



# A Cultural Perspective on the use of Herbal Medicine in Diabetic Care

Chelimo Faith Rebecca

Department of Clinical Medicine and Dentistry Kampala International University Uganda

Email: [rebecca.chelimo@studwc.kiu.ac.ug](mailto:rebecca.chelimo@studwc.kiu.ac.ug)

## ABSTRACT

Herbal medicine has long played a significant role in managing various diseases, including diabetes, across different cultures. The integration of traditional medicine with modern healthcare is a growing area of interest, as cultural beliefs strongly influence treatment choices. This study examines the cultural perspectives on the use of herbal medicine in diabetic care, analyzing its benefits, risks, and integration with conventional treatments. While herbal remedies are widely used for their perceived effectiveness and affordability, concerns regarding their safety, regulation, and potential interactions with pharmaceutical treatments remain. By examining traditional practices from different regions and the cultural beliefs that shape them, this study highlights the need for a balanced approach that integrates herbal medicine with conventional diabetes management. The findings suggest that healthcare providers should engage with patients to understand their cultural preferences, promote safe practices, and ensure informed decision-making regarding herbal remedies.

**Keywords:** Herbal medicine, diabetes care, cultural beliefs, traditional healing, complementary medicine, integrative healthcare, patient education.

## INTRODUCTION

Herbal medicine can be defined as the use of plants, plant materials, and plant preparations to provide wellness and prevent or manage common diseases. It has been used as a traditional remission in most cultures and civilizations, as recorded history shows. Western scholars named it "Traditional Chinese medicine" when they found their Western medicine was redundant for curing new diseases. Then they found its equivalents appeared in each culture as they discovered traditional medicine in other continents. It has been proven that traditional medicines involve comprehensive cultural, socially based, and nature-friendly knowledge and practices. World Health Organization recognized its significance and published a key paper on "Traditional Medicine and Its Role in Healthcare" in 2002, suggesting that various alternatives could be used and integrated into the healthcare system. Recently, the perception of patients with diabetes towards alternative treatments such as herbal remedies have affected their attitudes towards conventional diabetic treatments. This has worried clinicians, and as a result, many scholars have emphasized knowledge about the use of herbal remedies among diabetic patients. It has been found that diabetic patients are increasingly interested in herbals and alternative treatments. Twenty-five percent of diabetic patients in South Africa and Ghana have been shown to have herbal treatments with bitterless melon or cinnamon. In some African communities, 60% of patients are using anti-diabetic plant consulting with traditional healers, although modern diabetic therapy is established. Major drug-based treatments for diabetes are worth mentioning; (1) biguanide, which improves insulin sensitivity, (2) sulfonylurea forces  $\beta$ -cells to release more insulin, (3) insulin injections, or using a pump, or wearing an inhaler or other devices, (4) thiazolidinediones that reduce glucose production in the liver and increase insulin sensitivity. The benefits of herbs as a treatment for diabetes alongside these conventional therapies have been recently reported in some studies. It can be claimed that herbals in the form of dried powders, liquids, tinctures, capsules, or tablets are now widely available in health food stores, supermarkets, and herbal stores. Additionally, some hospitals have established herbal medicine clinics. Hence, healthcare providers need to know and discuss whether herbal remedies are used. Given the

significant interest, this study discusses the use of herbal remedies for chronic disease diabetic patients globally. At the same time, it is aimed to reveal the effectiveness and risks of herbal remedy therapy, especially on diabetes, high cholesterol, and high blood pressure. When discussing the use of herbals in diabetic care, it should be tackled by comprehensively considering cultural perspectives. Thus, research on the use of herbals in diabetic care is conducted considering cultural perspectives with a multidisciplinary approach. Moreover, information on the use of herbals will be given based on the written sources of various cultures as well as the theoretical and ethical perspectives, which are the focus of interest in the methodology of diabetic care [1, 2, 3].

#### **Cultural Beliefs and Practices Related to Herbal Medicine**

The traditional beliefs, norms, and practices that have developed in different societies have deeply influenced the perception of herbal medicine and its use in the course of care provision. Within different cultures, people have developed certain views and beliefs as to what causes illness and what can be done to treat and prevent the same. It is, therefore, reasonable that the perceived effectiveness of any care behavior is shaped to a large extent by culturally defined norms and practices. Cultural norms define what is acceptable for people to do, and these norms influence people's health beliefs and attitudes toward care practices that entail taking medications. In the same way that cultural beliefs influence illness experiences, they also shape perceptions of herbal medicine and the acceptability and usage of traditional remedies. Many cultural traditions view medicinal plants as valuable natural resources that are inherently linked to a society's basic needs. Several cultural traditions, such as herbal medicine, have been neither spineless in the face of industrialization nor experienced a crisis of credibility. Since time immemorial, herbal medicine has been considered a system of healing in many cultures, including Sudan. Accordingly, the existence of certain cultural norms shapes societal values about the acceptability of services, which, in turn, affects the utilization pattern of different types of cure facilities. Our ancestors have left behind the rudiments of treasured information that plant roots, leaves, flowers, or seeds can treat many diseases. As part of cultural heritage, knowledge about herbs is obtained through shared experiences and learned by copying the actions of others as a means of transmitting necessary skills to future generations. Empowering the community with information about the power of local herbs is thought of as being of high importance since shared knowledge helps in promoting the use of herbal medicine. Tradition and folklore make the Sudanese widely acquainted with the healing power of many herbs [4, 5, 6].

#### **Benefits and Risks of Herbal Medicine in Diabetic Care**

Optimal diabetic care is not only about managing what can be seen and measured but also what is taken by the patient. Several studies have demonstrated that the care given by healthcare providers is not the only behavior that greatly affects the progress of the patient's condition; patients' lifestyles can also play a significant role. Since most health-related choices are deeply rooted in cultural backgrounds, different populations handle these choices differently according to their social and cultural norms, traditions, historical experiences, and beliefs about illness and health. This cultural perspective is critical in providing a context in which the behavior of both patients and healthcare providers can be understood and optimal care may be suggested [7, 8, 9]. Herbal medicine has been, and still is, the most widely used method in managing diabetes by several patients in different cultures across the world. The importance of integrating the use of medicinal herbs for the treatment of diabetic patients is that it offers remedies of lower costs and has been proven effective in lowering the level of glucose in the blood among diabetic patients. Moreover, the use of local and herbal medicine is a form of health behavior that is rooted in a particular cultural orientation and belief system. Existing studies in the town where the current research was conducted found that the majority of herbal medicine is effective in managing various chronic diseases, including diabetes. One of the main benefits of using herbal medicine is the reduction of the intake of more than one prescribed pharmaceutical intervention. Since diabetes is a chronic disease that requires long-term care, the accumulated effect of the pharmaceutical drug might lead to some side effects. Although herbal medicine may also pose some risks of causing side effects and a bad reaction if not careful, the effect is not as quick and challenging as the chemical drugs taken when using a pharmaceutical intervention. Unfortunately, up to now, there has been a lack of clear guidance and policy on the implementation of herbal medicine for the management of diabetes. Since some people rely on herbs and other traditional medicines instead of mainstream health services, it is important to ensure the safety and efficacy of these treatments. Moreover, lack of information about the potential risks associated with an adverse reaction or the potential for herb-drug interactions might put a patient in an even more precarious situation. There is an urgent need for robust research to investigate the safety and the efficacy of these traditional practices. In the face of the widespread use of these practices, which remain largely beyond the control of policymakers and the health sector, the lack of such research presents a major

shortcoming [10, 11, 12]. Currently, even though herbal medicine is consumed daily by almost all Ethiopian societies and many diabetic patients in the town where this study was conducted, there is insufficient public information and health education about the use of herbal medicine, especially for diabetic patients. Providing patient education on the safe use and management of herbal medicine is a paramount principle, hence, it is important to consider public health information and health awareness strategies to be developed. Integrating the use of medicinal herbs with mainstream medical treatment or recommending the safe use of a medicinal herb is a holistic approach and should be the focus of future health education designs, campaigns, and awareness programs. A balanced perspective on the use of traditional medicine can be learnt and form a base for an informed choice. Therefore, the risks associated with herbal medicine use must be known and disclosed in available reports and campaigns. An informative discussion with a Health Care Worker, as well as an informed decision about herbal medicine use, is always important. Herbs should be bought in places that are subject to health inspections. All of these will contribute to patients receiving a quality herbal product and a good health benefit from traditional medical treatment [13, 14, 15].

### **Integration of Herbal Medicine with Conventional Treatment**

The possibilities and challenges of integrating herbal medicine with conventional diabetes treatment are evaluated. The collaborative care principles are outlined as a theoretical framework for the coexistence of herbal and conventional diabetes treatment and management. The necessity for familiarity with both treatment modalities is discussed, as well as some of the concerns that healthcare providers may have regarding the integration of herbal medicine. It must be underscored that in the management of diabetic care, the patient should receive maximum benefits without compromising patient safety [16, 17, 18]. Diabetes mellitus is a chronic condition that leads to hyperglycemia due to an abnormal carbohydrate metabolism. Due to its long-term complications and morbidity, the management of diabetes care must follow a multidisciplinary approach. Conventional diabetes treatments often include pharmacological agents, nutritional therapy, insulin therapy, and psychological counseling. Herbal medicine can work in parallel with conventional treatments to reduce blood glucose levels, while conventional treatment can handle the potential side effects of herbal medicine. As health care providers, nurses should have a comprehensive understanding of the complementary effectiveness of the combined approaches to diabetes. Similarly, herbalists should work closely with health providers to enhance diabetes care [19, 20, 21]. Traditional herbal medicine is a valuable option for the management of type 2 diabetes. However, this treatment modality should not replace conventional diabetes treatment. Thus, patient diabetes care that integrates herbal and conventional medicine must be by the preventive principles provided. This is because the co-existence of herbal and conventional medicine that is not by the patient's health status will pose health threats, as has been shown. With good patient education and ongoing monitoring between healthcare providers, nurses, and herbalists, an integrated herbal conventional care approach is believed to be beneficial for patients [22, 23, 24].

### **Case Studies and Examples of Herbal Medicine Use in Different Cultures**

The use of herbal medicine among different cultures is vast and diverse. By exploring different regions of the world, case studies reveal a detailed insight into the diversity of herbal medicine. The cases carefully consider the herbs used and their effectiveness as perceived by the patient or herbal practitioner. The examples suggest some interesting and innovative ways that herbal treatments have been used, either on their own or together with other traditional medical practices. Background information about other related practices is provided to create a clearer picture of the various ways in which diabetes is managed using culturally-specific treatments [25, 26, 27]. Herbal medicine exists in an intricately woven tapestry of cultural practice, identity, spirituality, and materials. However, it is still often marginalized or not effectively integrated within wider healthcare frameworks. Integrative and comparative case studies foster a deeper understanding whilst illuminating both the variety of uses of herbal medicine and the crucially important role that it plays in many lives. Broad herbal practices, often overlooked in research and policy, may shed interesting perspectives and open up new possibilities [28, 29, 30, 31, 32, 33, 34]. Specific cases of how diabetes is tackled in distinct cultural localities show the types of herbs often used and the perceived effectiveness of various treatments by either the patient or the wider community. The demographics of diabetes differ markedly in different parts of the world. Case studies present practices in diverse cultures and geographic areas, focusing on a village in India, the Sundarbans in West Bengal, and the Maasai people in Tanzania [32, 33, 34, 35, 36].

### **CONCLUSION**

The use of herbal medicine in diabetic care is deeply rooted in cultural traditions and remains a preferred treatment modality in many communities. While some herbal remedies have demonstrated potential in

managing diabetes, the lack of standardized regulation and scientific validation raises concerns regarding safety and efficacy. Integrating herbal medicine with conventional diabetes treatments requires a multidisciplinary approach that considers cultural perspectives, scientific evidence, and patient education. Healthcare professionals should actively engage with patients to understand their reliance on herbal medicine and provide guidance on its safe use. Policymakers should also prioritize research and regulations to ensure quality control and patient safety. Ultimately, a collaborative approach between traditional and modern healthcare systems can enhance diabetes management and improve patient outcomes globally.

## REFERENCES

1. Firempong CK, Addo-Fordjour P, Komlaga G, Ameyaw Y, Nirvana NO, Frederick K, Yaw AA. Ethnobotanical study of medicinal plants used to treat HIV, cancer and diabetes in some communities of the Ashanti Region, Ghana. *Journal of Herbal Medicine*. 2023 Jun 1;39:100648. [\[HTML\]](#)
2. Esom-Ibe AE, Ebong OO, Aprioku JS. Acute and sub-acute toxicity evaluation of *Commelina benghalensis* (Commelinaceae) and *Newbouldia laevis* (Bignoniaceae) ethanol leaf extracts in wistar rats. *J Adv Biol Biotechnol*. 2018;17(3):1-9.
3. Appiah EO, Appiah S, Oti-Boadi E, Oppong-Besse A, Awuah DB, Asiedu PO, Oti-Boateng LE. Practices of herbal management of malaria among trading mothers in Shai Osudoku District, Accra. *PloS one*. 2022 Jul 18;17(7):e0271669. [plos.org](#)
4. Ansong J, Asampong E, Adongo PB. Socio-cultural beliefs and practices during pregnancy, child birth, and postnatal period: A qualitative study in Southern Ghana. *Cogent Public Health*. 2022 Dec 31;9(1):2046908.
5. Teke N, Özer Z, Turan GB. Analysis of health care personnel's attitudes toward complementary and alternative medicine and life satisfaction due to COVID-19 pandemic. *Holistic nursing practice*. 2021 Mar 1;35(2):98-107.
6. Hall GL, Heath M. Poor medication adherence in African Americans is a matter of trust. *Journal of racial and ethnic health disparities*. 2021 Aug;8(4):927-42.
7. Alfahmi MZ. Patients' preference approach to overcome the moral implications of family-centred decisions in Saudi medical settings. *BMC Medical Ethics*. 2022 Dec 6;23(1):128.
8. Anthonj C, Setty KE, Ferrero G, Yaya AM, Poague KI, Marsh AJ, Augustijn EW. Do health risk perceptions motivate water-and health-related behaviour? A systematic literature review. *Science of the total environment*. 2022 May 1;819:152902. [sciencedirect.com](#)
9. Poureslami I, FitzGerald JM, Tregobov N, Goldstein RS, Loughheed MD, Gupta S. Health literacy in asthma and chronic obstructive pulmonary disease (COPD) care: a narrative review and future directions. *Respiratory Research*. 2022 Dec 19;23(1):361. [springer.com](#)
10. Sari Y, Yusuf S, Kusumawardani LH, Sumeru A, Sutrisna E. The cultural beliefs and practices of diabetes self-management in Javanese diabetic patients: an ethnographic study. *Heliyon*. 2022 Feb 1;8(2). [cell.com](#)
11. Izah SC, Ogidi OI, Ogwu MC, Salimon SS, Yusuf ZM, Akram M, Raimi MO, Iyingiala AA. Historical perspectives and overview of the value of herbal medicine. In *Herbal medicine phytochemistry: Applications and trends 2024* Jul 10 (pp. 3-35). Cham: Springer International Publishing. [\[HTML\]](#)
12. Az-Zahra FR, Sari NL, Saputry R, Nugroho GD, PRIBADI T, SUNARTO S, Setyawan AD. Traditional knowledge of the Dayak Tribes (Borneo) in the use of medicinal plants. *Biodiversitas Journal of Biological Diversity*. 2021 Oct 6;22(10). [smujo.id](#)
13. Alzahrani AS, Price MJ, Greenfield SM, Paudyal V. Global prevalence and types of complementary and alternative medicines use amongst adults with diabetes: systematic review and meta-analysis. *European journal of clinical pharmacology*. 2021 Sep;77:1259-74. [springer.com](#)
14. Sagar S, Mir PA, Kumar N, Chawla A, Uppal J, Kaur A. Traditional and herbal medicines: opportunities and challenges. *Pharmacognosy Research*. 2022;14(2). [phcogres.com](#)
15. Choudhury A, Singh PA, Bajwa N, Dash S, Bisht P. Pharmacovigilance of herbal medicines: Concerns and future prospects. *Journal of Ethnopharmacology*. 2023 Jun 12;309:116383. [\[HTML\]](#)
16. Mao JJ, Pillai GG, Andrade CJ, Ligibel JA, Basu P, Cohen L, Khan IA, Mustian KM, Puthiyedath R, Dhiman KS, Lao L. Integrative oncology: Addressing the global challenges of cancer prevention and treatment. *CA: a cancer journal for clinicians*. 2022 Mar;72(2):144-64. [wiley.com](#)

17. Obahiagbon EG, Ogwu MC. The nexus of business, sustainability, and herbal medicine. In *Herbal Medicine Phytochemistry: Applications and Trends 2023* Nov 8 (pp. 1-42). Cham: Springer International Publishing. [\[HTML\]](#)
18. Abbasi N, Nizamullah FN, Zeb S. AI in Healthcare: Integrating Advanced Technologies with Traditional Practices for Enhanced Patient Care. *BULLET: Jurnal Multidisiplin Ilmu*. 2023 Jun 13;2(3):546-6. [researchgate.net](#)
19. Monika P, Chandraprabha MN, Rangarajan A, Waiker PV, Chidambara Murthy KN. Challenges in healing wound: role of complementary and alternative medicine. *Frontiers in Nutrition*. 2022 Jan 20;8:791899. [frontiersin.org](#)
20. Alqahtani AS, Ullah R, Shahat AA. Bioactive constituents and toxicological evaluation of selected antidiabetic medicinal plants of Saudi Arabia. *Evidence-Based Complementary and Alternative Medicine*. 2022;2022(1):7123521. [wiley.com](#)
21. Lee EL, Richards N, Harrison J, Barnes J. Prevalence of use of traditional, complementary and alternative medicine by the general population: a systematic review of national studies published from 2010 to 2019. *Drug safety*. 2022 Jul;45(7):713-35.
22. Amirudin N, Panting AJ, Ithnain N. Disclosure of herbal medicine usage in diabetes management: a qualitative study amongst type 2 diabetes mellitus patients and health care providers in Negeri Sembilan, Malaysia. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*. 2021 Jan 6;6(1):279-88. [msocialsciences.com](#)
23. Omonaiye O, Holmes-Truscott E, Rasmussen B, Hamblin PS, Mc Namara K, Tran J, Steele C, Lai J, Manias E. Individual, Social and Environmental Factors Influencing Medication-Taking Among Adults of Vietnamese Heritage With Type 2 Diabetes Living in Australia: A Qualitative Study. *Clinical Therapeutics*. 2025 Feb 21. [sciencedirect.com](#)
24. Valenzuela Zamudio F, Segura Campos MR. Amaranth, quinoa and chia bioactive peptides: a comprehensive review on three ancient grains and their potential role in management and prevention of Type 2 diabetes. *Critical Reviews in Food Science and Nutrition*. 2022 Apr 5;62(10):2707-21. [researchgate.net](#)
25. Qadir SU, Raja V. Herbal medicine: Old practice and modern perspectives. In *Phytomedicine* 2021 Jan 1 (pp. 149-180). Academic Press.
26. Okaiyeto K, Oguntibeju OO. African herbal medicines: Adverse effects and cytotoxic potentials with different therapeutic applications. *International journal of environmental research and public health*. 2021 Jan;18(11):5988. [mdpi.com](#)
27. Aware CB, Patil DN, Suryawanshi SS, Mali PR, Rane MR, Gurav RG, Jadhav JP. Natural bioactive products as promising therapeutics: A review of natural product-based drug development. *South African Journal of Botany*. 2022 Dec 1;151:512-28. [sciencedirect.com](#)
28. Anwar T, Qureshi H, Naeem H, Shahzadi S, Sehar Z, Hassan R. Exploration of the wild edible plants used for basic health care by local people of Bahawalpur and adjacent regions, Pakistan. *Foods*. 2023 Sep 25;12(19):3557. [mdpi.com](#)
29. Awoke A, Siyum Y, Awoke D, Gebremedhin H, Tadesse A. Ethnobotanical study of medicinal plants and their threats in Yeki district, Southwestern Ethiopia. *Journal of Ethnobiology and Ethnomedicine*. 2024 Dec 21;20(1):107. [springer.com](#)
30. Corroto F, Rascón J, Barboza E, Macía MJ. Medicinal plants for rich people vs. Medicinal plants for poor people: A case study from the Peruvian andes. *Plants*. 2021 Aug 9;10(8):1634.
31. Esther Ugo Alum, Okechukwu P.C. Ugwu, Emmanuel Ifeanyi Obeagu, Patrick Maduabuchi Aja, Chinyere Nneoma Ugwu and Michael Ben Okon. *NUTRITIONAL CARE IN DIABETES MELLITUS: A COMPREHENSIVE GUIDE*. *International Journal of Innovative and Applied Research*. 2023 11(12): 16-25
32. Okechukwu P. C. Ugwu, Esther Ugo Alum, Emmanuel I. Obeagu, Michael Ben Okon, Patrick M. Aja , Awotunde Oluwasegun Samson, Mariam Oyediji Amusa and Adeyinka Olufemi Adepoju. Effect of Ethanol leaf extract of *Chromolaena odorata* on lipid profile of streptozotocin induced diabetic wistar albino rats. *IAA Journal of Biological Sciences*. 2023 10(1): 109-117
33. Yusuf S. Enechi, O.C., Ugwu, Kenneth K., Ugwu Okechukwu P.C. and Omeh. *EVALUATION OF THE ANTINUTRIENT LEVELS OF CEIBA PENTANDRA LEAVES*. 2013 3(3): 394-400
34. Nwodo Okwesili FC, Joshua Parker, Ugwu Okechukwu PC. Acute toxicity investigation and anti-diarrhoeal effect of the chloroform-methanol extract of the leaves of *Persea americana*. *Iranian Journal of Pharmaceutical Research*. 2014 13(2):651

<https://rijournals.com/public-health-and-pharmacy/>

35. Ugwu Okechukwu P.C., Nwodo, Okwesili F.C., Joshua, Parker E., Odo, Christian E. and Ossai Emmanuel C. Effect of Ethanol Leaf Extract of Moringa oleifera on Lipid profile of malaria infected mice. Research Journal of Pharmaceutical, Biological and Chemical Sciences.2013 4(1): 1324-1332.
36. Nwaka AC, MC Ikechi-Agba, PU Okechukwu, IO Igwenyi, KN Agbafor, OU Orji, AL Ezugwu. The effects of ethanol extracts of Jatropha curcas on some hematological parameters of chloroform intoxicated rats. American-Eurasian Journal of Scientific Research.10(1): 45-49

**CITE AS: Chelimo Faith Rebecca (2025). A Cultural Perspective on the use of Herbal Medicine in Diabetic Care. RESEARCH INVENTION JOURNAL OF PUBLIC HEALTH AND PHARMACY 4(1): 1-6. <https://doi.org/10.59298/RIJPP/2025/4116>**