

## Is traditional medicine controversial in Africa? A critical review

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### Abstract

*Traditional medicine (TM) remains an essential component of healthcare in Sub-Saharan Africa, where up to 80% of the population relies on it for primary care. Deeply rooted in cultural beliefs and local health practices, TM continues to play a significant role in disease prevention and treatment. Several African countries are working to integrate TM into national health systems, recognizing its accessibility, affordability, and alignment with community values. This critical review examined whether TM is indeed contentious in the region. Using literature sourced from Google Scholar, PubMed, and African Journals Online, the review thematically analyzed data from academic publications, books, and institutional reports. Findings reflect an imbalanced debate. Supporters emphasize TM's contribution to universal health coverage, its holistic approach, use of indigenous resources, and reported effectiveness in areas such as maternal and mental health. High utilization, especially in rural and underserved populations, underscores its continued relevance. However, critics point out the limited scientific validation, safety concerns, regulatory weaknesses, and difficulties in standardization and formal integration on the use and development of TM. Additional issues include inadequate practitioner training, environmental pressures on medicinal plants, and risks linked to commercialization. Overall, the debate stems from tension between TM's cultural importance and unresolved concerns about evidence, safety, and sustainability.*

**Keywords:** Culture; Integration; Regulation; Safety; Traditional medicine

### INTRODUCTION

Traditional medicine (TM) remains a cornerstone of healthcare across Africa, with an estimated 80% of the population relying on it as their primary source of care (Bishoge et al., 2024). Deeply rooted in cultural traditions and community practices, TM encompasses a wide range of

healing modalities, including herbal remedies, spiritual and faith-based healing, traditional bone setting, and the services of traditional birth attendants (Ahmed et al., 2023; Chebii et al., 2020). Its widespread use reflects not only historical continuity but also practical relevance, as many individuals turn to TM to address diverse health conditions. Prevalence rates vary significantly across regions and populations, ranging from 4.6% to 94% in the general population and 12% to 90% among pregnant women (Mbowe et al., 2025). Ethiopia, for example, is reported to have over 80% usage, mostly herbal ( $\approx$ 95%), making it a cornerstone of primary healthcare, particularly in rural and underserved areas, underscoring its pervasive role in everyday healthcare (Tuasha et al., 2023).

One of the key drivers of TM's prominence is its accessibility and affordability, particularly in rural and underserved areas where biomedical infrastructure is limited. In Tanzania, for example, studies indicate that between 60% and 80% of the population depends on TM due to the scarcity of conventional healthcare services and the prohibitive costs associated with them (Amegbor et al., 2019). Beyond economic factors, the continued reliance on TM is shaped by cultural beliefs, dissatisfaction with aspects of conventional medicine, and the perceived holistic nature of traditional healing practices (Opoku Agyemang et al., 2025). TM often serves not only as a medical resource but also as a culturally resonant form of care that aligns with community values and expectations.

Despite its widespread use and cultural significance, TM faces ongoing challenges related to regulation, standardization, and safety. Concerns about the scientific validation of traditional remedies, potential adverse effects, and inconsistent quality control have prompted calls for more rigorous oversight (Wang et al., 2023). Additionally, efforts to integrate TM into formal healthcare systems are complicated by stigma, skepticism from biomedical practitioners, and divergent epistemologies (Ikhoyameh, Okete, Ogbeye, Owoyemi, et al., 2024). While some African countries have begun to recognize the value of TM and are exploring pathways for its formal inclusion, the debate remains polarized. Ghana, for example, established the Traditional and Alternative Medicine Directorate under its Ministry of Health and has integrated TM into select public hospitals, allowing patients to access herbal treatments alongside conventional care (Ampomah et al., 2022). Similarly, Nigeria has developed regulatory frameworks through its Traditional Medicine Department within the

Federal Ministry of Health, aiming to standardize practices and ensure safety (Pal & Isa, 2024). These efforts are often supported by the World Health Organization (WHO), which advocates for evidence-based integration to improve health equity and preserve indigenous knowledge systems (Patwardhan et al., 2023). Advocates emphasize its potential to complement conventional medicine and expand healthcare access, while critics caution against uncritical adoption without robust evidence and safeguards.

## **METHODOLOGY**

This narrative synthesis of literature aimed to explore and summarize the existing literature on the contentiousness of TM in Africa. A systematic but flexible search of literature was used to access articles from PubMed, Google Scholar, Scopus, and African Journals Online. The inclusion criteria were English-language published articles in the period from 2015 to 2025. Relevant reports from organizations such as the World Health Organization (WHO) were also reviewed to capture additional sources. Excluded those studies of purely anecdotal, lacked relevance to health system implications, or did not provide substantive evidence or discussion on the role of TM in health care delivery. Data were extracted and synthesized thematically rather than quantitatively, allowing identification of recurring patterns, arguments, and gaps across the literature. The narrative approach was chosen given the heterogeneity of study designs, outcomes, and contexts, enabling integration of diverse perspectives.

## **FINDINGS**

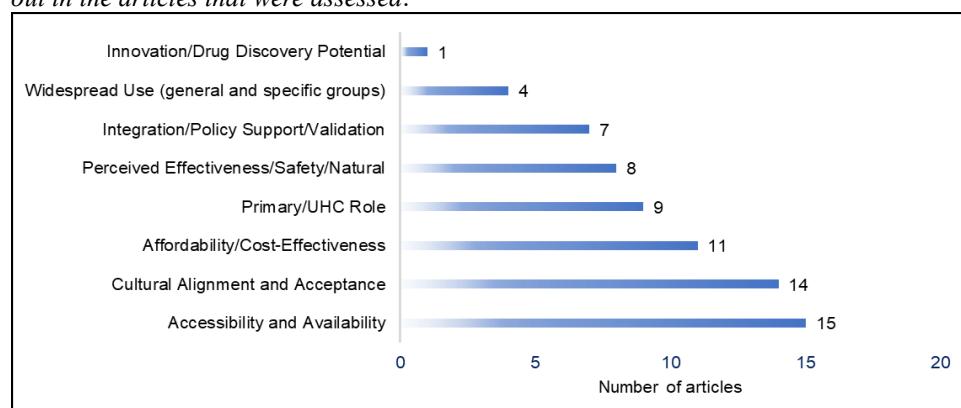
### **Arguments for TM**

This study has identified several arguments in support of the use of traditional medicine in Africa. TM is accessible and affordable (Christian, 2023; Ikhoyameh, Okete, Ogboye, Gbadebo, et al., 2024; James et al., 2018; Kasilo et al., 2019; Kendi, 2024; Mponda et al., 2025; Nixon, 2022; Reza Fadly, 2024; Shey Nsagha et al., 2020), culturally and spiritually aligned (D'Almeida et al., 2024; Kendi, 2024; Reza Fadly, 2024; Tuasha et al., 2023), and deeply embedded in community life, especially in rural and underserved areas (D'Almeida et al., 2024; Ikhoyameh, Okete, Ogboye, Gbadebo, et al., 2024; James et al., 2023; Tuasha et al., 2023). TM is a holistic approach, addressing physical, mental, and spiritual well-being (Christian, 2023; Kendi, 2024; Nixon, 2022).

TM resonates with local beliefs and practices (D'Almeida et al., 2024; James et al., 2018; Kendi, 2024; Nixon, 2022; Shey Nsagha et al., 2020), and it often requires minimal infrastructure, utilizing indigenous, natural materials perceived as safe and effective (James et al., 2018; Nixon, 2022), culturally and spiritually aligned (D'Almeida et al., 2024; James et al., 2018; Kasilo et al., 2019; Nixon, 2022; Reza Fadly, 2024; Shey Nsagha et al., 2020).. TM serves as a primary healthcare option for many (Ikhoyameh, Okete, Ogbeye, Owoyemi, et al., 2024; James et al., 2023; Mujinja & Saronga, 2022), including people with chronic illnesses such as HIV/AIDS (Mponda et al., 2025; Mudonhi & Nunu, 2022) and hypertension (Lassale et al., 2022), and it complements conventional care where formal services are limited or procedure-heavy (D'Almeida et al., 2024; James et al., 2018).

The growing policy frameworks and WHO-endorsed tools for scientific validation (Kasilo et al., 2019), along with integration efforts, position TM as a practical contributor to Universal Health Coverage (UHC) and primary care delivery (D'Almeida et al., 2024; Kasilo et al., 2019; Nixon, 2022) and even biomedical innovation through drug discovery (Ikhoyameh, Okete, Ogbeye, Owoyemi, et al., 2024). Its cultural familiarity, widespread acceptance, and versatility across prenatal, labor, postnatal, mental health, and general wellness needs (Kendi, 2024; Maina, 2024) (Kendi, 2024) make TM a relevant, trusted, and potentially cost-effective pillar of African health systems (D'Almeida et al., 2024; Nixon, 2022) (see Figure 1).

Figure 1:  
*The arguments for the use of TM in Africa represented by the frequency of issues pointed out in the articles that were assessed.*



## **Arguments Against TM**

The arguments against TM highlight a wide range of concerns, including significant safety issues such as reported adverse effects (Christian, 2023; James et al., 2018; Lassale et al., 2022; Mponda et al., 2025), particularly gastrointestinal and blood pressure compli

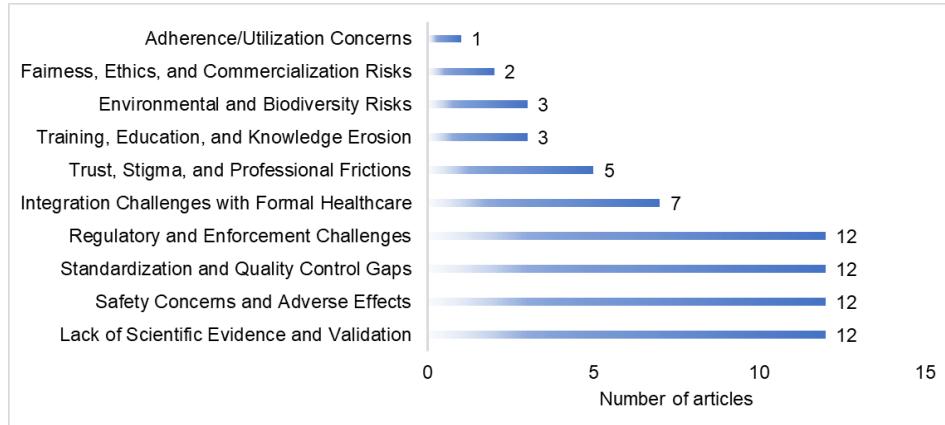
cations (James et al., 2018; Lassale et al., 2022), along with the lack of scientific evidence on safety and efficacy (Kasilo et al., 2019; Mujinja & Saronga, 2022), and risks of misdiagnosis or harm due to unverified treatments (Christian, 2023; Kendi, 2024; Reza Fadly, 2024).

Many criticisms revolve around the absence of standardization (D'Almeida et al., 2024; Nixon, 2022; Shey Nsagha et al., 2020), inadequate regulation, and weak enforcement of manufacturing and labeling standards (Ikhoyameh, Okete, Ogboye, Gbadebo, et al., 2024; Kasilo et al., 2019; Mudonhi & Nunu, 2022), as well as poor monitoring of practitioners' training and education (Christian, 2023; James et al., 2023). Additional challenges include mistrust between biomedical and traditional practitioners (Shey Nsagha et al., 2020), cultural stigma linking TM to witchcraft or sorcery (James et al., 2023) and difficulties integrating TM into formal healthcare systems (Christian, 2023; Mponda et al., 2025; Mudonhi & Nunu, 2022).

Broader risks also include biodiversity loss and resource limitations (Kasilo et al., 2019; Nixon, 2022), environmental harm (Nixon, 2022), potential exploitation through commercialization ([9]), and knowledge erosion (Nixon, 2022). Overall, TM faces persistent skepticism due to gaps in safety, regulation, quality control, and evidence (D'Almeida et al., 2024; James et al., 2018; Mponda et al., 2025; Reza Fadly, 2024; Shey Nsagha et al., 2020), which hinder its acceptance and effective integration into mainstream health systems (see Figure 2).

**Figure 2**

Arguments against the use of TM in Africa shown by the frequency of issues pointed out in the articles that were assessed.



## DISCUSSION

The *Accessibility and affordability* of TM make it an important aspect of healthcare delivery in Africa, particularly in populations where conventional healthcare is not easy to access (Ikhoyameh, Okete, Ogbeye, Gbadebo, et al., 2024). Traditional medicine is widely available in rural areas and affordable at a low cost (Onukansi et al., 2025). Traditional healers and remedies are often the first, and sometimes only, source of care for individuals facing financial constraints or geographic barriers to modern health facilities (Cruz et al., 2022; Jayte et al., 2025). This reliance is especially noticeable among vulnerable groups, including people living with HIV/AIDS, pregnant women, the elderly, and children who frequently turn to traditional medicine to meet their basic health needs in the absence of adequate formal healthcare infrastructure.

TM often plays a critical role in contexts where *formal health systems are under-resourced or unevenly distributed*. In many regions, especially rural or remote areas, hospitals and clinics may be scarce, inadequately staffed, or lack essential medical supplies (Yenet et al., 2023). TM fills these gaps by providing accessible, culturally familiar, and community-based care, allowing individuals to address common illnesses and maintain well-being without relying entirely on formal healthcare facilities (Ikhoyameh, Okete, Ogbeye, Gbadebo, et al., 2024; Ngere et al., 2022). By reducing the immediate demand on overstretched hospitals and health workers, TM can help alleviate pressure on formal health systems, ensuring that limited

resources are reserved for cases requiring specialized medical intervention.

TM has a *deep cultural resonance*, making it widely acceptable in these communities compared to formal medical services (Kropi et al., 2024). The African cultural values and beliefs align with the practices of traditional medicine that have been established for a long period of time in the communities (Katonge, 2025), hence establishing trust and acceptance among the people. TM takes on a holistic approach combining herbal treatment, spiritual therapies, and social activities to promote mental, emotional, and spiritual well-being (Hoenders et al., 2024). The *perceived effectiveness* of TM is linked to its reliability in treating chronic illnesses where conventional medicine may seem too costly, too far to reach, or seen as offering only palliative relief (Poli et al., 2025). TM is also commonly relied upon in maternal health, where it is used to support fertility, ease childbirth, and aid recovery after delivery (Makombe et al., 2023). Youla and colleagues reported that the highest prevalence of women using TM for child illnesses was found in Ghana (16.3%) and Guinea (13.80%) (Youla et al., 2025).

TM has the *potential to complement conventional healthcare systems*, particularly in areas such as primary care and maternal health, where accessibility and affordability are often major challenges (Sichalwe et al., 2025). Its integration aligns with the WHO's vision of achieving Universal Health Coverage, as it can help bridge healthcare gaps and expand treatment options for underserved populations (Akhigbe et al., 2025). By 2018, significant progress had been made in advancing African TM, with 34 research institutions established across 26 African countries to scientifically study and validate traditional practices. Importantly, 14 of these countries had utilized research findings to authorize the marketing of traditional medicine products, thereby ensuring their safety, efficacy, and quality (Mssusa et al., 2023). Furthermore, 8 countries had gone a step further by including traditional medicine products in their national essential medicines lists, signaling policy-level recognition of their value and creating opportunities for broader public access. This demonstrates both the growing institutional support for TM and its potential role in strengthening healthcare systems across Africa.

TM plays an important role in *advancing Primary Health Care (PHC)* and the broader goal of *Universal Health Coverage (UHC)*, particularly

in many African and low-resource settings (Kasilo et al., 2019). For a significant portion of the population, TM is the first point of care due to its accessibility, affordability, and deep cultural acceptance (Febriyanti et al., 2024). When properly regulated and integrated into national health systems, TM has the potential to complement biomedical care, strengthen primary health care delivery, and move countries closer to achieving UHC by ensuring that more people, especially vulnerable groups, have access to essential health services without financial hardship.

TM represents a valuable reservoir of bioactive compounds that hold significant *potential for pharmaceutical research and drug discovery* (Aware et al., 2022). Many modern drugs have their origins in compounds first identified in plants, minerals, or other natural sources used in the discovery of traditional therapies (Mushtaq et al., 2018). By systematically documenting and analyzing traditional knowledge, researchers can identify promising therapeutic candidates more efficiently, reducing the time and cost associated with the early stages of drug development (Fu & Chen, 2025). This integration of TM into modern biomedical research not only facilitates the discovery of novel treatments for complex diseases but also encourages the development of innovative therapeutic strategies that are informed by centuries of empirical use.

On the other hand, there is persistent *lack of scientific evidence* supporting the efficacy and safety of TM (Liheluka et al., 2023). This lack of scientific backing casts doubts on the quality, consistency, and reliability of traditional therapies, hindering the seamless integration of TM into formal healthcare (Ikhojameh, Okete, Ogboye, Gbadebo, et al., 2024). Many traditional practices are deeply rooted in cultural and spiritual beliefs, making them difficult to study using conventional scientific methods (Katonge, 2025). Another hindrance is the lack of transparency and record-keeping, where often information is transferred through word of mouth (Mujinja & Saronga, 2022). Lastly, western-centric approaches in medicine and research tend to undervalue indigenous practices, reinforcing a bias against their scientific study (Gall et al., 2025). One of the *safety concerns of traditional medical products* is the risk of contamination with harmful microorganisms, heavy metals, or being deliberately mixed with other substances to enhance perceived efficacy (Luo et al., 2020). Coupled with this is a lack of standardization, meaning that doses, preparation methods, and ingredient concentrations

vary widely, leading to unpredictable therapeutic outcomes (Chaachouay, 2025).

Another major challenge in the use of TM is the *issue of quality, manufacturing, and labelling*. Unlike conventional pharmaceuticals, which are produced under strict regulatory standards, many traditional medicines often lack standardized production processes (Chaachouay, 2025). This can result in significant variability in the concentration of active ingredients, contamination with harmful substances, or inconsistent potency across batches. Additionally, labelling is frequently incomplete or inaccurate, leaving consumers unaware of the correct dosage, potential side effects, or interactions with other medications (Gamil et al., 2025). Such gaps not only compromise the therapeutic effectiveness of traditional remedies but also pose serious health risks, particularly when patients rely solely on these products for treatment.

The *risk of misdiagnosis and poor adherence* also compounds the doubts cast on traditional medical products, as traditional medicine practitioners may sometimes lack formal diagnostic tools or standardized clinical guidelines, which can lead to incorrect identification of medical conditions (Thipanyane et al., 2022). Patients relying on these remedies might therefore receive inappropriate treatments, potentially delaying timely medical intervention for serious illnesses. The decline in preference for TM in Africa is closely linked to rising levels of formal education and changing social dynamics, which have contributed to the erosion of indigenous medical knowledge (Logiel et al., 2021; Malapane et al., 2024). One of the central concerns is the aging population of traditional healers, many of whom lack successors as younger generations increasingly pursue modern education and careers outside traditional practices (Ahmed et al., 2023).

Additionally, the decline of medicinal plant use threatens biodiversity conservation, creating a cycle of loss that weakens both cultural identity and healthcare resilience in the region (Ssenku et al., 2022). As a result of this, communities risk losing cultural heritage and potential gaps that may arise in the provision of medical care.

## **LIMITATIONS OF THE STUDY**

The lack of strict systematic protocols may introduce selection bias, and the heterogeneity of included studies, varying in design, quality, and

context, limits generalizability. Publication and language biases may also affect comprehensiveness, as some relevant studies, particularly unpublished or non-English sources, could have been missed. Additionally, the thematic synthesis relies on the reviewer's interpretation, which may introduce subjectivity. To mitigate these issues, a comprehensive search of multiple databases and grey literature sources was conducted, with predefined inclusion and exclusion criteria to guide selection. Triangulation of evidence from peer-reviewed articles, policy documents, and reports enhanced representativeness, while transparency in reporting and critical appraisal of study relevance and quality helped reduce bias and strengthen the reliability of conclusions.

## **CONCLUSION AND REMARKS**

The debate over traditional medicine in Africa reflects the tension between its cultural importance, widespread use, and the concerns about safety, evidence, and regulation. TM remains vital for underserved populations and contributes meaningfully to primary healthcare, yet ongoing weaknesses in quality control, practitioner training, and scientific validation limit its full potential. Strengthening regulatory frameworks, promoting collaborative research, and fostering respectful integration with conventional care are essential steps forward. Ensuring that TM is safe, evidence-based, and culturally grounded will help maximize its benefits while protecting public health and supporting more equitable, responsive healthcare systems across the continent.

## **Competing interests**

The authors declare no conflicts of interest.

## **ACKNOWLEDGMENTS**

Not applicable

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