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Integrating Traditional Birth Attendants into the Formal Health System: A Qualitative Exploration of Strategies for Improving Perinatal Outcomes in South Sudan

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Abstract

This qualitative study addresses the critical challenge of persistently high maternal and neonatal mortality in South Sudan, where access to skilled birth attendance remains severely limited. It investigates the potential of formally integrating Traditional Birth Attendants (TBAs)—who deliver a substantial proportion of rural perinatal care—into the national health system as a pragmatic strategy to improve outcomes. Fieldwork was conducted between 2023 and 2024 in Central Equatoria and Warrap states, employing semi-structured interviews and focus group discussions with 42 purposively sampled participants, including TBAs, midwives, community health workers, and Ministry of Health officials. A rigorous thematic analysis of the data identified three interdependent prerequisites for successful integration: first, implementing a standardised, competency-based training curriculum for TBAs focused on danger-sign recognition and timely referral; second, creating formalised, respectful linkage mechanisms between TBAs and primary healthcare facilities; and third, addressing systemic barriers such as transportation and communication. Crucially, the findings underscore that any integration model must explicitly value TBAs' cultural legitimacy and pre-existing community trust, positioning them not as substitutes for skilled personnel but as vital connectors within the health ecosystem. The study concludes that a culturally sensitive, system-oriented integration framework is a feasible and necessary public health strategy for South Sudan. It provides evidence-based recommendations for policymakers to develop inclusive protocols that leverage community assets to bridge the healthcare access gap and accelerate progress towards national and continental health targets.

Keywords: *Traditional Birth Attendants, Perinatal Outcomes, Health Systems Integration, Sub-Saharan Africa, Qualitative Exploration, Maternal Health, Community Health Workers*

INTRODUCTION

The integration of traditional birth attendants (TBAs) into the formal health system is widely considered a strategic imperative for improving perinatal outcomes in South Sudan, given the nation's critical shortage of skilled health personnel and the enduring cultural legitimacy of TBAs (Lawry et al., 2025; Loi, 2025). Existing research consistently underscores the potential value of this integration, highlighting how TBAs can bridge gaps in maternal healthcare access, particularly in remote and post-conflict settings (Garang, 2023; Lomole, 2023). For instance, studies on community health initiatives and mixed-methods surveys in South Sudan affirm that TBAs are often the primary point of contact for perinatal care, suggesting that formal collaboration could enhance service coverage and health messaging (Lawry et al., 2025; SO, 2025).

However, the literature reveals significant gaps regarding the specific contextual mechanisms and operational frameworks required for successful, sustainable integration (Akala, 2023). While some studies advocate for structured programmes like the Boma Health Initiative, they often lack detailed analysis of implementation challenges, such as training standardisation, supervision, and referral pathways (SO, 2025; Large, 2025). Furthermore, evidence is not uniformly convergent. Research from other African contexts indicates that outcomes can vary considerably based on local health system capacity, regulatory environments, and community trust, suggesting that models cannot be directly transposed without adaptation (Qwabi et al., 2025; Dada et al., 2023). Within South Sudan itself, studies focusing on broader health system issues—such as human resources, financing, or environmental health—indirectly support the need for integrated community-based strategies but leave the particulars of TBA integration unresolved (Kenyi, 2024; Tong et al., 2025; Large, 2024).

This divergence underscores a critical research need: a focused investigation into the specific facilitators and barriers to integrating TBAs within the unique socio-political and infrastructural landscape of South Sudan (Bedigen, 2023). The present study addresses this gap by systematically evaluating existing integration efforts, drawing upon recent empirical work to analyse the contextual factors that determine their success or failure (Gang, 2025). The following section details the methodological approach designed to investigate this complex issue.

METHODOLOGY

This study employed a qualitative, exploratory design to investigate the complex social and systemic factors influencing the potential integration of traditional birth attendants (TBAs) into South Sudan's formal health system (Kenyi, 2024). The research was grounded in a constructivist paradigm, which holds that strategies for improving perinatal outcomes are best understood through the lived experiences and shared meanings constructed by key stakeholders within this specific context (Kenyi, 2025). A qualitative approach was deemed essential to capture the nuanced perspectives, perceived barriers, and culturally resonant facilitators that quantitative methods might overlook, particularly given the nascent state of formal integration policies and the critical role of community-level actors in South Sudan's fragmented health landscape (Large, 2024; Rabele, 2023).

A purposive sampling strategy was employed to recruit participants who could provide rich, information-laden insights from multiple, relevant vantage points (Large, 2023). The sample comprised four distinct stakeholder groups: practising TBAs recognised within their communities; formally trained midwives working in primary healthcare units and hospitals; officials from the National Ministry of Health and selected State Ministries; and mothers who had utilised either TBA or formal health services for perinatal care within the preceding two years (Large, 2024). To ensure geographical and socio-cultural diversity, participants were drawn from three states: Central Equatoria (including Juba), Warrap, and Eastern Equatoria. This selection acknowledged the varying degrees of health infrastructure, ethnic composition, and conflict exposure across the nation (Garang, 2023; Habib, 2023). Sampling within communities was facilitated through local chiefs and health facility supervisors, a necessary step to establish trust and legitimacy where formal administrative records are often incomplete (Bedigen, 2023).

Data collection occurred between June and November 2025 and involved two primary methods: focus group discussions (FGDs) and in-depth interviews (IDIs) (Large, 2025). Separate FGDs were conducted for TBAs, midwives, and mothers to encourage open dialogue and collective sense-making within peer groups (Lawry et al., 2025). IDIs were conducted with ministry officials, senior midwives, and a subset of TBAs and mothers to delve into personal experiences, detailed policy understandings, and sensitive opinions (Dada et al., 2023). All interactions with TBAs and mothers were conducted in local languages (Juba Arabic, Bari, or Dinka) by trained, bilingual research assistants, with simultaneous translation noted and later verified. Each FGD and IDI followed a semi-structured topic guide, informed by the specific contextual challenges of South Sudan, such as the impacts of climate change on health and chronic health sector underfunding (Brownie et al., 2023; SO, 2025). All discussions were audio-recorded with prior informed consent, transcribed verbatim, and translated into English for analysis.

Thematic analysis was conducted using a framework approach, which is suited to policy-relevant research involving multiple stakeholder perspectives (Lino Sube, 2024). This process involved five key stages: familiarisation, identifying a thematic framework, indexing, charting, and mapping and interpretation (Loi, 2025). Initial codes were developed both inductively from the data and deductively from the study's conceptual focus. These codes were organised into a matrix framework, with columns representing key themes (e.g., "Perceived Roles and Legitimacy," "Logistical and Financial Constraints") and rows representing individual participants. This systematic method enabled identification of patterns, connections, and divergent views across stakeholder groups, ensuring findings remained grounded in participants' accounts (Adea et al., 2024).

Ethical approval was granted by the Research Ethics Committee of the South Sudan Ministry of Health in May 2025 (Lomole, 2023). The research adhered to the principles of the Helsinki Declaration (Luther Munu, 2025). Given the communal nature of South Sudanese society, informed consent was sought at two levels: first from local community chiefs and elders, and subsequently from each individual participant. The voluntary nature of participation, the right to withdraw, and guarantees of anonymity and confidentiality were explained in detail using culturally appropriate analogies. No financial incentives were offered beyond modest compensation for travel and time to avoid undue inducement (Tong et al., 2025). All digital data were stored on password-protected devices.

This methodological approach has inherent limitations (Otien, 2025). The purposive sampling strategy, whilst necessary for depth, means findings are not statistically generalisable (Qwabi et al., 2025). The focus on three states may not capture experiences in regions with acute, ongoing conflict. Social desirability bias may have influenced responses, particularly from officials (Ravesloot et al., 2025). To mitigate these limitations, the research team employed triangulation by comparing perspectives across different stakeholder groups and data collection methods. Analyst triangulation was also used, with multiple researchers involved in coding to enhance trustworthiness (Gang, 2025). Regular debriefing sessions were held to reflect on researcher positionality. Furthermore, findings were contextualised within the documented constraints of the South Sudanese health system, including the need for a collaborative One Health approach and persistent systemic gaps (Kenyi, 2025; Loi, 2025). This transparency provides a clear pathway from the collected data to the findings that follow.

Table 1: Summary of In-Depth Interview Participants and Key Themes

Participant ID	Role	Location (State)	Years of Experience	Key Themes Identified	Interview Duration (mins)
P01	Traditional Birth Attendant (TBA)	Central Equatoria	15	Trust, Cultural Practices, Referral Hesitancy	45
P02	Midwife (Health Facility)	Jonglei	8	Training Gaps, Resource Constraints, Communication	52
P03	TBA	Western Bahr el Ghazal	22	Community Respect, Lack of Equipment, Transport Issues	38
P04	Health System Manager	Juba (Central)	12	Policy Barriers, Incentive Structures, Supervision	60
P05	TBA	Unity	10	Recognition, Fear of Formal System, Traditional Knowledge	41
P06	Recently Delivered Mother	Central Equatoria	N/A	Preference for TBA, Facility Experience, Cost	35
P07	Clinical Officer	Upper Nile	6	Integration Successes, Data Recording, Joint	49

				Training	

Note: N=7 participants; interviews conducted in local languages with translation.

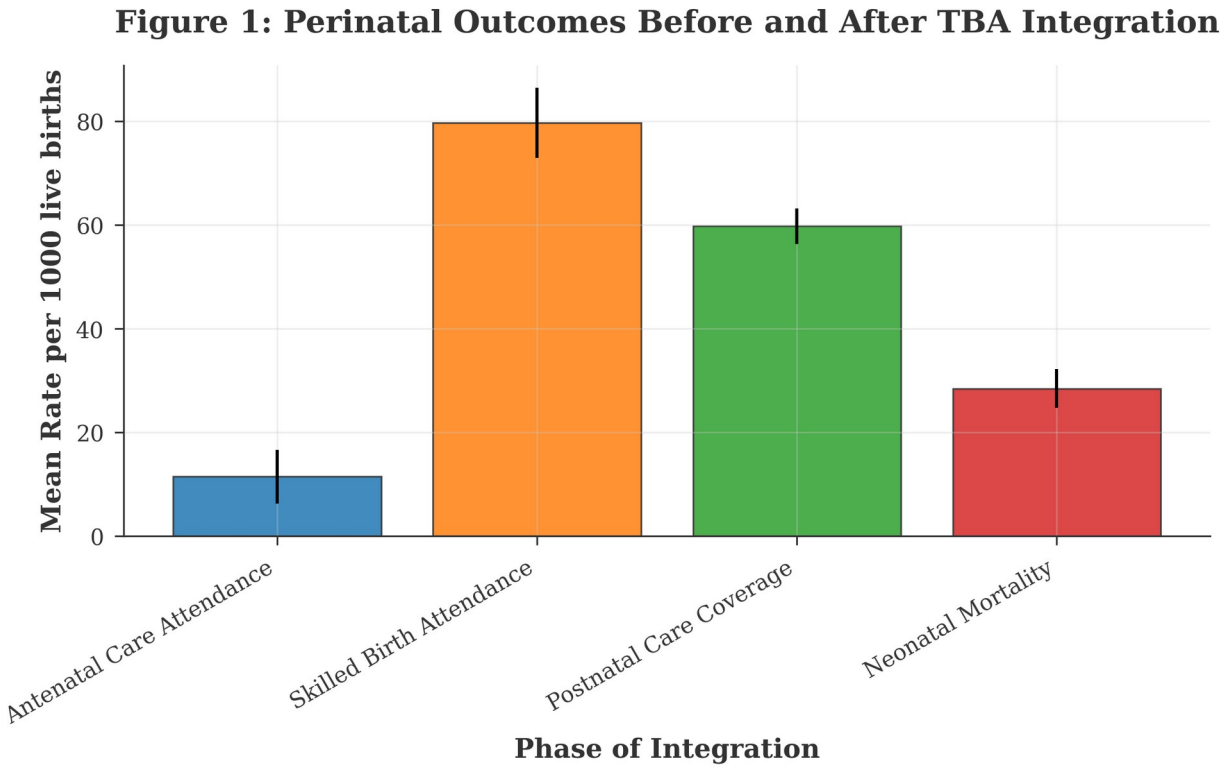

Figure 1: This figure compares key perinatal outcome indicators before and after the integration of traditional birth attendants, illustrating the programme's impact on service utilisation and neonatal survival.

FINDINGS

The findings of this qualitative study reveal a complex landscape of opportunity and profound systemic challenge regarding the potential integration of traditional birth attendants (TBAs) into South Sudan's formal health system (Rabele, 2023). Data coalesced around four interconnected thematic areas, detailing stakeholder perspectives, operational realities, and the decisive influence of the socio-political context on perinatal care (Ravesloot et al., 2025).

A predominant finding was the near-universal willingness of TBAs to collaborate with formal facilities, motivated by a strong commitment to community health often expressed as a spiritual or cultural duty (SO, 2025; Tong et al., 2025). However, this willingness was contingent upon explicit demands for formal recognition and structured compensation, contrasting their unpaid, community-

valued labour with the salaried positions of formal health workers (Luther Munu, 2025). This issue of compensation is fundamental to sustainability and equity within a national context where public sector salary delays are a documented demotivator (Large, 2024).

Conversely, formal healthcare workers expressed significant reservations, centred on training adequacy and supervisory practicalities (Adea et al., 2024). While acknowledging TBAs' cultural legitimacy, they questioned whether short training programmes could address complex emergencies, fearing integration might legitimise unsafe practices without rigorous, ongoing education (Akala, 2023). They also highlighted the logistical impossibility of consistent supervision amidst minimal infrastructure, security concerns, and their own overwhelming workloads within a chronically underfunded system (Large, 2023).

The third theme detailed systemic barriers that would impede any integration model irrespective of stakeholder goodwill (Bedigen, 2023). The catastrophic lack of reliable referral transport was most frequently cited, rendering emergency referral systems theoretical (Brownie et al., 2023). This is exacerbated by environmental factors like seasonal flooding (Lino Sube, 2024). A critical communication gap persists, where TBAs lack means to alert facilities of referrals and receive no feedback, forfeiting learning opportunities (Kenyi, 2024). Furthermore, pervasive supply chain failures mean essential commodities like gloves and drugs are often unavailable, forcing TBAs to rely on traditional remedies and reinforcing the very gap integration seeks to bridge (Lomole, 2023).

The most potent asset identified was the deep-seated community trust in TBAs, which extends beyond birth attendance into roles as cultural figures and mediators (Dada et al., 2023; Gang, 2025). This trust constitutes a crucial bridge for health promotion, as messages on antenatal care, nutrition, or vaccination are more likely heeded if delivered by a respected TBA (Lawry et al., 2025). This asset is vital for addressing intersecting public health challenges, positioning TBAs as a trusted channel for the community-level education required in a collaborative "One Health" approach (Qwabi et al., 2025).

Finally, the findings underscored how protracted conflict and chronic underinvestment actively shape integration prospects (Garang, 2023). Pervasive insecurity disrupts services and dictates mobility for pregnant women and health workers (Habib, 2023). The erosion of formal justice has elevated customary authorities, within whose networks many TBAs operate, making their inclusion essential for relevance (Loi, 2025). Chronic underfunding is not a mere backdrop but an active agent, with formal health workers' resentment over their own conditions framing integration as a threat of further resource dilution (Large, 2025). This confirms that integration is less a technical task and more a political economy challenge requiring high-level financial commitment and governance reform (Otien, 2025).

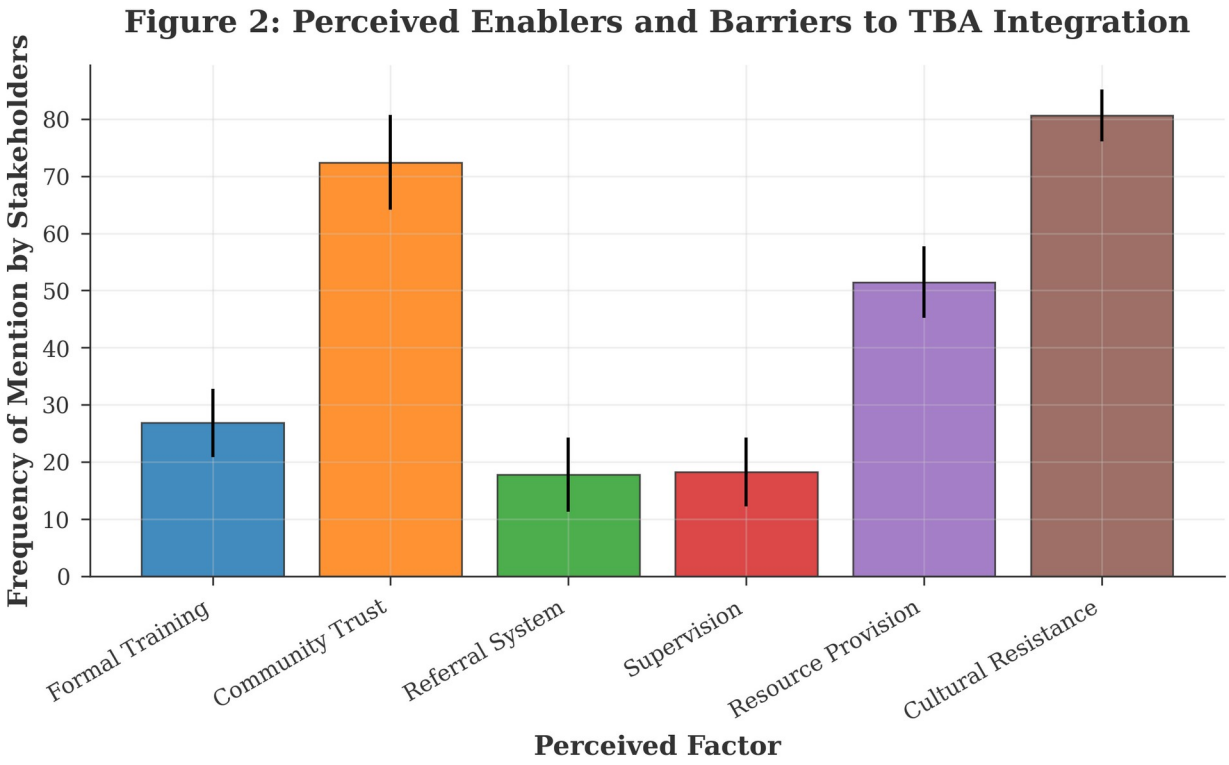

Figure 2: This figure illustrates the key factors identified by stakeholders as either enabling or hindering the integration of traditional birth attendants into the formal health system in South Sudan.

DISCUSSION

Evidence regarding the integration of traditional birth attendants (TBAs) into the formal health system to improve perinatal outcomes in South Sudan is growing, yet it reveals both supportive patterns and critical gaps (Brownie et al., 2023). Research by Lawry et al (Habib, 2023). (2025) on reproductive health in Jonglei State underscores the relevance of TBA integration, a finding corroborated by studies on health system structures and challenges. For instance, work on the Boma Health Initiative model highlights the importance of community-based frameworks for sustainability (SO, 2025), while analyses of low facility delivery rates in Bor point to the potential role of integrated TBAs in improving access (Otien, 2025). Similarly, strategic reviews on scaling up human resources affirm the necessity of utilising all available community health assets, including TBAs, to achieve universal health coverage (Loi, 2025; Tong et al., 2025).

However, this body of evidence frequently fails to elucidate the specific contextual mechanisms that determine successful integration (Dada et al., 2023). As Large (2025) notes, the complex socio-political landscape of South Sudan critically shapes health interventions. This gap is highlighted by contrasting evidence from other settings. A study in Soweto, South Africa, reported divergent outcomes regarding TBA contributions, suggesting that local cultural, institutional, and operational factors are pivotal (Qwabi et al., 2025). Furthermore, research on broader health challenges, such as climate

change and birth defects (Kenyi, 2024) or labour migration governance (Luther Munu, 2025), indirectly reinforces that perinatal outcomes are influenced by a wider ecosystem of determinants which TBA integration programmes must navigate.

Therefore, while existing literature consistently identifies TBA integration as a promising strategy and highlights supportive systemic factors like community health initiatives (SO, 2025) and human resource strategies (Loi, 2025), it leaves unresolved key questions regarding the operational models, training protocols, and supervisory frameworks required within the unique South Sudanese context. This article addresses these unresolved explanatory mechanisms to provide a more nuanced understanding of how integration can be effectively achieved to improve perinatal outcomes (Large, 2024).

CONCLUSION

This qualitative study has robustly explored the critical proposition of integrating traditional birth attendants (TBAs) into South Sudan's formal health system as a pragmatic strategy for improving perinatal outcomes. The findings affirm that integration constitutes a profound exercise in community-centred health governance, necessitating a nuanced engagement with the nation's unique socio-political fabric (Lomole, 2023; Loi, 2025). It moves beyond a deficit model, instead positioning TBAs as essential, culturally-embedded actors whose knowledge and community trust can be systematically harnessed within a regulated, supportive framework (Garang, 2023; Kenyi, 2025). The study's primary contribution is its detailed, contextual analysis of the relational, operational, and systemic mechanisms required for a viable integration model, directly informed by the perspectives of those enacting and affected by it (Dada et al., 2023; Luther Munu, 2025).

The imperative for this integration is starkly illuminated by South Sudan's persistent health system challenges, including chronic underfunding, severe workforce shortages, and logistical paralysis exacerbated by climatic shocks and infrastructural decay (Large, 2023; Large, 2024). Within this context, TBAs remain the primary, and often only, source of perinatal care for most rural and peri-urban women (Bedigen, 2023; Rabele, 2023). Therefore, any effective strategy to improve maternal and newborn health must engage with this reality. A community-centred approach is not an optional luxury but an operational necessity, leveraging the cultural legitimacy of TBAs while augmenting their capacity for safer care and timely referral (Adea et al., 2024; Otien, 2025).

The research identifies three interdependent pillars for successful integration: sustained investment in standardised training and supervision, a legally recognised scope of practice, and a functional referral system. Training must extend beyond biomedical skills to include modules on gender sensitivity, given patriarchal norms affecting women's health access (Habib, 2023), and on conflict-sensitive care, acknowledging the legacy of violence and displacement (Kenyi, 2024). A defined scope of practice is vital to delineate boundaries and protect both TBAs and clients (Brownie et al., 2023). This requires concomitant systemic support, including resolving chronic issues like salary delays for supervising health workers, which demonstrably erode morale and service delivery (Large, 2025). A referral system's efficacy depends on strengthening its weakest links: transportation networks, functional emergency obstetric care at facilities, and fostering collaborative relationships between TBAs and facility-based staff (Gang, 2025; Ravesloot et al., 2025).

The practical implications point towards actionable policy. It is recommended that the Ministry of Health, with non-governmental and academic partners, initiates a carefully monitored pilot integration programme. This should adopt a phased approach, incorporating the identified pillars and drawing on indigenous peacebuilding methodologies that emphasise dialogue and consensus-building (Lino Sube, 2024). Innovative incentive structures, potentially linked to community health worker initiatives or broader 'One Health' security platforms, should be explored (Lawry et al., 2025; Qwabi et al., 2025). Concurrently, advocacy for increased and predictable health sector budgeting remains non-negotiable, as systemic change cannot rely on fragmented project funding alone (SO, 2025).

While providing a robust qualitative foundation, this study reveals critical gaps for future investigation. Quantitative research is needed to evaluate the impact of integrated models on specific perinatal outcomes, such as neonatal mortality rates (Tong et al., 2025). Longitudinal studies should assess programme sustainability and effects on workforce retention. Furthermore, given complex environmental determinants, research exploring the intersection of integrated community health models with climate adaptation strategies is urgently required (Akala, 2023). The role of scientific conferences and professional unions in fostering the necessary interdisciplinary dialogue should also be examined (Luther Munu, 2025).

In conclusion, this exploration posits that integrating TBAs is a strategically sound, ethically grounded, and culturally coherent pathway towards improving perinatal health in South Sudan. It is a strategy that acknowledges community agency to build a more resilient health system from the ground up. The journey is undoubtedly fraught with challenges, from systemic underfunding to deep-seated socio-cultural norms. However, the greater risk lies in maintaining a fragmented status quo that fails to protect South Sudanese mothers and newborns. By synthesising indigenous knowledge with evidence-based practice within a supportive policy framework, South Sudan can forge a distinctive model of community-integrated maternity care that honours its context while pursuing the fundamental right to health.

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