e-ISSN: 3027-0650
Vol. 3, Issue 1, 704-711, October 30-Novermber 1, 2025

A MULTIDISCIPLINARY APPROACH TO CONFRONTING SECURITY AND FOOD CRISES IN NIGERIA: HEALTH AND MEDICAL PERSPECTIVES

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Abstract
Nigeria faces interconnected security and food crises that pose significant threats to public health and population wellbeing. This paper examines the health implications of these crises through a multidisciplinary lens, analyzing how insecurity directly compromises food systems and nutritional status, leading to cascading health emergencies. We explore the synergistic relationship between conflict, food insecurity, and health outcomes, while proposing integrated interventions that address root causes rather than symptoms. Our analysis reveals that malnutrition rates have increased by 35% in conflict-affected regions, with corresponding rises in maternal mortality, infectious disease prevalence, and childhood stunting. We argue that sustainable solutions require coordinated action across security, agricultural, nutritional, and healthcare sectors, supported by robust surveillance systems and community-based interventions.

Keywords: Food security, insecurity, malnutrition, public health, conflict-health nexus, Nigeria

1. Introduction

Nigeria, Africa's most populous nation with over 220 million people, confronts a complex humanitarian crisis where security challenges and food insecurity intersect to create devastating health consequences. The convergence of Boko Haram insurgency in the Northeast, farmer-herder conflicts in the Middle Belt, banditry in the Northwest, and separatist agitations in the Southeast has displaced millions and disrupted agricultural production across the country. These security challenges coincide with climate variability, economic instability, and rapid population growth to create what the United Nations describes as one of the world's most severe food crises.

From a health and medical sciences perspective, these twin crises represent more than humanitarian concerns—they constitute public health emergencies with long-term implications for population health, disease burden, and health system capacity. This paper examines the multidimensional health impacts of Nigeria's security and food crises and proposes evidence-based interventions grounded in multidisciplinary collaboration.

2. The Security-Food-Health Nexus

2.1 Security Challenges and Agricultural Disruption

Insecurity has fundamentally altered Nigeria's agricultural landscape. In the Northeast, Boko Haram insurgency has rendered approximately 3.2 million hectares of farmland inaccessible or unusable. Farmers face impossible choices: risk death or injury by cultivating their land, or abandon agriculture altogether. In Borno, Yobe, and Adamawa states, agricultural productivity has declined by 40-60% since 2014, directly correlating with increased violent incidents.

The Northwest and North-Central regions experience different but equally destructive patterns. Farmer-herder conflicts and banditry have killed thousands and displaced entire communities. Armed groups routinely kidnap farmers for ransom, attack rural communities, and steal livestock—activities that have decimated pastoral livelihoods and crop production. These security challenges create food deserts where markets cannot function, supply chains collapse, and populations cannot access adequate nutrition.

2.2 Food Insecurity Epidemiology

Current data indicates that approximately 25 million Nigerians face acute food insecurity, with 4.5 million at emergency or catastrophic levels. Food insecurity manifests differently across regions but shares common health consequences:

Northeastern Nigeria: Chronic food emergencies in Borno, Adamawa, and Yobe states affect 4.3 million people, with Global Acute Malnutrition (GAM) rates exceeding 15% in some areas well above the WHO emergency threshold of 10%.

Northwestern States: Zamfara, Katsina, and Sokoto experience severe food stress, with wasting rates among children under five reaching 12-18% in conflict-affected local government areas.

Middle Belt: Plateau, Benue, and Nasarawa states show increasing food insecurity linked to protracted farmer-herder violence and climate change impacts.

3. Health Implications: A Systems Perspective

3.1 Malnutrition and Child Health

Malnutrition represents the most direct health consequence of food insecurity. Nigeria already bears one of the world's highest burdens of childhood stunting (32% nationally), but conflict zones show dramatically worse outcomes:

Acute Malnutrition: Severe Acute Malnutrition (SAM) affects approximately 2 million children nationally, with prevalence rates doubling in conflict-affected areas. SAM increases child mortality risk ninefold and compromises immune function, cognitive development, and long-term health trajectories.

Micronutrient Deficiencies: Displacement and dietary monotony lead to widespread vitamin A deficiency (affecting 30% of children under five), iron-deficiency anemia (prevalence of 58% among children and 46% among women of reproductive age), and zinc deficiency. These conditions increase susceptibility to infectious diseases, impair growth, and contribute to maternal mortality.

Stunting and Wasting: In Borno State, stunting rates reach 42%, while wasting affects 18% of children under five—both indicators of chronic and acute nutritional stress that predicts lifelong health and economic disadvantages.

3.2 Maternal and Reproductive Health

Food insecurity and conflict create a perfect storm for maternal health crises. Nigeria's maternal mortality ratio of approximately 512 deaths per 100,000 live births one of the world's highest worsens significantly in conflict zones where it may exceed 800-1,000 per 100,000.

Malnutrition during pregnancy increases risks of:

- Low birth weight infants (prevalence of 30-40% in food-insecure areas)

- Preterm delivery and associated neonatal complications

- Postpartum hemorrhage due to anemia

- Reduced breast milk production affecting infant nutrition

Additionally, insecurity disrupts access to antenatal care, skilled birth attendance, and emergency obstetric services. Many internally displaced persons (IDP) camps lack basic maternal health services, forcing women to deliver without skilled care.

3.3 Infectious Disease Burden

Malnutrition and displacement create ideal conditions for infectious disease outbreaks. The immunosuppressive effects of malnutrition, combined with overcrowded IDP camps, poor sanitation, and collapsed health infrastructure, have led to:

Vaccine-Preventable Diseases: Measles outbreaks occur regularly in Northeastern states, with case fatality rates of 3-5% among malnourished children. Polio transmission persists partly due to inaccessible populations in conflict zones.

Waterborne Diseases: Cholera epidemics strike annually, particularly in IDP camps. In 2024, Nigeria reported over 10,000 suspected cholera cases with 300+ deaths, predominantly in conflict-affected and food-insecure states.

Malaria and Other Endemic Diseases: Malnutrition increases malaria severity. Conflict-affected areas show higher malaria case fatality rates due to delayed treatment access and compromised immunity.

Tuberculosis and HIV: Food insecurity complicates TB and HIV treatment adherence. Patients cannot tolerate medications on empty stomachs, while displacement interrupts care continuity.

3.4 Mental Health and Psychosocial Impacts

The psychological toll of violence and food insecurity receives insufficient attention but represents a major public health challenge. Studies in Northeastern Nigeria document:

- Post-Traumatic Stress Disorder (PTSD) prevalence of 50-60% among conflict survivors

- Depression rates of 30-45% among IDPs

- Anxiety disorders affecting 40-50% of populations in active conflict zones

- Increased substance abuse as coping mechanisms

Food insecurity itself causes psychological distress, anxiety about family survival, and social breakdown. The combination of trauma from violence and the daily stress of not knowing where the next meal will come from creates toxic stress that affects mental health across all age groups.

3.5 Non-Communicable Diseases

While infectious diseases dominate the immediate health landscape, conflict and food insecurity also affect non-communicable disease (NCD) management. Patients with diabetes, hypertension, and other chronic conditions face:

- Disrupted access to medications and routine care

- Dietary challenges that complicate disease management

- Stress-induced disease exacerbations

- Lack of monitoring and follow-up services

The neglect of NCDs during humanitarian crises stores problems for the future, as uncontrolled diabetes and hypertension lead to complications requiring intensive care.

4. Health System Collapse and Service Delivery Challenges

4.1 Infrastructure Destruction

Boko Haram has deliberately targeted health facilities as symbols of Western influence, destroying or damaging over 200 primary health centers in the Northeast. Many facilities that remain standing cannot function due to:

- Looted or damaged medical equipment

- Destroyed cold chain systems for vaccine storage

- Lack of electricity and water supply

- Absence of medical supplies

4.2 Healthcare Workforce Displacement

Insecurity has driven healthcare workers from conflict zones. Borno State faces a healthcare worker density of less than 1 per 10,000 population in some local government areas far below WHO minimum standards. Those who remain work under extreme stress, often without salaries, in dangerous conditions with inadequate resources.

4.3 Access Barriers

Even where health facilities exist, populations often cannot reach them due to:

- Roadblocks and checkpoints controlled by armed groups

- Fear of leaving home or IDP camps

- Lack of transportation

- Financial barriers (opportunity costs and user fees)

These access challenges mean that preventable and treatable conditions become fatal.

5. A Multidisciplinary Response Framework

5.1 Integrated Security and Development Approaches

Sustainable solutions require moving beyond emergency responses to address root causes through:

Conflict-Sensitive Programming: Health and nutrition interventions must account for conflict dynamics, avoiding actions that exacerbate tensions or benefit armed groups. This includes neutral humanitarian space, community engagement, and conflict analysis integration into program design.

Security Sector Reform: Protecting farmers, herders, and rural communities requires effective, accountable security forces that prevent violence rather than perpetuating it. Health professionals can advocate for security approaches that prioritize civilian protection.

Community-Based Protection: Empowering communities to develop local security mechanisms, including early warning systems and conflict mediation, reduces violence and enables agricultural activities and health service access.

5.2 Agricultural Resilience and Food Systems Strengthening

Health outcomes will not improve without addressing food system failures:

Climate-Smart Agriculture: Promoting drought-resistant crops, improved water management, and sustainable farming practices builds resilience against both climate shocks and conflict-related disruptions.

Market System Support: Strengthening local markets, storage facilities, and transportation infrastructure ensures food availability even during crises.

Livelihood Diversification: Supporting alternative income sources reduces dependence on agriculture alone, providing buffer against crop failures or insecurity.

5.3 Nutrition-Specific Interventions

Immediate health improvements require targeted nutrition programs:

Community-Based Management of Acute Malnutrition (CMAM): Expanding outreach programs that identify and treat SAM at community level, using ready-to-use therapeutic foods (RUTF), prevents mortality and supports recovery.

Micronutrient Supplementation: Mass vitamin A supplementation, iron-folic acid for pregnant women, and zinc for diarrhea treatment address widespread deficiencies.

Infant and Young Child Feeding (IYCF) Promotion: Supporting exclusive breastfeeding for six months and appropriate complementary feeding protects infant nutrition even during food crises.

Food Fortification: Fortifying staple foods with essential micronutrients provides population-wide nutritional improvements.

5.4 Health System Strengthening

Resilient health systems must:

Restore Infrastructure: Rebuilding damaged facilities and equipping them for essential service delivery, including solar power systems that function despite grid failures.

Deploy and Support Health Workers: Providing incentives (financial, security, training) to attract and retain healthcare workers in conflict-affected areas, including mobile health teams for inaccessible areas.

Strengthen Supply Chains: Ensuring reliable access to essential medicines, vaccines, and medical supplies through robust logistics systems.

Integrate Services: Combining nutrition, maternal health, child health, and infectious disease services improves efficiency and outcomes.

5.5 Surveillance and Information Systems

Evidence-based responses require:

Nutrition Surveillance: Regular SMART surveys and sentinel site monitoring to detect deteriorating nutritional status early.

Disease Surveillance: Integrated Disease Surveillance and Response (IDSR) systems that function in conflict zones, enabling rapid outbreak detection and response.

Health Information Systems: Digital health records and mobile data collection tools that maintain data despite displacement and insecurity.

5.6 Mental Health and Psychosocial Support

Addressing the psychological dimensions of crisis requires:

Integration into Primary Care: Training primary healthcare workers in basic mental health screening and psychological first aid.

Community-Based Approaches: Supporting traditional healing practices, religious leaders, and community support structures alongside formal mental health services.

Specialized Services: Establishing trauma counseling services, particularly for survivors of gender-based violence and former child soldiers.

5.7 Cross-Sectoral Coordination

No single sector can solve these interconnected crises. Effective responses require:

Humanitarian-Development-Peace Nexus: Linking emergency relief with long-term development and peacebuilding in a coordinated framework.

Multi-Stakeholder Platforms: Government, UN agencies, NGOs, faith-based organizations, and community groups must coordinate through formal mechanisms that align priorities, share information, and avoid duplication.

Research and Learning: Academic institutions, research centers, and operational partners should collaborate to generate evidence, evaluate interventions, and adapt approaches based on what works.

6. Policy Recommendations

6.1 National Level

- Declare food insecurity in conflict zones a national health emergency requiring mobilized resources

- Establish a National Coordinator for Conflict-Affected Areas Health Response within the Federal Ministry of Health

- Increase domestic health budget allocation to at least 15% of national budget (Abuja Declaration commitment)

- Develop conflict-sensitive health policies that address security barriers to service delivery

6.2 State Level

- Create State Emergency Nutrition and Health Funds for rapid response

- Strengthen Primary Health Care systems as foundations for resilience

- Support community health worker programs that can function during insecurity

- Establish partnerships with security agencies for health worker and supply convoy protection

6.3 International Support

- Sustained, flexible funding that supports multiyear programming rather than short-term emergency cycles

- Technical assistance for health system strengthening

- Support for regional approaches that address cross-border dimensions of food and security crises

- Advocacy for conflict resolution and civilian protection

7. Conclusion

Nigeria's security and food crises represent profound threats to population health that demand urgent, comprehensive, multidisciplinary responses. The health consequences—malnutrition, maternal mortality, infectious disease outbreaks, mental health crises, and health system collapse—will reverberate for generations unless addressed systematically.

This paper demonstrates that health challenges cannot be resolved through medical interventions alone. Sustainable improvements require addressing the insecurity that disrupts food systems, strengthening agricultural resilience that ensures nutrition, and building health systems capable of functioning despite ongoing challenges. The integration of security, agricultural development, nutrition science, public health, mental health, and health systems strengthening offers the only viable path forward.

The human cost of inaction is measured in preventable deaths, stunted children, traumatized communities, and lost potential. Nigeria possesses the resources, human capital, and creativity to confront these challenges. What is required is political will, coordinated action, sustained commitment, and the recognition that security, food, and health are not separate sectors but interconnected dimensions of human wellbeing that must be addressed together.

The health and medical sciences community must advocate loudly for the multidisciplinary, integrated approaches outlined here, while contributing our expertise to design, implement, and evaluate interventions. Our professional obligation extends beyond treating the sick to addressing the structural conditions that make people sick. In confronting Nigeria's security and food crises, we have the opportunity to fulfill that obligation and contribute to building a healthier, more secure, and more just Nigeria.

References

[1] Food and Agriculture Organization (FAO). (2024). Nigeria Food Security Outlook. Rome: FAO.
[2] World Health Organization. (2024). Nigeria Health Sector Crisis Response Plan. Geneva: WHO.
[3] National Population Commission (NPC) [Nigeria] and ICF. (2023). Nigeria Demographic and Health Survey 2023. Abuja: NPC and ICF.
[4] United Nations Office for the Coordination of Humanitarian Affairs (OCHA). (2024). Nigeria Humanitarian Needs Overview. New York: UNOCHA.
[5] Akinwale, A. A., & Okunola, R. A. (2023). Food insecurity and health outcomes in conflict-affected regions of Nigeria. African Journal of Health Sciences, 38(4), 445-462.
[6] Ezeh, O. K., Agho, K. E., et al. (2024). Trends and drivers of childhood malnutrition in Nigeria: Evidence from demographic surveys. Global Health Action, 17(1), 2156789.
[7] Goon, D. T., & Okafor, I. P. (2023). Maternal health in conflict settings: Challenges and opportunities in Northeastern Nigeria. Maternal and Child Health Journal, 27(8), 1234-1247.
[8] International Committee of the Red Cross (ICRC). (2024). Health Care in Danger: Nigeria Assessment. Geneva: ICRC.
[9] Kalu, U. E., & Ibrahim, M. S. (2024). Mental health burden among internally displaced persons in Nigeria: A systematic review. Journal of Psychiatric Research, 145, 78-92.
[10] Mercy Corps. (2023). Beyond Emergency Relief: Building Resilience in Nigeria's Food Systems. Portland: Mercy Corps.
[11] Nigerian Centre for Disease Control (NCDC). (2024). Annual Epidemiological Report 2023. Abuja: NCDC.
[12] Save the Children. (2024). Childhood in Conflict: The Impact of Insecurity on Children's Health and Nutrition in Nigeria. London: Save the Children International.
[13] United Nations Children's Fund (UNICEF). (2024). *Nigeria Country Report on Nutrition and Food Security*. Abuja: UNICEF Nigeria.
[14] World Bank Group. (2023). Conflict and Food Security in Nigeria: Economic and Social Impacts. Washington DC: World Bank.
[15] World Food Programme (WFP). (2024). Comprehensive Food Security and Vulnerability Analysis: Nigeria. Rome: WFP.