

Assessment of Community-Based Maternal Health Care Models for Internally Displaced Persons (IDPs) in Nigeria: A Literature Review

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Abstract

Nigeria faces a dual crisis of high maternal mortality and widespread internal displacement driven by conflict. This narrative literature review synthesizes evidence on community-based maternal health care models designed to serve internally displaced persons (IDPs) and conflict-affected populations in Nigeria. Drawing from existing studies spanning 2013-2025, this review examines intervention types, effectiveness, implementation challenges, and policy implications. The evidence reveals diverse community-based approaches including mobile health clinics, community health workers, emergency transport schemes, volunteer obstetrician programs, and faith-based initiatives. These interventions have demonstrated significant improvements in maternal health outcomes, with documented reductions in maternal mortality ratios ranging from 16.8% to 37%, substantial increases in antenatal care coverage, and improved facility delivery rates. However, persistent barriers including insecurity, inadequate funding, cultural norms, and weak health infrastructure continue to challenge sustainable implementation. This review provides critical insights for policymakers, humanitarian organizations, and health practitioners working to improve maternal health outcomes in displacement and conflict settings.

Keywords: Community-Based care, Internally displaced Persons (IDP), Nigeria

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1. Introduction

Nigeria bears one of the highest maternal mortality burdens globally, with an estimated maternal mortality ratio exceeding 1,000 deaths per 100,000 live births in some regions (Aradeon et al., 2016). This crisis is compounded by protracted internal displacement affecting millions of Nigerians, due to insurgency, non-state armed group activities and military operations which has precipitated significant internal displacement of over 2 million people since 2009 (Nwachukwu et al., 2022). Internally displaced persons, especially women of reproductive age, face heightened vulnerabilities including limited access to essential maternal health services, increased exposure to gender-based violence, and deteriorating living conditions in camps and host communities. Community-based maternal health care models have emerged as critical strategies to bridge gaps in service delivery for hard-to-reach and conflict-affected populations. These models leverage community resources, local health workers, and innovative delivery mechanisms to extend maternal health services beyond traditional facility-based care. However, the effectiveness, scalability, and sustainability of these approaches in the specific context of IDPs in Nigeria remain inadequately synthesized.

This literature review aims to: (1) identify and categorize community-based maternal health care models implemented for IDPs and conflict-affected populations in Nigeria; (2) assess the effectiveness of these interventions in improving maternal health outcomes; (3) examine barriers to implementation; and (4) provide evidence-based recommendations for policy and practice. By synthesizing evidence from diverse sources, this review contributes to the growing body of knowledge on health interventions in conflict settings.

2. Nigeria Context

2.1 Maternal Health Crisis in Nigeria

Nigeria accounts for approximately 20% of global maternal deaths, making it one of the most dangerous places in the world for pregnancy and childbirth. The maternal mortality crisis is particularly acute in northern Nigeria, where cultural practices, low literacy rates, limited health infrastructure, and poverty converge to create formidable barriers to maternal health care (Aradeon et al., 2016). Studies indicate

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that approximately 90% of women in some northern states deliver at home without skilled attendance, contributing to preventable maternal deaths (Sloan et al., 2018).

2.2 Internal Displacement and Conflict

The Boko Haram insurgency, which intensified in 2009, has created one of Africa's largest displacement crises. By 2020, over 2.7 million Nigerians were internally displaced, with the majority concentrated in Borno, Adamawa, and Yobe states in the Northeast (Odo et al., 2020). Displacement disrupts access to health services, destroys health infrastructure, and creates overcrowded camp conditions with inadequate sanitation and nutrition. Displaced women face specific reproductive health challenges including lack of antenatal care, unsafe deliveries, limited access to family planning, and increased vulnerability to sexual violence (Amodu, 2020; Okorafor et al., n.d.). Beyond the Northeast, internal displacement also affects other regions including Benue State in the North-Central zone, where farmer-herder conflicts have displaced thousands of families (Egbewole et al., 2025). These diverse displacement contexts require tailored maternal health interventions that account for varying security situations, camp infrastructures, and community dynamics.

2.3 Community-Based Care as a Response Strategy

Community-based maternal health care represents a paradigm shift from facility-centric models to approaches that bring services closer to women's homes and communities. These models are particularly relevant in displacement settings where traditional health infrastructure is absent, destroyed, or inaccessible due to insecurity. Community-based approaches leverage local human resources, utilize culturally appropriate delivery mechanisms, and engage community stakeholders to address both supply-side and demand-side barriers to maternal health care (Al-Mujtaba et al., 2020; Uzundu et al., 2015).

3. Typology of Community-Based Maternal Health Interventions

3.1 Mobile Health Clinics

Mobile health clinics represent a critical innovation for reaching displaced and conflict-affected populations where fixed health facilities are inaccessible or non-functional. Egbewole et al. (2025) evaluated mobile health clinics delivering antenatal and postnatal care to 300 displaced women in Benue State, finding that these clinics significantly improved access to essential maternal services including routine check-ups, skilled birth attendance referrals, immunizations, and health education. The mobile clinic model proved particularly effective in areas where traditional health facilities were inaccessible due to insecurity, resulting in reduced maternal complications and improved birth outcomes.

Similarly, Ngoshe (2022) documented the deployment of mobile health teams in hard-to-reach and newly liberated areas of Borno State, including IDP settlements. These integrated mobile teams provided comprehensive services including antenatal and postnatal care, treatment of minor ailments, vaccination, nutritional screening, HIV testing and counseling, and gender-based violence identification. The intervention reached 88,421 pregnant mothers with intermittent preventive therapy, demonstrating the scalability of mobile approaches in conflict settings. Mobile health clinics offer several advantages including flexibility to reach dispersed populations, ability to operate in insecure environments, and integration of multiple health services. However, they face challenges including inconsistent funding, limited medical supplies, and cultural barriers that require ongoing community engagement (Egbewole et al., 2025).

3.2 Community Health Worker Programs

Community health workers (CHWs) constitute the backbone of many community-based maternal health interventions in Nigeria. These lay health workers, often recruited from the communities they serve, provide health education, basic maternal and newborn care, and facilitate linkages to formal health facilities. Al-Mujtaba et al. (2020) assessed the Village Health Worker (VHW) program in Gombe State, where indigenous women were trained to educate communities on maternal, newborn, and child health services and provide basic care through home visits. The program achieved remarkable results, with facility delivery uptake among VHW beneficiaries reaching 65%, more than double the state's baseline of 27.6%. The deployment of female Community Health Extension Workers (CHEWs) in remote rural areas

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of Jigawa state demonstrated even more dramatic impacts. Uzundu et al. (2015) reported over 500% increases in health post visits, with monthly antenatal care coverage rising from 0.9%-5.8% to 11.9%-21.3%, and facility-based deliveries by skilled birth attendants more than doubling. Notably, Kadawawa recorded zero maternal and neonatal deaths for three consecutive years following CHEW deployment, illustrating the life-saving potential of resident female health workers in underserved communities. Björkman-Nyqvist et al. (2022) conducted a randomized controlled trial evaluating community health educators in Northern Nigeria, testing three intervention arms: health educators alone, health educators with safe birth kits, and health educators with community dramas. All interventions increased utilization of antenatal, postnatal, and infant care, with the program proving more effective when supplemented with additional components such as birth kits and community engagement activities.

3.3 Emergency Transport and Referral Systems

Emergency transport schemes address the critical "second delay" in the three-delays model the delay in reaching appropriate care once a complication is recognized. Oguntunde et al. (2018) evaluated Emergency Transport Schemes (ETS) integrated with community-level demand creation activities across six states in northern Nigeria. The intervention included volunteer drivers, support groups for women and men, training for traditional birth attendants, and sensitization of religious leaders. The integrated ETS model significantly increased emergency obstetric and newborn care service utilization, with community members perceiving the system as more reliable and responsive than previous arrangements. The Community Communication Emergency Referral (CCER) strategy evaluated by Aradeon et al. (2016) combined emergency transport with community mobilization and communication training. This comprehensive approach contributed to a 16.8% reduction in maternal mortality ratio (from 1,271 to 1,057 deaths per 100,000 live births) in intervention districts, with CCER accounting for one-third of lives saved. The program facilitated transport for 17,227 women and demonstrated the synergistic effects of combining transport infrastructure with community empowerment. However, emergency transport systems face significant challenges including security risks (attacks on drivers at night), difficult terrain, lack of vehicles, poor road conditions, and social-cultural barriers such as husbands refusing to allow drivers to transport their wives (Oguntunde et al., 2018).

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3.4 Volunteer and Task-Shifting Models

Task-shifting approaches that engage volunteers and non-specialist health workers have proven valuable in resource-constrained and conflict-affected settings. Bako et al. (2024) evaluated the Volunteer Obstetrician Scheme (VOS) in Maiduguri, which deployed volunteer obstetricians to primary health care centers in IDP camps and host communities to improve post-abortion care (PAC). This scheme addressed critical gaps in emergency obstetric care, as many primary health centers lacked capacity to manage miscarriages and provide quality PAC. The role of community-based birth attendants, including traditional birth attendants (TBAs), remains contentious but pragmatically important. Agoyi et al. (2022) noted that community-based birth attendants serve approximately 70% of Nigeria's reproductive population due to their accessibility, affordability, and social acceptance. While recognizing the limitations of TBA training, the authors advocated for continuous education on safe and hygienic practices and eventual integration into the formal health system with appropriate legal frameworks. Sloan et al. (2018) demonstrated the effectiveness of training and equipping TBAs as part of an integrated maternal and neonatal health program in Northern Nigeria. The program, which also included facility staff training, essential supplies provision, and emergency transport establishment, achieved a 37% decline in maternal mortality ratio compared to baseline.

3.5 Community Engagement and Behavioral Change Interventions

Community engagement and behavioral change interventions address demand-side barriers by improving health literacy, challenging harmful social norms, and mobilizing community support for maternal health. Eze et al. (2020) evaluated a community-driven behavioral change intervention in rural Ebonyi State that employed stakeholder engagement, health education, facilitation of emergency transport and fund-saving systems, and distribution of educational materials delivered by trained volunteer CHWs. The intervention significantly increased mean knowledge of danger signs of pregnancy (by 0.37, $p < 0.001$) and birth preparedness/complication readiness elements (by 0.27, $p < 0.001$), while antenatal care and facility delivery rates increased by 8.2% and 8.3% respectively.

Cockcroft et al. (2019) conducted a cluster randomized controlled trial of universal home visits with pregnant women and their spouses in Bauchi State. The intervention, which addressed upstream risk factors including domestic violence, heavy work in pregnancy, ignorance of danger signs, and lack of spousal communication, reduced maternal morbidity including raised blood pressure, swelling, and postpartum sepsis, without increasing health service utilization. This finding suggests that community-level interventions can improve maternal outcomes through mechanisms beyond facility-based care.

Faith-based community engagement represents another promising approach. Nwakamma et al. (2019) described the CHES-Advocates initiative, which engaged religious leaders and community members in health empowerment and social safety advocacy. The model improved uptake of antenatal care and immunization, instigated change in harmful practices, and enhanced maternal and child health-seeking behavior in rural and underserved communities in Benue and Kaduna states.

3.6 Integrated and Multi-Component Programs

Recognizing that maternal health challenges are multifaceted, several interventions have adopted integrated, multi-component approaches. Hamman et al. (2023) evaluated mobile outreach and health facility outreach programs in rural and hard-to-reach communities of Adamawa State, providing integrated services including antenatal care, family planning, routine immunization, vitamin A supplementation, deworming, and diarrhea treatment. The intervention achieved cumulative improvements of 21% in antenatal care and 18% in institutional delivery, demonstrating the effectiveness of comprehensive service packages. Willey et al. (2022) assessed a government-led partnership intervention in Gombe state that implemented a complex package of evidence-based interventions spanning the six WHO health system building blocks. Between 2016 and 2019, the intervention achieved improvements in multiple indicators including at least one antenatal visit (from 71% to 88%), at least four antenatal visits (from 46% to 69%), facility birth (from 48% to 64%), and administration of uterotonics (from 44% to 59%). Tilton et al. (2023) piloted Community-Maternal and Perinatal Death Surveillance and Response (c-MPDSR) in Kaduna State, which combined verbal and social autopsies with community-driven actions including closing unsafe clinics, providing 24-hour free transportation for pregnant women, and organizing pre-emptive blood donations. The intervention

increased antenatal care, facility deliveries, and postnatal care coverage while improving quality of care and trust between communities and health facilities.

4. Effectiveness and Outcomes of Community-Based Models

4.1 Maternal Mortality and Morbidity Reduction

Community-based interventions have demonstrated substantial impacts on maternal mortality and morbidity in Nigerian settings. The most dramatic mortality reduction was reported by Sloan et al. (2018), whose integrated maternal and neonatal health program in Northern Nigeria achieved a 37% decline in maternal mortality ratio (OR 0.629, 95% CI 0.490–0.806, $p \leq 0.0003$) compared to baseline levels of 440 per 100,000 births. This program combined TBA training, facility staff capacity building, essential supplies provision, and emergency transport establishment. Aradeon et al. (2016) documented a 16.8% reduction in maternal mortality ratio in intervention districts implementing the Community Communication Emergency Referral strategy, with MMR declining from 1,271 to 1,057 deaths per 100,000 live births. The CCER component alone contributed to saving one-third of lives saved, highlighting the importance of community mobilization and emergency referral systems. Beyond mortality, several interventions demonstrated reductions in maternal morbidity. Cockcroft et al. (2019) found that universal home visits reduced problems in pregnancy and postpartum including raised blood pressure (RRR 0.120), swelling of face or hands (RRR 0.271), and postpartum sepsis (RRR 0.399). Eze et al. (2020) reported that community-driven behavioral change interventions reduced the experience of serious pregnancy-related problems by 5.6% ($p = 0.018$).

4.2 Service Utilization and Access

Community-based models consistently improved utilization of maternal health services across the continuum of care. For antenatal care, improvements ranged from modest to dramatic. Aradeon et al. (2016) reported that ANC attendance doubled from 24.5% to 51.2% in CCER intervention areas. Uzundu et al. (2015) documented increases in monthly ANC coverage from 0.9%-5.8% to 11.9%-21.3% following deployment of female CHEWs. Willey et al. (2022) found that at least one antenatal visit increased from 71% to 88%, while at least four antenatal visits rose from 46% to 69%. Facility delivery rates, a critical

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indicator of access to skilled birth attendance, showed substantial improvements across multiple interventions. Al-Mujtaba et al. (2020) reported that facility delivery uptake among VHW beneficiaries reached 65%, more than double the state baseline of 27.6%. Aradeon et al. (2016) documented increases in skilled birth attendant deliveries from 11.3% to 26.8%. Hamman et al. (2023) achieved an 18% cumulative improvement in institutional delivery through mobile outreach strategies. The dramatic impact of resident female health workers is particularly noteworthy. Uzundu et al. (2015) reported that facility-based deliveries by skilled birth attendants more than doubled (105 vs. 43) following CHEW deployment, with one community recording zero maternal and neonatal deaths for three consecutive years.

4.3 Health Knowledge and Behavioral Change

Community-based interventions effectively improved maternal health knowledge and promoted positive behavioral changes. Aradeon et al. (2016) found that knowledge of four maternal danger signs increased from 10.2% to 29.4% among women in CCER intervention areas. Eze et al. (2020) reported significant increases in mean knowledge of danger signs of pregnancy (by 0.37, $p < 0.001$) and birth preparedness/complication readiness elements (by 0.27, $p < 0.001$). Behavioral changes extended beyond knowledge to include practical preparedness measures. Eze et al. (2020) documented an 11.6% increase in participation in community birth preparedness and complication readiness activities ($p = 0.012$). Cockcroft et al. (2019) found that home visits reduced heavy work during pregnancy (RRR 0.234), addressing an important risk factor for maternal complications. Björkman-Nyqvist et al. (2022) demonstrated that community health educator programs improved maternal and newborn health practices as well as health knowledge, with effectiveness enhanced when supplemented with additional program components such as safe birth kits and community dramas.

5. Barriers and Implementation Challenges

5.1 Structural and Resource Constraints

Structural barriers represent the most pervasive challenges to implementing community-based maternal health interventions in Nigeria. Inadequate health infrastructure, particularly in rural and conflict-

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affected areas, fundamentally limits service delivery capacity. Uzundu et al. (2015) documented weak health infrastructure, poorly equipped facilities, limited access to drugs and medicines, irregular supplies, and absence of emergency transport as major structural constraints. Aradeon et al. (2016) highlighted inadequate numbers and maldistribution of skilled birth attendants, insufficient resources and infrastructure for facilities, and limited 24-hour services. Financial constraints affect both health systems and communities. Egbewole et al. (2025) identified inconsistent funding and limited medical supplies as persistent challenges for mobile health clinics. Al-Mujtaba et al. (2020) noted inadequate financial compensation for village health workers, contributing to motivation and retention challenges. At the community level, poverty limits women's ability to pay for transport, facility fees, and other costs associated with maternal health care. Human resource shortages compound infrastructure deficits. Al-Mujtaba et al. (2020) reported healthcare worker insufficiency with low health worker density (1 per 1,000 in Gombe State). Sloan et al. (2018) noted that traditional birth attendants, who serve the majority of women in some areas, often have little education or training, creating critical gaps in care quality.

5.2 Security and Conflict-Related Challenges

Security challenges directly impact maternal health service delivery and access in conflict-affected areas. Egbewole et al. (2025) documented how insecurity makes traditional health facilities inaccessible, necessitating alternative delivery mechanisms such as mobile clinics. Oguntunde et al. (2018) reported security challenges including attacks on volunteer drivers at night, creating risks for emergency transport schemes. Aradeon et al. (2016) noted increased insecurity in some states such as Yobe, which complicated intervention implementation. The Boko Haram insurgency has destroyed health infrastructure, displaced health workers, and created environments where women cannot safely access care. The concentration of IDPs in camps and host communities creates additional challenges including overcrowding, inadequate sanitation, and limited resources to meet increased demand for services.

5.3 Sociocultural Barriers

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Sociocultural factors constitute formidable barriers to maternal health care utilization in Nigeria, particularly in northern regions. Aradeon et al. (2016) identified multiple cultural barriers including low social status of Hausa women, cultural norms such as purdah and early marriage, low literacy, husbands' financial and decision-making control, traditional beliefs, and negative attitudes of health workers. Oguntunde et al. (2018) documented social and cultural norms including men as primary decision-makers, women delivering at home, and husbands not permitting drivers to transport their wives. Gender dynamics significantly influence maternal health care access. Al-Mujtaba et al. (2020) found that husbands' and mothers-in-law's lack of support for women's use of maternal, newborn, and child health services, combined with women's reluctance to visit facilities, limited service uptake. Cockcroft et al. (2019) identified domestic violence, heavy work in pregnancy, ignorance of danger signs, and lack of spousal communication as upstream risk factors affecting maternal health. Cultural barriers also affect intervention implementation. Uzundu et al. (2015) noted that cultural mores prevented female CHEWs from riding motorcycles, limiting their mobility and reach. Egbewole et al. (2025) identified cultural barriers as persistent challenges for mobile health clinics. Agoyi et al. (2022) reported that disunity among community-based birth attendants drawn along lines of religion, initial training/education, and gender differences impeded knowledge uptake despite training attempts.

5.4 Implementation and Sustainability Issues

Implementation challenges threaten the effectiveness and sustainability of community-based interventions. Aradeon et al. (2016) documented variability in CCER implementation details, insufficient direct volunteer coverage, and limited data for robust monitoring and evaluation. Oguntunde et al. (2018) reported implementation issues including drivers not having identification cards and health facilities not readily admitting women without proper identification. Sustainability concerns center on financial viability, community ownership, and integration with formal health systems. Egbewole et al. (2025) emphasized the need for policy integration and long-term investment to ensure sustainability of mobile health interventions. Bello et al. (2025) identified supply chain disruptions as barriers hindering program sustainability and reach for nutritional interventions in IDP camps. Data quality and monitoring challenges limit the ability to rigorously evaluate interventions and make evidence-based adjustments.

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Sloan et al. (2018) noted data irregularities and under-reporting as challenges, along with the absence of contemporaneous control groups in many evaluations. The lack of robust monitoring systems makes it difficult to track outcomes, identify implementation problems, and demonstrate impact to funders and policymakers.

6. Discussion

6.1 Discussion of Key Findings

This narrative literature review reveals a diverse ecosystem of community-based maternal health interventions operating in Nigeria, with varying degrees of relevance to internally displaced populations. Several key findings emerge from the evidences. First, community-based approaches demonstrate substantial effectiveness in improving maternal health outcomes, even in challenging contexts characterized by conflict, displacement, and resource scarcity. Documented impacts include maternal mortality reductions of 16.8% to 37%, dramatic increases in antenatal care coverage and facility delivery rates, and improvements in maternal health knowledge and behaviors. These findings align with broader evidence from systematic reviews supporting community-based interventions for maternal and newborn health in low-resource settings. Second, no single intervention model emerges as universally superior; rather, effectiveness appears to depend on contextual factors, implementation quality, and the specific barriers being addressed. Mobile health clinics excel in reaching geographically dispersed and insecure areas. Community health worker programs leverage local knowledge and trust to improve both access and demand. Emergency transport schemes address critical delays in reaching care. Behavioral change interventions tackle sociocultural barriers. Integrated multi-component programs address multiple barriers simultaneously, potentially achieving synergistic effects.

Third, the evidence base reveals a tension between IDP-specific programming and broader rural/hard-to-reach interventions. While several studies explicitly target IDPs in camps and host communities (Egbewole et al., 2025; Bako et al., 2024; Ngoshe, 2022), many highly effective interventions address rural and underserved populations facing similar challenges without specifically focusing on displacement. This suggests that lessons from rural maternal health programming may be adaptable to

IDP contexts, though displacement-specific vulnerabilities require explicit attention. Fourth, persistent barriers particularly structural constraints, insecurity, and sociocultural factors limit the reach, effectiveness, and sustainability of interventions. Addressing these barriers requires multi-level action spanning community mobilization, health system strengthening, policy reform, and conflict resolution. No community-based intervention, however well-designed, can fully compensate for absent health infrastructure, ongoing insecurity, or deeply entrenched gender inequalities.

6.2 Implications for IDP-Specific Programming

The evidence reviewed has several important implications for designing and implementing maternal health interventions specifically for IDPs in Nigeria. First, flexibility and adaptability are essential. IDP populations are dynamic, with movements between camps, host communities, and areas of origin. Interventions must be designed to accommodate population mobility, changing security situations, and evolving needs over the displacement cycle. Second, integration with humanitarian response systems is critical. Maternal health interventions for IDPs should be coordinated with broader humanitarian assistance including food security, water and sanitation, shelter, and protection services. The nutritional intervention evaluated by Bello et al. (2025) exemplifies this integrated approach, recognizing that maternal health outcomes depend on adequate nutrition, sanitation, and overall living conditions. Third, IDP-specific programming must address unique vulnerabilities including trauma, gender-based violence, family separation, and loss of social support networks. Interventions should incorporate psychosocial support, gender-based violence screening and referral, and efforts to rebuild social support systems. The integration of gender-based violence identification and counseling into mobile health teams documented by Ngoshe (2022) represents a promising practice.

Fourth, engagement with host communities is essential to prevent tensions and ensure equitable access to services. Several studies note that interventions target both IDP camps and host communities (Bako et al., 2024), recognizing that displacement affects entire regions and that exclusive focus on IDPs can create resentment and conflict. Fifth, transition planning from humanitarian to development programming requires explicit attention. As displacement becomes protracted, interventions must evolve from emergency response to sustainable service delivery integrated with government health

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systems. The government-led partnership approach evaluated by Willey et al. (2022) offers a model for this transition.

8. Conclusion

Community-based maternal health care models are essential strategies for improving maternal health outcomes among internally displaced persons and conflict-affected populations in Nigeria. Evidence from the reviewed studies shows that community-based interventions can significantly reduce maternal mortality and improve access to maternal health services in difficult environments. Approaches such as mobile clinics, community health workers, emergency transport systems, and health education programs have demonstrated measurable improvements in antenatal care attendance and skilled birth delivery. These interventions have also strengthened maternal health knowledge and encouraged positive health-seeking behaviors among vulnerable women. Despite these achievements, several barriers continue to limit the effectiveness and sustainability of community-based programs. Structural challenges, insecurity, cultural beliefs, and limited health system capacity remain major obstacles to improved maternal health outcomes. Addressing these challenges requires coordinated efforts at the community, health system, and policy levels. Programs designed for internally displaced persons must consider their unique vulnerabilities, including trauma, poverty, and disrupted social networks. Flexible and context-specific approaches are necessary to meet the changing needs of displaced populations. Collaboration between humanitarian agencies, government institutions, and host communities is critical for sustainable implementation.

9. Recommendations

9.1 Policy Recommendations

- ★ Based on the evidence reviewed, several policy recommendations emerge for government agencies, humanitarian organizations, and development partners working to improve maternal health outcomes for IDPs in Nigeria.
- ★ Prioritize multi-component, integrated interventions: Policymakers should support integrated approaches combining service delivery innovations (mobile clinics, CHWs), demand-side

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interventions (community mobilization, behavioral change), and health system strengthening (training, supplies, infrastructure).

- ★ Invest in community health worker programs with adequate support. Policies should establish clear CHW roles, career pathways, and sustainable financing mechanisms.
- ★ Establish and maintain emergency transport and referral systems: Government and humanitarian actors should invest in establishing, equipping, and maintaining emergency transport systems in IDP-affected areas, with attention to security, community ownership, and integration with facility-based care.
- ★ Engage men and community leaders as champions for maternal health. Programs should incorporate male involvement strategies, engage religious and traditional leaders, and address harmful practices through culturally appropriate approaches.
- ★ Strengthen health systems in IDP-affected areas. Community-based interventions cannot substitute for functional health facilities with skilled staff, essential supplies, and emergency obstetric care capacity. Government investment in health infrastructure, human resources, and supply chains in conflict-affected regions is essential for sustainable improvements.
- ★ Ensure equitable access for both IDPs and host communities. Maternal health programming in displacement-affected areas should serve both IDPs and host communities to prevent tensions, ensure equity, and build social cohesion. Resource allocation should be based on need rather than displacement status alone.
- ★ Establish robust monitoring and evaluation systems. Investments in maternal health interventions should include resources for robust monitoring, evaluation, and operational research to generate evidence, enable adaptive management, and demonstrate impact.
- ★ Plan for transition from humanitarian to development programming. As displacement becomes protracted, humanitarian actors should work with government partners to transition interventions to sustainable, government-led service delivery integrated with national health systems. This requires capacity building, policy alignment, and sustainable financing mechanisms.

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