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Lassa Fever Health Emergency and Internal Security in Ondo State, Nigeria

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Article Info

Abstract

Public health emergencies increasingly pose non-traditional security threats with significant implications for internal security, particularly in fragile socio-economic contexts. This study investigates Lassa Fever health emergency and internal security in Ondo State, Nigeria, a recurrent epicenter of Lassa Fever outbreaks using a descriptive and explanatory research design based on secondary data that combine epidemiological data and security incident reports. Also, the study is anchored on four complementary theoretical perspectives, namely: Human Security Theory, Non-Traditional Security Theory, State Capacity Theory, and the Political Economy of Health, to explain how public health emergencies such as Lassa fever intersect with internal security dynamics. The study analyses how recurrent outbreaks have influenced public order, community safety, and state security operations. Findings reveal that the Lassa Fever emergency exacerbated internal security challenges through heightened public anxiety, misinformation, stigmatization of affected communities, disruption of livelihoods, and overstretching of security agencies tasked with enforcing containment measures. The study argues that Lassa Fever in Ondo State transcends a purely biomedical concern and constitutes a human security issue with direct implications for internal security governance. The study concludes by recommending the institutionalization of health security coordination frameworks, community-based risk communication strategies, adoption of one health approach, and strengthened state capacity for emergency preparedness as critical measures for mitigating the security impacts of future public health emergencies.

Introduction

Lassa Fever is an acute viral haemorrhagic illness caused by the Lassa virus, which belongs to the Arenaviridae family, the virus is primarily transmitted to humans through contact with the urine or faeces of infected multimammate rats (Mastomys natalensis), which are the natural reservoirs of the disease (WHO, 2023) [74]. According to NCDC (2022) [46], secondary human-to-human transmission of the disease can occur through direct contact with the blood or bodily fluids of infected individuals, particularly in healthcare settings where infection prevention and control (IPC) measures are inadequate.

Asogun *et al*. (2019) [10], noted that Lassa Fever has been identified as a yearly outbreak in West Africa with Nigeria having the highest yearly incidence, the seasonal peaks of this viral hemorrhagic fever occur during the dry season from November to April, and it is common in Sierra Leone, Ghana, Mali, Nigeria, Benin, Togo, Guinea and Liberia. Delay in disease diagnosis often occurs because of non-specific symptoms such as fever and the assumption that the febrile illness is caused by other factors, especially malaria that is endemic in sub-Saharan Africa. Identifying the onset of the disease is often difficult due to the generalized symptoms and clinical presentation such as fever, vomiting, fatigue, abdominal pain, sore throat, chest pain and myalgia.

Lassa Fever was first identified in 1969 in the town of Lassa, Borno State, Nigeria, giving the disease its name and since then, Nigeria has remained one of the countries with the highest burden of Lassa Fever globally, with recurrent outbreaks reported annually in multiple states, therefore, the disease is considered endemic, meaning that the virus persists in the human population and environment over long periods rather than appearing only in isolated outbreaks (WHO, 2023) [74]. According to NCDC (2022) [46], Nigeria recorded its largest Lassa Fever outbreak in 2018 with 3,498 suspected cases out of which 633 were confirmed positive and 171 deaths in confirmed cases with a case fatality rate of 27%, these were reported from 93 LGAs in 22 states and the Federal Capital Territory. Forty-four health workers were affected across 7 states with 10 deaths recorded among the health workers.

Fisher-Hoch et al. (1995) [25], noted that several factors such as widespread presence of the rodent reservoir, substandard housing, inadequate sanitation, and poor food storage practices contribute to the endemicity of Lassa Fever in Nigeria adding that the increase human-rodent contact, particularly during the dry season (December–April) when outbreaks peak is also an index for the recurrent of the disease. Also, epidemiological data indicates that states such as Ondo, Edo, and Bauchi experience recurrent outbreaks, often leading to high morbidity and mortality among hospitalized patients (NCDC, 2022) [46].

Fidler (2010) [24], opined that the public health significance of Lassa Fever extends beyond its direct health impacts as recurring outbreaks strain health systems, disrupt economic activities, and threaten social stability, highlighting its importance as a non-traditional security threat. The NCDC and international partners, including the WHO, implement strategies such as surveillance, rapid response, laboratory testing, risk communication, and community engagement to control the spread of the virus but despite these measures, challenges such as limited resources, delayed case reporting, and inadequate infection control measures continue to hinder effective control. Given its persistent presence, recurrent outbreaks, and significant impacts on health systems and communities, Lassa Fever in Nigeria is rightly classified as a public health emergency of national importance, requiring continuous monitoring, research, and multi-sectoral interventions (NCDC, 2022; WHO, 2023) [46, 74].

Mustapha (2025) [38], stated that Ondo State, located in the Southwestern region of Nigeria, has repeatedly emerged as one of the states most affected by Lassa Fever in Nigeria as epidemiological data indicates that Ondo consistently records a high proportion of confirmed cases and fatalities compared to other Nigerian states, establishing it as a persistent epidemiological hotspot. The high burden of Lassa Fever in Ondo State is evident in national surveillance reports, for instance, during the 14-week outbreak period in 2025, Ondo accounted for approximately 30% of all confirmed Lassa Fever cases nationwide, surpassing other high-burden states such as Bauchi and Edo. Similarly, mid-2025 data revealed that Ondo contributed about 33% of national infections, highlighting the state's continuous vulnerability while historical trends show that Ondo has consistently ranked among the top states for Lassa Fever cases over the last decade, confirming a long-standing pattern of high endemicity (Fisher-Hoch et al., 1995; African Journal of Health, Nursing, & Midwifery, 2023) [25, 5].

According to Institute of Human Virology Nigeria (2025) [30],

certain local government areas (LGAs), such as Owo and Ose LGAs, have been identified as consistent epicenters of the disease, indicating the presence of localized transmission hotspots within the state. Ondo situation report of epidemiological week 4 (January 1 to 23, 2019) showed a cumulative of 100 suspected cases, 51 laboratory-confirmed cases, 2 health workers infected, 32 cases on admission and 9 deaths in confirmed cases. The distribution of the cases across LGAs showed that Owo had the highest number of cases (37), followed by Ose (9), Akoko Southwest (3) and Akure North cases (2). Two neighbouring LGAs Owo and Ose are the boundaries of the state with neighbouring Edo State which is also known to be endemic for Lassa Fever (Ijarotimi et al., 2018) [28]. The state's health infrastructure and emergency response capacity have also influenced outbreak dynamics, facilities such as the Infectious Disease Hospital in Akure, the Federal Medical Centre, Owo, and State Government Specialist Hospitals, Akure, Ikare, and Ondo town with General Hospitals at Idanre, Igbara-Oke, Ile-oluji, Owo and Okitipupa have improved diagnostic and laboratory capabilities, challenges therefore, remain in early case detection, community engagement, and effective infection prevention and control measures. These limitations exacerbate the state's vulnerability, allowing outbreaks to escalate before containment measures take full effect.

Ondo State's repeated outbreaks carry significant public health implications and the persistent high incidence highlights the need for targeted interventions, including improved environmental sanitation, rodent control measures, health education, and strengthened community surveillance. Additionally, sustained investment in health system readiness, inter-agency coordination, and rapid response capacity is critical to reduce both morbidity and mortality associated with Lassa Fever (NCDC, 2022; WHO, 2023) [46, 74].

Winslow (1920) [62], conceptualized Public Health as the science and art of preventing disease, prolonging life, and promoting health through organized efforts of society. It focuses on populations rather than individuals and emphasizes prevention, health promotion, surveillance, and policy interventions. According to WHO (2014), public health involves collective actions to create conditions in which people can be healthy, including environmental sanitation, disease control, and access to health services. On the other hand, Internal security is the protection of a state and its citizens from internal threats such as crime, insurgency, terrorism, civil unrest, and other factors capable of undermining public order and stability. It involves the maintenance of law and order, protection of lives and property, and preservation of social cohesion through institution such as police, armed forces, intelligence agencies and emergency management bodies (Buzan, 1991) [14]. In modern security discourse, internal security extends beyond physical violence to include non-traditional threats such as pandemics, food insecurity, environmental disaster, and public health emergencies (UNDP, 1994) [60].

Chapman & Zilinskas (2007) [16], cited that traditionally, internal security has been associated with military threats, crime prevention, and maintaining public order. However, global health crises, such as the COVID-19 pandemic and the Ebola outbreak in West Africa, have demonstrated that public health emergencies can have direct and indirect consequences on internal security. They added that inadequate preparedness for such crises can lead to civil unrest, weaken governance,

and strain security resources. Also, Adeyemi (2019) [4], stated that internal security involves protecting citizens and institutions from threats that compromise social stability, public order, and national integrity, these threats can include crime, civil unrest, terrorism, and disruptions caused by public health crises.

According to Elston et al. (2020), the COVID-19 pandemic demonstrated the interplay between public health emergencies and internal security globally. Countries that struggled with containment faced heightened civil unrest, misinformation campaigns, and challenges in enforcing lockdown measures and security agencies were often redeployed to enforce public health measures, highlighting the intersection of health and internal security. During the 2014–2016 Ebola outbreak, fear and misinformation contributed to civil unrest and mistrust of authorities in affected regions. Governments faced difficulties coordinating responses while maintaining security, demonstrating the critical need for integrated planning between health and security agencies (WHO, 2015) [64].

Additionally, WHO (2020), referred Public Health Emergencies (PHEs) as events that pose a significant risk to population health, often requiring urgent and coordinated responses. Examples include infectious disease outbreaks, chemical spills, or natural disasters with health implications. PHEs often overwhelm healthcare systems, disrupt normal societal functions, and require interventions beyond routine healthcare capacity (Khan et al., 2022) [33].

Elston et al. (2017) [19] noted that public health emergencies can trigger economic instability by reducing workforce productivity, increasing healthcare costs, and disrupting trade and commerce, during the Ebola outbreak in West Africa (2014–2016), countries like Liberia and Sierra Leone experienced significant economic contraction, which indirectly increased social tensions and instability (WHO, 2015) [64]. Also, Health emergencies can generate fear, panic, and social unrest, particularly if government responses are perceived as inadequate. Lockdowns, quarantine measures, and restricted movement can lead to protests and civil disobedience as well as challenging the enforcement capacity of security forces (Khan et al., 2022; Adeyemi, 2019) [33, 4].

Chapman & Zilinskas (2007) [16], also noted that governments that fail to manage PHEs effectively risk losing legitimacy because weak health responses can erode public confidence, resulting in diminished cooperation with security measures and reduced political stability. This creates a feedback loop where poor governance exacerbates both health and security vulnerabilities. Public health crises can directly affect security forces through illness or operational limitations as reduced workforce capacity in police, military, and emergency services can compromise law enforcement and public safety (WHO, 2020).

The history of insecurity in Nigeria is neither new nor isolated. Rather, it is a complex and evolving phenomenon that has mirrored the country's socio-political transformations from colonial times through independence to the modern democratic era. What began as regional tensions and identity-based contestations has expanded into a nationwide crisis involving terrorism, banditry, armed robbery, communal violence, and the systematic erosion of public trust in the state's capacity to ensure safety and justice. In the immediate post-independence period, insecurity was largely rooted in ethno-political competition and contestations over power and resources. The Biafran War

(1967–1970), for instance, represented the climax of ethnic and regional discontent, leaving deep scars on national unity and setting the stage for militarised responses to dissent (Ojo, 2024) [53]. The subsequent decades under military rule further entrenched a culture of repression, arbitrary arrests, and a general disregard for civil liberties. The return to democratic rule in 1999, though celebrated, did not bring the expected relief. Instead, it coincided with the rise of armed militancy in the Niger Delta, followed by ethno-religious violence in Plateau and Kaduna States, and eventually the emergence of Boko Haram in the North-East. These phases reflect a shift in insecurity from politically motivated agitation to ideologically and economically driven violence (Ayika & Onwurah, 2025) [11]. The evolution of Boko Haram from a religious sect to a full-fledged terrorist organisation marked a watershed moment in Nigeria's security history, prompting not only widespread internal displacement but also a surge in military expenditure and regional cooperation efforts.

Over time, the nature of insecurity in Nigeria has become multi-dimensional. Ethno-religious clashes continue to erupt in the North-Central and North-East; kidnapping for ransom and cultism are prevalent in the South-East and South-West; while resource-driven militancy remains entrenched in the South-South. More recently, banditry and farmer-herder conflicts have emerged as dominant threats, particularly in the North-West and Middle Belt. These forms of insecurity often overlap and reinforce each other, leading to complex crises that defy singular explanations. Unlike in previous decades when political violence dominated headlines, the current wave of insecurity is characterised by its decentralisation. Violence now originates not only from organised insurgent groups but also from fragmented actors, such as armed herdsmen, street gangs, and opportunistic criminals. The result is a security environment marked by unpredictability and the rapid erosion of state authority in many rural and peri-urban areas (Mevayerore, 2020) [37].

Nigeria's regional diversity has meant that the experience and causes of insecurity vary widely. In the North-East, terrorism has left entire communities deserted, while in the South-South, oil theft and piracy continue to sabotage the economy. The Middle Belt suffers frequent farmer-herder conflicts fueled by climate change and ethnic tension. The South-West States including Ondo state once regarded as relatively stable, has recently seen a surge in ritual killings, land disputes, and kidnappings particularly along Owo and Akoko highway (Balogun, 2019) [12].

Statement of the Problem

Historical data indicate that Lassa Fever is endemic in West African countries of Nigeria, Sierra- Leone, Liberia, Benin and Guinea and it's affecting an estimated two million persons and deaths of 5,000-10,000 persons annually (Asogun et al., 2019) [10]. Nigeria has reported the greatest number of confirmed Lassa Fever cases in the region, accounting for 66% and 67% of all reported Lassa Fever cases in 2018 and 2019 respectively. Overall, there were 1,463 reported Lassa Fever confirmed cases and 344 (23.5%) deaths in Nigeria during the 2018 and 2019 outbreaks, with 23 of the 36 states reporting confirmed cases (NCDC, 2019) [42].

In 2020, 328 patients tested positive for Lassa Fever in Ondo state with 47 deaths, this was about 36% of the Lassa Fever incidence in the country. This is in agreement with the report of Nyenke et al. (2022) [51] which stated that in 2020, three

states (Edo, 32%; Ondo, 36%; and Ebonyi, 7%) accounted for 75% of the total Lassa Fever incidence while the remaining 24 states accounted for 25% of Lassa Fever cases. The repeated occurrences of Lassa Fever in Ondo State have caused fear among the populace, hindered local commerce, and necessitated the deployment of security personnel to enforce quarantine measures and manage affected communities (FMOH, 2018) [22]. Despite these challenges, there is limited empirical research exploring the direct linkage between Lassa Fever outbreaks and internal security in the state. Consequently, policymakers and security agencies face difficulties in implementing integrated strategies that address both public health and internal security concerns, highlighting a critical gap in knowledge and practice. Moreso, if nothing is done by Ondo State Government to control Lassa Fever, the state will likely experience escalating infections and deaths, overwhelmed health systems, worsening poverty, productivity losses, increased crime and erosion of public trust in government (NCDC, 2023) [48].

Research Objectives
General Objective
To investigate Lassa Fever health emergency and internal security in Ondo State.

Specific Objectives
1. Assess the effects of Lassa Fever health emergency on internal security in Ondo State.
2. Evaluate the economic implications of Lassa Fever outbreaks and how they influence security challenges in Ondo State.

Review of Literature
Conceptual Framework
Public Health Emergencies
Public Health Emergencies (PHEs) are events that pose a significant threat to the health of populations, including infectious disease outbreaks (e.g., Lassa Fever, Ebola, COVID-19) or natural disasters impacting health systems, they can strain healthcare infrastructures, reduce workforce productivity, and disrupt societal stability (WHO, 2021) [69].

Internal Security
Aning & Atta-Asamoah (2018) [9], conceptualized Internal Security as the protection of a nation's citizens and institutions from threats that can destabilize domestic peace and governance. Traditionally associated with crime, insurgency, or civil unrest, internal security now also incorporates non-traditional threats such as pandemics, which can exacerbate social unrest or political instability.

Human Security
Human Security is a people-centered concept of security focusing on protecting individuals from chronic threats (hunger, disease, unemployment) and sudden disruptions (conflict, health emergencies) and Health security is a critical component of human security (UNDP, 1994; Alkire, 2003) [60, 8].

Non-Traditional Security (NTS)
Non-Traditional Security (NTS) Threats are security threats that are not military but can significantly undermine national and human security, including environmental disasters, pandemics, transnational crimes, cyber threats, and food insecurity. Public health emergencies are increasingly recognized as NTS threats (Chen et al., 2020) [17].

Relationship Between Concepts
Public Health Emergency ↔ Internal Security
Many theoretical approaches emphasize the link between health and security, supporting public health emergencies in internal security frameworks. The securitization hypothesis is a well-known idea that problems might be posed as security risks to encourage rapid action and resource allocation. Due to pandemics, bioterrorism, and antibiotic resistance, public health, historically connected with social policy, has focused increasingly on security. This theoretical framework highlights the need to treat health crises as important internal security threats and allocate significant resources. Outbreaks can disrupt social order, provoke civil unrest, and challenge law enforcement capacity. E.g., overwhelmed hospitals and shortages of essentials can trigger protests or violent incidents (Aning & Atta-Asamoah, 2018) [9].

Public Health Emergency ↔ Human Security
Health is fundamental to human security, which is concerned with protecting the "vital core of all human lives in ways that enhance human freedoms and human fulfilment," and people's ability to exercise their freedoms depends on their health. In other words, health directly constitutes people's wellbeing and enables people to exercise agency (that is, the ability to pursue what they value in life). In contrast, ill health not only diminishes wellbeing; it also limits people's agency. Threats to health present some of the most critical challenges to human security (WHO, 2021) [69]. The Covid-19 pandemic has been one of the most acute threats to people's health in recent decades, but this type of pandemic is expected to increase in frequency in the near future. Covid-19 started as a health shock and has gone hand in hand with an enormous setback for human development. In 2021 Covid-19 adjusted Human Development Index (HDI) values remain far below their precrisis levels resulting in a clear setback to human security. The pandemic has shown that without considering threats to human security, gains in human development remain vulnerable to reversal. Health crises directly threaten life, livelihoods, and well-being, reducing human security (WHO, 2021) [69].

Internal Security ↔ Human Security
Whether naturally occurring or intentionally inflicted, microbial agents can cause illness, disability, and death in individuals while disrupting entire populations, economies, and governments. In the highly interconnected and readily traversed 'global village' of our time, one nation's problem soon becomes every nation's problem as geographical and political boundaries offer trivial impediments to such threats (UNDP, 1994) [60]. The end of the Cold War and with it the demise of superpower conflict predicated on military might opened an intellectual and policy space for the consideration of threats of a non-military nature. In 1994 the United Nations Development Programme released its annual report entitled New Dimensions of Human Security. Although directed towards a development studies audience, the report was quickly co-opted by security studies policy-makers and scholars as a landmark document that established the initial parameters of the then nascent field of non-traditional security research. Among the seven fields of human security

identified in the report was that of health security. The 1994 report identified health security as encompassing infectious diseases in the developing world as well as lifestyle diseases in the developed world. Therefore, weak internal security exacerbates vulnerabilities, while insecurity limits access to healthcare and social services (UNDP, 1994) [60].

Public Health Emergency ↔ NTS Threats
Historically, public health and security were treated independently from each other, that is, as separate legal, policy, and practical issues. They also formed part of different policy domains. Since the 1990s, however, this historical perception of a public health-security relationship has drastically changed. The main catalyst for this change has been the perceived increased risk of acts of bioterrorism and other military acts that may lead to the international spread of diseases (for example, the intentional release of biological, chemical, or radiological agents) as well as naturally occurring outbreaks of infectious diseases as a global public health risk. Hence, it was not until the early post-Cold War period when the menace of inter-state armed conflicts considerably diminished that the first tendencies in the direction of connecting public health protection and the

maintenance of international peace and security began to emerge. Such an understanding of global health securitization focused on the anthropocentric notion of "human security," thus enabling consideration of international security dimension of infectious disease outbreaks as "non-traditional" threats to international peace and security. Therefore, epidemics represent non-traditional threats affecting economies, governance, and social cohesion (Chen *et al*., 2020) [17].

NTS Threats ↔ Internal Security
The concept of security has expanded beyond traditional military threats to encompass various non-traditional security challenges. The security, stability, and defense of a nation are significantly influenced by its armed forces. However, the military entities do not operate in isolation; they are an integral part of the larger society they serve. Throughout history, military institutions have not only been responsible for safeguarding a nation's security but also played a pivotal role in shaping societal values, norms, and cohesion. Non-traditional threats, including health emergencies, climate disasters, or migration crises, can compromise internal security systems (Thakur, 2018) [59].
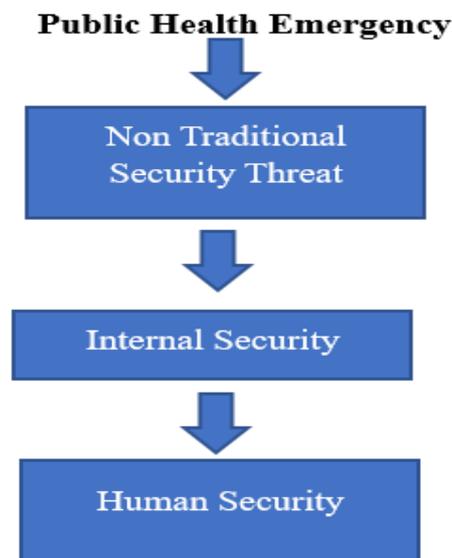
Conceptual Framework Diagram

Fig 1: Conceptual Framework Diagram

Explanation:
Public health emergencies trigger non-traditional security threats, such as social unrest, economic instability, and political stress.
These threats impact internal security, testing law enforcement, governance, and civil order.
Ultimately, the population's human security is affected, encompassing health, economic, and personal safety dimensions.
The arrows also reflect feedback loops: poor human security or weak internal security can worsen the effects of future public health emergencies.
This framework demonstrates that health crises are no longer solely medical concerns. They are intertwined with national security, societal stability, and human well-being.

Addressing public health emergencies requires multi-sectoral strategies integrating health policies, security planning, and social protection measures (Chen *et al*., 2020; WHO, 2021).

Lassa Fever Health Emergency and Internal Security in Ondo State
Lassa Fever is an acute viral haemorrhagic disease caused by the Lassa virus, a member of the Arenaviridae family, the disease is endemic in Nigeria and several West African countries, where it constitutes a persistent public health emergency (WHO, 2023) [74]. Nigeria records seasonal outbreaks annually, with Ondo State consistently identified as one of the most affected states, as the classification is linked to sustained transmission, repeated outbreaks, and a high proportion of national confirmed cases reported from the

state over multiple years (Ajayi *et al*., 2021; NCDC, 2023) [7, 48]. Lassa Fever transmission in Ondo State occurs through both zoonotic and human-to-human pathways, the primary transmission results from exposure to food, water, or household items contaminated with urine or faeces of infected Mastomys natalensis rodents (WHO, 2023) [74] while secondary transmission occurs through direct contact with blood or bodily fluids of infected individuals, particularly in healthcare settings lacking adequate infection prevention and control (IPC) measures (Olayinka *et al*., 2020).

Epidemiological surveillance shows that Ondo State accounts for a significant proportion of Nigeria's confirmed Lassa Fever cases annually, particularly during the dry season (December–April), when rodent intrusion into homes increases (NCDC, 2022) [46]. Local government areas such as Owo, Akure South, and Idanre frequently record clusters of cases, indicating localized endemicity (Ajayi *et al*., 2021) [7]. Historically, data have revealed that Lassa Fever has persisted in Ondo State for over a decade with increasing intensity, between 2014 and 2019, the state recorded over 550 confirmed cases and more than 130 deaths, reflecting both rising incidence and improved surveillance capacity (Isere *et al*., 2021) [32]. In 2018, Ondo State contributed approximately 25% of Nigeria's total confirmed cases, rising to nearly 30% in subsequent outbreak years (NCDC, 2020; NCDC, 2023) [44, 48].

According to Adebimpe (2020), socio-cultural and environmental factors play a critical role in sustaining Lassa Fever transmission in Ondo State, poor waste management, inadequate housing structures, and food storage practices that attract rodents increase human–rodent contact. Cultural practices such as drying agricultural produce in open spaces and limited use of rodent-proof containers further heighten exposure risks (Olayinka *et al*., 2020). Furthermore, environmental studies have shown that communities with poor sanitation infrastructure and high population density record higher incidence rates, highlighting the interaction between ecology, poverty, and disease transmission (Ajayi *et al*., 2021) [7].

Ondo State's internal security framework comprises the, Nigeria Police Force, Department of State services, (DSS), Nigeria Security and Civil Defence Corps (NSCDC), emergency management agencies, and local vigilance structures. During Lassa Fever outbreaks, these institutions assist in intelligence gathering, report writing, crowd control, protection of health facilities, and enforcement of public health measures. While health institutions lead outbreak response, security agencies ensure stability and compliance, illustrating the intersection between health governance and internal security. Ondo state once regarded as relatively stable, has recently seen a surge in ritual killings, land disputes, and kidnappings particularly along Owo and Akoko highway (Balogun, 2019) [12].

Effects of Lassa Fever Health Emergency on Internal Security in Ondo State
Lassa Fever in Nigeria, particularly in Ondo State, is not only a public health crisis but also an emerging internal security concern. The recurrence of outbreaks creates disruptions in social stability, government operations, economic activity, public order, and the capacity of security institutions to perform their duties. Understanding these effects is crucial for integrating public health into internal security frameworks and for developing effective, multi-sectoral response

strategies. Hereunder is the detail explanation of the effects of Lassa Fever health emergency on internal security in Ondo State:

1. Disruption of Social Stability and Public Order
Lassa Fever outbreaks generate fear, uncertainty, and behavioural disruptions in communities, this high levels of anxiety, fear of contagion, and misinformation can lead to social unrest, resistance to public health directives, and breakdown of routine social interactions (WHO, 2023) [74]. Stigma against infected persons or communities can further erode social cohesion, leading to exclusion, discrimination, and community tension. In many affected communities, rumours and misconceptions about the disease may result in distrust of government messages and health facilities, increasing resistance to disease containment measures such as isolation and contact tracing, potentially escalating into public unrest. These dynamics directly challenge internal security by undermining compliance with law and public order. (WHO, 2023; Ajayi *et al*., 2021) [74, 7]

2. Strain on Government and Security Institution Capacities
Repeated Lassa Fever emergencies place additional burdens on government resources and security agency capacity. Health facilities and public health workers are often overwhelmed during peaks, limiting their ability to provide routine care (NCDC, 2022) [46]. Simultaneously, security agencies like the Nigeria Police Force and the Nigeria Security and Civil Defence Corps may be required to allocate personnel and logistics to support health directives and public compliance efforts, diverting resources from routine policing and traditional internal security duties.
This strain affects the operational effectiveness of security agencies when they must balance health emergency support with enforcement of law and order, crime prevention, and protection of citizens from other non-health threats. As crises escalate, the dual expectations on security and civil defence agencies can challenge their capacity to manage concurrent non-health security issues. (NCDC, 2022; McInnes & Rushton, 2014) [46, 35]

3. Pressure on Public Trust and Governance
Lassa Fever emergencies may expose weaknesses in government preparedness and response capacity. When communities perceive delays in response or inadequate support, public trust in institutions may decline, yielding frustration, protests, or reduced compliance with public directives. This erosion of trust can complicate enforcement of public health and security policies and may indirectly weaken state authority in some localities. Trust deficits can also lead to increased reliance on unofficial community authorities, which can fragment coordination efforts and create competing sources of social influence, sometimes to the detriment of unified internal security objectives (WHO, 2023; Ajayi *et al*., 2021) [74, 7].

Security Challenges Arising from the Lassa Fever Emergency
The Lassa Fever health emergency gives rise to specific internal security challenges in Ondo State to include:

1. Misinformation and Rumour-Driven Unrest
Misinformation including beliefs that the disease is a hoax or

that response teams are not trustworthy fuels public anxiety and can prompt non-compliance with isolation protocols, attacks on health workers, or refusal to report symptoms. Such conditions can result in confrontations between community members and law enforcement, straining internal security apparatus (WHO, 2023) [74].

2. Community Resistance to Public Health Measures
Outbreak control relies on community cooperation with isolation, quarantine, and contact tracing. Resistance can create flashpoints requiring security support to enforce compliance, which can strain relationships between citizens and security agencies and reduce cooperation in future emergencies. (NCDC, 2022) [46]

3. Increased Burden on Security Services
With security personnel diverted to support outbreak efforts such as crowd control at health facilities or assisting in mobility directives, there is reduced enforcement presence for conventional internal security threats such as theft, vandalism, and civil unrest unrelated to health emergencies. This reallocation can create gaps in crime prevention and law enforcement. (McInnes & Rushton, 2014) [35]

4. Stigma, Social Exclusion, and Community Tension
Fear of infection and stigma against individuals suspected of or recovering from Lassa fever may lead communities to ostracize affected families or households. Social exclusion can contribute to anger, resentment, and localised conflict, posing additional challenges to maintaining peace and stability. (Ajayi *et al*., 2021) [7]

5. Coordination Difficulties Between Agencies
During emergencies, internal security can be challenged by coordination difficulties among public health authorities, security forces, local government officials, and community leaders. Conflicting priorities and communication gaps can slow response times and hinder proactive measures to maintain both health safety and public order. (WHO, 2018; NCDC, 2023) [65, 48]

Economic Implications of Lassa Fever Outbreaks and How They Influence Security Challenges in Ondo State
Lassa fever outbreaks have significant economic impacts that can undermine internal security stability in Ondo State. These include:

Loss of productivity: Illness and mortality reduce labour supply, particularly in agricultural and informal sectors that dominate Ondo State's economy, leading to reduced household income and economic hardship (Eneh, 2022) [20].

Healthcare costs: Outbreaks increase medical and indirect costs for families and government, affecting overall economic resilience (Eneh, 2022) [20].

Business interruptions: Markets, trade, and local enterprises may slow due to fear of spread and reduced consumer engagement.

Economic hardship can contribute to increased social tensions, petty crime, and instability as communities struggle with reduced livelihoods and elevated stress conditions that pose challenges to maintaining internal security (Eneh, 2022; McInnes & Lee, 2012) [20, 36].

Theoretical Framework
This study is anchored on four complementary theoretical perspectives, namely: Human Security Theory, Non-Traditional Security Theory, State Capacity Theory, and the Political Economy of Health, to explain how public health emergencies such as Lassa fever intersect with internal security dynamics. Together, these theories provide a multidisciplinary lens for understanding the complex linkages between disease outbreaks, governance, and security outcomes.

Human Security Theory
Human Security Theory emerged in the 1990s as a response to the limitations of state-centric security approaches that focused primarily on military threats. Popularized by the United Nations Development Programme (UNDP), the theory shifts the referent object of security from the state to the individual, emphasizing protection from threats such as disease, poverty, hunger, and environmental hazards (UNDP, 1994) [60]. Human security is broadly defined as freedom from fear and freedom from want, encompassing health, economic, food, environmental, personal, and community security, within this framework, health security is recognized as a core pillar of human security. Disease outbreaks undermine human security by threatening lives, disrupting livelihoods, and eroding access to essential services (Chen *et al*., 2003) [18]. In the context of Lassa fever in Nigeria, recurrent outbreaks compromise human security by increasing mortality, overwhelming healthcare systems, and creating widespread fear and social disruption. The theory therefore provides a strong justification for conceptualizing Lassa fever not merely as a biomedical issue but as a security concern that directly affects human survival and dignity.

Non-Traditional Security Theory
Non-Traditional Security (NTS) Theory broadens the concept of security beyond conventional military threats to include non-military challenges such as pandemics, climate change, food insecurity, and transnational crime (Buzan, Wæver, & de Wilde, 1998) [15]. According to this et, al. perspective, threats to security can arise from social, economic, and environmental processes rather than armed conflict alone. Public health emergencies are increasingly recognized as non-traditional security threats because of their capacity to destabilize societies, weaken institutions, and generate internal unrest (McInnes & Rushton, 2013) [34]. Lassa fever fits squarely within this framework, as its outbreaks disrupt social order, strain public resources, and necessitate the involvement of security agencies in enforcing public health measures. By adopting Non-Traditional Security Theory, this study situated Lassa fever within the evolving security discourse that acknowledged health crises as legitimate internal security threats.

State Capacity Theory
State Capacity Theory focuses on the ability of the state to design and implement policies, enforce rules, provide public goods, and respond effectively to crises (Fukuyama, 2004) [27]. High state capacity is associated with effective governance, public trust, and social stability, while weak capacity often results in policy failure and insecurity. In public health emergencies, state capacity determines the effectiveness of surveillance, emergency response, healthcare delivery, and coordination among institutions (Besley & Persson, 2011) [13]. In Nigeria, limitations in health infrastructure, funding, and inter-agency coordination have often constrained the response to Lassa fever outbreaks (NCDC, 2022) [46]. Weak state capacity can exacerbate insecurity by delaying containment efforts, increasing mortality, and undermining public confidence in government authority. This theory therefore explains how governance deficits contribute to the security implications of Lassa fever emergencies.

Political Economy of Health
The Political Economy of Health examines how political, economic, and social structures shape health outcomes and access to healthcare (Navarro, 2007) [40]. It argues that disease patterns are not accidental but are influenced by poverty, inequality, power relations, and policy choices. From this perspective, Lassa fever outbreaks in Nigeria are linked to structural conditions such as poor housing, inadequate sanitation, informal economies, and uneven health investment (Farmer, 2004) [21]. These structural vulnerabilities increase exposure to disease and limit the capacity of communities to respond effectively. The political economy approach highlights how marginalization and underdevelopment contribute to both poor health outcomes and heightened insecurity, reinforcing the cyclical relationship between disease and social instability.

Integrative Relevance of the Theories

Variables and Measurement

Combined, these four theories provided a robust analytical framework for understanding the relationship between Lassa fever and internal security. Human Security Theory foregrounds the protection of individuals; Non-Traditional Security Theory legitimizes health emergencies as security threats; State Capacity Theory explains institutional effectiveness and governance challenges; and the Political Economy of Health reveals the structural drivers of vulnerability. Together, they justify the study's argument that Lassa fever constitutes a significant internal security challenge, particularly in endemic regions such as Ondo State.

Methodology
Research Design
The study adopts a descriptive and explanatory research design based on secondary data. This design allows for systematic examination of existing records on Lassa fever outbreaks and internal security incidents to determine patterns and relationships. The secondary data were sourced from official and credible institutions including the Nigeria Centre for Disease Control (NCDC), Ondo State Ministry of Health, Nigeria Police Force annual security reports, government publications, and peer-reviewed academic journals.

Study Period
The study covers the period from 2017 to 2024, with exception of some years in between owing to none availability of data, capturing multiple cycles of Lassa Fever outbreaks and corresponding internal security dynamics in Ondo State.

Data Presentation
Findings are presented using tables and figures, such as line graphs, showing trends in Lassa fever cases and internal security incidents across the study period.

Table 1: Variables and Measurement (NCDC 2025; Nigeria Police Force annual security reports, 2025)

Variable	Type	Measure/source
Lassa Fever Confirmed Cases	Independent	Quarterly confirmed cases (NCDC reports)
Internal Security Incidents	Dependent	Quarterly recorded incidents (Police reports)

Table 1 highlights variable types and measure/source, it shows that both independent and dependent variables which are Lassa fever confirmed Cases and Internal security Incidents were quarterly measured and sourced for from NCDC reports and police reports.

Table 2: Sample Quarterly Data Summary (NCDC 2025; Nigeria Police Force annual security reports, 2025)

Year	Quarter	Lassa fever cases	Security incidents	Lassa fever burden on security services
2017	Q1	8	21	29
2018	Q1	15	36	51
2020	Q2	22	41	63
2024	Q4	9	19	28

Table 2 highlights sample quarterly data summary, it shows the year, particular quarter in the year, cases of lassa fever recorded and reported security incidents sourced for from NCDC reports and police reports.
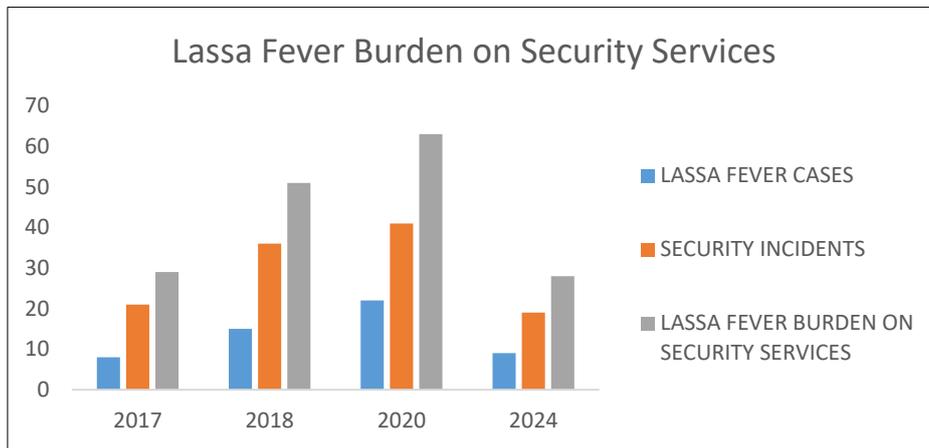
Fig 2: Frequency of Lassa Fever cases, Security Incidents and the burden of Lassa Fever on Security Services in Ondo State in the year 2017, 2018, 2020 and 2024.

Figure 2 Shows the frequency of lassa fever cases, security incidents, and the burden of lassa fever cases on security serv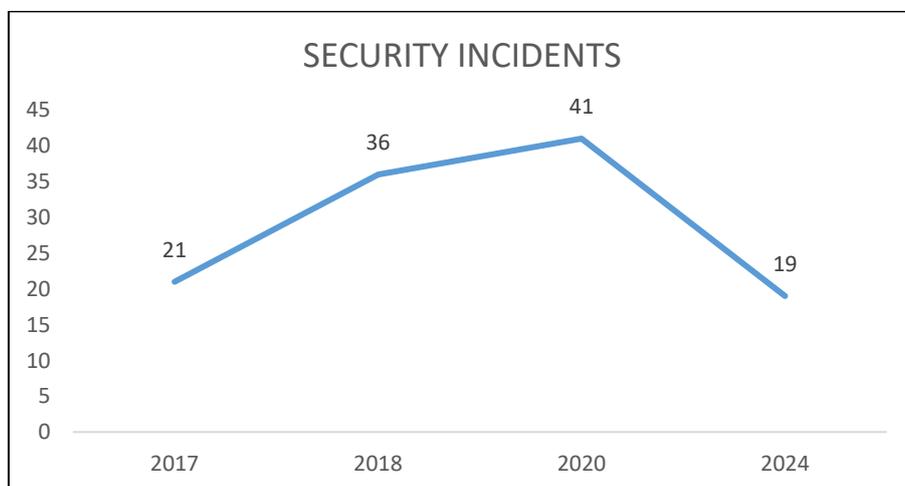ices in Ondo state in the 2017, 2018, 2020 and 2024 indicating that outbreak of Lassa fever can cause increased burden on security services.
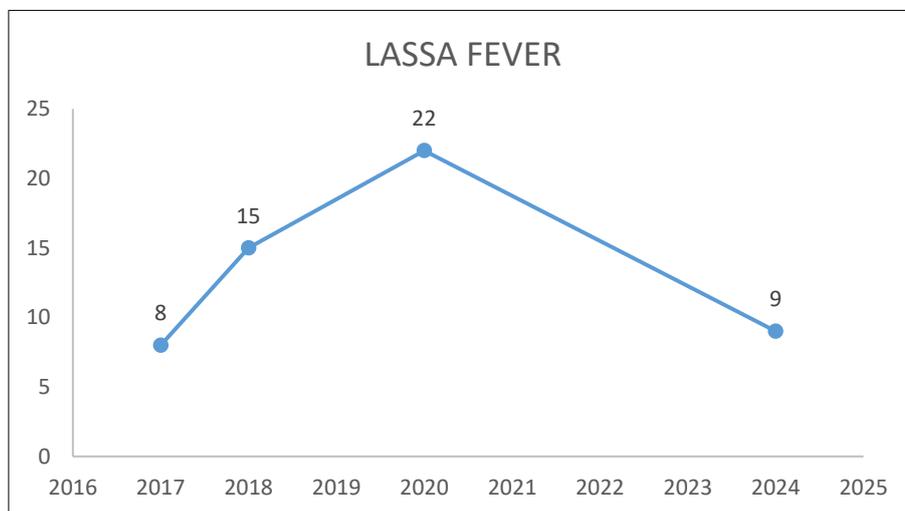
Fig 3: Frequency of Lassa Fever Cases in Ondo state in the year 2017, 2018, 2020 and 2024.

Figure 3: Shows the frequency of Lassa Fever Cases in Ondo state in the year 2017, 2018, 2020 and 2024 indicating high number of cases in the year 2020 occasioned by stretched of health system as many health facilities redirected staff, equipment and resources towards handling covid-19, and indication that public health crises can strain health system and by extension affect internal security.

Fig 4: Frequency of security incidents in Ondo State in the year 2017, 2018, 2020, and 2024

Figure 4 shows frequency of security incidents in Ondo State in the year 2017, 2018, 2020, and 2024 indicating increase in security incidents in the year 2020 due to outbreak of covid-19 and lassa fever as security personnel were less visible in communities because they were tasked with enforcing pandemic rules or handling emergency responses.

Ethical standards such as data accuracy, source acknowledgment, and objectivity were maintained. All data used were sourced from credible public databases and publications and proper citation practices were observed to respect intellectual property rights.

Data Analysis

Sample quarterly data summary indicates that there were 8 cases of Lassa Fever in the first quarter of year 2017, which put additional burden on security services battling with the 21 security incidents in the first quarter of the same year. This report is related to the previous study by NCDC (2022) [46] that reported that repeated Lassa Fever emergencies place additional burdens on government resources and security agency capacity.

Also, data indicates that there were 15 cases of Lassa Fever and 36 cases of security incidents in the first quarter of 2018, the recurrent Lassa Fever health emergency is capable of disrupting social stability and public order, this is similar to a previous study by (Ajayi et al., 2021; WHO, 2023) [7, 71] that reported that Lassa Fever outbreaks generate fear, uncertainty, behavioural disruptions, and misinformation that can lead to social unrest, resistance to public health directives and breakdown of routine social interaction.

Furthermore, data indicates that there were increase in the numbers of Lassa Fever cases (22) and security incidents (41) in the second quarter of year 2020. The study is related to the previous study by (McInnes & Rushton, 2014; NCDC, 2022) [35, 46] that repeated Lassa Fever emergencies place additional burdens on government resources and security agency capacity and this strain affects the operational effectiveness of security agencies when they must balance health emergency support with enforcement of law and order, crime prevention and protection of citizens from other non-health threats.

Discussion of the Findings

The result of this research presented that repeated Lassa Fever emergency place additional burdens on government resources and security agency capacity. This report is similar with a previous report by McInnes & Rushton (2014) [35], that Lassa Fever health emergency affects the operational effectiveness of security agencies when they must balance health emergency support with enforcement of law and order, crime prevention, and protection of citizens from other non-health threats. As crises escalate, the dual expectations on security agencies can challenge their capacity to manage concurrent non-health security issues.

Also, the result of this analysis that Lassa Fever put additional burden on security services, is similar to Non-Traditional Security Theory that stated that threats to security can arise from social, economic, and environmental processes rather than armed conflict alone. The theory further added that public health emergencies are increasingly recognized as non-traditional security threats because of their capacity to destabilize societies, weaken institutions, and generate internal unrest (McInnes & Rushton, 2013) [34]. The theory concluded that Lassa fever fits squarely within this framework, as its outbreaks disrupt social order, strain public resources, and necessitate the involvement of security agencies in enforcing public health measures.

This report is also in conformity with State Capacity Theory that stated that state capacity determines the effectiveness of surveillance, emergency response, healthcare delivery, and coordination among institutions (Besley & Persson, 2011) [13]. The theory stated further that limitations in health infrastructure, funding, and inter-agency coordination have often constrained the response to Lassa fever outbreaks (NCDC, 2022) [46].

Similarly, data indicates that there were increase in the numbers of Lassa Fever cases (22) and security incidents (41) in the second quarter of year 2020. The report is related to the previous study that increase in illness and mortality reduce labour supply, particularly in agricultural and informal sectors that dominate Ondo State's economy, leading to reduced household income and economic hardship and that this hardship can contribute to increased social tensions, petty crime, and instability as communities struggle with reduced livelihoods and elevated stress conditions that pose challenges to maintaining internal security (Eneh, 2022; McInnes & Lee, 2012) [20, 36].

Relatedly, analysis shows that Lassa Fever recurrent is capable of generate fear, uncertainty, behavioural disruptions, and misinformation that can lead to social unrest, resistance to public health directives and breakdown of routine social interaction. This is in contrast with human security theory that stated that Human security is broadly defined as freedom from fear and freedom from want, encompassing health, economic, food, environmental, personal, and community security. The theory added that health security is recognized as a core pillar of human security therefore, disease outbreaks undermine human security by threatening lives, disrupting livelihoods, and eroding access to essential services (Chen et al., 2003) [18]. In the context of Lassa Fever recurrent outbreaks compromise human security by increasing mortality, overwhelming healthcare systems, and creating widespread fear and social disruption.

Conclusion

The Lassa Fever health emergency in Ondo State has demonstrated that public health crises are not isolated medical events but complex security challenges with far-reaching implications for internal stability. The recurrent outbreaks, particularly since 2017 and peaking during periods such as the COVID-19 pandemic, have exposed structural weaknesses in healthcare delivery, emergency preparedness, and inter-agency coordination within the state (NCDC, 2020; WHO, 2023) [44, 71].

The study establishes that Lassa fever outbreaks indirectly affect internal security by overstretching state institutions, diverting security agencies to support public health enforcement, and heightening fear, misinformation, and social tension at the community level. Quarantine enforcement, restriction of movement, and resistance to health interventions have occasionally strained civil–security relations, thereby complicating routine policing and crime prevention (Adebimpe, 2019; Ilesanmi & Afolabi, 2021) [1, 29]. In rural and peri-urban communities where trust in government institutions remains fragile, health emergencies have further weakened community-based security cooperation.

Furthermore, the socio-economic consequences of Lassa fever—loss of livelihoods, increased poverty, disruption of markets, and healthcare costs—create conditions that can exacerbate criminality and social unrest, particularly among vulnerable populations (Oyeyemi *et al*., 2020) [55]. The Ondo State experience underscores the validity of human security and non-traditional security perspectives, which emphasize that threats to health can translate into threats to state stability when institutional response capacity is limited.

In conclusion, Lassa fever in Ondo State represents a dual public health and internal security challenge. Effective management therefore requires an integrated governance approach that strengthens health systems while safeguarding public order, community trust, and institutional legitimacy.

Recommendations

1. Institutionalisation of Health–Security Coordination
There should be collaboration between public health authorities and security agencies through standing emergency response frameworks. Joint planning and simulation exercises involving the Ministry of Health, NCDC, Police, Civil Defence, and local governments will improve crisis response efficiency and reduce operational friction during outbreaks.

2. Strengthening Disease Surveillance and Early Warning Systems
Enhanced community-based surveillance and real-time reporting mechanisms should be expanded across all Local Government Areas. Early detection of outbreaks will reduce escalation, limit social disruption, and minimise the need for heavy security deployment during health emergencies.

3. Community Engagement and Trust-Building
Risk communication strategies must go beyond awareness campaigns to actively involve traditional rulers, religious leaders, and community associations. Strengthening community trust will improve compliance with health directives and sustain informal security networks critical for maintaining internal stability.

4. Capacity Building for Frontline Personnel
Regular training in infection prevention and control should be extended to security personnel who support outbreak responses. This will protect officers, reduce fear-driven resistance, and enhance professional conduct during enforcement of public health measures.

5. Adoption of a One Health Approach
A coordinated One Health strategy integrating environmental sanitation, rodent control, agricultural practices, and public health interventions should be prioritised. Addressing the ecological drivers of Lassa fever will reduce outbreak frequency and its attendant security pressures.

6. Sustainable Funding and Health System Strengthening
Long-term investment in healthcare infrastructure, laboratory capacity, and emergency operations centres is essential. A resilient health system reduces dependence on security agencies during crises and enhances overall state capacity to manage non-traditional security threats.

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