider–patient relationship. Trust and continuity facilitate open dialogue and encourage patients to express concerns and preferences. Ngo-Metzger et al. found that sustained relationships improve communication quality and patient satisfaction (20), creating a supportive environment essential for managing a lifelong condition like diabetes. In Cameroon, however, structural limitations such as high patient-to-provider ratios, brief consultation times, and insufficient continuity of care often hinder the development of these trust-based relationships. Mogueo et al. noted that in many public health facilities, providers are overburdened, leading to rushed consultations and limited opportunities for dialogue; conditions that undermine patient-centered care and weaken communication quality (4).

Cultural competence is another key factor influencing interaction quality. It reflects a provider's ability to respect and adapt to patients' cultural values and health beliefs. In diverse settings, culturally responsive communication improves understanding, trust, and treatment adherence—critical components for effective chronic disease management. Betancourt et al. highlighted its role in enhancing satisfaction and diabetes control (21). In Cameroon, where traditional health beliefs and cultural dietary norms vary significantly across regions, culturally informed communication is essential for tailoring education and treatment strategies to individual needs (11). The impact of provider–patient interaction quality is evident. Positive communication is linked to improved medication adherence, self-care, and metabolic outcomes. Schillinger et al. found that respectful, clear communication led to better adherence and glycemic control (18), while Ha Dinh et al. (17) showed that the teach-back method enhanced patient understanding and diabetes self-management. In Cameroon, low health literacy and language barriers often weaken provider–patient interactions. These could lead to misunderstandings, poor engagement, and missed follow-up on treatment. Improving communication through culturally adapted strategies and education tools can help providers build stronger relationships with patients and support better diabetes management (4). Strengthening these relational dynamics can significantly improve diabetes self-management and care outcomes.

**Barriers to Quality Communication Practices in Diabetes Management:** While effective communication remains a cornerstone of quality diabetes care, various barriers continue to limit its application, particularly in low-resource and multicultural settings like Cameroon. These barriers occur at different levels of the healthcare system and significantly impact patient engagement, care outcomes, and health equity. In Cameroon, several factors hinder effective provider–patient communication in diabetes care. Language discordance is a major barrier, as consultations are often conducted in English or French, which many patients may not fully understand, leading to confusion and poor adherence (22). Low health literacy, especially in rural and under-resourced communities, further limits patients' ability to manage their condition and contributes to poor outcomes (10). Cultural beliefs also

influence how patients perceive illness and treatment, with traditional views sometimes conflicting with biomedical advice, resulting in delayed care or non-adherence (11). Additionally, provider workload and time constraints in overcrowded public facilities reduce opportunities for meaningful dialogue, education, and trust-building—key components of effective chronic disease management (4). These barriers collectively have significant implications for both individual and system-level outcomes. Ineffective communication can lead to misunderstanding of treatment plans, incorrect use of medications, and non-adherence to lifestyle changes. These failures in care contribute to uncontrolled diabetes, resulting in complications such as nephropathy, neuropathy, and retinopathy (18).

At the system level, miscommunication increases healthcare costs due to repeated hospitalizations, medication errors, and prolonged hospital stays. In resource-constrained environments, such costs place additional pressure on already limited health budgets (23). Moreover, patients who struggle to understand their condition or care instructions often express dissatisfaction and are more likely to withdraw from ongoing care, which can worsen disease progression (17). Communication barriers also exacerbate health disparities. As the case in Cameroon, populations in rural areas or those who speak neither English nor French are particularly at risk of receiving inadequate care due to language and cultural mismatches. This further deepens inequalities in health outcomes (4). Addressing communication challenges in diabetes care requires a combination of practical and systemic interventions. Trained interpreters have been shown to improve understanding and outcomes (24), but in Cameroon, community health workers fluent in local languages offer a cost-effective alternative. The use of plain language, visual aids, and culturally adapted educational materials can also enhance comprehension, particularly for patients with low literacy (25). Provider training in cultural competence is essential for fostering respectful and effective interactions (21), while community-based health literacy programs can empower patients across varying education levels (26). To ensure sustainability, policy reforms must institutionalize these practices by mandating interpreter use, allocating time for education, and embedding communication training into medical curricula. In Cameroon, government support is critical for implementing these strategies effectively (4).

## DISCUSSION

**Communication practices:** This review underscores strong evidence that effective communication improves diabetes management by enhancing patient understanding, adherence, and glycemic control. Studies from both high- and low-resource settings confirm the benefits of patient-centered communication in supporting self-management and reducing complications (8, 9). Studies have shown that strategies emphasizing respect, active listening, and patient involvement lead to better outcomes (9, 10). However, implementation varies widely, with noticeable gaps in low- and middle-income settings like Cameroon, where such approaches remain underutilized. Globally, patient-centered care and shared decision-making (SDM) are widely endorsed as essential components of effective chronic disease management (5, 13). They are associated with improved satisfaction, greater treatment adherence, and enhanced health outcomes. However, in Cameroon, these practices are not consistently applied.

**Table 1. Summary of communication practices in diabetes management**

Communication Practice	Description	Reference(s)
Patient-Centered Care	Incorporates patients' preferences, beliefs, and values in care planning.	[4,11]
Shared Decision-Making (SDM)	Providers and patients collaborate to make informed treatment decisions.	[12,13]
Motivational Interviewing (MI)	Uses empathy and reflection to help patients resolve ambivalence and change behavior.	[15,16]
Teach-Back Method	Patients repeat information in their own words to confirm understanding.	[17,18]
Use of Visual Aids	Uses diagrams, pictures, or charts to aid comprehension of medical information.	[8,9]
Culturally Tailored Counseling	Provides health information and counseling adapted to the local culture and belief systems.	[3,4]
Use of Community Health Workers	Employs trained locals to bridge the gap between providers and hard-to-reach patients.	[2,12]
Open-Ended Questioning	Asks questions that allow patients to express themselves freely and share concerns.	[8,10]
Reflective Listening	Repeats and rephrases patient responses to demonstrate understanding and build trust.	[10,15]
Simplified Language	Delivers information using plain, jargon-free language appropriate to the patient's literacy level.	[10,17]

**Table 2. Key qualities for effective provider–patient interactions in diabetes care**

Quality	Description	Reference(s)
Empathy	Demonstrating genuine understanding and concern for the patient's emotions.	[19]; [9]
Mutual Respect	Valuing patients' experiences, beliefs, and preferences during clinical care.	[21]; [11]
Trust	Building dependable and open relationships that encourage adherence.	[20]; [4]
Continuity of Care	Fostering long-term patient–provider relationships.	[20]
Active Listening	Giving full attention to patient concerns and responding meaningfully.	[10]; [19]
Cultural Competence	Understanding and adapting care to the patient's cultural background.	[21]; [11]
Clear Communication	Using simple, jargon-free language appropriate to patient literacy.	[18]; [17]
Shared Decision-Making	Collaborating with patients in treatment planning and care decisions.	[13]; [14]
Language Concordance	Communicating in the patient's preferred language or using trained interpreters.	[20]; [11]
Patient Empowerment	Enabling patients to take active roles in managing their health.	[9]; [8]

**Table 3. Barriers to effective communication and strategies to overcome**

Barrier	Brief Description	Suggested Solutions	References
Language Barriers	Patients do not understand provider language.	Use interpreters or multilingual community health workers.	[22]; [24]
Low Health Literacy	Patients struggle to understand health information.	Use plain language and visual aids.	[10]; [25]
Cultural Beliefs	Traditional beliefs conflict with medical advice.	Train providers in cultural competence.	[11]; [21]
Time & Workload Limits	Providers lack time for proper patient engagement.	Adjust policies to allow more time per consultation.	[4]; [23]
Patient Disengagement	Patients feel ignored or confused and drop out of care.	Use participatory, patient-centered education strategies.	[17]; [18]
Health Inequities	Marginalized groups face systemic communication challenges.	Localized, culturally sensitive outreach and education.	[4]; [26]

I wish tables be put under their respective sections above for clarity or if not possible put it before discussion. Studies reveal that time constraints, overburdened providers, and a lack of formal training in communication limit their implementation (4, 12). Whereas in high-income countries SDM is often embedded in clinical workflows, in Cameroon, most provider–patient encounters remain didactic and biomedical in nature, with minimal space for participatory dialogue (11). This discrepancy extends to the application of structured communication strategies like motivational interviewing (MI) and the teach-back method. These techniques are well-established in global literature for improving patient motivation, behavior change, and treatment comprehension (15–18). However, their usage in Cameroon is limited. Reasons include low provider awareness, inadequate training, and the absence of institutional support. Yet similar low-resource settings, such as Nigeria, have shown that structured communication training significantly enhances provider–patient interaction and improves diabetes outcomes (28). This suggests that similar interventions could be feasible and beneficial in Cameroon if appropriately adapted and scaled.

The review highlights that communication practices are shaped by contextual barriers such as low health literacy, language discordance, and cultural misalignment, which are common globally but particularly pronounced in Cameroon (10, 22). With over 250 local languages, communication is

often hindered when care is delivered solely in French or English, reducing patient understanding and adherence (4). Similar to findings in the U.S. and Canada (22, 24), language mismatches in Cameroon are linked to lower satisfaction with care; however, the lack of interpreter services in low-resource settings further compounds these challenges. Cultural beliefs about disease causation also influence communication, as traditional explanations may clash with biomedical approaches, leading to mistrust or disengagement from formal care (11). While global evidence underscores the role of cultural competence in improving communication (21), such training remains limited in Cameroon. The WHO's people-centered care framework reinforces the need to integrate cultural sensitivity and shared decision-making into chronic disease management, highlighting a critical area for system-level reform (27). Despite these gaps, there is convergence across studies in recognizing that systemic changes are needed to improve communication. Interventions focusing solely on provider behavior will not suffice unless supported by national policies, institutional training programs, and community outreach. Cameroon's health strategy lacks structured investment in communication tools and training (7). Integrating communication skills development into medical and nursing curricula, creating patient education tools in local languages, and leveraging community health workers as communication intermediaries are crucial next steps.

### **Quality of provider–patient interactions in diabetes care:**

The literature consistently shows that strong provider–patient interactions are essential to effective diabetes management. When care is built on empathy, trust, mutual respect, and shared decision-making, patients are more likely to engage, adhere to treatment, and achieve better health outcomes (9,19). Studies have found that patients who feel heard and involved in their care are more committed to following treatment plans and maintaining healthy behaviors. For example, Heisler et al. (19) linked participatory communication to better medication adherence and self-management, while Arora et al. (9) found that continuity and collaboration in care planning improve glycemic control. These findings are especially relevant for low-resource settings like Cameroon, where chronic disease management is complicated by structural limitations and cultural diversity. In such environments, culturally sensitive and linguistically appropriate communication is crucial (4, 11). Although patient-centered communication is widely recognized as best practice, its consistent application in Cameroonian healthcare settings is hindered by short consultations, heavy workloads, and a lack of continuity in care (4). Continuity in provider–patient relationships is a key factor in ensuring quality interactions. Studies show that repeated contact with the same provider fosters trust, encourages open communication, and improves understanding of patient needs (20). In Cameroon’s public hospitals, however, frequent staff rotations often prevent such continuity. This fragmentation undermines trust and limits the development of lasting relationships essential for effective communication and chronic disease management (4).

Another critical factor influencing interaction quality is cultural competence. Research shows that a provider’s ability to acknowledge and incorporate patients’ cultural backgrounds into care planning enhances communication and treatment adherence (21). In Cameroon, where traditional health beliefs, language diversity, and dietary customs vary widely, cultural competence is not optional it is essential. When providers fail to understand patients’ perspectives, care plans may become misaligned, reducing patient cooperation and engagement (11). Yet, despite its importance, cultural competence is often overlooked in clinical training and is rarely integrated into national health policies. The quality of provider–patient interactions has direct, measurable effects on health outcomes. Evidence shows that clear and respectful communication improves medication adherence and glycemic control (18), while techniques like the teach-back method enhance understanding and self-care, especially among patients with limited health literacy (17). These findings are particularly relevant in Cameroon, where many rural and semi-urban populations face low health literacy and frequent language mismatches with healthcare providers (4). A comparative review of studies shows that while high-income countries have increasingly institutionalized strategies such as relational continuity, teach-back, and cultural competence training, similar practices in Cameroon remain informal or absent. Even in other African settings like Nigeria, structured communication training has yielded improvements in interaction quality and clinical outcomes (28), suggesting that context-specific adaptation of such models could be feasible and impactful in Cameroon as well.

**Hindrances to quality communication practices in diabetes management:** Despite the established importance of effective communication in managing chronic diseases like diabetes,

numerous barriers continue to undermine its quality, particularly in resource-limited and culturally diverse contexts such as Cameroon. These hindrances are well-documented across both global and local studies, with recurring themes including language discordance, low health literacy, cultural misalignment, and systemic constraints within health systems. The barriers to effective communication in diabetes care observed in this review align with patterns reported globally, yet they appear more pronounced in low-resource contexts like Cameroon. Language discordance, for instance, is a widely documented challenge in multilingual societies such as the United States and Canada, where it has been linked to reduced patient comprehension and adherence (22,24). However, unlike these high-income settings, Cameroon lacks consistent interpreter services, making the communication gap more difficult to bridge (4). Similarly, low health literacy is a recognized barrier in many regions, but in Cameroon, it is exacerbated by widespread poverty, limited education, and minimal access to health information, particularly in rural areas (10, 18). This sharply contrasts with countries where health education programs are more integrated into primary care. Cultural beliefs further complicate care delivery in Cameroon, often clashing with biomedical explanations and influencing patients’ health-seeking behavior—an issue less pronounced in more secular or medically aligned populations (11). In addition, structural limitations such as brief consultations and high patient loads mirror issues found in other LMICs, but the absence of supportive communication training and systemic investment distinguishes the Cameroonian context (4, 23). These compounded barriers highlight why strategies proven effective elsewhere, such as teach-back and culturally adapted education, must be contextually tailored to improve outcomes in Cameroon (17, 18). The situation is especially critical for marginalized populations. Rural residents and individuals who do not speak official languages are disproportionately affected by communication gaps, further exacerbating health disparities in an already inequitable system (4). This mirrors global evidence that underserved populations often face compounded risks when communication is not tailored to their linguistic and cultural needs (22). Several evidence-based strategies can help overcome the communication challenges identified in this review. Interpreter services, for example, have been shown to enhance patient satisfaction, adherence, and clinical outcomes in high-resource settings (24). In Cameroon, where formal interpreters are scarce, trained community health workers who speak local dialects offer a culturally appropriate and cost-effective alternative. These individuals not only facilitate language understanding but also help bridge cultural gaps and strengthen patient trust (4). Improving health literacy through community-based initiatives is equally critical. Participatory education approaches, such as those recommended by Nutbeam, emphasize tailoring information to varied literacy levels, using plain language, visual aids, and culturally relevant content to improve comprehension and self-care (25,26). Cultural competence training for healthcare providers has also proven effective globally, helping professionals better understand and respond to patients’ beliefs and values, thereby improving relational quality and treatment engagement (21). However, for these interventions to be sustainable, policy-level support is necessary. Embedding communication and cultural training into health education curricula, ensuring time for patient counseling, and supporting interpreter availability can institutionalize these practices. Yet in Cameroon, such reforms remain limited and underfunded. Without structural

changes, provider-level efforts may continue to be constrained by systemic barriers (4).

## CONCLUSION

This systematic review has reaffirmed the critical role of communication in the effective management of diabetes, particularly in contexts like Cameroon where patients often face a combination of linguistic, cultural, and systemic barriers. Globally recognized strategies such as patient-centered care, shared decision-making, motivational interviewing, and the teach-back method have demonstrated strong potential to improve patient understanding, adherence, and health outcomes. However, their implementation in Cameroon remains inconsistent and largely undocumented in terms of effectiveness or sustainability. Across the reviewed literature, notable gaps persist. While many studies have evaluated communication practices from a clinical or theoretical standpoint, few have explored the quality of provider–patient communication in routine diabetes care, particularly through the dual lens of both healthcare providers and patients.

Existing studies rarely capture the nuanced interactional dynamics, contextual influences, and real-world challenges that shape communication practices on the ground. Moreover, limited research has been conducted to assess how cultural beliefs, language barriers, and health literacy specifically affect communication effectiveness in Cameroonian healthcare settings. These gaps highlight a clear need for empirical research that moves beyond general observations to critically assess the quality of communication practices in diabetes care. A study focusing on both providers' and clients' perspectives will offer deeper insights into the enablers and barriers of effective communication, inform targeted interventions, and support the development of context-appropriate strategies to improve chronic disease outcomes.

## RECOMMENDATIONS

- **Train Healthcare Providers in Culturally Competent Communication:** Incorporate communication skills, including cultural competence and patient-centered techniques, into health worker training programs to improve engagement and trust in diabetes care.
- **Implement the Teach-Back Technique in Clinical Practice:** Encourage the routine use of the teach-back method during consultations to confirm patient understanding of diagnoses, medications, and lifestyle instructions—especially in low-literacy settings.
- **Utilize Community Health Workers to Bridge Language and Cultural Gaps:** Engage trained community health workers who speak local languages to support diabetes education and facilitate provider–patient communication in rural and underserved areas.
- **Develop and Distribute Simplified, Culturally Relevant Educational Materials:** Create visual and plain-language diabetes education tools in local languages to support comprehension, especially for patients with limited literacy or unfamiliarity with biomedical concepts.

## REFERENCES

1. International Diabetes Federation. *IDF Diabetes Atlas*. 10th ed. Brussels: IDF; 2021. Available from: <https://diabetesatlas.org/>
2. Pastakia SD, Pekny CR, Manyara SM, Fischer L. Diabetes in sub-Saharan Africa – From policy to practice to progress: Targeting the existing gaps for future care for diabetes. *Diabetes Metab Syndr Obes*. 2017;10:247–63. <https://doi.org/10.2147/DMSO.S126314>
3. Katte JC, Kengne AP, Dzudie A, Sobngwi E, Mbanya JC. Prevalence of prediabetes and diabetes mellitus among adults residing in Cameroon: A systematic review and meta-analysis. *Diabetes Res Clin Pract*. 2018;137:19–28. <https://doi.org/10.1016/j.diabetes.2017.12.012>
4. Mogueo A, Mbanya JC, Kengne AP, Sobngwi E. Challenges and opportunities in diabetes care: Perspectives from Cameroon. *Pan Afr Med J*. 2022;41:134. <https://doi.org/10.11604/pamj.2022.41.134.26311>
5. Tchoumi JC, Foma F. Management of diabetes mellitus in Cameroon: Challenges and prospects. *Cardiovasc J Afr*. 2011;22(4):166–8. <https://doi.org/10.5830/CVJA-2010-097>
6. VOA News. Cameroon says COVID worsens diabetes burden (Internet). 2020 Nov 14 (cited 2025 Apr 15). Available from: <https://www.voanews.com/a/covid-19-pandemic-cameroon-says-covid-worsens-diabetes-burden/6198394.html>
7. Minsante Cameroon Ministry of Public Health. *National Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2020–2024*. Yaoundé: Ministry of Public Health; 2020.
8. Peimani M, Nasli-Esfahani E, Sadeghi R. Patients' perceptions of patient–provider communication and diabetes care: A systematic review of quantitative and qualitative studies. *Chronic Illn*. 2018;16(1):3–22. <https://doi.org/10.1177/1742395318782378>
9. Arora S, Burner E, Terp S, Nok Lam C, Menchine M. Patient-centered communication and diabetes care: A systematic review. *Patient Educ Couns*. 2021;104(2):284–95. <https://doi.org/10.1016/j.pec.2020.07.025>
10. Al Sayah F, Majumdar SR, Williams B, Robertson S, Johnson JA. Health literacy and health outcomes in diabetes: A systematic review. *J Gen Intern Med*. 2014;29(2):487–97. <https://doi.org/10.1007/s11606-013-2686-5>
11. Awah PK, Unwin N, Phillimore P. Cure or control: Complying with biomedical regime of diabetes in Cameroon. *BMC Health Serv Res*. 2008;8:43. <https://doi.org/10.1186/1472-6963-8-43>
12. Negsang AS, Tendongfor N, NguediaAssob JC, Nji KE, Njajou O. Knowledge, Practices and Experiences of Type II Diabetic Patients on Self-Care Management at the Limbe and Buea Treatment Centers. *J Environ Sci Public Health*. 2023;7:123–30. <https://doi.org/10.26502/jesph.96120109>
13. Elwyn G, Frosch D, Thomson R, Joseph-Williams N, Lloyd A, Kinnersley P, et al. Shared decision making: A model for clinical practice. *J Gen Intern Med*. 2012;27(10):1361–7. <https://doi.org/10.1007/s11606-012-2077-6>
14. Barry MJ, Edgman-Levitan S. Shared decision making—the pinnacle of patient-centered care. *N Engl J Med*. 2012;366(9):780–1. <https://doi.org/10.1056/NEJMp1109283>

15. Rollnick S, Miller WR, Butler CC. *Motivational interviewing in health care: Helping patients change behavior*. New York: Guilford Press; 2008.
16. Rubak S, Sandback A, Lauritzen T, Christensen B. Motivational interviewing: A systematic review and meta-analysis. *Br J Gen Pract*. 2005;55(513):305–12. <https://bjgp.org/content/55/513/305>
17. Ha Dinh TT, Bonner A, Clark R, Ramsbotham J, Hines S. The effectiveness of the teach-back method on adherence and self-management in health education for people with chronic disease: A systematic review. *JBIS Database Syst Rev Implement Rep*. 2016;14(1):210–47. <https://doi.org/10.11124/jbisr-2016-2296>
18. Schillinger D, Piette J, Grumbach K, Wang F, Wilson C, Daher C, et al. Closing the loop: Physician communication with diabetic patients who have low health literacy. *Arch Intern Med*. 2003;163(1):83–90. <https://doi.org/10.1001/archinte.163.1.83>
19. Heisler M, Bouknight RR, Hayward RA, Smith DM, Kerr EA. The relative importance of physician communication, participatory decision-making, and patient understanding in diabetes self-management. *J Gen Intern Med*. 2002;17(4):243–52. <https://doi.org/10.1046/j.1525-1497.2002.10905.x>
20. Ngo-Metzger Q, Sorkin DH, Phillips RS, Greenfield S, Massagli MP, Clarridge B, et al. Providing high-quality care for limited English proficient patients: The importance of language concordance and interpreter use. *J Gen Intern Med*. 2007;22(Suppl 2):324–30. <https://doi.org/10.1007/s11606-007-0340-z>
21. Betancourt JR, Green AR, Carrillo JE, Ananeh-Firempong II. Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Rep*. 2003;118(4):293–302. [https://doi.org/10.1016/S0033-3549\(04\)50253-4](https://doi.org/10.1016/S0033-3549(04)50253-4)
22. Diamond L, Izquierdo K, Canfield D, Matsoukas K, Gany F. A systematic review of the impact of patient–physician non-English language concordance on quality of care and outcomes. *J Gen Intern Med*. 2019;34(8):1591–606. <https://doi.org/10.1007/s11606-019-04847-5>
23. Eichler K, Wieser S, Brügger U. The costs of limited health literacy: A systematic review. *Int J Public Health*. 2009;54(5):313–24. <https://doi.org/10.1007/s00038-009-0058-2>
24. Karliner LS, Jacobs EA, Chen AH, Mutha S. Do professional interpreters improve clinical care for patients with limited English proficiency? A systematic review of the literature. *Health Serv Res*. 2007;42(2):727–54. <https://doi.org/10.1111/j.1475-6773.2006.00629.x>
25. Wilson EA, Makoul G, Bojarski EA, Bailey SC, Waite KR, Rapp DN, et al. Comparative analysis of print and multimedia health materials: a review of the literature. *Patient Educ Couns*. 2012;89(1):7–14. <https://doi.org/10.1016/j.pec.2012.06.008>
26. Nutbeam D. Health literacy as a public health goal: A challenge for contemporary health education and communication strategies into the 21st century. *Health Promot Int*. 2000;15(3):259–67. <https://doi.org/10.1093/heapro/15.3.259>
27. World Health Organization. Framework on integrated, people-centred health services. Geneva: WHO; 2016 (cited 2025 Apr 19). Available from: <https://apps.who.int/iris/handle/10665/155002>
28. Olowookere OO, Fatiregun AA, Fawole OI, Akomolafe AA. Effect of training on primary care physicians' communication skills in Nigeria: a randomized controlled trial. *BMC Health Serv Res*. 2019;19:292. <https://doi.org/10.1186/s12913-019-4115-4>

\*\*\*\*\*