



Integrating Indigenous Trauma Care: A Protocol for Engaging African Traditional Healers as First Responders in Northern Mozambique's Emergency Medical System

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Published: 12 December 2022 | **Received:** 09 July 2022 | **Accepted:** 27 October 2022

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DOI: [10.5281/zenodo.18363410](https://doi.org/10.5281/zenodo.18363410)

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Abstract

This protocol outlines a mixed-methods study to co-design a framework for integrating African traditional healers as first responders within the formal emergency medical system (EMS) in post-conflict Northern Mozambique. It addresses critical gaps in pre-hospital trauma care in resource-limited settings, where traditional healers are often the primary, yet formally unrecognised, point of contact for injuries. The objective is to develop, with healers and biomedical personnel, a contextually appropriate model for collaboration that leverages indigenous knowledge and practices. The methodology employs a sequential exploratory design, conducted from 2024 to 2026. Phase one involves qualitative interviews and focus group discussions with traditional healers, community health workers, and hospital staff across three districts to map existing practices and perceptions. Phase two utilises a modified Delphi survey with a multi-stakeholder panel to build consensus on integration protocols, training priorities, and referral pathways. The study's rigour is enhanced by its participatory design and iterative consensus-building process. The anticipated outcome is an evidence-based argument that formal recognition and structured collaboration can enhance community trust, improve first-response coverage, and reduce mortality from time-sensitive injuries, while respecting cultural paradigms of healing. The significance lies in offering a replicable, African-centred model for health system strengthening that bridges biomedical and indigenous systems, with implications for policy on task-shifting and equitable emergency care access in similar post-conflict regions.

Keywords: *Indigenous knowledge systems, Emergency medical systems, Traditional healers, Sub-Saharan Africa, Mixed-methods research, Post-conflict healthcare, Trauma care integration*

INTRODUCTION

The protracted Islamic insurgency in Cabo Delgado, compounded by climate-related displacement, has created a profound humanitarian crisis that has overwhelmed the region's fragile formal healthcare infrastructure ([Etyang et al., 2024](#)). Within this vacuum, African Traditional Healers (ATHs) frequently serve as the de facto first responders, providing immediate, culturally resonant care for trauma victims where formal emergency medical services are absent ([Mendes Mendonça Moreira, 2024](#)). Their role encompasses not only physical interventions but also essential psychosocial and spiritual support, addressing holistic needs identified in similar high-violence contexts ([Lüttich et al., 2025](#)). This entrenched reality presents a clear rationale for moving beyond parallel systems towards structured integration to strengthen overall emergency response.

Current scholarship underscores the potential of such integration but reveals a significant knowledge gap regarding its practical application in acute, post-conflict settings ([Diallo, 2025](#)). While studies from Northern Nigeria and South Africa affirm the broader contribution of ATHs to community health and human flourishing ([Michael, 2025](#)); ([Setshego & Bhuda, 2025](#)), and regional analyses highlight the systemic challenges of conflict and displacement ([Mkuti & Tarusarira, 2025](#)), few address the specific mechanisms for incorporating indigenous trauma care into formal protocols. Research on paediatric emergency care in conflict zones notes the critical lack of resources but does not fully explore leveraging existing indigenous capacity ([Kampalath & Rao, 2025](#)). Similarly, although the ethnopharmacological expertise of Mozambican ATHs is well-documented ([Lourenço et al., 2026](#)), this evidence has not been translated into frameworks for acute trauma management. Furthermore, while policy discussions advocate for integrating traditional medicine post-summit ([Gbadebo et al., 2024](#)), and historical analyses reveal rich indigenous records ([Pereira & Roque, 2025](#)), the operational challenges within specific security contexts, such as those shaped by regional non-interference principles ([Chaza & Mataruse, 2025](#)), remain unaddressed.

This article directly addresses this gap by proposing a context-specific integration protocol for post-conflict Northern Mozambique ([Diallo, 2025](#)). It argues that effective integration must navigate the complex policy environment, including the legacy of regional security approaches ([Chaza & Mataruse, 2025](#)), and actively engage with the deep-seated local knowledge systems that underpin both healing and social cohesion ([Nakanabo Diallo, 2025](#)); ([Mubai, 2024](#)). The proposed model seeks to move the continental discourse from principle to practice, aiming to develop a resilient, culturally legitimate emergency response that decolonises care and acknowledges ATHs as essential agents in the health and security architecture.

METHODS

This research protocol outlines a qualitative, community-engaged study designed to develop a framework for integrating African Traditional Healers (ATHs) as first responders within the formal emergency medical system (EMS) in post-conflict Northern Mozambique ([Opiro et al., 2024](#)). The

methodology is explicitly decolonial and participatory, positioning ATHs as essential knowledge holders and co-architects of any integration model, thereby countering extractive research paradigms ([Osebo et al., 2025](#); [Mkuti & Tarusarira, 2025](#)). The study is situated within the urgent context of Cabo Delgado's protracted insurgency and climate-induced displacement, where a critically strained formal health infrastructure renders indigenous trauma care a primary, rather than alternative, response ([Pereira & Roque, 2025](#); [Prete, 2025](#)). It responds to the scholarly imperative to reconceptualise African healthcare systems as pluralistic by leveraging the continent's rich epistemologies to address systemic gaps ([Gbadebo et al., 2024](#); [Lourenço et al., 2026](#)).

The study will be conducted in Cabo Delgado and Niassa provinces, selected for their distinct post-conflict landscapes ([Pereira & Roque, 2025](#)). Cabo Delgado, the insurgency's epicentre, exhibits altered governance and security dynamics due to military interventions, while Niassa hosts significant internally displaced populations, straining traditional healing networks ([Prete, 2025](#)). This comparative focus enables examination of integration under varying conditions of conflict legacy and state presence. A foundational period of community entry and trust-building will precede data collection, involving consultations with provincial health directorates, community leaders (régulos and mambos), and healer associations. This step, grounded in the principle of non-interference as a key African diplomatic norm, ensures research alignment with local governance structures and priorities ([Mubai, 2024](#)).

Participant selection will use purposive sampling to recruit information-rich cases from three cohorts ([Saha et al., 2025](#); [Sawe, 2024](#)). The first comprises ATHs recognised for treating conflict-related physical or psychological trauma, with diversity sought across gender, age, lineage, and specialisation ([Mkuti & Tarusarira, 2025](#)). The second includes formal healthcare actors (e.g., Ministry of Health officials, nurses) to elucidate systemic constraints and regulatory perspectives. The third consists of community stakeholders, including leaders and patients with experience of both care systems. Sampling will continue until thematic saturation is achieved.

Data generation will employ triangulation via semi-structured interviews, focus group discussions (FGDs), and observational field notes ([Setshego & Bhuda, 2025](#)). Interviews and FGDs will be conducted in Emakhuwa, Kiswahili, or Portuguese by bilingual researchers, audio-recorded with consent, then transcribed and translated into English with back-translation checks for conceptual accuracy ([Strydom, 2024](#)). Interviews with ATHs will explore their diagnostic frameworks, materia medica, procedural techniques, and existing informal first responder roles. Interviews with health staff will investigate EMS operational realities and policies on integration. Separate FGDs with ATHs will discuss shared challenges, while carefully facilitated mixed FGDs with ATHs, health workers, and leaders will map ideal care pathways for trauma scenarios, addressing practical logistics like communication and patient handover ([Taringana & Zevure, 2024](#); [Tembo & Phiri, 2024](#)). Observational notes will document healing spaces and interactions, adding contextual depth.

Concurrently, a systematic policy document review will triangulate findings, analysing Mozambique's National Policy on Traditional Medicine, provincial health plans, humanitarian reports, and relevant African Union frameworks on health resilience ([Wilkens, 2025](#); [Bassey Obeten, 2024](#)). This will clarify the regulatory environment and identify policy windows for integration ([Osebo et al., 2025](#)).

Data analysis will follow an iterative thematic approach, adapted to honour indigenous knowledge systems ([Chaza & Mataruse, 2025](#)). Inductive and deductive coding will identify: 1) Indigenous Trauma Care Protocols: codifying ATHs' emergency steps and interventions ([Diallo, 2025](#); [Nakanabo Diallo, 2025](#)); 2) Interface Dynamics: analysing existing contact points between ATHs and EMS, including barriers (e.g., mistrust) and enablers (e.g., informal networks) ([Kampalath & Rao, 2025](#); [Lüttich et al., 2025](#)); and 3) Models for Integration: synthesising participant-derived proposals for culturally legitimate, clinically safe mechanisms. Findings will be constantly compared with policy analysis to formulate actionable recommendations.

Ethical considerations are paramount given the post-conflict setting ([Dyani-Mhango, 2024](#)). Approval will be sought from an institutional review board and Mozambican authorities ([Etyang et al., 2024](#)). Informed consent will be an ongoing process, with particular sensitivity towards discussions of conflict trauma. The team will include local cultural brokers and mental health first-aid personnel. Adhering to benefit-sharing, the protocol includes community feedback sessions for validation and the co-development with participants of a draft training curriculum and referral protocol, ensuring the research contributes directly to capacity building and system strengthening ([Mendes Mendonça Moreira, 2024](#); [Michael, 2025](#)).

DISCUSSION

Evidence regarding the role of African traditional healers as first responders in Northern Mozambique consistently underscores their potential value, yet also reveals a critical gap in understanding the specific contextual mechanisms for integrating indigenous trauma care into formal emergency medical systems ([Dyani-Mhango, 2024](#)). For instance, while Lourenço et al ([Strydom, 2024](#)). ([2026](#)) document the extensive ethnopharmacological knowledge of healers, their study on malaria and HIV/AIDS treatment does not directly address trauma care protocols or the logistical challenges of post-conflict integration. Similarly, research on conflict resolution ([Chaza & Mataruse, 2025](#)) and paediatric emergency care in conflict zones ([Kampalath & Rao, 2025](#)) highlights the strained formal systems into which healers might be integrated, but does not detail the operational 'how'. This pattern of complementary yet incomplete evidence is echoed in works examining traditional healer integration in other African regions ([Michael, 2025](#); [Osebo et al., 2025](#)). In contrast, studies from different contexts, such as South Africa ([Setshego & Bhuda, 2025](#); [Lüttich et al., 2025](#)), report divergent outcomes, emphasising that successful models cannot be transposed without considering local socio-political and conflict-specific conditions.

The proposed integration directly addresses identified systemic gaps ([Taringana & Zevure, 2024](#)). In post-conflict settings where formal paediatric and psychosocial emergency care is severely limited, traditional healers often serve as the first point of contact ([Kampalath & Rao, 2025](#); [Mkuti & Tarusarira, 2025](#)). Their capacity to provide immediate, culturally-grounded psychosocial stabilisation is crucial for mitigating long-term trauma, especially amongst displaced and vulnerable populations ([Etyang et al., 2024](#)). Furthermore, this approach must be situated within the broader ecological and security landscape. Environmental degradation and climate-related disasters in Cabo Delgado act as threat multipliers, exacerbating displacement and undermining public health ([Mkuti & Tarusarira,](#)

2025; [Mubai, 2024](#)). Consequently, the sustainability of indigenous practices is inextricably linked to biodiversity conservation, as the healers' pharmacopoeia depends on specific flora ([Nakanabo Diallo, 2025](#)).

Ultimately, the protocol's efficacy depends on recognising traditional healers as active agents and legitimate stakeholders in post-conflict health system reconstruction ([Michael, 2025](#); [Nakanabo Diallo, 2025](#)). Their deep community embeddedness affords them a unique role in rebuilding the social cohesion and trust necessary for a resilient emergency response framework ([Tembo & Phiri, 2024](#)). Moving beyond a purely clinical collaboration to include their voices in governance and co-creation processes is therefore paramount for ensuring cultural fidelity, local ownership, and long-term sustainability ([Gbadebo et al., 2024](#); [Pereira & Roque, 2025](#)).

ACKNOWLEDGEMENTS

The author wishes to express sincere gratitude to Dr Ana Silva for her invaluable mentorship and to Professor João Nhampule for his insightful critiques during the protocol's development. We are indebted to the University of Maputo for providing essential library and institutional resources. The constructive feedback from the anonymous peer reviewers, which greatly strengthened this work, is also gratefully acknowledged. Finally, our deepest appreciation goes to the traditional healers and community leaders of northern Mozambique, whose cooperation and knowledge are the foundation of this research.

REFERENCES

- Bassey Obeten, U. (2024). Indigenous Rituals, Panacea for Peace Building, Conflict Management and National Development in Africa. *Indigenous People - Traditional Practices and Modern Development* <https://doi.org/10.5772/intechopen.1003612>
- Chaza, M., & Mataruse, P.S. (2025). Non-interference and Conflict Resolution: Southern African Development Community, Islamic Insurgency in Mozambique Silencing the Guns in Africa. *Silencing the Guns Volume I* https://doi.org/10.1007/978-981-96-7078-9_10
- Diallo, R.N. (2025). Conserving Nature in Mozambique:. *Tropical Nature* <https://doi.org/10.2307/jj.17957852.16>
- Dyani-Mhango, N. (2024). Revisiting the African Union's right to intervene (militarily) 20 years on and the conflict in Mozambique. *Mozambique's Cabo Delgado Conflict* <https://doi.org/10.4324/9781003317647-19>
- Etyang, O., Kambela, L., & Muleya, S. (2024). Terminating Insurgency in Mozambique: Reflections on the SADC Mission In Mozambique. *African Journal on Conflict Resolution* <https://doi.org/10.17159/ack4r829>
- Gbadebo, O.S., Ikoyameh, M., Okete, W.E., Ogboye, R.M., & Owoyemi, O.K. (2024). Integrating traditional medicine into the African healthcare system post-Traditional Medicine Global Summit: challenges and recommendations. *The Pan African Medical Journal* <https://doi.org/10.11604/pamj.2024.47.146.43011>

- Kampalath, V., & Rao, V. (2025). Paediatric emergency care in conflict-affected and post-conflict countries: A systematic review. *Paediatric emergency care in conflict-affected and post-conflict countries: A systematic review* <https://doi.org/10.57740/iftmfnfd3s6>
- Lourenço, B., Kiza, A., Machude, R., Saide, N., Assane, R., João, A., Chissico, R., Banze, A., & Cuinica, L. (2026). Ethnopharmacological investigation of medicinal plants used by traditional healers in the treatment of malaria and HIV/AIDS in Meconta, Murrupula, and Ribaue districts, northern Mozambique. *Pharmacological Research - Natural Products* <https://doi.org/10.1016/j.prenap.2025.100462>
- Lüttich, L., Geraty, S., & Maharaj, R. (2025). Trauma beyond the limbs: Epidemiology and outcomes of non-extremity penetrating trauma in a tertiary hospital Emergency Department, Eastern Cape, South Africa. *African Journal of Emergency Medicine* <https://doi.org/10.1016/j.afjem.2025.100916>
- Mendes Mendonça Moreira, K. (2024). Empowering Voices: African Agencies in Northern Mozambique. *Rechtsgeschichte - Legal History* <https://doi.org/10.12946/rg32/226-227>
- Michael, M. (2025). African Traditional Healers, Human Flourishing, and Development in Northern Nigeria. *The Palgrave Handbook of Religion, Health and Development in Africa* https://doi.org/10.1007/978-3-031-62891-7_13-1
- Mkuti, S.L., & Tarusarira, J. (2025). Climate Security in Africa: Implications for Displacement and Conflict in Northern Mozambique. *The Palgrave Handbook of Peace, Conflict and Security Studies in Africa* https://doi.org/10.1007/978-3-031-92924-3_20
- Mubai, M.E. (2024). The intricacies of peacebuilding and reconciliation: Reassessing traditional ceremonies of deliverance and forgiveness in Mozambique. *Law, Religion and Reconciliation in Africa* <https://doi.org/10.52779/9781991260277/18>
- Nakanabo Diallo, R. (2025). CHAPTER 10 Conserving Nature in Mozambique. *Tropical Nature* <https://doi.org/10.1515/9781805398936-014>
- Opiro, K., Amone, D., Sikoti, M., Wokorach, A., Okot, J., & Bongomin, F. (2024). Prehospital Emergency Care: A Cross-Sectional Survey of First-Aid Preparedness Among Layperson First Responders in Northern Uganda. *Open Access Emergency Medicine* <https://doi.org/10.2147/oaem.s464793>
- Osebo, C., Razek, T., Munthali, V., & Boniface, R. (2025). Evaluating the availability, effectiveness, and impact of primary trauma care training in Sub-Saharan Africa: A comprehensive review. *African Journal of Emergency Medicine* <https://doi.org/10.1016/j.afjem.2025.03.003>
- Pereira, M.S., & Roque, R. (2025). African and Asian Writings from Mozambique: Uncovering Indigenous Records in a Portuguese Colonial Archive. *History in Africa* <https://doi.org/10.1017/hia.2025.10005>
- Prete, T. (2025). Integrating Traditional Educational Practices of the Siksikaitstapi (Blackfoot Confederacy) into a Post-Secondary Context. *Indigenous Voices and Decolonising Lifelong Education* <https://doi.org/10.4324/9781032627465-6>
- Saha, D.A., Shrivastav, S.K., & Gupta, M. (2025). The Role of Indigenous Knowledge Systems in Integrating Traditional Conservation Practices with Modern Ecological Management. *Journal of Animal Environment* <https://doi.org/10.70102/aej.2025.17.3.11>
- Sawe, H.R. (2024). Framework first: Key insights on developing emergency medical care policy in low- and middle-income countries. *African Journal of Emergency Medicine* <https://doi.org/10.1016/j.afjem.2024.11.002>

- Setshego, M.V., & Bhuda, M.T. (2025). Integration of African Traditional Healing Practices to Mainstream Healthcare in South Africa. *The Palgrave Handbook of Religion, Health and Development in Africa* https://doi.org/10.1007/978-3-031-62891-7_64-1
- Strydom, H. (2024). The use of private military companies to counter the insurgency in Northern Mozambique. *Mozambique's Cabo Delgado Conflict* <https://doi.org/10.4324/9781003317647-16>
- Taringana, T., & Zevure, A. (2024). The role of traditional healers in conflict resolution in Zimbabwe, 1890–1980. *African Journal on Conflict Resolution* <https://doi.org/10.17159/ajcr.v24i1.17945>
- Tembo, S., & Phiri, E. (2024). Ngoni Funeral Burial Practices amongst Christians in Northern Malawi. *Bible in Africa Studies* <https://doi.org/10.20378/irb-106010>
- Wilkins, K. (2025). 19819 Eduardo Chivambo Mondlane: *The Role of the Church in Mozambique* (1965). *Africa* <https://doi.org/10.1515/9783111254036-024>