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A systematic review of the impact of economic and security conditions on mental health and well-being in Nigeria

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Abstract

Nigeria faces the dual burden of escalating economic instability and pervasive insecurity. However, a comprehensive synthesis of evidence examining how these macro-level stressors are associated with mental health and well-being in the Nigerian population remains limited. This systematic review synthesized empirical evidence linking economic hardship and security challenges to mental health outcomes in Nigeria.

A systematic search of PubMed, Scopus, AJOL, BMC, SpringerLink, ScienceDirect, and Google Scholar was conducted for peer-reviewed original studies published between 2020 and 2025. Studies were included if they examined associations between economic conditions (including unemployment, poverty, inflation, and food insecurity) or security-related conditions (including conflict, displacement, and violence) and mental health outcomes among Nigerian populations. Risk of bias was assessed using the Joanna Briggs Institute critical appraisal checklist, and findings were synthesized narratively because of substantial methodological and clinical heterogeneity across included studies.

A total of 26 studies met the inclusion criteria. Financial strain, unemployment, and food insecurity were consistently associated with elevated depression, anxiety, and psychological distress. Security-related exposures, particularly the Boko Haram insurgency, communal violence, and displacement, were linked to increased post-traumatic stress disorder, depression, and psychological distress among internally displaced persons and frontline populations. Women, youth, informal workers, and conflict-affected populations experienced disproportionately elevated mental health burdens. Social support, religious involvement, physical activity, and stable income emerged as important protective factors.

The findings suggest that economic deprivation and insecurity are important and interrelated determinants of mental health challenges in Nigeria. Addressing these burdens requires integrated and multi-sectoral strategies combining mental health services with poverty alleviation, social protection, humanitarian response, and peacebuilding initiatives. Strengthening community-based psychosocial support systems and integrating mental health into humanitarian and economic recovery programs should be prioritized.

Key words: impact, economic conditions, security conditions, insecurity, mental health, well-being, Nigeria.

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Introduction

Mental health is increasingly recognized as a fundamental component of global public health and sustainable development.[1] The Sustainable Development Goals (target 3.4) emphasize the promotion of mental health and well-being for all.[1] Globally, mental disorders account for approximately 13% of the total disease burden, with depression remaining a leading cause of disability worldwide.[2] Low- and middle-income countries (LMICs) bear a disproportionate share of this burden, yet more than 75% of individuals with mental disorders in these settings do not receive adequate treatment or psychosocial support.[3]

Economic and security conditions are increasingly recognized as important structural determinants of mental health. Evidence from high-income and LMIC settings indicates that unemployment, poverty, financial insecurity, income inequality, and economic instability are associated with elevated risks of depression, anxiety, psychological distress, and suicide.[4] Similarly, exposure to armed conflict, displacement, terrorism, and community violence has consistently been linked to post-traumatic stress disorder (PTSD), depression, anxiety, and reduced quality of life.[5] In fragile and conflict-affected settings, economic hardship and insecurity frequently coexist and may interact to worsen mental health outcomes.[6]

Sub-Saharan Africa faces substantial mental health system challenges, including severe shortages of trained professionals and limited access to mental health services.[7] The region has fewer than 1.4 mental health workers per 100,000 population, compared with a global average of approximately 9.0 per 100,000.[7] Nigeria, Africa's most populous country, experiences one of the largest mental health treatment gaps globally, with an estimated 85% of individuals living with mental disorders lacking access to formal care.[8] Although the 2023 National Mental Health Policy marked an important shift toward a broader public health approach to mental

healthcare, implementation remains limited because of inadequate funding, workforce shortages, and weak service integration.[9]

Nigeria's recent economic environment has been characterized by prolonged instability.[10] The country experienced economic recessions in 2016 and 2020, while the COVID-19 pandemic intensified unemployment, inflation, and household financial insecurity.[10] Although revisions in labor force methodology altered official unemployment estimates in 2023, economic hardship remains widespread.[11] Inflation exceeded 31.7% in February 2024, while the removal of fuel subsidies in May 2023 substantially increased transportation costs and the prices of essential commodities.[12,13] Food insecurity has also intensified, with more than 25 million Nigerians estimated to be experiencing acute food insecurity.[14] Alongside these economic pressures, Nigeria continues to face multiple and overlapping security crises.[15] The Boko Haram insurgency in northeast Nigeria has resulted in extensive displacement, loss of life, and destruction of livelihoods.[15] Other regions have experienced banditry, kidnapping, farmer-herder conflicts, communal violence, and separatist-related insecurity.[16,17] These conditions have contributed to persistent uncertainty, trauma exposure, displacement, and social disruption across affected communities.[18]

Emerging evidence suggests increasing rates of depression, anxiety, PTSD, psychological distress, and suicidal behavior among various Nigerian populations affected by economic hardship and insecurity.[19-21] However, existing studies remain fragmented, with most focusing on either economic conditions or security-related exposures independently. Limited evidence synthesis exists regarding how these intersecting structural stressors collectively influence mental health and well-being in Nigeria. In this review, "economic hardship" refers broadly to adverse socioeconomic conditions, including unemployment, poverty, inflation, food insecurity, and financial strain. Related concepts such as "economic deprivation" and "financial strain" are interpreted according to how they were operationalized within the included studies.

This systematic review therefore synthesises empirical evidence on the associations between economic conditions, insecurity, and mental health outcomes in Nigeria. The review also examines vulnerable populations, protective factors, methodological limitations, and key evidence gaps relevant to research, policy, and mental health system strengthening. Given the heterogeneity of included studies, findings were synthesized narratively rather than quantitatively.

Objectives of the study

The primary objective of this systematic review was to synthesize evidence on the impact of economic and security conditions on the mental health and well-being of populations in Nigeria. Specific objectives were: i) to identify and characterize the key economic conditions (*e.g.*, poverty, unemployment, inflation, food insecurity, financial strain) associated with adverse mental health outcomes in Nigeria; ii) to identify and characterize the key security conditions (*e.g.*, insurgency, communal conflict, displacement, violence, kidnapping) associated with adverse mental health outcomes; iii) to examine the interplay and potential synergistic effects of co-occurring economic hardship and insecurity; iv) to map the most commonly reported mental health outcomes, including depression, anxiety, PTSD, psychological distress, and suicidal behavior; v) to identify vulnerable population subgroups disproportionately affected by these dual stressors; vi) to identify protective factors and coping mechanisms that mitigate adverse mental health outcomes; vii) to highlight gaps in the existing literature and propose directions for future research.

Methods

Study design

A systematic review employing narrative synthesis was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines.[22] Given the substantial heterogeneity in study populations, exposure definitions, outcome measures, and study designs, meta-analysis was not considered appropriate.

Information sources

The following electronic databases were systematically searched: PubMed, Scopus, AJOL, BMC, SpringerLink, ScienceDirect, and Google Scholar. Searches were conducted between January 2020 and December 2025. The final search was completed on 30 April 2026. Reference lists of eligible studies were hand-searched for additional citations.

Search strategy

The search strategy was developed iteratively and refined following preliminary searches across the selected databases. Both Medical Subject Headings (MeSH) and free-text terms were used. A sample PubMed search strategy included the following terms: ("Nigeria" OR "Nigerian") AND ("economic hardship" OR "economic crisis" OR "unemployment" OR "poverty" OR "financial strain" OR "food insecurity" OR "insecurity" OR "conflict" OR "insurgency" OR "Boko Haram" OR "displacement" OR "violence") AND ("mental health" OR "psychological distress" OR "depression" OR "anxiety" OR "PTSD" OR "post-traumatic stress disorder" OR "suicide"). Filters for publication year (2020-2025) and English language were applied. The search strategy was adapted appropriately for each database.

Eligibility criteria

Inclusion criteria

Inclusion criteria involved peer-reviewed original research (quantitative, qualitative, or mixed-methods), studies conducted in Nigeria, studies that explicitly examined the association or impact of at least one economic or security condition on at least one mental health or well-being outcome, published in English between January 1, 2020, and December 31, 2025, and full-text articles accessible through institutional or open-access means.

Exclusion criteria

Exclusion criteria involved editorials, commentaries, conference abstracts, letters, grey literature, dissertations, reviews of any kind (systematic, scoping, meta-analysis), studies that did not report original data, studies conducted exclusively on Nigerian diaspora populations outside Nigeria, studies examining mental health as an exposure and economic/security conditions as outcomes, studies focusing exclusively on clinical treatment interventions without examining economic or security determinants. Table 1 presents the criteria for inclusion and exclusion.

Risk of bias assessment

Risk of bias was formally assessed using the Joanna Briggs Institute (JBI) critical appraisal checklist for analytical cross□sectional studies.[23] Table 2 presents the risk of bias assessment summary table.

Study selection

Two reviewers independently screened titles and abstracts against the eligibility criteria. Full texts of potentially eligible studies were then independently assessed. Disagreements were resolved through discussion.

Data extraction and synthesis approach

A standardized data extraction form was used. Extracted data included authors (year), objectives, study design, study settings and sample size, instrument used, key findings, and conclusion. Due to heterogeneity in study populations, sampling approaches, exposure measurements, mental health outcomes, and analytical methods, quantitative pooling of results was not feasible. Consequently, a narrative thematic synthesis approach was employed to organize and interpret the findings.

Study selection and screening procedure

Records identified through database searching (n=2847); records after duplicates removed (n=1963), records screened (title/abstract) (n=884); records excluded (n=744); full-text articles assessed for eligibility (n=140); full-text articles excluded, with reasons (n=114): not focused on Nigeria (n=17), did not examine economic/security determinants (n=29), did not measure mental health outcomes (n=18), review article (n=8), commentary/editorial (n=14), duplicate data

Table 1. Eligibility criteria.

Criterion	Inclusion	Exclusion
Study type	Peer-reviewed original research	Reviews, commentaries, editorials, grey literature
Population	Residents of Nigeria	Diaspora populations only
Exposure	Economic and/or security conditions	No such exposure examined
Outcome	Mental health/well-being measures	Other health outcomes only
Language	English	Non-English
Year	2020-2025	Prior to 2020
Accessibility	Full text available	Abstract only

Table 2. Risk of bias assessment.

Authors (year)	Risk of bias assessment	Quality assessment
Bakare *et al*. (2024)[13]	Moderate risk of bias	Moderate quality
Eneh and Eneh (2024)[17]	Low risk of bias	High quality
Yakubu *et al.* (2025)[19]	Low risk of bias	High quality
Sato *et al.* (2022)[20]	Low risk of bias	High quality
Haruna *et al.* (2025)[21]	Moderate risk of bias	Moderate quality
Egwuaba *et al.* (2025)[24]	Moderate risk of bias	Moderate quality
Salami *et al.* (2024)[25]	Moderate risk of bias	Moderate quality
Abonyi *et al.* (2024)[26]	High risk of bias	Low quality
Oladosu *et al.* (2024)[27]	Low risk of bias	High quality
Abamara *et al*. (2024)[28]	Moderate risk of bias	Moderate quality
Oderinde *et al*. (2023)[29]	Moderate risk of bias	Moderate quality
Agberotimi *et al*. (2020)[30]	Moderate risk of bias	Moderate quality
Folaya*et al*. (2021)[31]	Moderate risk of bias	Moderate quality
Mūrage *et al*. (2023)[32]	High risk of bias	Low quality
Ani *et al.* (2024)[33]	Moderate risk of bias	Moderate quality
Oginni *et al.* (2023)[34]	High risk of bias	Low quality
Okeke *et al*. (2023)[35]	Moderate risk of bias	Moderate quality
Daniel (2024)[36]	High risk of bias	Low quality
Olorunlambe *et al.* (2024)[37]	Moderate risk of bias	Moderate quality
Ochonye *et al*. (2024)[38]	Moderate risk of bias	Moderate quality
Umeh *et al.* (2024)[39]	Moderate risk of bias	Moderate quality
Olugbenga-Bello *et al*. (2025)[40]	Moderate risk of bias	Moderate quality
Alapa *et al*. (2023)[41]	Moderate risk of bias	Moderate quality
Olusina *et al.* (2025)[42]	Moderate risk of bias	Moderate quality
Omotosho *et al*. (2025)[43]	Moderate risk of bias	Moderate quality
Olohunlana *et al*. (2024)[44]	Moderate risk of bias	Moderate quality

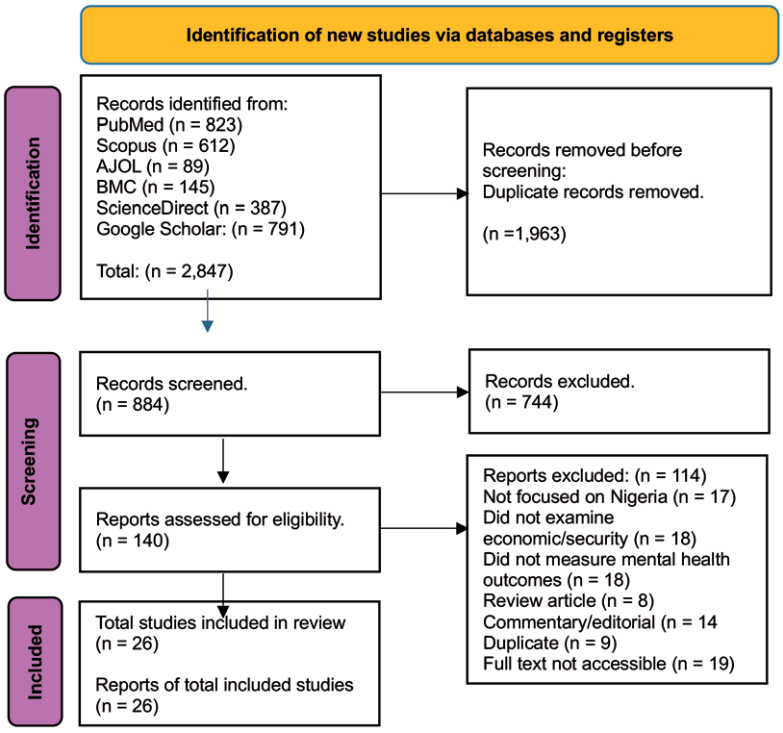

Figure 1. Diagram of the PRISMA 2020 Process for Systematic Reviews and Meta-Analyses.

(n=9), full text not accessible (n=19); studies included in synthesis (n=26). Figure 1 presents the PRISMA Flow Diagram.

Quality appraisal of the included studies

Overall methodological quality was appraised by integrating the risk of bias ratings with additional considerations relating to study design appropriateness, sampling methods, measurement validity, and generalizability. Studies were categorized as high quality (rigorous methodology and low risk of bias), moderate quality (methodologically informative with some limitations), or low quality (substantial methodological concerns reducing confidence in findings). Most studies (n=18) were rated as moderate quality, primarily because of reliance on cross-sectional designs and self-reported mental health measures. Four studies were categorized as high quality, while four were rated as low quality because of substantial sampling limitations or inadequate methodological reporting. Although methodological limitations reduce confidence in causal interpretation, the consistency of findings across diverse populations and settings strengthens confidence in the overall direction of the observed associations. Table 3 presents the quality appraisal of included studies.

Table 3. Quality appraisal of included studies.

Domain	Rating	Comments
Clarity of objectives	High (n=24) Moderate (n=2)	Most studies articulated clear aims
Appropriateness of design	High (n=21) Moderate (n=5)	Cross-sectional designs predominated
Sampling strategy	High (n=10) Moderate (n=13) Low (n=3)	Convenience sampling was common
Measurement of exposures	Moderate (n=20) Low (n=6)	Few used validated economic/security scales
Measurement of outcomes	High (n=23) Moderate (n=3)	PHQ-9, GAD-7, PCL-5 widely applied
Control of confounding	Moderate (n=16) Low (n=10)	Variable adjustment for confounders
Generalizability	Moderate (n=18) Low (n=8)	Geographic and occupational specificity

GAD-7, Generalized Anxiety Disorder-7; PCL-5, PTSD Checklist for DSM-5; PHQ-9 Patient Health Questionnaire-9.

Results

Characteristics of eligible included studies

A total of 26 studies were included in this systematic review. The studies comprised predominantly cross-sectional quantitative designs (n=22), alongside three qualitative studies and one mixed-methods study.[13,17,19,20,21,24-44] This distribution reflects the exploratory nature of the existing literature on the relationship between economic and security conditions and mental health outcomes in Nigeria. The included studies were conducted across all six geopolitical zones of Nigeria, with a higher concentration in the northeast, southwest, and southeast regions. This geographic distribution reflects both the severity of insecurity-related challenges in the northeast and the concentration of economic and occupational studies in more urbanized southern regions.

Sample sizes varied considerably across studies, ranging from small qualitative samples of approximately 14-30 participants to large-scale quantitative surveys exceeding 2000 respondents. Overall, the included studies captured diverse population groups, including internally displaced persons (IDPs), healthcare workers, students and adolescents, military personnel, informal sector workers, civil servants, elderly populations, and other vulnerable or hard-to-reach groups.

Mental health outcomes were assessed using a range of validated and non-validated instruments. Commonly reported outcomes included depression, anxiety, PTSD, psychological distress, suicidal ideation, and quality of life. Frequently used standardized tools included the Patient Health Questionnaire-9, Generalized Anxiety Disorder scale, PTSD Checklist, Strengths and Difficulties Questionnaire, and other validated psychometric scales. However, some studies relied on self-reported or qualitative assessments of mental health without standardized diagnostic instruments. Exposure variables across the included studies were broadly categorized into economic and security-related determinants. Economic exposures included unemployment, poverty, food insecurity, inflationary pressures, income instability, financial strain, and policy-related economic shocks such as subsidy removal and currency redesign. Security-related exposures included armed conflict, insurgency (particularly Boko Haram), communal violence, kidnapping, displacement, and exposure to traumatic events.

Despite variation in study design, population, and measurement tools, a consistent pattern emerged across studies linking both economic hardship and insecurity to adverse mental health outcomes. However, the heterogeneity in study methodologies, instruments, and sampling approaches limits direct comparability across studies and precludes quantitative synthesis. Overall, the included studies reflect a heterogeneous but converging body of evidence suggesting consistent associations between structural socioeconomic stressors, insecurity, and mental health outcomes in Nigeria, although methodological limitations restrict causal interpretation. *Supplementary Table 1* shows the summary of the included studies.

Thematic synthesis of findings

The thematic synthesis identified five overarching themes: i) economic deprivation as a pervasive mental health stressor; ii) insecurity and conflict as direct traumatic pathways to mental illness; iii) synergistic effects of co-occurring economic and security adversity; iv) vulnerable populations and intersecting inequalities; v) protective factors and resilience resources.

Economic determinants and mental health outcomes

Economic hardship emerged as the most consistently reported factor associated with adverse mental health outcomes across the included studies. Financial strain, unemployment, poverty, inflation, food insecurity, and reduced income were repeatedly linked to elevated depression, anxiety, psychological distress, and suicidal ideation.[13,19,20,29] Several studies suggested that economic stress operated through both material and psychosocial pathways. Persistent financial insecurity contributed to chronic stress, uncertainty, and emotional strain, while unemployment was associated with loss of income, social identity, and perceived stability.[4] Food insecurity further intensified psychological distress because of concerns regarding survival, caregiving responsibilities, and inability to meet basic household needs.[25,31]

The removal of the fuel subsidy in May 2023 was frequently discussed as a major economic stressor. Bakare *et al*. reported substantial increases in depression and anxiety symptoms among healthcare workers and community members in Jigawa State following the subsidy removal, with market women experiencing particularly high levels of distress.[13] Similarly, Ani *et al*. found that the Naira redesign policy and resulting cash scarcity were associated with worsening psychological well-being among affected populations.[33]

Low-income earners and unemployed individuals consistently experienced poorer mental health outcomes.[19,28] One study reported that earnings below ₦20,000 monthly were associated with significantly higher depressive symptoms among civil servants.[19] Unemployment was also identified as an important correlate of psychiatric relapse and suicidal behavior in several studies.[17,28,29] These findings collectively suggest that worsening economic conditions may contribute substantially to mental health vulnerability in Nigeria.

Security-related exposures and mental health outcomes

Security-related exposures constituted another major theme across the included studies. Conflict, terrorism, displacement, kidnapping, communal violence, and direct exposure to traumatic events were consistently associated with PTSD, depression, anxiety, and psychological distress.[17,21,24,39-41] The Boko Haram insurgency in northeast Nigeria was the most extensively examined security-related exposure.[24,39,41] Studies involving IDPs documented particularly high levels of trauma exposure, including witnessing killings, abductions, sexual violence, and destruction of homes and livelihoods.[24] These experiences were associated with severe psychological distress and elevated PTSD symptoms.

Children and adolescents appeared especially vulnerable to conflict-related mental health consequences. Haruna *et al*. found high levels of psychological distress among flood-affected and conflict-exposed children in Maiduguri.[21] Multiple stressors, including displacement, disrupted education, family instability, food insecurity, and persistent insecurity, contributed to worsening mental well-being.[39] Security-related mental health burdens extended beyond civilian populations. Military personnel deployed to insurgency-affected areas reported elevated psychological distress associated with combat exposure and operational stressors.[39]

Similarly, adolescents exposed to terrorist attacks in north-central Nigeria reported poor quality of life and emotional distress.[40] In the southeast region, insecurity associated with kidnapping and attacks by unknown gunmen was linked to worsening mental health and treatment disruption among psychiatric patients.[17]

Synergistic effects of economic hardship and insecurity

The findings suggest that economic hardship and insecurity frequently co-occurred and interacted in ways that amplified mental health risks.[24,41] This pattern was particularly evident among displaced populations in conflict-affected regions, where violence-related trauma was compounded by poverty, unemployment, food insecurity, and loss of livelihoods.[24,41] Sato *et al*. provided evidence suggesting an interconnected relationship between conflict exposure, depression, and reduced economic productivity.[20] Conflict exposure was associated with increased probability of depression, while depression itself was associated with reduced labor participation and lower investment in children's education.

These findings indicate that mental health challenges may both result from and contribute to worsening socioeconomic conditions. The interaction between insecurity and economic deprivation appeared to create a reinforcing cycle of vulnerability. Conflict disrupted livelihoods and economic activity, while poverty and unemployment reduced coping capacity and increased susceptibility to psychological distress. Collectively, these conditions contributed to persistent mental health burdens across affected communities.

Vulnerable populations and intersecting inequalities

The mental health impacts of economic and security conditions were not evenly distributed across populations. Women, adolescents, IDPs, informal workers, low-income earners, and residents of conflict-affected communities consistently experienced disproportionately higher psychological burdens.[13,24,32,37,42] Women appeared particularly vulnerable to the combined effects of economic insecurity and social stressors.[13] Market women experienced marked increases in anxiety and depressive symptoms following fuel subsidy removal, while female entrepreneurs reported psychological distress related to loan repayment pressures and financial instability.[13,44] Adolescent girls living in urban informal settlements also faced heightened vulnerability because of poverty, unsafe environments, and gender-based violence.[32]

Youth and students constituted another high-risk group.[26] Financial stress among university students was associated with depression, anxiety, and poor academic functioning.[42] Justice-involved adolescents and welfare-involved youth also demonstrated elevated PTSD and depressive symptoms.[37] Older adults similarly experienced substantial mental health challenges linked to financial strain, poor social support, and declining quality of life.[43]

Protective factors and resilience resources

Several studies identified protective and moderating factors that appeared to buffer the psychological effects of economic hardship and insecurity. Social support from family members, community networks, peers, and religious institutions emerged as the most consistently reported protective factor across diverse populations.[24,27] Among IDPs in Borno State, family cohesion, religious participation, and informal community support networks served as important coping mechanisms in the context of displacement and trauma exposure.[24] Similarly, reciprocity within social and occupational networks positively predicted mental well-being among informal workers.[27]

The findings suggest that protective factors may operate through psychosocial buffering mechanisms that reduce perceived stress, enhance emotional coping, and strengthen resilience under conditions of prolonged adversity. Religious involvement appeared particularly important within the Nigerian sociocultural context, where faith-based organizations frequently provide emotional, material, and social support in the absence of accessible formal mental health services.[24] Physical activity and relatively stable income levels also emerged as independent protective factors associated with reduced depression and anxiety symptoms.[19]

However, the evidence further indicates that informal coping mechanisms alone may be insufficient under conditions of severe or prolonged structural adversity. Persistent exposure to poverty, displacement, violence, and economic instability can overwhelm existing community resilience systems, particularly in settings with limited access to formal psychosocial and mental health services.[20] These findings underscore the importance of integrating community-based resilience approaches with sustainable structural and policy interventions.

Discussion

Interpretation and synthesis of findings

This systematic review synthesized evidence on the associations between economic conditions, insecurity, and mental health outcomes in Nigeria. Across the included studies, both economic hardship and insecurity consistently emerged as important correlates of depression, anxiety, PTSD, psychological distress, and suicidal behavior.[13,17,19-21,24-44] Economic hardship was consistently associated with poorer mental health outcomes across diverse populations. Unemployment, poverty, inflation, food insecurity, and financial strain were frequently linked with increased psychological distress.[19,25,31] These associations reflect both material deprivation and sustained psychosocial stress, particularly in contexts of unstable income and limited social protection.

Security-related exposures, particularly armed conflict and displacement associated with the Boko Haram insurgency and other violent events, were strongly associated with trauma-related mental health outcomes.[24,39,41] IDPs and conflict-affected populations reported high levels of PTSD symptoms, depression, and anxiety, reflecting sustained exposure to violence, loss, and instability. The findings further suggest that economic and security stressors often coexist and may reinforce each other. Conflict frequently disrupts livelihoods and economic stability, while economic deprivation may heighten vulnerability to the psychological consequences of insecurity.[20,24]

However, given the predominance of cross-sectional designs, these relationships should be interpreted as associations rather than causal pathways. Interpretation of the findings should be undertaken cautiously because most included studies employed cross-sectional designs, limiting the ability to establish temporality or causal relationships between exposures and outcomes. Reliance on self-reported mental health instruments may also have introduced reporting bias, while convenience and geographically restricted sampling approaches reduced representativeness in several studies. Nevertheless, the consistency of findings across multiple settings, populations, and methodological approaches suggests that the observed associations are unlikely to be entirely attributable to methodological artifacts alone.

Comparison with global and regional evidence

The observed associations between economic hardship and mental health align with global evidence indicating that unemployment, poverty, and financial insecurity are linked to increased risk

of depression and anxiety.[45] Similarly, findings from this review are consistent with evidence from other LMICs where economic instability has been associated with psychological distress.[46]

The mental health burden associated with conflict exposure in Nigeria is also comparable to findings from other conflict-affected settings.[47] Global estimates suggest elevated prevalence of depression, anxiety, and PTSD among populations exposed to armed conflict.[5,48,49] The high levels of PTSD and psychological distress reported among IDPs in Nigeria reflect similar patterns observed in other protracted humanitarian crises, although variation in prevalence likely reflects differences in exposure intensity, duration of conflict, and access to psychosocial services.[50-52]

Unique study location contextual influences

Nigeria's mental health burden is shaped by a combination of economic volatility, governance challenges, and widespread insecurity. The country's dependence on oil revenues exposes households to macroeconomic fluctuations that directly affect the cost of living and financial stability. Events such as fuel subsidy removal and currency redesign have had widespread economic consequences, which were associated with increased psychological distress in several studies.[13,33] Geographical inequalities also play a critical role. The North-East region simultaneously experiences higher levels of poverty, insecurity, and limited access to mental health services, creating a compounded burden of vulnerability.[24,39,41] These structural inequalities reflect broader regional disparities in development and service delivery.

Cultural and religious factors also influence mental health outcomes and coping strategies. Religious involvement and community support systems were frequently identified as important sources of emotional and psychosocial support.[24] However, stigma surrounding mental illness and reliance on non-medical explanations for psychological distress may delay help-seeking and limit access to formal care.[29]

The vicious cycle of economic deprivation, insecurity, and mental illness

The findings suggest the presence of a reinforcing cycle between economic deprivation, insecurity, and mental health outcomes. Economic hardship may increase vulnerability to psychological distress, while mental health conditions such as depression may reduce productivity, employment participation, and economic stability.[20] In turn, reduced economic capacity may heighten exposure to insecurity and limit coping resources. Similarly, insecurity contributes to displacement, loss of livelihoods, and social disruption, which further exacerbates economic hardship and psychological distress.[24,41]

This cyclical relationship suggests that mental health outcomes in Nigeria are shaped by interconnected structural conditions rather than isolated risk factors.[29] Breaking this cycle requires integrated interventions addressing both economic and security determinants alongside mental health service provision.

Intervention and policy implementations

The limited availability of intervention studies and implementation research reflects broader structural weaknesses within Nigeria's mental health system. Chronic underfunding, shortage of trained mental health professionals, insecurity in conflict-affected regions, fragmented service delivery systems, and persistent stigma surrounding mental illness collectively constrain implementation capacity. Mental health services remain concentrated in urban tertiary facilities, limiting accessibility for vulnerable and rural populations. Evidence from other LMICs suggests that task-shifting approaches, integration of mental health into primary healthcare, community-based psychosocial support programs, and World Health Organisation Mental Health Gap Action Program (WHO mhGAP)-informed interventions may provide scalable models for improving access in resource-constrained settings. Adapting and evaluating such approaches within the Nigerian context should constitute a future research and policy priority.

Strengths, limitations, and evidence gaps

Strengths

This systematic review provides the first comprehensive synthesis of empirical evidence on the associations between economic conditions, security-related exposures, and mental health outcomes in Nigeria. A major strength of the review lies in its broad inclusion criteria, which enabled the synthesis of diverse quantitative, qualitative, and mixed-methods evidence across multiple population groups and geopolitical regions. The review followed PRISMA 2020 guidelines, enhancing methodological transparency and reproducibility. In addition, the inclusion of studies from all six geopolitical zones of Nigeria strengthens the geographical representativeness of the findings. The integration of multiple mental health outcomes, including depression, anxiety, PTSD, psychological distress, and suicidal ideation, also provides a comprehensive understanding of the mental health burden associated with structural stressors. Furthermore, the use of a structured risk of bias assessment (JBI checklist) allowed for systematic appraisal of study quality and improved the robustness of evidence interpretation.

Limitations

Despite these strengths, several limitations should be acknowledged. The predominance of cross-sectional study designs limits the ability to establish temporal or causal relationships between economic or security exposures and mental health outcomes. Most studies relied on self-reported measures, which may introduce reporting bias and reduce diagnostic precision.

Substantial heterogeneity in study populations, sampling strategies, exposure definitions, and mental health measurement tools limited comparability across studies and precluded meta-analysis. In addition, several studies employed convenience sampling or were geographically restricted, thereby limiting generalizability. Finally, exclusion of grey literature and non-English publications may have introduced publication bias, potentially limiting the comprehensiveness of the evidence base.

Evidence gaps

The review identified several important gaps in the literature. First, there is a scarcity of longitudinal and quasi-experimental studies capable of assessing causal pathways between economic insecurity, conflict exposure, and mental health outcomes. Second, there is limited research examining the interactive or synergistic effects of economic hardship and insecurity, despite strong conceptual justification for such relationships. Third, intervention studies evaluating the effectiveness of mental health, psychosocial, or socio-economic support programs remain extremely limited. Fourth, there is insufficient evidence on protective and resilience mechanisms, particularly within informal community and cultural

systems. Finally, there is a notable gap in implementation research addressing how mental health services can be effectively integrated into Nigeria's primary healthcare and humanitarian response systems.

Conclusions

This systematic review demonstrates that economic hardship and insecurity are consistently associated with adverse mental health outcomes in Nigeria. Across diverse populations and study settings, unemployment, poverty, food insecurity, inflationary pressures, armed conflict, and displacement were linked to increased levels of depression, anxiety, PTSD, and psychological distress. Although causality cannot be established due to the predominance of cross-sectional evidence, the consistency of findings across studies suggests that structural socioeconomic and security-related conditions play an important role in shaping mental health outcomes in Nigeria. The findings underscore the need for integrated responses that address both economic vulnerability and insecurity as interconnected determinants of mental health.

Recommendations

Based on the findings of this review, the following recommendations are proposed.

i. Integrate mental health into economic policy: macroeconomic policy decisions such as fuel subsidy removal or currency redesign should be accompanied by mental health impact assessments and social protection measures that buffer households against acute economic shocks.
ii. Embed MHPSS in humanitarian response: all humanitarian programming in conflict-affected regions should include a robust MHPSS component, with trained lay counsellors, community-based psychosocial activities, and referral pathways to clinical services.
iii. Expand community-based mental health services: task-shifting models that train primary healthcare workers, community health extension workers, and lay health workers to deliver evidence-based psychological interventions must be scaled up nationally, with a focus on underserved regions.
iv. Strengthen the mental health workforce: the number of psychiatrists, psychologists, psychiatric nurses, and social workers must be substantially increased through expanded training programs, incentives for practice in underserved areas, and retention strategies.
v. Address the social determinants of mental health: poverty alleviation, youth employment programs, food security interventions, and social protection schemes should be conceptualized as mental health interventions and funded accordingly.
vi. Combat stigma and promote mental health literacy: nationwide public education campaigns that normalize mental health help-seeking and challenge harmful stereotypes are essential to closing the treatment gap.
vii. Target interventions to vulnerable groups: women, youth, IDPs, and informal workers require tailored mental health programs that address their specific stressors and leverage their existing coping resources.
viii. Invest in mental health research: funding agencies and academic institutions should prioritise longitudinal studies, intervention trials, economic evaluations, and research on positive mental health and resilience in Nigeria.

Implications of the study

Public health implications

The high prevalence of depression, anxiety, PTSD, and suicidal behavior documented in this review represents a substantial burden of disease that reduces population health, increases disability, and shortens life expectancy. Strengthening mental health surveillance, integrating mental health indicators into national health surveys, and establishing a national mental health observatory are urgent public health priorities.

Practice implications

Healthcare practitioners must be equipped to recognize and manage the mental health consequences of economic and security stressors. This requires expanding mental health training in medical, nursing, and social work curricula; embedding mental health screening in primary care, antenatal care, and HIV/tuberculosis programs; and developing culturally adapted, evidence-based psychological interventions that can be delivered by non-specialists.

Research implications

This review highlights the imperative for a substantial increase in mental health research in Nigeria. Priority areas include longitudinal cohort studies, randomized controlled trials of scalable psychological and social interventions, implementation science research, health economics research, and qualitative research that amplifies the voices of affected communities.

Policy implications

The evidence supports a "mental health in all policies" approach, whereby mental health considerations are systematically integrated into economic, social, security, and development policy. The 2023 National Mental Health Policy provides a platform, but it must be matched by legislative action, budget allocation, and accountability mechanisms.

Global health implications

Nigeria's experience offers lessons for other LMICs confronting the intersection of economic precarity, violent conflict, and inadequate mental health systems. Global mental health initiatives must move beyond a narrow focus on individual-level interventions to engage with the macroeconomic, political, and security dimensions of mental health.

Educational implications

School-based mental health programs that build emotional literacy and coping skills can mitigate the impact of economic and security stressors on children and adolescents. University counselling services must be strengthened to address the high burden of financial stress and mental distress among students.

Future directions

Future research should prioritize longitudinal and cohort studies to better understand the temporal and causal relationships between economic insecurity, conflict exposure, and mental health outcomes. There is also a need for intervention-based studies evaluating the effectiveness of psychosocial, economic, and community-level support programs. Mixed-methods research could further deepen understanding of resilience mechanisms and lived experiences in affected populations.

Additionally, future studies should explore the combined and interactive effects of economic hardship and insecurity, rather than treating them as isolated determinants. Finally, implementation science research is needed to identify effective models for integrating mental health services into primary healthcare and humanitarian systems in Nigeria, particularly in resource-limited and conflict-affected contexts.

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Online supplementary material:

Supplementary Table 1. Summary of included studies.

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