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A systematic review of community-based counseling interventions for improving mental health and social well-being among vulnerable populations in Nigeria

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Abstract

Nigeria faces a substantial mental health burden, with an estimated 40-50 million individuals affected and a treatment gap exceeding 85%. Vulnerable populations, including internally displaced persons (IDPs) and conflict-affected women, children, and adolescents, experience compounded risks and severely limited access to care. Community-based counseling interventions delivered through task shifting have emerged as a promising strategy to bridge this gap. This systematic review aimed to systematically map the existing evidence on community-based counseling interventions designed to improve mental health and social well-being among vulnerable populations in Nigeria.

A comprehensive search of PubMed, Scopus, Springer, Frontiers, ScienceDirect, AJOL, Springer, Cambridge Core, BMC, and grey literature sources was conducted for studies published between 2014 and 2026. Eligible studies included peer-reviewed articles and program evaluations of community-based counseling interventions targeting vulnerable Nigerian populations. A narrative synthesis was employed to map intervention types, delivery modalities, and outcomes.

A total of 12 studies met the inclusion criteria. Vulnerable populations included IDPs, conflict-affected adolescents, women, and primary care patients. Interventions included group cognitive-behavioral therapy, didactic counseling, and integrated mental health and peacebuilding programs delivered by lay counselors and non-specialist health workers. Key findings demonstrated significant reductions in depression, anxiety, post-traumatic stress, and aggression.

Community-based counseling interventions delivered through task shifting demonstrate considerable promise for improving mental health outcomes among Nigeria's most vulnerable populations. However, the evidence base remains limited in geographic scope and methodological rigor. Future research should prioritize longitudinal, controlled studies across Nigeria's diverse socio-cultural contexts to strengthen causal inference and inform sustainable scale-up.

Key words: community-based, counseling, intervention, mental health, social wellbeing, Nigeria.

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Introduction

Mental health disorders constitute one of the most significant yet persistently neglected public health challenges globally, affecting approximately 1 in 8 individuals and contributing substantially to the global burden of disease.^{1,2} The World Health Organization (WHO) recognizes mental health as integral to overall well-being, influencing cognitive functioning, emotional regulation, and social participation.³ Despite this, the global mental health treatment gap, the proportion of individuals requiring care but not receiving it, remains critically high.⁴ This gap is particularly pronounced in low- and middle-income countries (LMICs), where an estimated 76-85% of individuals with severe mental disorders receive no treatment.⁵ In sub-Saharan Africa, systemic weaknesses, including limited infrastructure, workforce shortages, stigma, and competing health priorities, continue to constrain mental health service delivery.⁶

Nigeria exemplifies these challenges. With a population exceeding 200 million, the country faces a substantial mental health burden, with estimates suggesting that nearly 1 in 4 Nigerians, approximately 40-50 million people, experience a mental disorder.^{7,8} Yet, fewer than 10% receive formal care.³ The mental health workforce remains critically inadequate, with approximately 250-350 psychiatrists nationwide, representing about 0.1 per 100,000 population, far below WHO recommendations.^{1,3} Services are heavily concentrated in tertiary facilities located in urban centers, leaving rural and underserved populations with minimal access.⁷ Although the Mental Health Act (2021) represents a significant policy advancement, implementation remains uneven, and mental health funding continues to account for less than 1% of the national health budget.^{8,9} Beyond structural limitations, sociocultural factors further constrain care access. Stigma and beliefs attributing mental illness to supernatural causes discourage help-seeking and drive reliance on informal care systems, including traditional and religious healers.^{8,10} Concurrently,

Nigeria faces protracted humanitarian crises. Since 2009, insurgency in the North-East has displaced millions, with internally displaced persons (IDPs) experiencing disproportionately high levels of depression, anxiety, and post-traumatic stress disorder.^{11,12}

Other vulnerable groups, including adolescents, women exposed to gender-based violence, older adults, and individuals with severe mental illness, also face significant mental health disparities due to limited services, social exclusion, and economic vulnerability.¹³⁻¹⁶ In response to these challenges, community-based counseling interventions delivered through task shifting have emerged as a viable strategy to expand access to care.² Task shifting involves redistributing clinical responsibilities from specialists to trained non-specialist providers, such as community health extension workers (CHEWs), nurses, and lay counselors.¹⁷ In Nigeria, this approach underpins several initiatives, including Mental Health Gap Action Program (mhGAP)-based primary care integration models and non-governmental organization-led psychosocial programs.¹⁸ Notable interventions include the HAPPINESS program, which integrates mental health into primary healthcare using WHO mhGAP guidelines,¹⁸ community-based mental health and peacebuilding initiatives,¹⁹ culturally adapted psychological interventions, such as culturally adapted manual-assisted psychological intervention,²⁰ and school-based counseling programs targeting adolescents.¹⁴ Despite these efforts, the evidence base remains fragmented, heterogeneous, and insufficiently synthesized. This systematic review addresses this gap by synthesizing available evidence on community-based counseling interventions targeting vulnerable populations in Nigeria, with the aim of informing scalable, culturally appropriate, and contextually relevant mental health strategies.

Objectives of the study

This systematic review aimed to systematically synthesize the existing evidence on community-based counseling interventions designed to improve mental health and social well-being among vulnerable populations in Nigeria.

This systematic review was conducted with the following specific objectives: i) to identify and describe the range of community-based counseling interventions implemented to improve mental health and social well-being among vulnerable populations in Nigeria; ii) to map the characteristics of these interventions, including target populations, geographic settings, delivery modalities, therapeutic approaches, and provider cadres; iii) to synthesize evidence on the effectiveness, feasibility, and acceptability of community-based counseling interventions in the Nigerian context; iv) to identify key themes, evidence gaps, and methodological limitations within the existing literature; v) to articulate implications for policy, practice, and future research that will advance community-based mental health service delivery in Nigeria.

Methods

Study design

This study employed a systematic review design with narrative synthesis, conducted in accordance with the PRISMA 2020 guidelines.^{21,22} The methodological approach was further informed by guidance from the Joanna Briggs Institute (JBI) for systematic reviews of heterogeneous evidence.²³ A scoping approach was not adopted, as the review aimed to synthesize evidence on intervention effectiveness rather than broadly map literature.

Information sources

A comprehensive search was conducted across PubMed, Scopus, SpringerLink, Frontiers, ScienceDirect, AJOL, Cambridge Core, and BMC. Grey literature sources included Google Scholar, NGO program repositories (e.g., MANI, NEEM Foundation), and institutional databases. Reference lists of included studies were also hand-searched.

Search strategy

The search strategy was developed iteratively and refined following preliminary systematic searches. Keywords combined MeSH and free-text terms. Search terms were combinations of “community-based” OR “community” OR “lay counsellor” OR “lay counsellor” OR “task-shifting” OR “task-sharing” OR “primary health care” OR “primary healthcare” OR “PHC” AND “counselling” OR “counseling” OR “psychosocial” OR “psychotherapy” OR “MHPSS” OR “mental health intervention” OR “psychological intervention” OR “trauma counselling” AND “mental health” OR “depression” OR “anxiety” OR “PTSD” OR “post-traumatic stress” OR “psychological distress” OR “social well-being” OR “psychosocial well-being” AND “vulnerable populations” OR “internally displaced persons” OR “IDP” OR “conflict-affected” OR “women” OR “adolescents” OR “youth” OR “children” AND “Nigeria” OR “Nigerian”. Searches were limited to publications in English. No date restrictions were applied during initial searching; however, subsequent eligibility screening focused on studies published between January 2014 and March 2026 to capture contemporary evidence reflective of current implementation contexts and policy frameworks. Boolean operators (AND/OR) and truncation were applied. The final search was conducted on 1 April 2026.

Eligibility criteria

Inclusion criteria

Studies were eligible for inclusion if they evaluated community-based counseling interventions targeting vulnerable populations in Nigeria (e.g., IDPs, conflict-affected individuals, women, adolescents, and primary care patients in underserved settings) published in English between 2014 and 2026. Eligible interventions comprised structured psychological or psychosocial support delivered by non-specialist providers (lay counselors, CHEWs, or nurses) within community settings such as IDP camps, primary health centers, schools, or outreach services, and had to report mental health or social well-being outcomes. We considered peer-reviewed primary research, program evaluations, and mixed-methods or qualitative studies with adequate methodological description.

Exclusion criteria

Studies were excluded if the intervention was delivered exclusively by specialist mental health professionals in tertiary hospitals, comprised solely awareness-raising without a therapeutic component, lacked measurable outcome data, were set outside Nigeria, or were opinion pieces, editorials, or conference abstracts without accompanying full-text articles, were published before 2014, and in languages other than English. Table 1 presents the summary of the inclusion and exclusion criteria.

Study selection

Two reviewers independently screened titles/abstracts and full texts. Discrepancies were resolved through consensus.

Data extraction

A standardized data extraction form was developed. Data were extracted on the following domains: study characteristics (authors, year); study objectives; study design; study setting and sample size; key findings; and conclusions.

Data synthesis approach

Given substantial heterogeneity in study design, populations, and outcome measures, meta-analysis was not feasible. A structured narrative synthesis was conducted, grouping findings by

intervention types, target populations, and outcomes. Consistent with systematic review methodology, no meta-analysis or statistical pooling of results was undertaken.

Risk of bias assessment

Risk of bias was assessed using JBI critical appraisal tools appropriate to the study design.²³ Findings from quality appraisal informed interpretation of results, particularly in relation to causal inference and generalizability. The risk of bias assessment score is presented in Table 2.

Table 1. Inclusion and exclusion criteria for the review.

Criterion	Inclusion criteria	Exclusion criteria
Population	Vulnerable populations in Nigeria (IDPs, conflict-affected, women, adolescents, primary care patients)	General population without identified vulnerability
Intervention	Community-based counselling (individual, group, or digital) delivered by lay counsellors, CHEWs, nurses, or non-specialist providers	Intervention Specialist-delivered interventions in tertiary hospitals; awareness/education without counseling
Settings	Community settings (IDP camps, PHC, schools, community centers, mobile outreach)	Tertiary hospitals; inpatient psychiatric facilities
Study Design	Primary research, program evaluations, qualitative studies, mixed-methods, systematic review	Editorials, commentaries, conference abstracts without full text
Outcome	Mental health and social well-being outcomes	Studies reporting only feasibility/process outcomes without participant outcomes
Timeframe	January 2014 - December 2026	Prior to January 2014
Language	Language English	Non-English
Geographical location/settings	Nigeria	Outside Nigeria

IDPs, internally displaced persons; CHEWs, community health extension workers; PHC, primary healthcare.

Table 2. Quality appraisal/risk of bias.

Author (year)	Quality assessment/Risk of bias
Adeyuya <i>et al.</i> (2026) ²	Mixed-methods descriptive case study; rich program data, large scale; low risk for process evaluation but no controlled outcomes; reliance on routine records.
Omobowale <i>et al.</i> (2024) ⁷	Cross-sectional survey; self-rated competence; limited generalizability; potential for social desirability bias; small sample.
Kaiser <i>et al.</i> (2020) ¹²	Mixed-methods study; survey, free lists, interviews, and focus group discussions; risk of selection bias.
Wallis (2025) ¹⁷	Phenomenological qualitative study; rigorous method, thick description; limited transferability; small sample; risk of self-selection bias.
Paphitis <i>et al.</i> (2023) ¹⁹	Pre-post analysis of program data; validated DASS-21/PTSD-8; moderate risk of confounding and attrition; limited follow-up.
Adesina <i>et al.</i> (2024) ²⁴	Single-group pre-post design; validated PHQ-9; moderate risk of bias from lack of control group and attrition not fully addressed; no blinding.
Peter <i>et al.</i> (2024) ²⁵	Quasi-experimental with control group; locally developed scales with good reliability; risk of bias from non-random assignment and lack of blinding.
Eno (2026) ²⁶	Cross-sectional with mixed methods; self-reported substance use; intervention component not controlled; risk of recall and social desirability bias.
Adeyuya <i>et al.</i> (2025) ²⁷	Convergent mixed-methods; robust institutional ethnography and survey; large stakeholder sample; low risk of selection bias; triangulation used.
Adeyuya <i>et al.</i> (2026) ²⁸	Mixed-methods process evaluation; platform analytics and interviews; high fidelity for admin tools; risk of observation bias in clinical tool use.
Adeyuya <i>et al.</i> (2026) ²⁹	Large cross-sectional school survey; validated MINI-Kid; dose-response modelling; risk of unmeasured confounding; cross-sectional design limits causality.
Onyechere <i>et al.</i> (2025) ³⁰	Qualitative case study; no standardized outcome measures; descriptive; high risk of bias for effectiveness claims; small purposive sample.

Study selection and screening procedure

The PRISMA flow diagram (Figure 1) illustrates the study selection process. Records identified through database searching (n=847); records removed before screening (n=235); records screened (title/abstract) (n=612); records excluded (n=568); full-text articles assessed for eligibility (n=44); full-text articles excluded (n=32) (reasons: not community-based (n=14), not counselling intervention (n=8), not Nigeria (n=4), insufficient methods (n=6)); studies included in the synthesis (n=12).

Results

Characteristics of the eligible included studies

The 12 included studies (2023-2026) were geographically concentrated, with the majority conducted in north-east Nigeria (n=8), followed by the south-West (n=3) and north-central (n=1), reflecting a strong focus on conflict-affected settings.^{2,7,12,17,19,24-30} Study designs were predominantly quasi-experimental and single-group

pre-post evaluations, with limited use of comparative or controlled methodologies; no randomized controlled trials were identified. Study populations included internally displaced adolescents and young adults, conflict-affected adults, women exposed to gender-based violence, and primary care patients. Interventions were delivered primarily through task-shifting models, with lay counselors, nurses, and CHEWs providing care under supervision.

Intervention modalities included group-based cognitive behavioral therapy, integrated mental health and peacebuilding programs, didactic counseling approaches, and mhGAP-aligned primary care services. Outcome assessment was conducted using validated instruments such as Patient Health Questionnaire (9-item) (PHQ-9), Depression, Anxiety and Stress Scale (21-item) (DASS-21), and Post-Traumatic Stress Disorder (8-item) (PTSD-8) in most quantitative studies. Across studies, interventions were associated with significant reductions in depression, anxiety, post-traumatic stress symptoms, and aggression. However, variability in outcome measures, short follow-up periods, and the absence of control groups limit comparability and causal interpretation. Qualitative findings highlighted the importance of supervision,

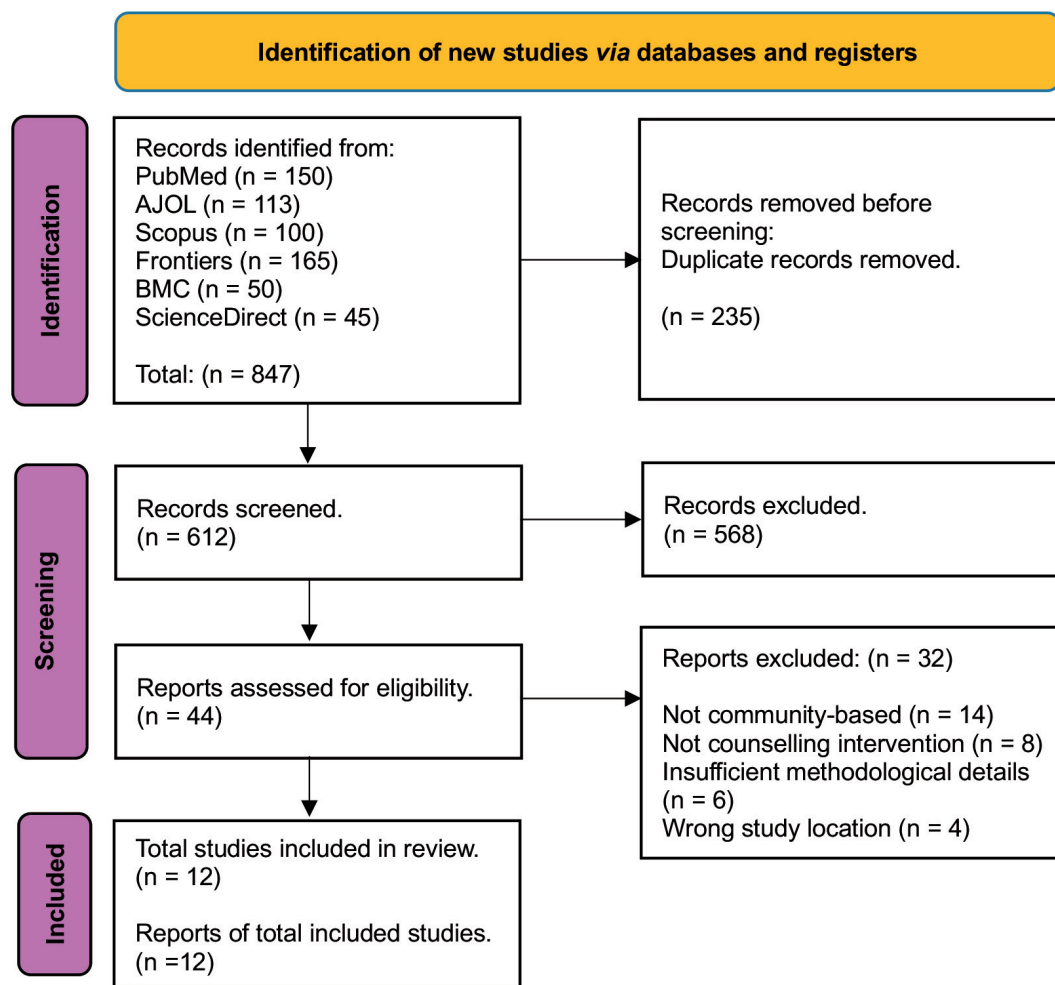


Figure 1. Diagram of the PRISMA 2020 process for systematic reviews and meta-analyses.

cultural adaptation, and community trust in facilitating intervention effectiveness, while also documenting the operational challenges faced by lay counselors.

Overall, the evidence supports the feasibility and potential

effectiveness of community-based counseling interventions in Nigeria, but methodological limitations and geographic concentration constrain generalizability and strength of inference. The summary of the included studies is presented in Table 3.

Table 3. Summary of included studies.

Authors (year)	Objectives of the study	Study design	Study settings and sample size	Key findings	Conclusions
Adeyuya <i>et al.</i> (2026) ²	To document the institutional scale-up of task-shifted mental health services within primary care in Lagos.	Retrospective mixed-methods case study.	Lagos State 890 health workers across 57 PHC and 5 general hospitals.	Successful screening and treatment initiation for thousands, improved supervision fidelity and reduced medication stockouts.	Government-led task-shifted care is feasible when embedded in routine systems with structured support.
Omobowale <i>et al.</i> (2024) ⁷	To evaluate self-rated competence and roles of primary health care workers in mental health delivery.	Cross-sectional study.	Oyo State 40 PHC workers and mental health desk officers.	Majority rated their competence as good, but confidence gaps existed for psychosis; role awareness was limited.	Targeted training and role clarification are necessary to enhance PHC mental health delivery.
Kaiser <i>et al.</i> (2020) ¹²	To explore the mental health and psychosocial burden, existing resources and coping mechanisms, and remaining needs among internally displaced persons and host communities in Borno State.	Mixed-methods study.	Borno State, Nigeria (IDP camps and host communities).	High burden of mental health needs exist among the participants, strongly endorsed at least one mental health symptom with adult men having highest rates of symptom.	MHPS needs could be addressed through solutions-focused approaches, although tailored interventions are needed for stigmatised and vulnerable groups such as drug users and rape victims.
Wallis (2025) ¹⁷	To explore lived experiences of lay counsellors delivering child mental health interventions in conflict-affected Northeast Nigeria.	Post-intentional phenomenological qualitative study.	Northeast Nigeria 6 lay counsellors.	Counsellors described the work as constrained, consuming, collaborative, and fulfilling, with fluctuating confidence.	Sustainable support systems including supervision and stepped-care are essential for lay counsellors.
Paphitis <i>et al.</i> (2023) ¹⁹	To describe an integrated MHPSS and peacebuilding mobile programme and assess preliminary outcomes.	Secondary analysis of programme pre-post data.	Borno State 1550 conflict-affected adults.	Meaningful reductions in depression, stress, PTSD, and vulnerability to violent extremism.	Integrated mental health and peacebuilding shows promise in conflict-affected communities.
Adesina <i>et al.</i> (2024) ²⁴	To evaluate a lay counsellor-delivered group mental health project for young internally displaced persons.	Quasi-experimental study (one-group pre-post design).	Northern Nigeria IDP camps 100 young persons aged 13–24 years with depressive symptoms.	Significant reduction in depressive symptoms and clinically significant depression prevalence.	Lay counsellor-led group therapy is feasible and effective. Scale-up in similar settings are recommended.
Peter <i>et al.</i> (2024) ²⁵	To investigate the effect of didactic counselling on anxiety and aggression among internally displaced persons.	Quasi-experimental design with control group.	Adamawa State IDP camps 1761 persons.	Significant reductions in anxiety and aggression in the intervention groups.	Didactic counselling is effective for managing anxiety and aggression in camp settings.
Eno (2026) ²⁶	To examine the impact of substance abuse and community-based interventions among urban youth.	Cross-sectional study with qualitative components.	Abuja Municipal Area Council 384 youths aged 15–35 years.	High substance use prevalence; community-based interventions showed limited impact.	Holistic, multi-sectoral approaches are required for youth substance abuse.
Adeyuya <i>et al.</i> (2025) ²⁷	To analyse adaptive mechanisms sustaining mental health integration in Lagos primary care.	Convergent mixed-methods study.	Lagos State 130 stakeholders (health workers, policymakers, manager, care recipients).	Underfunding and staff turnover drove adaptation; informal peer mentoring and role flexibility-maintained services.	Adaptive capacity can sustain mental health integration despite resource constraints.
Adeyuya <i>et al.</i> (2026) ²⁸	To evaluate fidelity and feasibility of WHO digital tools for mental health scale-up in primary care.	Convergent mixed-methods process evaluation.	Lagos State 5 PHC facilities.	Administrative tools showed high fidelity; clinical decision-support tools had lower uptake due to workflow disruption.	Digital tool success depends on integration into existing workflows and human systems.

To be continued on next page

Table 3. Continued from previous page.

Authors (year)	Objectives of the study	Study design	Study settings and sample size	Key findings	Conclusions
Adewuya <i>et al.</i> (2026) ²⁹	To examine associations between school protective factors and adolescent mental health outcomes	School-based cross-sectional survey.	Lagos State 9437 secondary school adolescents.	Cumulative protective factors were strongly associated with lower odds of mental health conditions.	School-based mental health promotion strategies should be prioritised.
Onyechere <i>et al.</i> (2025) ³⁰	To provide virtual psychosocial support to displaced women through telemedicine.	Case study with qualitative evaluation.	Abuja Displaced women receiving remote counselling.	Collaboration across locations was feasible despite connectivity challenges; participants reported satisfaction.	Tele-counselling can extend support to underserved women if technological barriers are addressed.

IDP, internally displaced person; MHPSS, mental health and psychosocial support; PHC, primary healthcare; PTSD, post-traumatic stress disorder; WHO, World Health Organization.

Quality appraisal of the included studies

Quality appraisal was conducted using the JBI critical appraisal tools,²³ with instruments selected according to study design, including quasi-experimental, cross-sectional, qualitative, and mixed-methods studies. The appraisal aimed to evaluate methodological rigor, internal validity, and transparency of reporting across included studies rather than to exclude studies based on quality thresholds. Overall, the included studies demonstrated moderate methodological quality with notable variability across domains. All studies clearly stated their research objectives and aligned their designs appropriately to their stated aims. Eleven studies demonstrated congruence between research questions and study design, particularly in quasi-experimental and mixed-methods evaluations of counseling interventions.

However, methodological limitations were evident across several domains. Only 8 studies provided sufficient justification for sample size or participant selection, reflecting limited statistical rigor in some intervention evaluations. In quantitative studies, validated outcome measures such as PHQ-9, DASS-21, and PTSD-8 were used in 7 of 9 studies, enhancing measurement reliability and comparability across interventions. Nevertheless, some studies relied on locally adapted or non-standardized tools, limiting cross-study comparability. Intervention descriptions were adequately detailed in nine studies, allowing partial replication; however, variability in reporting intensity, duration, and counseling fidelity reduced reproducibility in some cases. Attrition handling and missing data management were adequately addressed in five of eight applicable studies, indicating a moderate risk of attrition bias in several evaluations.

Analytical approaches were generally appropriate to study design, particularly in pre-post and quasi-experimental studies; however, the absence of control groups in most studies limited causal inference. Furthermore, few studies explicitly reported confounding control strategies, which may have inflated observed intervention effects. Importantly, no study achieved high-risk-free ratings across all domains, reflecting systemic limitations in the Nigerian mental health intervention research landscape rather than isolated study weaknesses. Overall, the evidence base demonstrates moderate confidence in reported outcomes but limited strength for causal generalization. The quality appraisal summary is presented in Table 2.

Thematic review/key themes

The thematic synthesis of included studies identified six inter-related themes that characterize community-based counseling interventions for vulnerable populations in Nigeria.^{2,7,12,17,19,24-30} These themes are interpreted through a systems and implementation science lens, reflecting both intervention design and contextual constraints.

Task shifting as the dominant service delivery paradigm

Task shifting emerged as the dominant service delivery strategy across all included studies, reflecting that Nigeria has a severe shortage of mental health specialists, including psychiatrists and other mental health professionals, contributing to a substantial treatment gap.^{2,7} This strategy represents not only a pragmatic response to workforce deficits but also a structural adaptation within a constrained health system. The Mental Health in Primary Care (MeHPriC) initiative in Lagos demonstrated a formalized, government-led task-shifting model involving CHEWs, nurses, medical officers, and lay counselors trained using the WHO mhGAP framework.^{2,12} In contrast, humanitarian settings in the north-east, interventions frequently used short-term training approaches involving lay counselors embedded within humanitarian programs and NGO-supported delivery structures.^{17,19,24}

While task shifting improved access, qualitative evidence revealed variability in provider confidence, emotional burden, and perceived role adequacy. Lay counselors reported fluctuating self-efficacy and strong dependence on supervision structures for sustained performance.¹⁷ These findings suggest that task shifting is effective only when embedded within robust supervision, structured training, and stepped-care systems, consistent with WHO mhGAP implementation principles.²

Predominance of cognitive-behavioral and psychoeducational modalities

Cognitive-behavioral therapy (CBT)-based and psychoeducational interventions dominated the intervention landscape, reflecting their manualizability, adaptability, and compatibility with non-specialist delivery models. The Brave Heart program demonstrated clinically meaningful reductions in depression scores among inter-

nally displaced youth following group CBT intervention.²⁴ Similarly, didactic counseling and rational emotive behavioral therapy-based interventions showed significant improvements in anxiety, aggression, and behavioral outcomes.^{25,26}

This dominance reflects global implementation trends in LMICs, where CBT is frequently prioritized due to its structured format and ease of training delivery.²⁴ However, the reliance on CBT also reveals a therapeutic narrowness, with limited exploration of culturally embedded modalities such as narrative therapy, interpersonal therapy, or indigenous healing systems. This represents a critical gap in cultural and contextual responsiveness.²⁶

Group-based delivery as a mechanism for scalability and social support

Group counseling was the predominant delivery format across most interventions, particularly in IDP and school-based settings.^{19,24,25} Group-based approaches enhanced scalability in low-resource settings while simultaneously fostering peer support, shared meaning-making, and normalization of distress.^{26,27} The Counselling on Wheels program demonstrated that group-based mental health and psychosocial support integrated with peace-building activities facilitated both psychological recovery and social cohesion.¹⁹ However, despite its widespread use, there is limited comparative evidence on the relative effectiveness of group vs. individual counseling formats in Nigeria, particularly regarding long-term outcomes and subgroup differences.

System integration vs. parallel humanitarian delivery models

A major structural divergence emerged between interventions embedded within government systems and those operating in humanitarian parallel systems. The MeHPriC model achieved deep integration into primary healthcare systems, including governance structures, workforce supervision, and essential medicines availability.²⁸ Conversely, most north-east interventions functioned within NGO-led or donor-funded parallel systems with limited institutional integration.^{19,24} While these systems enabled rapid deployment during conflict, they raise sustainability concerns due to dependence on external funding and weak government ownership.^{29,30} The WHO's partnership with Borno, Adamawa, and Yobe state governments to train healthcare workers in mhGAP represents a bridging strategy between humanitarian and development approaches.² This duality reflects a broader LMIC tension between emergency response systems and long-term health system strengthening.⁷

Cultural and contextual adaptations

Although cultural adaptation was acknowledged in several studies, it was rarely systematically operationalized. Few interventions conducted formative research to understand idioms of distress, explanatory models, or help-seeking behaviors prior to implementation. Where adaptation occurred, it was often superficial or implicit, such as integration of peacebuilding activities or use of local facilitators.^{19,24} This is particularly important in Nigeria, where supernatural explanations of mental illness strongly influence care pathways.⁸ The absence of structured cultural adaptation frameworks represents a major limitation in the evidence base and may constrain intervention acceptability, engagement, and long-term effectiveness.²⁶

Implementation barriers and facilitators within a fragile health system

Implementation barriers were consistently reported across studies and included chronic underfunding, workforce shortages, medication stockouts, and stigma.^{7,27,28} These structural constraints significantly limited intervention scalability and continuity. At the provider level, limited confidence among primary healthcare (PHC) workers and emotional burden among lay counselors were recurrent challenges.^{7,17} At the system level, weak financing and fragmented governance reduced sustainability. Despite these barriers, several facilitators emerged, including committed leadership, supervisory structures, adaptive problem-solving, and digital support tools. Notably, the concept of functional fidelity emerged, highlighting that adaptation to context does not necessarily reduce effectiveness when core intervention components are preserved.²⁸

Discussion

This systematic review synthesized evidence from 12 studies evaluating community-based counseling interventions for vulnerable populations in Nigeria.^{2,7,12,17,19,24-30} Overall, findings demonstrate consistent improvements in depression, anxiety, PTSD, and behavioral outcomes, particularly among internally displaced and conflict-affected populations. However, the evidence base remains geographically concentrated, methodologically heterogeneous, and dominated by quasi-experimental designs, limiting causal inference and national generalizability.

Integration with implementation science and system thinking

The findings can be interpreted through a health systems and implementation science framework, particularly the Consolidated Framework for Implementation Research (CFIR). Intervention success appears to be driven less by therapeutic modality alone and more by contextual fit, workforce capacity, supervision structures, and system integration.²⁸⁻³² Task shifting functions as a structural adaptation to workforce constraints but requires enabling system conditions such as training, supervision, financing, and governance to be effective. This aligns with broader LMIC evidence demonstrating that task shifting is necessary but not sufficient for mental health system strengthening.^{4,33-35}

Comparison with global evidence

The observed outcomes align with global meta-analyses, demonstrating the effectiveness of lay-delivered psychological interventions for depression and PTSD.^{33,34} However, Nigeria's evidence base is distinguished by its strong reliance on humanitarian contexts and post-conflict populations, which is less prominent in stable LMIC settings. Unlike some African mhGAP implementations that emphasize routine PHC integration, Nigeria demonstrates a dual-system model combining government-led integration and humanitarian parallel delivery.^{2,35}

Equity, urbanization and structural determinants

Urbanization, poverty, and insecurity emerged as key structural determinants shaping mental health outcomes and intervention

access.¹⁷ These findings reflect broader social determinants of mental health frameworks, where distress is produced and sustained by intersecting economic, environmental, and political conditions.³⁶⁻³⁸ Importantly, disparities in service access across geopolitical zones highlight systemic inequities in health system development and conflict exposure.³⁹

Unique study location contextual influences

Nigeria's federated health system governance creates both opportunities and inequities. The MeHPriC initiative demonstrates the potential for state-level leadership in mental health system strengthening, yet the federated structure also generates variability in political will and resource allocation across states, contributing to the geographic inequities evident in this review.^{3,27} The over-15-year insurgency in the Borno, Adamawa, and Yobe states has generated a humanitarian crisis of immense scale, resulting in large-scale population displacement and humanitarian disruption in north-east Nigeria, and catalyzing innovation in community-based mental health programming.^{11,19,32} However, the destruction of health infrastructure and ongoing insecurity limit the capacity of government systems to deliver or absorb these services, perpetuating parallel humanitarian structures with uncertain sustainability.¹⁷

Cultural and religious explanatory frameworks profoundly shape mental health help-seeking in Nigeria.⁴⁰⁻⁴² Many Nigerians attribute mental illness to supernatural causes such as evil spirits, ancestral curses, or divine punishment, and seek care from traditional healers or religious leaders rather than biomedical services.^{3,8} Community-based counseling interventions must navigate this pluralistic landscape, engaging respectfully with traditional and faith-based structures while promoting evidence-informed care.⁴² Engagement with culturally relevant structures may improve intervention acceptability and uptake.³² Yet most interventions provided limited documentation of systematic cultural adaptation processes, representing a significant gap given the diversity of Nigeria's over 250 ethnic groups.^{7,26}

Implications for scaling and sustainability

The evidence supports continued investment in task-shifting as a core strategy for expanding mental health service coverage, with systematic replication of the MeHPriC model across other Nigerian states as a high-priority policy objective.^{28,39} Sustainable financing mechanisms, including meeting the Abuja Declaration target of 15% health budget allocation and integrating mental health into social health insurance, are essential for long-term viability.^{3,27} Supportive supervision, continuous professional development, and attention to the mental health of the non-specialist workforce are equally critical to protect both providers' well-being and quality of care.^{7,17} Finally, the integration of mental health into PHC must be accompanied by broader health system strengthening, as the challenges with psychotropic medication stockouts and high staff turnover in Lagos illustrate the interdependence of mental health integration with foundational health system functions.^{28,29}

Strengths and limitations of the study

Strengths

This review employed a comprehensive and systematic search strategy, incorporating both peer-reviewed and grey literature, thereby capturing a broad spectrum of evidence. Adherence to

PRISMA guidelines enhanced methodological transparency and reproducibility. The inclusion of diverse study designs enabled a holistic understanding of intervention effectiveness, feasibility, and contextual dynamics. Additionally, the thematic synthesis approach facilitated the identification of cross-cutting implementation patterns across heterogeneous studies.

Limitations

The review is constrained by the limited number of included studies (n=12) and their concentration in specific geographic regions, which restricts generalizability to the national context. The predominance of quasi-experimental designs and the absence of randomized controlled trials limit causal inference. Heterogeneity in intervention types, outcome measures, and follow-up periods precluded meta-analysis. Restriction to English-language publications introduces potential language bias, and the absence of economic evaluations limits insight into cost-effectiveness. Publication bias may also be present because intervention studies reporting positive outcomes are more likely to be published than studies with null or negative findings.

Review of existing gaps in the literature

The review identified several important gaps in the evidence base. First, methodological limitations persist, particularly the absence of randomized controlled trials and the limited use of comparative designs. Second, evidence remains geographically concentrated within north-east Nigeria, limiting national representativeness. Third, several vulnerable populations, including people living with HIV/AIDS, older adults, individuals with disabilities, sexual and gender minority populations, and individuals with severe mental disorders, remain underrepresented. Fourth, intervention approaches are largely limited to CBT and psychoeducational models, with minimal exploration of culturally adapted, indigenous, interpersonal, or narrative approaches. Finally, evidence on cost-effectiveness, implementation processes, and long-term sustainability remains sparse.

Conclusions

This systematic review demonstrates that community-based counseling interventions, delivered through task shifting, represent a viable and effective strategy for addressing the substantial mental health burden among vulnerable populations in Nigeria. Despite methodological limitations and geographic concentration of the evidence, the consistency of positive mental health outcomes across diverse intervention models supports their strategic expansion within primary care and community systems. However, scalability and long-term impact are constrained by structural weaknesses, including inadequate funding, workforce instability, limited cultural adaptation, and weak integration into formal health systems.

Addressing these constraints requires a transition from pilot and donor-driven programs to institutionalized, government-led models embedded within Nigeria's health system architecture. Ultimately, advancing community-based mental healthcare in Nigeria demands a dual focus on evidence and implementation, combining rigorous research with pragmatic system strengthening. With coordinated policy commitment, sustained financing, and context-sensitive design, these interventions can move beyond proof-of-concept to become a cornerstone of equitable and accessible mental healthcare delivery in Nigeria.

Recommendations

To translate evidence into practice, the following targeted, operational recommendations are proposed.

Policy and governance

- Institutionalize task-shifting within national and state mental health policies, with clear regulatory frameworks for training, supervision, and accreditation of non-specialist providers.
- Scale successful models (*e.g.*, MeHPriC) through state-level adaptation, supported by dedicated budget lines and integration into primary healthcare systems.

Health system strengthening

- Establish structured supervision systems, including stepped-care models and specialist oversight, to maintain intervention fidelity and provider competence.
- Improve supply chain systems to ensure consistent availability of psychotropic medications, addressing a key barrier to integrated care.

Workforce development

- Develop standardized national training curricula for lay counselors and CHEWs, incorporating competency-based assessment and continuous professional development.
- Introduce provider well-being programs to mitigate burnout and high turnover among non-specialist mental health workers.

Intervention design and delivery

- Expand beyond CBT-dominant approaches by integrating culturally relevant and indigenous therapeutic models, including faith-informed and community-led practices.
- Optimize group-based intervention delivery, while evaluating comparative effectiveness against individual formats to refine implementation strategies.

Research and evidence generation

- Prioritize randomized controlled trials and longitudinal studies to strengthen causal inference and assess the sustainability of outcomes.
- Incorporate implementation science frameworks (*e.g.*, CFIR) to systematically evaluate contextual drivers of success and failure.
- Conduct economic evaluations (cost-effectiveness and cost-utility analyses) to inform policy and scale-up decisions.

Equity and access

- Expand interventions to underrepresented populations (*e.g.*, older adults, persons with disabilities, rural communities, and severe mental illness cohorts).
- Ensure geographic diversification across all six geopolitical zones to improve national representativeness and equity.

Implications of the study

This review positions community-based counseling interventions as a critical systems-level response to Nigeria's persistent mental health treatment gap, particularly among vulnerable pop-

ulations who remain underserved by specialist-driven care models. The findings demonstrate that task-shifted, community-embedded interventions can deliver clinically meaningful reductions in depression, anxiety, and post-traumatic stress symptoms, thereby supporting their integration into national mental health strategies.

From a public health perspective, these interventions represent scalable, cost-conscious approaches capable of expanding coverage in resource-constrained settings, aligning with global mental health priorities and universal health coverage targets. By decentralizing care to primary health and community platforms, they address structural inequities in access while reducing reliance on overstretched tertiary services. At the health systems level, the review underscores that effectiveness is contingent not merely on intervention design but on implementation architecture, including supervision, workforce stability, and integration into existing service delivery frameworks. The contrast between deeply embedded programs such as MeHPriC and parallel humanitarian interventions highlights the importance of institutionalization for sustainability.

Clinically, the findings reinforce the feasibility of delivering evidence-based psychotherapies such as CBT through non-specialist providers, provided that training fidelity and ongoing supervision mechanisms are maintained. However, the limited diversity of therapeutic modalities suggests a need to expand beyond standardized approaches toward culturally grounded and contextually adaptive models.

From an equity standpoint, the evidence reveals uneven intervention distribution, with overrepresentation of conflict-affected populations and geographic clustering in specific regions. This imbalance signals the need for intentional targeting of neglected groups, including rural populations, older adults, and individuals with chronic mental disorders.

Economically, scaling community-based counseling has the potential to yield long-term cost savings by reducing the burden of untreated mental illness on productivity, healthcare utilization, and social systems. However, the absence of cost-effectiveness data limits policy advocacy and resource allocation decisions.

Collectively, these implications highlight that while community-based counseling is necessary, its impact depends on system integration, contextual adaptation, and sustained investment, positioning it as a foundational component of Nigeria's mental health reform agenda.

Future directions

Future studies should prioritize randomized controlled trials with longitudinal follow-up to strengthen causal evidence on intervention effectiveness and durability. Geographic expansion to the under-researched north-west, south-east, and south-south zones is essential, along with inclusion of neglected vulnerable groups such as persons with disabilities and older adults. Evaluations of alternative therapeutic modalities beyond CBT, including culturally grounded and faith-based approaches, are needed. Rigorous economic evaluations and systematic application of implementation science frameworks would inform resource allocation and scale-up. Finally, research should examine the differential mechanisms of group *vs.* individual delivery and investigate the long-term sustainability of community-based counseling programs beyond initial funding cycles.

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